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**Trade sustainability impact assessment
(SIA) on the comprehensive economic
and trade agreement (CETA) between
the EU and Canada: Final report**

Kirkpatrick, Colin; Raihan, Selim; Bleser, Adam;
Prud'homme, Dan; Mayrand, Karel; Morin, Jean Frederic;
Pollitt, Hector; Hinojosa, Leonith and Williams, Michael
DEVELOPMENT Solutions Ltd, European Commission

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A Trade Sustainability Impact Assessment (SIA) Relating to the Negotiation of a Comprehensive Economic and Trade Agreement (CETA) Between the EU and Canada

Final Report

June 2011

This report can also be found published on the EC Directorate General of Trade's website at: http://trade.ec.europa.eu/doclib/docs/2011/september/tradoc_148201.pdf

And annexes at: http://trade.ec.europa.eu/doclib/docs/2011/september/tradoc_148202.pdf

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PROJECT WEBSITE

For further information on the EU-Canada SIA visit
www.eucanada-sia.org

EU-Canada SIA Final Report Team:**

Colin Kirkpatrick, PhD, Team Leader

Selim Raihan, PhD, CGE and FDI gravity equations modeller

Adam Bleser, sectoral economic and social impacts expert

Dan Prud'homme, government procurement, investment, trade facilitation and competition policy expert

Karel Mayrand, sectoral environmental expert on North America

Jean-Frédéric Morin, PhD, intellectual property rights expert

Hector Pollitt, E3MG modelling team

Leonith Hinojosa, PhD, sectoral environmental expert on EU, other third countries expert

Michael Williams, labour mobility and free circulation of goods sections, and researcher

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A special thanks to those stakeholders and other experts who provided feedback to the study team on the report.

***Contact information and/or affiliations in order:**

-Professor Colin Kirkpatrick, Emeritus Professor of Development Economics, University of Manchester, UK (Colin.Kirkpatrick@manchester.ac.uk)

-Dr. Selim Raihan: Associate Professor, Department of Economics at University of Dhaka (selim.raihan@econdu.ac.bd); Executive Director, South Asian Network on Economic Modelling (SANEM)

-Adam Bleser: DEVELOPMENT Solutions (adam@development-solutions.eu)

-Dan Prud'homme, Senior Consultant, IPA Assessment Group (dprudhomme@ipaassessmentgroup.com); DEVELOPMENT Solutions

-Karel Mayrand: senior expert to the team

-Dr. Jean-Frédéric Morin: Université Libre de Bruxelles

-Hector Pollitt: Cambridge Econometrics (hp@camecon.com)

-Dr. Leonith Hinojosa: Open University, Honorary Fellow at the IARC/SED University of Manchester (Leonith.Hinojosa@manchester.ac.uk)

-Michael Williams: DEVELOPMENT Solutions

Sylvie Trottier provided research on the environmental assessments in the agriculture, PAPS and fisheries section.

The views of the authors expressed herein are their own and do not necessarily reflect the views of their affiliated institutions.

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LIST OF ABBREVIATIONS

AGP	Agreement on Government Procurement
AIT	Agreement on Internal Trade
ATC	Agreement on Textiles and Clothing
AVMSD	Audiovisual Media Services Directive
BIT	Bilateral Investment Treaty
BOD	Biochemical oxygen demand
BRIC	Brazil, Russia, India and China
BSE	Bovine spongiform encephalopathy
CAMSC	Canadian Aboriginal Minority Supplier Council
CAP	Common Agricultural Policy
CBA	Canadian Bankers Association
CCA	Causal chain analysis
CDC	Canadian Dairy Commission
CDE	Constant difference of elasticity
CDIA	Canadian Direct Investment Abroad
CEC	Commission for Environmental Cooperation
CERT	Canada-EU Round Table
CES	Constant Elasticity of Substitution
CETA	Comprehensive Economic and Trade Agreement
CFA	Committee of Freedom of Association
CFIA	Canadian Food Inspection Agency
CFP	Common Fisheries Policy
CGE	Computable General Equilibrium
CITT	Canadian International Trade Tribunal
CLS	Core Labour Standards
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CSR	Corporate Social Responsibility
CSRA	Canadian Securities Regulatory Authority
CSTO	Canadian Securities Transition Office
CUSFTA	Canada-US Free Trade Agreement
CWB	Canadian Wheat Board
DFAIT	Department of Foreign and International Trade
DG	Directorate General
DWA	Decent Work Agenda
ECTI	EU-Canada Trade Initiative
EEC	European Economic Community
EESC	European Economic and Social Committee
EEZ	Exclusive Economic Zone
EFTA	European Free Trade Association
EMU	Economic and Monetary Union
ENGO	Environmental non-governmental organisation
FARA	Federal Acquisition Reform Act
FAR	Federal Acquisition Regulation
FASA	Federal Acquisition Streamlining Act
FATS	Foreign Affiliate Trade in Services
FBT	Food, beverage and tobacco

FDI	Foreign direct investment
FFN	Functional foods and nutraceutical
FIAS	Financial information and advisory service
FIPA	Foreign Investment Promotion and Protection Agreement
FQD	Fuel Quality Directive
GATS	General Agreement on Trade in Services
GDP	Gross Domestic Product
GHG	Greenhouse Gas Emissions
GI	Geographical indications
GM	Genetically modified
GP	Government procurement
GPA	Government Procurement Agreement
GTAP	Global Trade Analysis Project
GVA	Gross value added
HACCP	Hazard Analysis and Critical Control Points
HS	Harmonised system
ICA	Investment Canada Act
ICAAT	International Commission for the Conservation of Atlantic Tunas
IEA	International Energy Agency
ILO	International Labour Organization
IMF	International Monetary Fund
IMO	International Maritime Organization
IPR	Intellectual property rights
ISDS	Investor-state dispute settlement
JCC	Joint Cooperation Committee
LDC	Least developed country
LICO	Low-income cut off
LULUCF	Land use, land use change and forestry
M&A	Merger and acquisitions
MASH	Municipalities, academic institutions, school boards and hospitals
MFN	Most favoured nation
MLC	Maritime Labour Convention
MMS	Maritime Modal Schedule
MNC	Multinational corporation
MNE	Multinational enterprise
MOU	Memorandum of Understanding
MRA	Mutual recognition agreement
MS	Member State
NAFO	Northwest Atlantic Fisheries Organization
NAFTA	North American Free Trade Agreement
NAMA	Non-agricultural market access
NC	Net cost
NEC	Not elsewhere classified
NGO	Non-governmental organisation
NPE	Nonylphenol and its ethoxylates
NPRI	National Pollutant Release Inventory
NROP	Non-Resident Ownership Policy

NTB	Non-tariff barrier
OCT	Overseas countries and territories
OECD	Organisation for Economic Co-operation and Development
OIE	World Organisation for Animal Health
PA	Preferential agreement
PAC	Polycyclic aromatic compounds
PAP	Process agricultural product
PGM	Platinum group metal
PM	Particulate matter
PMPRB	Patented Medicines Price Review Board
PNAS	Proceedings of the National Academy of Sciences
PSAB	Procurement Strategy for Aboriginal Businesses
PWGSC	Public Works and Government Services Canada
RAMP	Regional Aquatics Monitoring Program
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
REE	Rare earth elements
RoO	Rules of Origin
RVC	Regional value content
SAGD	Steam assisted gravity draining
SARA	Species at Risk Act
SAWP	Seasonal Agricultural Worker Program
SCM	Steering Committee Meeting
SCO	Synthetic crude oil
SDS	Schéma de Développement Stratégique
SIA	Sustainability Impact Assessment
SITC	Standard International Trade Classification
SME	Small and medium-sized enterprise
SOP	Standard operating procedure
SPM	Saint-Pierre et Miquelon
SPS	Sanitary and phytosanitary
STRI	Services Trade Restrictiveness Index
TAA	Trade Agreements Act
TAC	Total allowable catch
TBT	Technical barrier to trade
TEU	Twenty-foot equivalent unit
TFEU	Treaty on the Functioning of the European Union
TFWP	Temporary Foreign Worker Program
TIEA	Trade and Investment Enhancement Agreement
TILMA	Trade, Investment and Labour Mobility Agreement
TOR	Terms of reference
TPM	Total particulate matter
TPRP	Telecom Policy Review Panel
TRIPS	Trade Related Aspects of Intellectual Property Rights
TRQ	Tariff rate quota
TSE	Transmissible spongiform encephalopathies
TSIA	Trade Sustainability Impact Assessment
TV	Transaction value

UECBV	European Livestock and Meat Traders Union
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPOV	Union for Protection of New Varieties of Plants
VA	Value added
VAT	Value-added tax
VOC	Volatile organic compound
VNM	Value of non-member materials
WEF	World Economic Forum
WIPO	World Intellectual Property Organization
WMI	Whitehorse Mining Initiative
WTO	World Trade Organization

EXECUTIVE SUMMARY

This Final Report for the EU-Canada Sustainability Impact Assessment (SIA) on the EU-Canada Comprehensive Economic and Trade Agreement (hereafter “the CETA,” “CETA,” or “the Agreement”) provides a comprehensive assessment of the potential impacts of trade liberalisation under CETA. The impact analysis assesses the economic, social and environmental impacts in Canada and the European Union, in three main sectors, sixteen sub-sectors and seven cross-cutting issues. It also assesses the potential impacts of CETA on the US, Mexico and other countries and regions, including a number of developing countries and the EU OCTs of Saint-Pierre-et-Miquelon and Greenland. There are nine main sections of this report. **Section one** provides background information on the CETA negotiations, and on the EC’s Sustainability Impact Assessment (SIA) programme. **Section two** outlines the methodology used in carrying out the SIA study.

Sections three to seven contain the core of this report, namely, an assessment of the potential economic, social and environmental impacts of trade liberalisation under the CETA. The macro-economic assessment is included in **section three** and discusses the main macro-economic impacts on the EU and Canada as predicted by the CGE model. The sectoral assessments are included in **sections four through six** and provide individual impact assessments for 3 sectors and 16 sub-sectors: the agricultural and processed agricultural products (PAPs) and fisheries sector (and the sub-sectors of (i) grains and oilseeds, (ii) beef and pork, (iii) dairy, (iv) beverages, (v) other PAPs, and (vi) fisheries); the industrial products sector (and the sub-sectors of (vii) mining and manufacturing of metal, (viii) oil and petroleum products, (ix) coal, (x) forest-based industries, (xi) automotive and other transport equipment and (xii) textiles); and the services sector (and the sub-sectors of (xiii) transportation, (xiv) financial, (xv) telecommunication, and (xvi) other business services). **Section seven** assesses cross-cutting issues and provides individual impact assessments for 7 issues: government procurement, intellectual property rights, investment, trade facilitation, labour mobility, free circulation of goods, and competition policy. **Section eight** lists the policy recommendations, also called flanking measures, based on the results of the sustainability analyses. These measures cover both enhancement and preventative/mitigation measures, i.e. measures needed to reinforce key positive sustainability impacts and to prevent or at least mitigate major negative sustainability impacts. **Section nine** provides a Conclusion to the SIA report.

The **annexes** are located in a separate document (available for download alongside this report), and include a further methodological explanation of the CGE model, E3MG model and gravity models as well as results of these models; and information on consultations undertaken and the stakeholder network.

KEY FINDINGS FROM THE FINAL IMPACT ASSESSMENT:

Macro-economic assessment:

The CETA is expected to lead to overall gains in welfare, real GDP, total exports, the balance of trade and wages in both Canada and the EU over the long-term. Based on modelling results, these gains will be maximised under an agreement that offers the highest degree of liberalisation.

Specifically, the modelling estimates that the EU will experience increases in its real GDP of 0.02% to 0.03% over the long-term, while Canada is estimated to see increases ranging from 0.18% to 0.36%. Increases in total exports are also expected over the long-term, ranging from 0.05% to 0.07% in the EU and from 0.54% to 1.56% in Canada. These increases in exports are expected to improve the balance of trade in both Canada and the EU, with Canada likely to see the greatest improvements from the removal

of tariffs and the EU from the removal of barriers to trade in services. In both Canada and the EU, the CETA is similarly expected to lead to increased real wages. Third countries are estimated to experience minor degrees of welfare loss as a result of the Agreement, though the overall impact on these countries is insignificant, with GDP projected to exhibit no noticeable change.

The CGE model results include that the distribution of the gains between agriculture, industrial goods and services varies according to the level of liberalisation achieved under the CETA. Liberalisation appears to generate its greatest gains for the services sector, though greater degrees of liberalisation can result in a worse outcome for some industrial or agricultural products as expansion in the services stimulates resources to move out of these sectors and into the services over the long-term. Liberalisation of sensitive agricultural products is estimated to have pronounced impacts on output and trade over the long-term.

Sectoral-level assessment:

(1) Agriculture, PAPs and fisheries: significant degrees of liberalisation would likely have a pronounced **economic impact** on a number of sectors in Canada and the EU. In Canada, significant degrees of liberalisation would produce pronounced gains for the beef and pork sectors. The ultimate impact would be further influenced by the rules of origin agreed to, given Canada's integration with the United States. While maintaining the EU's ban on hormone free beef would likely limit Canadian producers' ability to realise gains from improved market access, it is expected that large enough concessions would stimulate producers to shift some of the production over the long-term to meet EU requirements. Increased imports from Canada would, however, be expected to negatively impact producers of beef and, particularly, pork within the EU. Additional increases in output and exports for Canada could be realised in the food processing sector as well as in the fisheries sector (particularly in frozen seafood).

While the removal of tariffs on fisheries products would likely produce gains in output and exports for Canada's fisheries sector, doing so could negatively impact the EU OCTs of Saint-Pierre-et-Miquelon (SPM) and Greenland. While losses engendered from an erosion of preferences would be nominal for the two OCTs, the limited industrial diversification and reliance on fisheries as a source of exports implies that losses could be relatively substantial.

The EU would be expected to realise the most pronounced gains from the removal of restrictions on dairy products in Canada. While tariff liberalisation would be expected to benefit Canadian consumers, any removal of supply management would result in a significant decrease in output and employment in the Canadian dairy sector. With the continued maintenance of the supply management system in Canada, smaller gains for EU producers could still be realised through improved minimum access requirements and/or greater recognition of GIs for a number of EU produced cheeses as well as the removal of Canadian TBTs pertaining to the compositional standards of cheese. The EU could also realise increased exports of beverages to Canada, though the outcome is largely non-tariff related measures and relies on the Agreement's ability to resolve discriminatory practices that are alleged to take place in provincial liquor control boards. Finally, the EU stands to benefit from the removal of tariffs on prepared foods, with exporters also likely to benefit from greater harmonisation in labelling and packaging requirements.

Conversely, if sensitivities on (i) pork and beef in the EU and (ii) dairy in Canada are maintained, it is expected that potential gains on either side will be significantly lower. At the same time, the negative impact associated with increased competition for the beef and pork industries in the EU and the dairy sector in Canada would likely be averted.

It is not expected that the CETA's economic impact on agriculture, PAPs and fisheries will lead to a pronounced **social impact** in either Canada or the EU. It is unclear how expansion in agricultural employment would impact quality and decency of work. In Canada, workers in agriculture are generally subject to provincial regulation and are often regulated differently from workers in other sectors. Given that many provinces exempt a number of workers involved in agriculture and certain types of processing from minimum employment standards, greater shifts into the sector could lower the overall level of standards that the workforce is exposed to. This would also create greater levels of temporary employment, given the nature of the work, which could disproportionately be filled by foreign labour under Canada's Seasonal Agricultural Worker Program. Further, as agriculture and food processing tend to have some of the highest rates of work related injuries and fatalities, expansion of employment in Canada and the EU's agriculture and food processing sectors could expose a greater number of workers to working conditions that are more unsafe than average. This could, in turn, produce negative consequences for the level of work-related stress of employees in both Canada and the EU.

Under a full removal of tariffs, the CETA will likely have an **environmental impact** in the agriculture and PAPs sector by increasing output of Canadian products. This higher demand will require an intensification of agriculture to be achieved by increasing chemical inputs, changing the distribution of crop production, and potentially encroaching onto marginal or other productive lands. These changes will affect land usage and quality, water usage and quality, air pollution, biodiversity and waste creation. Under less ambitious liberalisation scenarios, the expected overall environmental impact from CETA would be limited. Liberalisation of beef and pork, in particular, have potential to lead to greater herd size in Canada, potentially leading to increased released of methane as a by-product. Moreover, if increases in crops like wheat are produced using more sustainable practices, such as no or reduced till, the negative environmental impact can be mitigated because of reduced emissions and chemical inputs. This trend towards more beneficial agricultural practices can potentially be further supported under CETA through Canadian-European cooperation and European preferences for sustainable products.

(2) Industrial products: the CETA is unlikely to have a pronounced **economic impact** on the mining, metal manufacturing, oil, coal or forest-based industries in either Canada or the EU. While Canada is imbued with a significant stock of metallic ores, oil, coal and lumber, the low or complete absence of duties on these products within the EU, limits the impact that the CETA is likely to have. Investment liberalisation – notably through the extension of national treatment provisions – could lead to greater levels of EU investment in these sectors within Canada (perhaps stimulating greater levels of output); though given the fact that the EU's existing FDI in these Canadian sectors – particularly in mining and oil – is already fairly robust, it does not appear that existing barriers have not been overly restrictive to capital inflows from the EU.

The elimination of tariffs could lead to increased output and exports in the automotive industries on both sides of the Atlantic. Given Canada's high degree of integration with the U.S. auto industry, the rules of origin that are ultimately agreed to will be a key factor determining the extent of the CETA's impact. Specifically, rules of origin that require a higher percentage of a product's value be produced within the country would likely limit the ability of Canadian producers to qualify for preferential tariffs, reducing gains from the Agreement. The CETA would likewise be expected to have a positive economic impact on the textiles industries of the EU and Canada over the long-term. For Canada, the greatest gains would be expected to arise under an Agreement that obtained the greatest liberalisation of tariffs, with the modelling projecting increases in output and exports in its textiles and apparel sectors; though there could be some deterioration in its balance of trade in these products. While Canada is expected to experience declines in these indicators within its leather manufacturing sector, the EU is projected to see increases in output, exports and its balance of trade in all three sub-sectors over the long-term.

Further gains for the EU would arise if the CETA leads to the removal of barriers to the free circulation of goods in Canada as well as improved enforcement of IPR. The impact on Canada and the EU will likely be significantly influenced by the rules of origin ultimately adopted.

The **social impact** is likely to be limited. Quality and decency of work could be somewhat improved where the CETA includes a chapter on trade and labour that provides for better implementation and ratification of the ILO's Core Labour Standards and Decent Work Agenda. Canada, specifically, could see its standards and rights improved with respect to collective bargaining and freedom of association with provisions that require ratification of the ILO's Convention 98 which provides legally binding measures on such rights.

With limited expected impact on production in the mining, metal manufacturing, oil, coal and forest-based industries, it is not expected that the CETA will lead to a significant **environmental impact** in these sectors. GHG emissions from the auto industry may increase, though improvements in energy intensity could help offset these gains and mitigate the negative impact.

(3) Services sector: the services sector has the potential to generate the greatest **economic gains** for both Canada and the EU, though this outcome is dependent on a CETA that achieves a significant amount of liberalisation. Increased merchandise trade resulting from the CETA will directly increase the demand for maritime transport services, increasing output and exports. Provisions in the CETA that would enhance the positive gains include liberalisation of feeder services and repositioning in Canada which would lower costs, increase competitiveness and efficiency and also spur greater levels of FDI in Canada's maritime transport sector.

The CETA has the potential to significantly impact the Canadian telecom sector, primarily through its ability to liberalise Canada's foreign ownership restrictions. If the CETA results in the removal of these restrictions, it is likely that the impact in Canada will be pronounced, with sizeable increases in inward FDI, output and exports occurring over the long-term. Additional benefits would occur through improved competitiveness in the industry, which would serve to enhance technological acquisition of Canadian telecom companies and help to stimulate their expansion into foreign markets. Canadian consumers would likely benefit substantially from reduced prices, improved service and wider selection. EU telecom companies would also benefit by increased access to the Canadian market, spurring increased investment through establishment and acquisitions. While such an outcome may not impact output and cross-border trade within the EU, it would benefit EU exports via mode 3. Additional benefits could be achieved by the CETA's granting of non-discriminatory access to infrastructure and networks, though this is likely to have less of an impact than the removal of ownership restrictions.

The CETA is unlikely to have a pronounced impact on output, trade and investment in the financial services sector of either Canada or the EU. The CETA is, however, expected to have a positive impact on non-financial business services sectors within both Canada and the EU, with greater gains likely to accrue under an Agreement that provides higher degrees of liberalisation. However, given the absence of restrictions for most sub-sectors within the business services sector, the overall impact from the CETA may be limited, and instead serve to make the existing level of liberalisation legally binding. Nevertheless, liberalisation could yield benefits in certain subsectors where specific barriers are present, while improvements in the temporary movement of labour could serve to benefit trade and investment across the entire sector. Liberalisation of both at-the-border and behind-the-border restrictions on temporary movement of professionals would likely serve to increase the level of cross-border trade as well as the investment and trade occurring via foreign affiliates, providing greater benefits. In order to realise the greatest gains it will be important for the CETA to foster mutual recognition agreements allowing professionals to have their qualifications/certificates recognised in both Canada and the EU.

The **social impact** is expected to be positive, with the CETA expected to lead to the creation of services jobs in both Canada and the EU. The **environmental impact** is also expected to be limited and could be beneficial if expansion redirects resources away from more environmentally harmful sectors (e.g. extractive industries) and towards services. Increased merchandise trade would be expected to lead to greater GHG emissions from the transport services sector. At the same, the vast majority of this increased trade would be expected to occur through maritime transport, which has a lower environmental impact than land or air transport. To the degree that trade in Canada is diverted away from the U.S. and toward the EU, the environmental impact could be positive by replacing land transport with maritime transport. Further, liberalising feeder services within Canada could contribute to the development of Canada's short-sea shipping industry, which could help improve environmental performance of the transport sector by redirecting land shipments to sea shipments.

Cross-cutting issues assessments:

(1) Government procurement (GP): A government procurement chapter in CETA will have a variety of **economic impacts** that are positive for some and negative for others. The main effect of the chapter would be to encourage competitiveness in the bidding process. It could potentially create some reductions in economic (and social, and potentially environmental) policy space in Canada of the type relevant to this SIA; however, any loss of policy space would be mitigated to a certain degree given that the Agreement would only directly apply to contracts above certain thresholds, and given a number of other legalities likely in CETA.

Specifically, the economic impacts of a GP chapter would be felt in terms of government savings, market share, and employment. The increased GP competition mentioned may result in savings by the Canadian government and lower-cost goods and services, while any similar effect would be much less pronounced in the EU given its already highly liberalised GP market. CETA will likely allow EU firms to gain some GP market share where they could not before, e.g. in some utilities, and overall may allow Canadian firms to make some, although comparatively lesser, gains in the EU GP market. The extent of these gains depends on a number of factors of competitiveness and not just market access afforded in CETA, as a wide range of foreign subsidiaries are already competitive in the Canadian GP market. An increase in indirect cross-border competition, i.e. from foreign subsidiaries, may lead to shifts in jobs among firms operating in Canada. The full effect on employment within jurisdictions/regions in Canada is unclear, although prohibition of offsets may have some negative impacts therein. If set-asides for Aboriginal business are prohibited, Aboriginal suppliers could be negatively impacted at least in the short-term on both economic and social indicators, although there is some indication that such set-asides in fact may not be prohibited in CETA.

Potential **social impacts** are mixed. Neutral impacts are expected on the quality of government-procured goods and services. CETA may create some positive impacts in terms of wider choice of GP service providers, although available evidence does not clearly indicate that a GP chapter in CETA would significantly affect quality of public goods and services, including water delivery and management, and health and education. In part, a number of legalities likely included in CETA's GP Chapter would ensure quality of goods and services. Overall, CETA's affect on decency and quality of work in the GP market would be limited by the strong domestic laws and institutions in the EU and Canada. CETA's impact on "fair wage" and other "social consideration" GP policies in the EU and Canada is unclear without further details of the Agreement, although government consultations suggest both parties remain committed to preserving such policies.

A GP Chapter in CETA would likely have mixed **environmental impacts**, although the full extent of these impacts is unclear without further details of the Agreement. CETA's prohibition of offsets could have some mixed environmental impacts, particularly in Canada. If CETA restricts initiatives on green procurement it would have a significant negative impact in Canada and the EU according to a number of environmental indicators; however, this may very well be a non-issue given the current commitment of the parties to green procurement policies.

(2) Intellectual Property Rights: Canada offers a standard level of IP protection but one lower than that of the EU, and it is thus assumed that CETA will lead to an upward harmonisation and call primarily for change in Canadian IPR laws. IPR-related provisions of CETA could have a minor positive **economic impact** on Canadian GDP growth, and may have a minor positive impact on European GDP. Specifically, a CETA IPR chapter will likely have a slight positive effect on specific industries in the EU, such as agri-food companies using geographical indications. It would also benefit the Canadian publishing industry and the innovative pharmaceutical industry. It could also benefit certain television, film and sound recording industries via reducing piracy and increasing revenues. At the same time, an IPR chapter in CETA could lead to notable negative effects on certain consumers in Canada, for example via higher prices on educational and pharmaceutical products.

An IPR chapter in CETA would also have economic impacts on employment and policy space. Improving IPR enforcement as a result of CETA could lead to increased FDI flows and technology transfer, resulting in positive spill-over effects on production and potentially on employment. Overall, however, stronger IPR protection would have mixed impacts on Canadian employment. It would have a positive but minor impact on the employment rate in the EU. In terms of policy space, as a net importer of IPR-related assets, Canada has an interest in maintaining some IPR exceptions and limitations.

Raising levels of IPR protection is likely to have some **social impacts** but unlikely to have significant **environmental impacts**.

(3) Investment: The **economic impact** of CETA as a whole on investment in Canada will likely be positive, and could be of a 'notable' magnitude. The Investment Chapter in CETA itself could encourage economic benefits including trade-stimulating effects and fostering intangible business linkages in Canada, although the significance of these will likely be minor to notable at most. In the EU, CETA as a whole and its Investment Chapter specifically, will likely follow the trends mentioned for Canada but on a smaller level of significance given the relatively larger size of the EU economy as well as the EU's relatively higher level of investment liberalisation.

As a whole, there will likely be some positive, and potentially some negative, social and environmental impacts from investment encouraged under CETA. Regarding **social impacts**, increased investment under CETA might be channelled into creating jobs in Canada and the EU that score higher on quality and decency of work indicators, although it may also create some degree of worker displacement and wage inequality. Either way, these impacts would likely be relatively limited. Regarding **environmental impacts**, if CETA were to increase FDI in the oil sands and mining sectors in Canada, this could lead to increased environmental impacts since these sectors are environmentally intensive. At the same time, some investment might gravitate towards green technology, producing positive impacts in Canada and the EU.

Regarding investor-state dispute settlement (ISDS) specifically, the conflicting costs and benefits of such a mechanism make it doubtful that its inclusion in CETA would create a net/overall (economic, social and environmental) sustainability benefit for the EU and/or Canada. There is no solid evidence to suggest that ISDS will maximise economic benefits in CETA beyond simply serving as one form of an enforcement mechanism, just as state-state dispute settlement is also an enforcement mechanism. And

the policy space reductions caused by ISDS allowances in CETA, while less significant than foreseen by some parties, would be enough to cast doubt on its contribution to net sustainability benefits. As such, the study's assessment suggests that a well-crafted state-state dispute settlement mechanism might be a more appropriate enforcement mechanism in CETA than ISDS.

(4) Trade facilitation: Given the relatively sophisticated state of existing customs and border regimes in Canada and the EU overall, but with exceptions for certain individual EU Member States, it is unlikely that there will be significant **economic, social or environmental impacts** from trade facilitation reform under CETA. However, incorporating provisions under CETA to reform and improve trade facilitation would be particularly useful in limiting costs of compliance that will inevitably increase with the introduction of new rules of origin under CETA.

(5) Labour mobility: Labour mobility provisions in the CETA focused on workers in professional business services could result in **economic gains** in the form of a more efficient allocation of skills and increased productivity in Canada and the EU, as well as increase innovation that could lead to **social and environmental benefits**.

(6) Free circulation of goods: The CETA provides an opportunity to bring the federal and provincial governments together to enact major reform in terms of allowing free-circulation of goods within Canada. Provisions allowing freer circulation of goods, which will likely focus on the agriculture and agri-foods sector given the barriers in that sector, could result in positive **economic impacts** through an improvement in Canada's productivity performance and allowing benefits to EU exporters.

(7) Competition policy: If CETA removes discriminatory practices of the Canadian liquor control boards this would foster **economic gains** by encouraging competition. While reducing regulatory flexibility, evidence suggests that this would not necessarily undermine public health and safety objectives as the Canadian government would retain the most important policy tools for reducing over-consumption of alcohol, i.e. being able to set price floors and impose taxes on beer, wine and spirits.

Removal of discriminatory practices by the Canadian Wheat Board could improve sales and wages of competitive wheat farmers. Concerns about the negative **economic and social impacts** of removing such practices do not appear to have strong evidential support.

No significant negative impacts and unclear impacts are respectively predicted for the two other competition policy issues. If included, CETA would legally bind Canada's recent liberalisation in international letter delivery via Bill C-9 to the EU, but would not be expected to have negative effects on the quality of postal services. The impacts of revising state aid policies under CETA are unclear without further details of the Agreement.

POLICY RECOMMENDATIONS:

The following is a non-exhaustive summary of key policy recommendations for EU and Canadian authorities to consider during CETA negotiations, a full list of which is found in section eight. The purpose of these flanking measure proposals is to enhance the positive impacts and prevent or mitigate negative impacts that have been identified in the SIA.

Agriculture, PAPs and Fisheries

- Establish an appropriate timetable for the phased reductions in tariffs and non-tariff barriers in beef, pork, dairy and fish and seafood. Consult with representatives from Saint-Pierre-et-

Miquelon and Greenland to determine which fisheries products are sensitive and how liberalisation these products could impact their industries.

- Rules of origin should be carefully considered in the negotiations, with a special group of EU and Canadian officials formed to deal with the issue. Special consideration should be given to beef and pork as well as food preparations containing sugar.
- A framework should be established to formalise enhanced regulatory cooperation and regular dialogue on SPS and TBT issues. Such cooperation should seek to prevent future barriers while providing greater transparency on packaging, labelling and certification requirements.
- Canada and European governments should cooperate on the exchange of best agricultural practices to reduce the environmental impacts associated with agricultural production.
- Promote fishery practices that are more sustainable through Canada-EU collaboration, while maintaining strict monitoring and implementation of quotas and Total Allowable Catch to remain within sustainable population levels and avoid depletion of fish stocks. More R&D should be invested into environmental risk of farmed fish, and into mechanisms such as the containment tasks, to reduce impact on wild species.

Industrial products

- Establish an appropriate phasing-in period for liberalisation in the textiles and transport equipment so that producers have time to adjust to changing incentives.
- Rules of origin should be carefully considered in the negotiations, with a special group of EU and Canadian officials formed to deal with the issue. Special consideration should be given to automotive products and textiles; a study could also be conducted on the implications of rules of origin policies being negotiated.
- Cooperation between companies in the energy and minerals sectors could help to produce sound environmental governance across the EU and Canada, and also have important spill-over effects in third countries. This could include exchanges of information, technology transfers, involvement of public-private initiatives from both sides and, in the long run, the formulation of a common energy policy.

Services sectors

- Restrictions on investment in telecom should be liberalised or removed completely, but should be accompanied by appropriate phase-in periods and policies to ensure that Canadian cultural objectives can continue to be met.
- Liberalise feeder services within Canada's maritime transport services to increase infrastructural investments over the long-term while helping to improve Canada's underdeveloped short-sea shipping industry.
- To increase bilateral trade and investment in services, measures should be taken to streamline the visa process for professionals seeking to temporarily work in Canada or the EU. Canada should review its requirements for 'needs tests' for certain professionals under the TFWP, with specific attention to facilitation of intra-corporate transfers between the EU and Canada.

- Negotiators create a mechanism for fostering agreements on mutual recognition of professional qualifications.

Government procurement

- Explicitly allow for Social Considerations in Public Procurement, including fair wages. Create a monitoring body to oversee that these allowances are not being abused.
- Allow for green procurement policies in all 'standard' forms in the General Notes of both Canada and the EU in the GP Chapter. Other specific language for environmental protection should be included.
- Explicitly allow set-asides for Aboriginals in Canada's schedule in the GP Chapter; however, make such exception more stringent than the ones allowed in NAFTA and the GPA.
- Do not include a full-stop prohibition on GP offsets for municipalities, but rather include an 'offset justification provision' pertaining exclusively to municipalities. Other offset measures should also be considered.

IPR

- To ensure a minimal level of flexibility, duplicate the language of *TRIPs agreement* article 7, 8, 13, and 30 as well as the language of the *Declaration on the TRIPs Agreement and Public Health* in the introduction of CETA's IPR chapter.
- The EU and Canada should cooperate to make sure their agreed norms on enforcement become recognised globally as minimal standards, cooperate in multilateral fora (WHO, WIPO, WTO, etc.), in plurilateral settings (OECD, ACTA, etc.) and bilaterally in their respective agreement with third parties.
- To accelerate the entry of new medicines on the market and lessen the actual use of patent extensions, the EU and Canada should cooperate to fast-track marketing approvals for those drugs already approved by the respective regulatory agencies.

Investment

- Consider excluding ISDS from CETA and instead use a state-state enforcement mechanism like that in the US-Australia FTA.
- Consider a number of key issues when drafting dispute settlement expropriation language.
- Emphasise domestic dispute settlement even if ISDS is included in CETA.
- Exclude 'essential and basic' public services from investment commitments.
- A dispute settlement monitoring body/forum should be created.

Overarching issues

- Include a Trade and Sustainable Development Chapter in CETA and within that chapter establish an effective monitoring body. Include a section on trade and labour, committing to ILO Core Labour Standards and Decent Work Agenda.
- Ensure CETA allows usage of domestic policy tools to limit alcohol abuse.
- Create a clean energy partnership initiated between the EU and Canada, which could be modelled off of existing programs.

1. INTRODUCTION

1.1. EU-Canada Comprehensive Economic and Trade Agreement

Overview of negotiations

With the negotiations on a Comprehensive Economic and Trade Agreement (CETA), the EU-Canada trade and economic relationship has now moved beyond the Trade and Investment Enhancement Agreement (TIEA) toward an agreement with a much broader and more ambitious scope. The TIEA, on which negotiations began in 2004 but were suspended in 2006, followed several other previous EU-Canada economic cooperation frameworks, for example the 1998 EU-Canada Trade Initiative.

Negotiations on a CETA are taking place on a number of areas including trade in goods and services, investment, government procurement, competition policy, intellectual property and trade and sustainable development. Negotiations on trade of goods are expected to include trade in industrial, agricultural and fishery products while also including tariff and non-tariff measures, trade defence instruments, technical barriers to trade (TBT), sanitary and phytosanitary (SPS) measures, customs/trade facilitation and rules of origin. Within trade in services, negotiations will include cross-border delivery (modes 1 and 2), the temporary presence of natural persons for business purposes (mode 4), and regulatory principles. Investment issues are expected to address establishment (mode 3) for services and non-services sectors, capital movements and payments.

The launch of CETA negotiations was officially announced on 6 May 2009 at the Canada-EU Summit in Prague. The first full round of negotiations was held in Ottawa in October 2009 with many of the Canadian provinces in attendance. As of publication of this report, seven rounds of negotiations had taken place, with the seventh round in April 2011, and with the eighth round expected in July 2011.

2008 Joint Study vs. the EU-Canada SIA (2011)

A joint study entitled *Assessing the Costs and Benefits of a Closer EU-Canada Economic Partnership*, conducted by the Government of Canada and the EU and completed in 2008 (thus referred to as the “2008 Joint Study”), incorporates tariffs and nontariff barriers into an analysis to assess the costs and benefits of an EU-Canada CETA. Using a CGE model to estimate the potential economic effects of the full removal of tariffs on bilateral trade in goods, a partial reduction of the cost of non-tariff barriers on trade in goods, and a partial liberalisation of bilateral trade in services, the study estimates that the EU-Canada trade relationship could be significantly enhanced through a closer economic partnership. The study also supports enhancing the relationship in areas such as government procurement, investment, temporary labour mobility, regulatory cooperation, environment, and science and technology.

This EU-Canada SIA (2011) is far more comprehensive than the 2008 Joint Study. First, it provides a far more comprehensive economic assessment of the CETA. Importantly, it also provides comprehensive social and environmental assessments of the Agreement. Further, not only does the report consider the economic, social and environmental effects on the EU and Canada across a range of in-depth indicators,

but it also assesses the potential impacts on the US, Mexico and other countries/regions including, among others, a variety of developing countries.

1.2. EU-Canada Sustainability Impact Assessment

European Commission Trade Sustainability Impact Assessments (hereafter also referred to interchangeably as “Trade SIAs,” “TSIAs,” or simply “SIAs”) assess the potential impacts of proposed trade liberalisation agreements on all pillars of sustainable development in order to optimise policy decision-making/trade negotiations. The EU-Canada SIA is conducted by DEVELOPMENT Solutions Europe Ltd. (DS) in cooperation with key external experts.

The SIA is divided into 3 phases:

Phase 1 (end of July – beginning of September 2010)

Phase 1 was designed to ensure the review of relevant information sources, flagging of sustainability issues, first stages of data preparation, preparation of analytical tools and to present how the work for the EU-Canada SIA will be carried out. The phase culminated with the Final Inception Report.

Inception Report: following submission of the draft Inception Report at the end of August 2010, the first Steering Committee Meeting and Civil Society Meeting was held in Brussels on 7 September 2010 to formally discuss the contents of the report and provide any necessary feedback for revisions. The minutes of this Civil Society meeting can be found on the SIA website at <http://www.eucanada-sia.org/>. Feedback from the steering committee meeting and civil society meeting were directly incorporated into the Inception Report in order to create the Final Inception Report. The report was made public on the SIA website after approval in August 2010.

Phase 2 (September 2010 – December 2010/January 2011)

Phase 2 was designed to incorporate developments from Phase 1 and deliver the Trade SIA’s interim quantitative and qualitative impact assessment, which was presented in the Interim Report. The Interim Report only includes preliminary considerations from the economic modelling, and not the full results of these models.

Consultation with civil society was an important tool for development of the impact assessment in this report. During this phase the team prepared for and delivered the Local Workshop in Ottawa on 26 November 2010. A Preliminary Findings document, a summary of the results from the draft Interim Report, was provided to stakeholders registered to attend that meeting. The minutes of the Local Workshop can be found on the SIA website.

Interim Technical Report:

The draft Interim Technical Report was submitted to the Steering Committee in late October 2010 and its contents were initially discussed at the second Steering Committee meeting on 10 November 2010. A revised version of the report was submitted to the Contracting Authority in mid December 2010. The report was made public on the SIA website after approval in January 2011.

Phase 3 (January – April 2011)

Phase 3 builds on the Interim Technical Report and ultimately culminates in the Final Report. This phase involves further incorporation of stakeholder feedback into the impact analysis, revised economic modelling, revised impact assessment, and policy recommendations.

The draft Final Report was submitted to the Contracting Authority in early March 2011 and made public on the SIA website in late March 2011. A second Civil Society Meeting and the third and final steering committee meeting were held in Brussels on 30 2011 March to review and provide feedback on the draft Final Report. The minutes of this meeting are available in the annex of this report.

Final Report:

Contents: This Final Report includes all findings from the study. The report includes the following elements:

- Executive Summary
- Introduction and progress of the SIA's implementation
- Summary of methodology
- Baseline conditions overview (trade and economic, social and environmental spheres)
- Final sustainability impact assessment (including modelling results and expert analysis)
 - Macro level (trade and economic, social and environmental spheres)
 - Sectoral level (trade and economic, social and environmental spheres)
 - Cross cutting level (trade and economic, social and environmental spheres)
- Proposals for flanking measures/policy recommendations
- Conclusions
- Information on consultation activities undertaken
- References
- Annexes (modelling tables; minutes of local workshop, workshop program and list of participants)

Additionally, the Final Report is accompanied by a Briefing Document for the Contracting Authority.

State of play

The EU-Canada SIA Final Report provides a comprehensive sustainability assessment on potential impacts of trade liberalisation under CETA. The assessment is undertaken at three levels:

- Macro-economic assessment
- Sectoral assessment
- Cross-cutting issues assessment

The macro-economic section discusses macro-economic effects forecasted for Canada and the EU as a whole, and includes a brief discussion of the macro-economic effects on certain third countries.

The sectoral assessment looks in detail at the social, economic and environmental impacts in 3 sectors and 16 sub-sectors. The sectors and sub-sectors selected for analysis in this report are those that contain the highest frequency and magnitude of potential impacts and sensitivities as identified in the Inception Report and as confirmed and/or added by additional research (including consultations) for the Interim Report. The 3 sectors and 16 sub-sectors: are the agriculture, processed agricultural products (PAPs), and fisheries sector, and the sub-sectors of grains and oilseeds, beef and pork, dairy, other PAPS,

beverages, and fisheries; the industrial products sector, and the sub-sectors of mining and manufactured metal products (ferrous, nonferrous and fabricated metals), oil and petroleum products, coal, forest-based industries (wood, paper and forestry), automotive and transport equipment, textiles (textiles clothing, leather and footwear); and the services sector, and the sub-sectors of transportation, telecommunications, financial, and other business services.

The cross-cutting assessment analyses 7 key issues. These ‘cross-cutting’ issues are defined in part by the study’s Terms of Reference. The cross-cutting issues considered in the report are: government procurement, intellectual property rights, investment, trade facilitation, labour mobility, free circulation of goods, and competition policy.

While the focus of the assessment is on the economic, social and environmental effects on the EU and Canada, it also assesses the potential impacts on the US, Mexico and a group of other countries/regions including, among others, a variety of developing countries.

The Final Report also includes a section on policy recommendations, also called flanking measures, which are based on the results of the sustainability analyses. These measures cover both enhancement and preventative/mitigation measures, i.e. measures needed to reinforce key positive sustainability impacts and to prevent or at least mitigate major negative sustainability impacts.

Recommendations are presented in two main categories:

- Measures related to provisions that will likely be included in CETA (“trade measures”)
- Measures, not directly related to provisions in CETA, for cooperation that may accompany the agreement (“cooperation measures”)

The Final Report built on the draft Final Report by considering additional feedback received from stakeholders and the Steering Committee up until the cut-off deadline of 11 April 2011. It used this feedback to refine different sections of the report.

2. METHODOLOGY

2.1. Introduction: Evidence-based Approach

The EU-Canada SIA adopts the basic methodological framework for Trade SIAs as described in the EC's *Handbook for Trade Sustainability Impact Assessment* (EC, 2006). The SIA methodology is designed to provide trade negotiators and policy-makers with an evidence-based assessment of the potential economic, social and environmental impacts of alternative trade liberalisation scenarios.

This section describes the main components and tools of the SIA methodology as applied in the EU-Canada SIA. The study team has used a variety of evidence sources to inform the qualitative and quantitative sustainability impact analyses for specific indicators. The sources of evidence include formal modelling (CGE, E3MG and investment gravity modelling) results, and quantitative and qualitative evidence collected from desk research and consultations. Causal chain analysis is applied to the evidence base to estimates of impact on key economic, social and environmental indicators.

2.2. Indicators

Table 1 lists the main TSIA sustainability indicators that are applied in this Final Report.¹ The core economic, social and environmental indicators listed in bold are taken directly from the original 1999 SIA methodology and mentioned in the *Handbook for Trade Sustainability Impact Assessment* (EC, 2006).² In addition, other frequently used indicators are listed (not in bold) in the table.

¹ Before selecting the indicators proposed herein, key sustainability themes and related sub-themes were identified. The indicators are specific and measurable, illustrate trends over time, are reliable and credible, coherent, and comprehensive; they are also relevant to policymaking (in terms of relevance to sustainable/unsustainable development, domestic policy targets/international agreements, etc.).

² These indicators are used consistently, as envisaged by the SIA handbook; however this SIA makes changes to the usage of other core indicators as envisaged in the handbook. Although a core indicator for previous SIAs, the poverty indicator was not applied in-depth in all analyses within this report. For context, the SIA methodology was employed in the past on trade agreements the EU was negotiating with developing countries. Poverty issues in the context of the EU-Canada CETA are not of the same magnitude as in an agreement between the EU and developing countries, and as such the poverty indicator is given different weight in this particular SIA and only mentioned when relevant. Indicators for health and education were used only were relevant throughout the SIA. FDI was used as a proxy for the “fixed capital formation” indicator proposed in the 1999 methodology.

Table 1: Sustainability impact assessment indicators

<u>Sustainability pillar</u>	<u>Theme</u>	<u>Indicator</u>
ECONOMIC	People's ability to support themselves and their families	Employment/unemployment rate
	Competitiveness and economic performance	-market share -exports -output -imports - FDI flows -GDP growth rate -overall trade balance -bilateral trade balance between EU and Canada
	Other	-strength of institutional and regulatory environments -policy space*
SOCIAL	Quality and decency of work	-Wages/income -Equity in wages -worker displacement levels and ability to shift among occupations -strength of collective bargaining -quality of work environment in terms of health and safety
	Other	-strength of institutional and regulatory environments -policy space* -poverty levels -public safety -access to and/or quality of healthcare -access to and/or quality of education -rate of technological advancement/innovation
ENVIRONMENTAL	Environmental quality	-Waste from output (including hazardous and toxic waste, as well as other types of wastes) -rate of GHG emissions
	Natural resource stocks	-rate of reduction in biodiversity -fish stocks -forest usage -mineral usage -fossil fuel usage
	Other	-strength of institutional and regulatory environment -policy space*

* **Usage of the concept of “policy space” in this SIA:** Some use the term “policy space” to mean all ‘regulatory flexibility’ in terms of the breadth that government is afforded in making policies. However, “policy space” as used as an SIA indicator exclusively refers to regulatory flexibility that if reduced directly results in the inability of governments to make policies that have clear economic, social or environmental benefits. In other words, reductions in policy space as defined herein should lead to negative externalities (for example, hurting human and/or environmental health, increasing the cost of goods and services, reducing quality of goods and services, hurting wages and employment, among other negative effects). It does not refer to the wider concept of reductions in regulatory flexibility that can create positive impacts (for example, improving the efficiency with which businesses operate and creating positive spill-over effects on employment and income, among other effects). As a note, the costs and benefits from reductions in policy space are typically difficult to calculate and vary among circumstances.

2.3. Evidence

2.3.1. Modelling Approach

Modelling using a CGE model, E3MG model and gravity models provided a fundamental source of evidence for the quantitative analysis performed in this Final Report. These results were then interpreted and incorporated into the more detailed assessment of specific indicators, as described in Section 2.4 below.

CGE Model

Due to the inter-linkages between various sectors within Canada and the EU as well as the relationship these sectors have with the rest of the world, the assessment of the liberalisation of trade and investment in the EU-Canada CETA requires an analytical framework that allows for a holistic view of world economies. This has been accomplished through application of a multi-region Computable General Equilibrium (CGE) model based on the framework of the Global Trade Analysis Project (GTAP).

Basic model structure

The model employed is a comparative static model grounded in neoclassical theories.³ In particular, CGE models build upon general equilibrium theory that combines behaviour assumptions of rational economic agents with the analysis of equilibrium conditions. The model assumes perfect competition and thus constant returns to scale in some sectors and monopolistic competition in a number of sectors (depending on prior assessment of the sectors), and profit and utility maximising behaviour of firms and households, respectively. The model uses version 7 of the GTAP database and is executed with GEMPACK software.

The main virtue of the CGE approach is its comprehensive micro-consistent representation of price-dependent market interactions. The simultaneous explanation of the origin and spending of agents’ income makes it possible to address both economy-wide efficiency as well as distributional impacts of policy intervention/interference.

³ Full documentation of the GTAP model and the database can be found in Hertel (1997) and Dimaranan and McDougall (2002)

Baseline, liberalisation scenarios, countries and timeframe

Scenarios prepared within a CGE model represent ‘what if’ or counter-factual examples that estimate what is likely to happen under the assumptions made in the model, the data estimates, and the policy and other changes specified. These scenarios employ a baseline scenario that outlines the ‘likely economic, social and environmental effects in the absence of a bilateral trade agreement between the EU and Canada,’⁴ as well as liberalisation scenarios as requested in the Terms of Reference.

Baseline scenario: A baseline scenario is utilised to quantify the economic, social and environmental effects in the absence of a bilateral trade agreement between the EU and Canada. In order to obtain separate price and quantity observations, the common convenient procedure is to choose units for goods and factors so that they have a price of unity in the benchmark equilibrium. This scenario encompasses a successful completion of the Doha Round.

Liberalisation scenarios:

The Final Report employs four liberalisation scenarios:⁵

- **Scenario A.** Limited liberalisation of agriculture and PAPs resulting in an overall liberalisation of 95% of trade in goods in terms of tariff lines and less ambitious liberalisation of services. The reduction in tariffs is achieved using a sensitive list approach whereby there is no tariff cuts for meat products (incl. beef and pork) in the EU and no tariff cuts for dairy products and ‘other food products’ in Canada; all other agriculture and industrial products are fully liberalised. For services, liberalisation is based on the service trade cost cuts modelled in the 2008 Joint Study, multiplied by a factor of 0.6 (Table 2).
- **Scenario B.** Limited liberalisation of agriculture and PAPs resulting in an overall liberalisation of 95% of trade in goods in terms of tariff lines and ambitious liberalisation of services. The reduction in tariffs is modelled in the same manner as in Scenario A, while liberalisation in the services is based on the service trade cost cuts modelled in the 2008 Joint Study (Table 2).
- **Scenario C.** 100% liberalisation of goods and less ambitious liberalisation of services, using the services trade cost cuts employed in the 2008 Joint Study multiplied by a factor of 0.6 (Table 2).
- **Scenario D.** 100% liberalisation of goods and ambitious liberalisation of services, using the services trade cost cuts employed in the 2008 Joint Study (Table 2).

⁴ Terms of Reference, pg 11.

⁵ Given the importance of investment in EU-Canada bilateral relations, a fifth CGE scenario was originally intended that modelled the effects of investment liberalisation within the CGE model. However, given data limitations it was ultimately decided that such an exercise would not be able to accurately reflect the outcome of the CETA and would thus not provide realistic, policy-based outcomes.

Table2: Cut in service trade costs by sector and scenario (% reduction)

Sectors	Scenario A & C	Scenario B & D
Electricity	3.49	5.82
Gas manufacture, distribution	3.49	5.82
Water	3.49	5.82
Construction	6.13	10.21
Trade	3.76	6.27
Other transport	5.45	9.09
Maritime transport	5.45	9.09
Air transport	5.45	9.09
Communication	2.53	4.21
Financial services	3.76	6.27
Insurance	3.76	6.27
Other business services	5.45	9.09
Recreation and other services	3.76	6.27
PubAdmin/Defence/Health/Education	2.29	3.81
Dwellings	3.76	6.27

Geographical aggregation: The liberalisation scenarios have been applied across a select group of countries: the EU; Canada; US; Mexico; Least Developed Countries (LDCs) for which GTAP data is available; European/Mediterranean countries with preferential agreements with the EU for which GTAP data is available and Russia; Africa, Caribbean and Pacific Countries excluding LDCs for which GTAP data is available; and China.

Timeframe: The results of the CGE model reflect long-term outcomes where resources have had sufficient time to reallocate capital in response to the CETA. Herein, all results should be understood as representing the outcome of the CETA by approximately 2020.

The main results generated by the CGE modelling are:

- Impacts on output, trade volumes and trade prices, by product group
- Macroeconomic impacts: Welfare, GDP and aggregate exports
- Labour market impacts: Employment and wage rates

For further information on the CGE model employed in the SIA, and the modelling results see Annex 1.

E3MG Model

The modelling approach further employs a multi-region framework of global trade and energy use. Combustion of fossil fuels is a driving force of global warming through the release of CO₂ and causes serious regional and transboundary pollution through emissions of SO_x and NO_x. An additional model, the E3MG model, has been used along with the CGE model to better detail the full scale of relevant CO₂ emissions.

The E3MG model is an econometric model for the world capable of addressing issues that link developments and policies in the areas of energy, the environment and the economy. The essential purpose of the model is to provide a framework for evaluating different policies in the long-term, while also giving an indication of short-term transition effects.

E3MG is a detailed model of over 40 sectors, compatible with ESA95 (Eurostat, 1995) accounting classifications, and with the disaggregation of energy and environment industries, in which the energy-environment-economy interactions are central; this gives a strong degree of consistency between the economy and environment results. The model is designed to be estimated and solved for 20 regions of the world, although single-region solutions are possible.

The E3MG model provides a notable amount of detail in its modelling of GHG emissions. The model decomposes greenhouse gas (GHG) effects into scale effects (as a result of increased output), composition effects (as a result of shifts in the relative weight of sectors) and possible technique effects (as a result of productivity increases that can be attributed to the CETA). As such, the GHG analysis throughout this report covers emissions across a range of sectors.

By combining the workings of the CGE model and the E3MG model, estimated environmental effects have been directly linked with changes in production and will account for pollutions costs. Resulting impacts are expressed in units of welfare in terms of million tons of CO2 emissions.

The E3MG model used scenarios C and D from the CGE model in running its scenarios as these two scenarios would intuitively have the greatest impacts in terms of energy demand and GHG emissions.

The main results from the E3MG model are:

- Energy consumption, by user group and by fuel
- CO2 emissions by sector, other atmospheric emissions
- Macroeconomic and labour market impacts

For further information on the CGE model to be employed in the SIA, and the results of the model for this draft Interim Report, see Annex 2.

Investment Modelling

Gravity modelling is used to estimate the responsiveness of sectoral level FDI flows to liberalisation of investment flows between Canada and the EU. The key explanatory variable employed is investment restrictiveness as measured by the OECD. The model shows how investment flows into certain sectors in Canada and the EU change with a reduction in restrictiveness. The applicability of the modelling is restricted given the limited availability of data on which it was based, although the results are generally referenced as relevant throughout the economic analyses in the individual impact assessments of the SIA.

2.3.2. Desk research

Desk research was critical to the research phase of this report. Sources used include credible literature, statistics, and case studies. Also, policy statements, laws, regulations and international agreements were reviewed. Where these types of evidence are used in developing the assessment of economic, social and environmental impacts, the original sources are cited in the report.

2.3.3. Stakeholder consultations

Brief overview of the SIA consultation process

A key part of the SIA process is consultations with stakeholders. Consultation with key stakeholders as experts is an important source of evidence and advice for the ex ante assessment of impacts. Consultation also contributes to the process of good governance, by strengthening the accountability and transparency of the assessment. Detailed and thorough stakeholder consultation is vital to a successful impact assessment, and has proven to be an integral part of the data-collecting for this report as well as provided information and feedback on the likely impacts and scenarios studied.

A range of consultation methods was used in preparing the Inception, Interim Technical and Final Reports. A project website (<http://www.eucanada-sia.org>) was created at the inception of the project and was used to create awareness of the SIA and to elicit feedback from stakeholders. Each report was put on the website and comments were received on the reports during a specified consultation period. Comments received were considered by the study team.⁶ Civil society meetings were held in Brussels (3) and Ottawa (1) to facilitate face-to-face dialogue between the study team and stakeholders, and to elicit feedback on the draft reports.⁷ In-depth consultations were undertaken via telephone, email and person-to-person interviews.

The extensive stakeholder network developed for the consultation process is described in Annex 5. The same annex summarises the feedback from civil society and business groups in particular, and provides a summary of where such information was incorporated into the report.

While a large number of stakeholders were contacted for the SIA, not all stakeholders actually provided input to the study team. In some cases, groups interested in the SIA chose to place their comments on their own websites or on mediums outside those related to the SIA consultation process rather than providing substantive comments directly to the study team. Nonetheless, the study team did closely consider the views of these organisations by reviewing their publicly available reports, and where appropriate, were used as part of the evidence used in the assessment.⁸ Also, while a wide range of stakeholders responded positively to the notification of the civil society meetings in Brussels as well as the Ottawa workshop, and confirmed their attendance, not all actually attended the meetings.⁹

A variety of stakeholders representing a number of interests were closely involved in the SIA process. Stakeholders involved in IPR matters were the most active in the consultation process. The study team received numerous comments from stakeholders in the EU and Canada both for and against certain provisions in an IPR Chapter in CETA. A range of stakeholders in different agricultural industries in both Europe and Canada provided valuable feedback to the study team through a variety of consultation methods. Useful comments were received from groups representing a number of other sectoral and cross-cutting issues.

Despite attempts to consult a wide array of environmental NGOs and academics in Canada and Europe on the environmental effects of CETA, the study team received only limited feedback from environmental stakeholders. A number of the most active stakeholders in the field were contacted to identify academics or ENGOs who would be working on the topic or who would be interested in

⁶ Details of the comments received from stakeholders are given in Annex 4.

⁷ Minutes of these meetings are included in Annex 4.

⁸ These sources are cited in the report.

⁹ The onset of adverse weather conditions on the day of the Ottawa workshop affected attendance.

providing comments. In Canada, these experts were probed to provide an explanation for the apparent lack of interest among environmental stakeholders for CETA, which contrasts with the mobilisation that occurred with NAFTA twenty years ago, and more recently with the Doha Round WTO negotiation and proposed Free Trade Agreement of the Americas (FTAA). In Europe, little or no response was received from the stakeholders contacted.¹⁰

Several academic and institute-based experts, additional to the stakeholder groups described above, also provided helpful comments on the SIA, in particular on the investment section. These comments are cited in the relevant sections.

Consultation tools and timing

The SIA involved phases of consultations, organised using the mechanisms listed below. In all phases the study team actively sought the comments from stakeholders. Additionally, an open consultation process was instituted, where any stakeholders could send feedback through to the study team.

Three major periods were used to collect feedback in each consultation phase. The first phase was opened from early August to mid October 2010, whereas feedback received during this phase was considered for inclusion in the Inception Report. The second phase was from October 2010 to 11 March 2011, whereas feedback received during this phase was considered for inclusion in the Interim Report. And feedback received from 11 March to 11 April 2011 was considered for inclusion in the Final Report.

Steering Committee meetings – Brussels

Steering committee meetings were held with members of the European Commission at each phase of the study. The comments from these meetings have been considered in revising study reports. The final steering committee meeting was held on 30 March 2011 to discuss the draft Final Report.

Civil Society Meetings - Brussels

Public meetings were held throughout the study. The meetings are organised by the European Commission and are located in Brussels and involve Brussels-based civil society and unions.

The first civil society meeting was held in Brussels on 7 September 2010 where the contents of the draft Inception Report were presented including its process, purpose, methodology, timing and consultation activities. And an update on negotiations was provided. The minutes from this meeting, including a list of attendees, can be found in the second table in Annex 5.

The final civil society meeting took place on 30 March 2011 after publication of the draft Final Report. Representatives from the EC provided an update on the CETA negotiations, while the study team reviewed the SIA methodology, and provided an overview of the draft Final Report's findings in terms of its macro-economic assessment, sectoral assessments, and cross-cutting issues assessments. The ETUC and EUROCOMMERCE gave brief presentations at the meeting. The study team and EC representatives answered questions from stakeholders regarding CETA and the SIA in particular. While 39 stakeholders publicly registered for the meeting, only fourteen attended in addition to the EC and study team representatives. The minutes from this meeting, including a list of attendees, can be found in Annex 5.

¹⁰ Some hypotheses for the lack of feedback from environmental stakeholders in Canada in particular are that domestic issues, including climate and transportation policies take most importance; that CETA represents a small portion of Canada's trade; and that Europe is generally perceived as an environmental leader. For these reasons, CETA appears to generate little interest or worries in the environmental community.

Stakeholder Workshop – Ottawa, Canada

A full one-day consultation workshop, organised by the study team, was held on November 26th in Ottawa, Canada. A total of 71 stakeholder groups were formally invited to the EU-Canada SIA Ottawa Workshop. A balanced selection of stakeholders was proposed by the study team based upon consultations with stakeholders in the earlier phases of the SIA and knowledge of the major issues in the SIA, and discussed with the EC Delegation in Canada. Invitees included 38 industry and trade associations, from a variety of industries, from agricultural sub-sectors to IPR; three major labour organisations, from public workers' unions to unions for workers in the private sector; eleven environmental organisations, from ENGOs to university-based research institutions; four groups focused on minority rights; and ten other interest groups, with a variety of different focuses. Of these 71 groups, 32 representatives confirmed attendance to the workshop. Perhaps due to light snow the day of the meeting, only thirteen of these representatives, in addition to the EC and study team representatives, attended the workshop.

During the workshop, the project experts presented the preliminary findings of the Interim Report. The workshop began with an introduction from the lead EC representative present on the CETA negotiations. Dr. Colin Kirkpatrick and Dr. Selim Raihan then provided an overview of the SIA methodology, and discussed it with stakeholders. Dr. Raihan then provided an overview of the macro-economic assessment in the SIA, and responded to stakeholder questions on the assessment. Then, Dr. Érick Duchesne, Adam Bleser and Karel Mayrand presented on the agricultural, PAPS and fisheries sector assessments and answered related questions from stakeholders. Adam Bleser and Karel Mayrand then presented on the industrial products and services sectors, and answered related questions from stakeholders. Lastly, Dan Prud'homme presented on public procurement, investment, competition policy and the other cross-cutting issues, and answered related questions from stakeholders.

Overall, discussion and debate was productive. Many of those who attended commented at-length on the work delivered within the Preliminary Findings document sent to those interested in the workshop. The workshop closed with remarks on ensuring civil society input into the SIA.

The workshop agenda, list of invitees, list of confirmed participants, and meeting minutes can be found in Annex 4 of this report. Comments from that workshop were incorporated in this report in relevant sections.

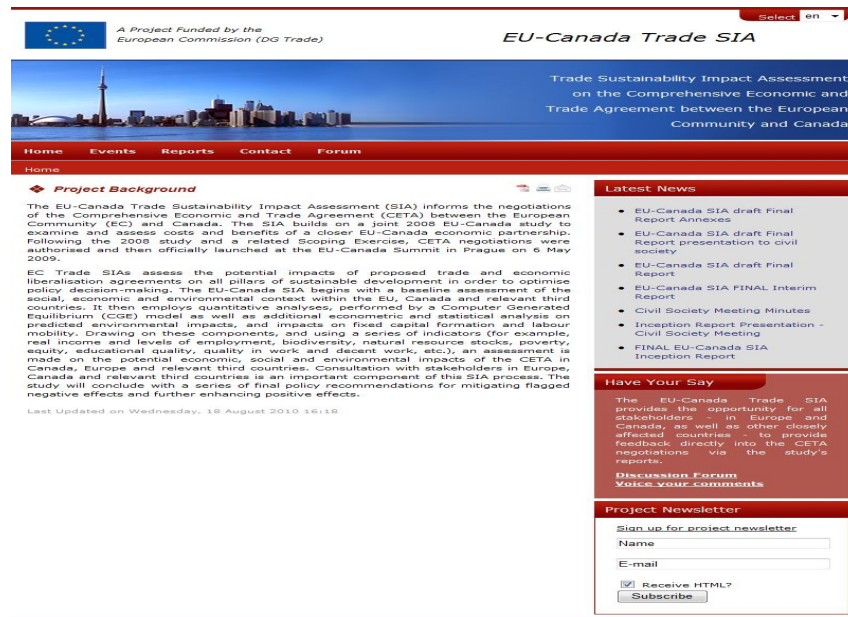
Digital Consultation

Website

DS launched a project website to support the project's visibility as well as to assist in facilitating the collection of stakeholder feedback (see www.eucanada-sia.org). The website is updated to coincide with the completion of each phase of the study and relevant deliverables. It provides all relevant information concerning the SIA's progress, reports, meeting minutes and relevant contact information.

To date, the website has received 1235 hits with a bounce rate of 46.8%. The average time spent viewing the site is 20 minutes and 50 seconds.

Snapshot of EU-Canada SIA website:



Discussion Forum

The website’s Discussion Forum also serves as a communications platform through which European and Canadian, as well as American and other stakeholders’ from other countries that convincingly make the case that they will be impacted by CETA are able to provide feedback into the EU-Canada Trade SIA.

Electronic Trade SIA Newsletter

Another aspect of digital consultation is the project’s Trade SIA newsletter/email update which is disseminated to the project’s consultation network. This newsletter is distributed electronically at key points during the study, coinciding with the release of each report.

Interviews and Email Feedback

In the course of the study, more than 350 civil society organisations, trade associations, academic institutions and government agencies were contacted to participate in telephone consultations. Initially, the response rate was high with close to 70 replies in the first week. However, the response rate subsequently declined¹¹ although a number of key stakeholder interviews were conducted via telephone and numerous respondents communicated their positions via email.

For a complete list of stakeholders contacted please see Annex 5.

¹¹ Interest may have waned when it became known that the study team did not have access to the content of CETA negotiations beyond what was publicly available

2.4. Analysis

The results from the CGE model, E3MG model, desk research and consultations were analysed according to the principles of “causal chain analysis,” with more specific forms of analysis employed under this umbrella. Different types of analyses were employed for different issues. As relevant, ‘comparative analysis’ was employed. Even more specifically, policy analysis incorporating socio-economic, economic/statistical, and legal analysis was used. All analysis was organised in terms of the relevant indicators.

The main purpose of the evidence-based assessment in the SIA is to identify where significant impacts are expected to occur, i.e. the most important ways in which the trade agreement being analysed will change the status quo/baseline per relevant indicators. The significance of an impact has been evaluated by expert opinion relative to an appropriate context-specific benchmark, based on the research and analysis described in the methodology herein. Impacts identified as less than significant are still discussed as relevant, particularly if stakeholders, for example, allege that such impacts will be significant. Also, these impacts may receive the bulk of attention in an analysis under a certain indicator if there are not more significant impacts to be discussed under such an indicator. As a rule of thumb, within each indicator, impacts with comparatively less significance receive less discussion than those with more significance. The below table provides an overview of how different degrees of significance for impacts are described in this SIA. Once a level of significance is determined, the positive and/or negative dimensions of such impacts are described to the extent feasible.

Core level of impact	According keywords in SIA
Significant	significant, or substantial
Moderately significant < significant	moderate/moderately significant, notable/noteworthy, or “not insignificant”
Less than moderately significant > insignificant	marginal, minor, or limited
Insignificant	non-existent → negligible → insignificant/not significant*

* “→” indicates increasing degree of significance *among* keywords

Core form of analysis

As envisaged in the SIA Handbook, causal chain analysis was the fundamental form of *all* analysis employed in this SIA. Causal chain analysis entails reviewing impacts from a baseline and subsequently along a sequence of potential resulting impacts. This process was followed for each individual indicator employed in the assessments, as indicators are only useful in predicting future trends in so much as they first consider past and present trends in the absence of the trade agreement (the baseline). Subsequently, making a causal link between existing (past and present) trends and potential future trends requires a thorough risk assessment: identifying possible risks, and analysing the linkages between the causes/sources of risks and the possible damages.

More specific forms of analysis

‘Comparative analysis’ was a key tool used in a significant portion of the economic, social and environmental sustainability impact analyses for this SIA. Comparative analysis as used in this SIA

constitutes reviewing trends on similar indicators with those employed in this SIA after signature of trade/economic agreements or policies comparable to CETA (in terms of breadth and scope) with comparable countries (considering the level of development of the EU and Canada). Herein, efforts were made to ensure that (a) the indicators themselves, (b) the provisions of the trade/economic agreements or policies, and (d) circumstances of the countries (in terms of size and structure of economy, and nuances in the economic, social and environmental spheres) that were used are all relevant to an analysis of CETA. Assessments on different components of NAFTA, for example, were often used as a foundation for comparative analyses. The information used to create these comparisons was largely taken from desk research and consultations.

Specific approaches to analysis per each of the 3 pillars of sustainability are as follows:

Economic assessments in the sectoral analyses focused largely on the results of the CGE model and incorporated information from desk research and consultations; while economic assessments in the cross-cutting issues section focused more on statistical and economic analysis built on information outside the CGE model, including desk research and consultations.

The social assessments in the sectoral analyses were based on the potential outcomes arising from estimated economic impacts, particularly in terms of primary concerns over employment creation and job displacement, as well as the impact on labour standards, health, security and culture.

The social assessments in the cross-cutting issues sections were made through a variety of different forms of analysis depending on the issues, including, among others, socio-economic analysis following the principles of comparative analysis.

The environmental assessments in the sectoral and cross-cutting issues sections were made through a variety of different forms of analysis depending on the issues, including, among others, statistical analysis of the results of the E3MG model, and comparative analysis.

Legal analysis was applied in assessing all three pillars of sustainability specifically in the government procurement, investment, competition policy, and IPR sections of the cross-cutting issues assessment. Such analysis was combined with the other aforementioned forms of analysis to provide a comprehensive assessment.

2.5. Policy Recommendations

As a final step, a series of policy recommendations, also called flanking measures, were created based on the results of the sustainability analyses. These measures cover both enhancement and preventative/mitigation measures, i.e. measures needed to reinforce key positive sustainability impacts and to prevent or at least mitigate major negative sustainability impacts.

A number of steps were undertaken to facilitate the process of developing the policy recommendations. First, individual experts created a brief bullet-pointed summary of all the major impacts from their sections of the sustainability impact assessment. This highlighted issues that deserved to be addressed with policy recommendations. It was then considered that recommendations should generally fit within two main categories (i.e. trade measures and “cooperation” measures). A detailed list of recommendations was then brainstormed, based upon best practice for formulating such recommendations as shared among study team members.

Attention was paid to making sure all recommendations are practical. It was considered that the recommendations to be made in this SIA will differ in many ways from those made on past SIAs, one reason being that past SIAs have focused on EU trade with developing countries and emerging economies.

SUSTAINABILITY IMPACT ASSESSMENTS

3. MACRO-ECONOMIC ASSESSMENT¹²

Summary

The CGE model estimates that the CETA will lead to overall gains in welfare, real GDP, total exports and real wages in both Canada and the EU over the long-term. While these gains are expected under the four scenarios modelled in the economic assessment, the gains are expected to be higher under an agreement that offers the highest degree of tariff and services liberalisation. Third countries are estimated to experience minor degrees of welfare loss as a result of the Agreement, though the overall impact on these countries is insignificant.

INDICATOR: Welfare

In the GTAP model, welfare is measured by Equivalent Variations (EVs).¹³ Table 3 suggests that trade liberalisation under the CETA will lead to welfare gains in the EU and Canada over the long-term. As can be seen, the greatest gains will be achieved under an agreement that provides the greatest amount of liberalisation (Scenario D).

Table 3: Equivalent Variation (Million US\$ at 2004 prices)

	Scenario A	Scenario B	Scenario C	Scenario D
EU 27	1,964.22	2,676.47	2,687.12	3,400.98
Canada	1,796.87	2,437.59	2,291.10	2,931.87

¹² **Introductory notes:** Included in this section are specific estimates from the CGE model outlining expected changes in both Canada and the EU in terms of welfare, GDP, exports and wages. These results are influenced by the model's assumptions regarding services and tariff liberalisation. Specifically, the four scenarios estimated within the modelling simulations are:

- Scenario A: 95% reduction in tariffs and less ambitious cuts in trade costs of services (taking the cuts used in the 2008 Joint Study and multiplying them by a factor of 0.6)
- Scenario B: 95% reduction in tariffs and ambitious cuts in trade costs of services (taking the cuts used in the 2008 Joint Study)
- Scenario C: 100% reduction in tariffs and cuts in trade costs of services as employed in the 2008 Joint Study multiplied by a factor of 0.6 (i.e. less ambitious liberalisation of services)
- Scenario D: 100% reduction in tariffs and cuts in trade costs of services as employed in the 2008 Joint Study (i.e. less ambitious liberalisation of services).

Results from the CGE model should be interpreted as reflecting the impact of the CETA itself on these indicators and does not necessarily imply overall changes, which could be further affected by exogenous factors. All estimated impacts are to be understood as occurring over the long-term (e.g. in 10+ years) after final implementation of an Agreement. As data limitations made it impossible to incorporate investment effects into the CGE model, the results take into account the impact of trade liberalisation only and do account for the impact from investment liberalisation.

More information on the CGE model, its assumptions and the scenarios employed can be found in Annex 1.

¹³ Equivalent variation (EV) is a measure of how much more money a consumer would pay before a price increase to avert the price increase.

The decomposition of the welfare effects (as presented in Figures 1 and 2) further suggests that under less ambitious liberalisation of services, the rise in welfare for EU and Canada is more greatly attributed to the cut in tariffs on goods. However, under the more ambitious cuts in services, the gains from services trade liberalisation are larger than the gains from tariff cuts. At the same time, however, this does not take into account potential welfare gains that may arise through investment liberalisation, which could lead to greater trade through foreign affiliates and increases in output through enhanced productivity.

Figure 1: Decomposition of welfare effects for EU (Equivalent Variation in Million US\$ at 2004 prices)

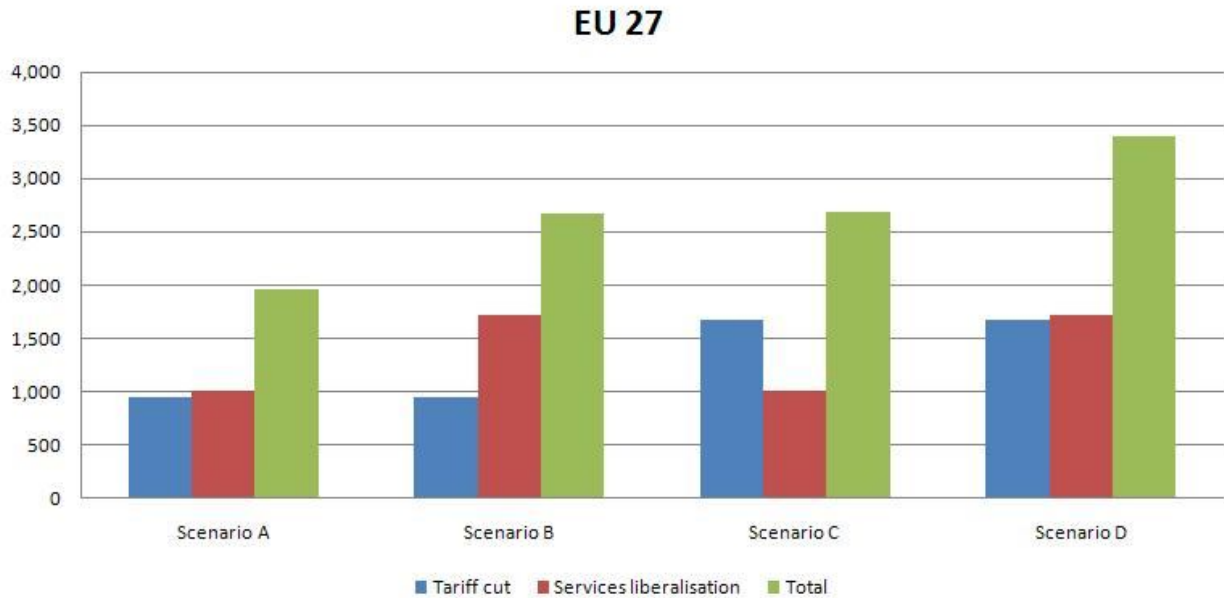


Figure 2: Decomposition of welfare effects for Canada (Equivalent Variation in Million US\$ at 2004 prices)

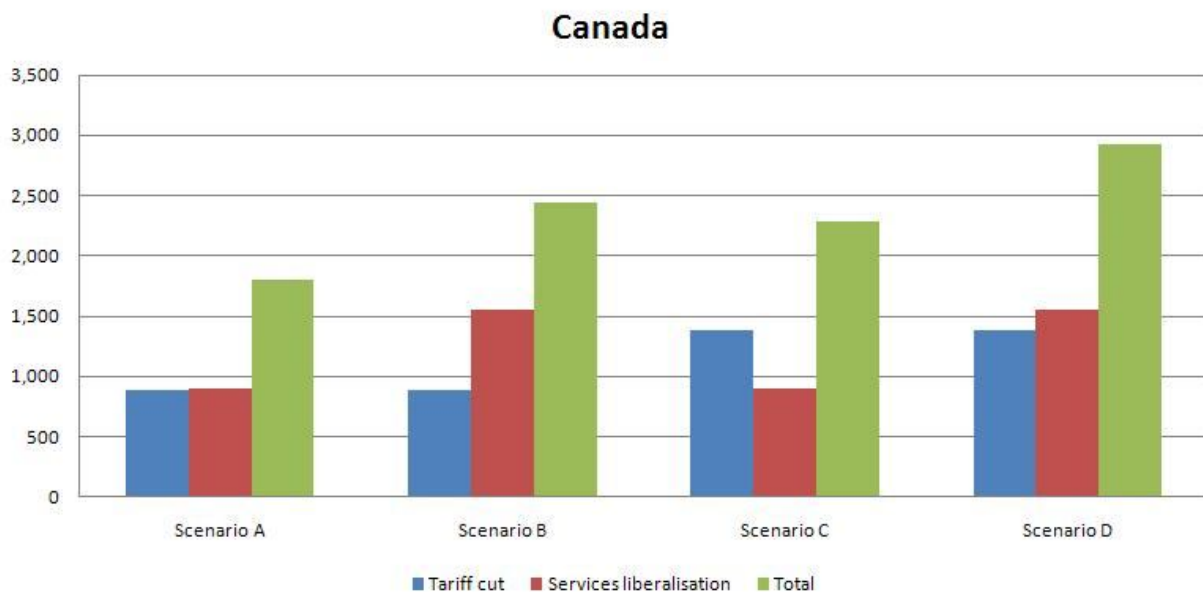


Table 4 suggests that under the four scenarios modelled, there will be welfare losses for all third countries except Mexico and China (under certain scenarios). The magnitude of welfare losses increases under the scenarios with more intensified services liberalisation. In terms of value, the United States suffers from the largest welfare losses. Table 5 shows estimates of the percentage share of EV in terms of GDP (for scenarios C and D). Despite the fact that the value of welfare losses for LDCs, the countries with which the EU shares preferential trade agreements (EUPTA) and the countries of African, Pacific and Caribbean (excluding LDCs) would be smaller than estimated for the U.S. and rest of world (RoW), these groups of countries will be more greatly impacted as their volume of welfare losses in terms of percent share in GDP are as high as for USA or higher than that for RoW. The impact on China is negligible. However, as the magnitude of these losses is in the range of 0.0 and 0.01 percent of GDP, the CETA would not have a significant impact on third countries.

Table 4: Equivalent Variation (Million US\$ at 2004 prices)

	Scenario A	Scenario B	Scenario C	Scenario D
USA	-798.65	-978.18	-848.28	-1,028.28
Mexico	-26.12	-17.43	3.03	11.8
China	-60.69	-62.96	1.14	-1.1
EUPTA	-68.33	-96.83	-87.61	-116.12
LDCs	-14.57	-16.24	-11.39	-13.06
ACPexLDC	-36.96	-50.31	-21.78	-35.12
ROW	-266.58	-350.61	-109.57	-193.37

Table 5: Equivalent Variation as % of GDP

	Scenario C	Scenario D
USA	-0.01	-0.01
Mexico	0.00	0.00
China	0.00	0.00
EUPTA	-0.01	-0.01
LDCs	-0.01	-0.01
ACPexLDC	0.00	-0.01
ROW	0.00	0.00

INDICATOR: GDP

Under the four scenarios, both the EU and Canada are expected to experience a rise in real GDP. The higher gain is found to be achieved under the most ambitious scenario (Scenario D), again suggesting greater liberalisation will provide the greatest benefit to both sides.

Table 6: Percentage change in Real GDP

	Scenario A	Scenario B	Scenario C	Scenario D
EU 27	0.02	0.02	0.02	0.03
Canada	0.18	0.25	0.29	0.36

Under these four scenarios, third countries such as the U.S., Mexico, China and the rest of the world would not experience a fall in real GDP. However, under the most ambitious scenario (Scenario D) the countries with which the EU shares preferential trade agreements (EUPTA), LDCs and the countries of the APC would experience a minor decline in real GDP. Again, the magnitude of the impacts for third countries is in the range of 0.0 and 0.01 percent and thus insignificant.

Table 7: Percentage change in Real GDP

	Scenario A	Scenario B	Scenario C	Scenario D
USA	0	0	0	0
Mexico	0	0	0	0
China	0	0	0	0
EUPTA	-0.01	-0.01	0	-0.01
LDCs	-0.01	-0.01	-0.01	-0.01
ACPexLDC	-0.01	-0.01	0	-0.01
ROW	0	0	0	0

INDICATOR: Total exports

Both the EU and Canada are expected to experience a rise in total exports. For the EU, the rise in exports ranges between 0.05% and 0.07%, whereas for Canada it ranges between 0.54% and 1.56%. Total exports would be expected to increase with greater levels of services liberalisation and tariff cuts. In terms of tariffs, the rise in exports observed when liberalising the sensitive products in the agriculture and PAPs sector implies that significantly reducing tariffs on these products would likely have a pronounced impact on trade in both regions.

While it would be expected that bilateral exports will increase in most sectors, the reallocation of resources towards expanding sectors may nevertheless imply reduced overall exports (i.e. decreases of exports to third countries) in some sectors over the long-term. It should be noted that as services liberalisation appears to stimulate an increase in exports, these results are probably underestimated as they do not account for exports that occur via sales of foreign affiliates (mode 3 trade), which serve an important role in bilateral trade in services between Canada and the EU.

Table 8: Percentage change in Total Exports

	Scenario A	Scenario B	Scenario C	Scenario D
EU 27	0.05	0.06	0.06	0.07
Canada	0.54	0.63	1.47	1.56

INDICATOR: Balance of trade

Both Canada and the EU are expected to experience improvements in their overall balance of trade over the long-term. As shown in Figure 3, the EU will generate its greatest improvements through services liberalisation, with removal of tariffs on sensitive sectors estimated to worsen its balance of trade in goods. Given that this does not take into account exports that occur via mode 3 (sales by foreign affiliates), the gains for its services sector may be underrepresented. Conversely, Canada would be

expected to generate its greatest improvements through the full removal of tariffs, though it should see positive improvements to its balance of trade in services as well (Figure 4). Specifically, these results highlight the potential impact from removing tariffs on beef and pork in the EU, which would enhance gains to the balance of trade in Canada while worsening the balance of trade in the EU. (See relevant sectoral analysis for more discussion).

Figure 3: Change in the EU’s balance of trade (Million US\$ at 2004 prices)

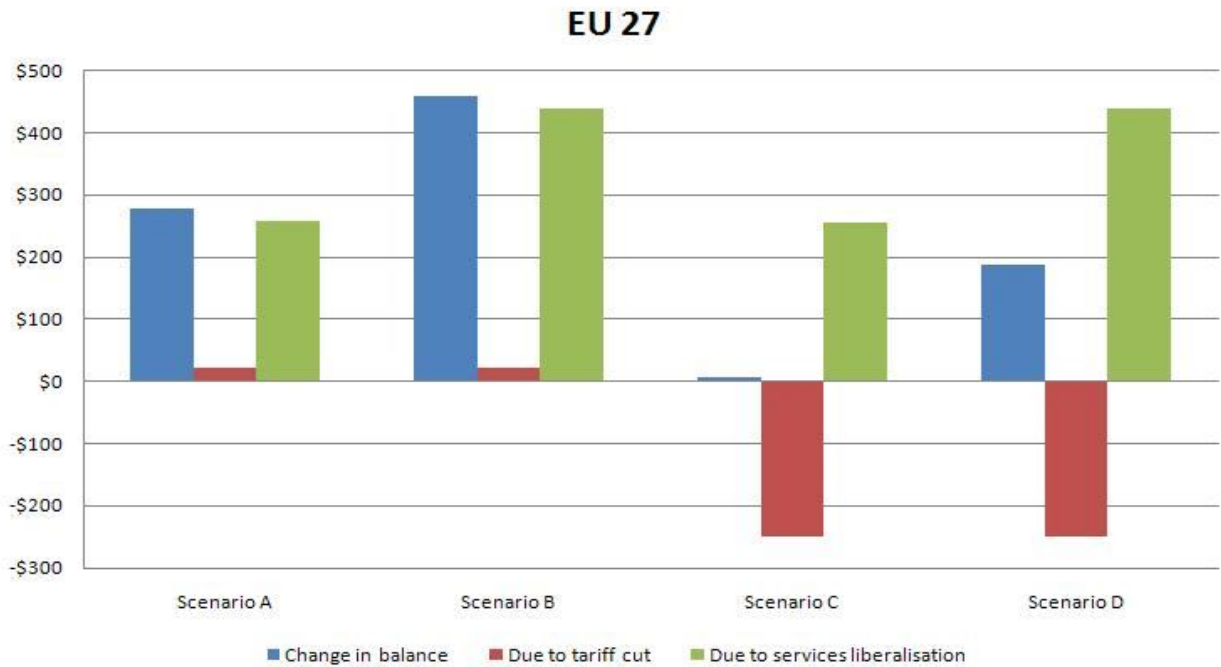
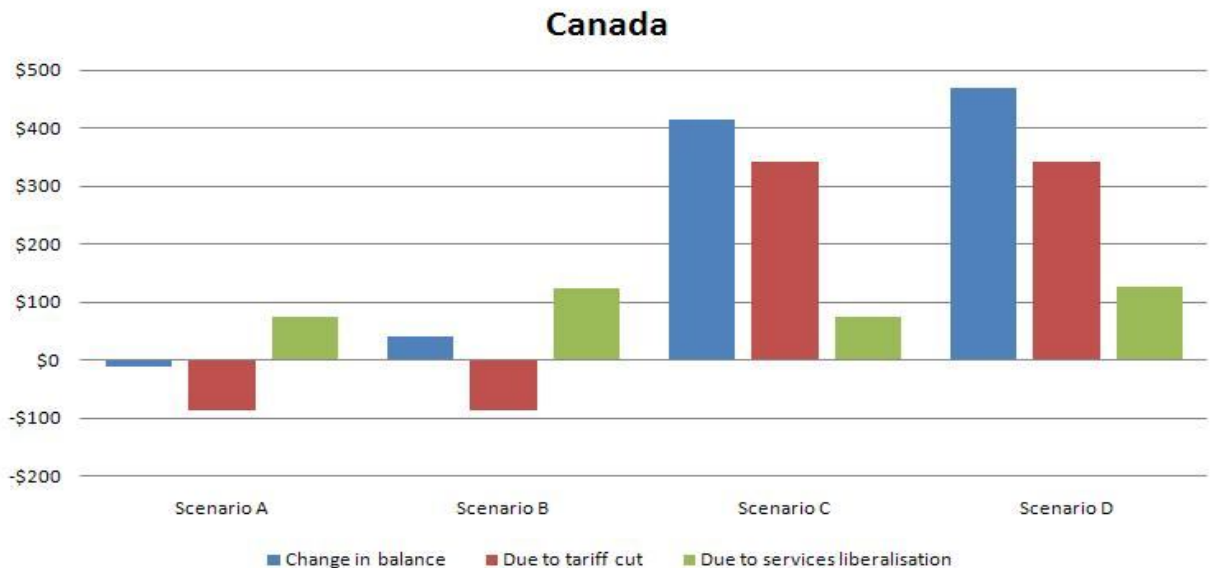


Figure 4: Change in Canada’s balance of trade (Million US\$ at 2004 prices)



INDICATOR: Wages

In EU, the real wage rates of unskilled and skilled labour are expected to exhibit small increases in magnitudes over the long-term under all four scenarios. For the EU, the largest rise in the wage rates is observed under the most ambitious scenario (Scenario D). However, under this scenario, the wage rate of skilled labour rises more than that of unskilled labour. Conversely, Canadian wages are estimated to exhibit the highest increases under an ambitious liberalisation of services but where dairy and 'other food products' are not liberalised (Scenario B).¹⁴

For Canada, the rises in wages for both skilled and unskilled labour are much higher than those in EU across all scenarios. However, the wage rate of unskilled labour rises more than that of skilled labour.

Table 9: impact on wages for skilled (s) and unskilled labour (u)

	Scenario A		Scenario B		Scenario C		Scenario D	
	U	S	U	S	U	S	U	S
EU 27	0.03	0.03	0.03	0.04	0.06	0.05	0.06	0.07
Canada	0.45	0.42	0.57	0.55	0.4	0.37	0.52	0.49

¹⁴ An explanation for this could be that such a scenario would imply continued protections for Canada's dairy farmers, which would help to support wages for those in the sector. Alternatively, the most liberalised scenario (Scenario D), could lead to lower costs of capital which could be creating greater substitution of labour for capital, placing downward pressure on wages.

4. AGRICULTURE, PROCESSED AGRICULTURAL PRODUCTS (PAPs) & FISHERIES¹⁵

Summary

For nearly all sectors in agriculture, PAPs and fisheries, the impact of the CETA will largely depend on the degree of liberalisation reached under the Agreement. CGE estimates suggest that for those sectors in which Canada and the EU are restricted in their market access, the greatest degree of liberalisation will produce the greatest gains.

*The **economic impact** assessment suggests that the removal of tariffs would result in moderate to significant benefits for Canada's beef, pork, other PAPs and fisheries sectors and for the EU's dairy and other PAPs sector. Conversely, maintaining sensitivities on these products is estimated to eliminate any potential gains in these products for Canada and the EU, but would serve to also guard against declines in output and employment. Eliminating non-tariff barriers could further increase these gains for Canada and the EU while also potentially leading to pronounced gains for the EU's alcoholic beverages sector.*

*In terms of **grains and oilseeds**, the impact of the CETA is likely to be contingent on the level of liberalisation achieved. Full removal of tariffs is estimated to have a positive, though marginal, impact on*

¹⁵ **Introductory notes:** This subsector within the Sectoral Analysis encompasses 2 broad categories and a number of sub-categories that were identified in the scoping stage for more in depth assessment. These broadly include, 'Agricultural and Processed Agricultural Products', with sub-categories of 'Grains and oilseeds', 'Beef and Pork', 'Dairy', 'Other Processed Agricultural Products' and 'Beverages'. Other processed agricultural products should be understood as pertaining to all PAPs that do not classify under meat, dairy or seafood, while beverages focuses primarily on wine and spirits. The second broad category is fisheries which does not have any subsectors.

All estimated impacts are to be understood as occurring over the long-term (e.g. in 10+ years) after final implementation of an agreement. Results from the CGE model can be found in Annex 6. It is important to note that the findings discussed herein are formed largely on the basis of a CGE model and the assumptions it has employed regarding the level of liberalisation to be reached under a CETA. For agriculture one important assumption is that of a successful completion of Doha.

Although the future of Doha remains uncertain, both Canada and the EU remain committed to its successful completion. As such, and under the request of the Contracting Authority, the CGE model has assumed a successful conclusion of Doha. While the term 'successful' could have a number of interpretations, it was formulated in the modelling for agricultural products as:

1. A 36% cut in agricultural tariffs in developed countries and a cut of 24% in developing countries.
2. A one-third reduction in domestic agricultural subsidies in both developed and developing countries
3. A complete elimination of agricultural export subsidies

These assumptions have particular importance in understanding and interpreting the modelling results outlined in the agricultural, PAPs and fisheries sectors, particularly as domestic support measures and export subsidies constitute two of the most oft-cited areas of concern among stakeholders in Canada and the EU. As domestic subsidies for agriculture in the EU can have trade distorting effects on Canadian sales in third markets (and vice versa), the assumption of a successful completion of Doha – and the reductions on domestic support it formulates – is likely influencing the model's projections for changes to trade and output as result of the CETA. While it is difficult to quantify the impact these assumptions are having without further modelling, it is important to take these assumptions into account when reading the modelling results.

While the effects of investment liberalisation have been considered in the analysis of the industrial products and services sectors, the modelling results for agriculture, PAPs and fisheries is based solely on the impact from trade liberalisation. This Final Report employs four scenarios: two maintaining sensitivities on certain products in Canada and the EU and two modelling 100% reduction in tariffs in all agricultural sectors (see box in main text for further clarification)

Canadian growers and a limited negative impact on the EU. Conversely, scenarios that limit tariff liberalisation on sensitive sectors project that CETA could lead to declines in output and exports in Canada over the long-term. The impact of tariff liberalisation is significantly reduced on account of the ability for Canadian exports of durum and high quality non-durum wheat to enter the EU duty-free. However, as these duties have only been suspended as a response to increased global prices for wheat, the positive impact for Canada could be more pronounced if the CETA makes these zero tariffs permanent. The impact on the sector is also likely to be influenced by the CETA's impact on the Canadian Wheat Board, which is viewed as a non-competitive tool by the EU.

If the CETA improves Canada's access to duty-free exports of hormone-free **beef**, the Agreement will likely produce a positive impact for Canada's beef industry. Gains would likely be limited to moderate, with EU rules of origin and ban on hormone-treated beef likely to limit potential gains and/or require the passing of an adequate amount of time for Canadian producers to adjust to increased access. The Canadian **pork** industry could see even greater gains as a result of the CETA, with the model suggesting that the full removal of tariffs would lead to pronounced increases in Canadian output and exports over the long-term. Increased access would also likely lead to greater investment in processing plants in Canada that meet EU standards, helping to facilitate exports over the long-term. As with beef, the impact will likely be influenced by the rules of origin adopted, with an agreement that promotes Canadian rules likely to lead to greater gains for Canada by allowing greater transshipment of products through Canada. The CETA also has the potential to increase cooperation on SPS/TBT issues relevant to trade in meat, allowing the Agreement to facilitate the trade of beef and pork between the two sides. Further, with collaboration on creating a separate tariff code in the EU for bison meat, the CETA could produce minor gains for Canada's bison producers.

While gains would be expected for Canada, the EU would be expected to be negatively impacted under a CETA that provided substantial improvements in market access to Canadian producers. The magnitude of this impact would be expected to increase with greater levels of liberalisation, with the pork industry in particular standing to be negatively affected. Conversely, under scenarios that maintain existing tariffs on Canadian imports of beef and pork, the modelling projects that the EU industry would not be negatively impacted, while Canadian output and exports would decrease over the long-term.

Canada maintains clear defensive interests with respect to the **dairy** sector, with the current system of supply management serving to restrict EU market access. To the degree that the CETA leads to the elimination of supply management, it is expected that EU output and exports would substantially increase while Canada would experience significant declines in both indicators. While the impact on Canadian dairy producers would invariably be negative, it is envisaged that Canadian consumers would benefit through reduced prices. Under a less ambitious outcome, gains to the EU could still be realised through improved minimum access requirements and/or greater recognition of GIs for a number of EU produced cheeses. Under scenarios where dairy in Canada is not liberalised, the modelling projects the EU would see declines in output and exports over the long-term, while Canada would see increases in these indicators.

In production of **processed agricultural products** (not including meat, dairy or fish), both Canada and the EU could experience economic gains from the CETA, though again the size of these gains is positively related to the achieved level of liberalisation. In scenarios where existing tariffs in Canada are maintained, the modelling projects decreases in EU output and exports over the long-term. Additional factors that will influence the CETA's outcome on the sector are the rules of origin on sugar that are ultimately agreed to, with more relaxed rules like to produce greater gains for Canada. Both sides would gain from harmonisation in labelling and packaging requirements.

The economic impact of the CETA on the **beverages** sector is largely dependent on the Agreement's ability to resolve discriminatory practices present in the provincial liquor control board. Without better enforcement/compliance of provisions to end these practices at the provincial level, it is unlikely that the CETA will have a pronounced impact on the sector. Where the Agreement is able to resolve this issue, the EU would likely realise increased exports to Canada, allowing European producers to capture a greater share of the Canadian market for alcoholic beverages.

With 80% of its **fish and seafood** production exported into foreign markets, Canada could realise gains from tariff reductions in the EU. Limited to moderate gains are expected for Canada under full removal of tariffs, with the greatest impact likely to occur in exports of frozen fish and seafood. Additionally, Canada could realise gains if the CETA facilitates the approval of genetically modified salmon. In the EU, processors could potentially benefit from cheaper imports from Canada, while consumers would stand to benefit from reduced costs. The EU would also likely benefit from liberalisation of investment in the sector, particularly in regards to lowering the domestic ownership requirement for the granting of commercial fishing licenses. Conversely, the removal of tariffs on Canadian imports of fisheries products into the EU would erode preferences enjoyed by the EU OCTs of Saint-Pierre-et-Miquelon and Greenland. Given these OCTs' reliance on the fisheries sector and limited industrial diversification, losses in competitiveness could have a pronounced negative impact on their economies.

In terms of the **social assessment**, the propensity of the Agreement to engender job creation and increased wages in the agriculture, PAs and fisheries sector is largely contingent on the level of liberalisation. With greater removal of tariffs, it is expected that Canada will experience increased employment and likely increased wages for its agricultural, fisheries and food processing sector. At the same time, maintaining sensitivities is likely to eliminate these gains and may result in greater shifts of labour into other sectors over the long-term. While high degrees of liberalisation would produce the greatest overall economic gains, it could negatively impact dairy in Canada and beef/pork in the EU. Workers in these sectors would, subsequently, be expected to be negatively impacted with a number of workers likely forced to shift into alternative sectors over the long-term. Maintaining sensitivities on these sectors would likely limit any negative social impact on these workers.

It is unclear how expansion in agricultural employment would impact quality and decency of work. In Canada, workers in agriculture are generally subject to provincial regulation and are often regulated differently from workers in other sectors. Given that many provinces exempt a number of workers involved in agriculture and certain types of processing from minimum employment standards, greater shifts into the sector could lower the overall level of standards that the workforce is exposed to. This would also create greater levels of temporary employment, given the nature of the work, which could disproportionately be filled by foreign labour under Canada's Seasonal Agricultural Worker Program. Further, as agriculture and food processing tend to have some of the highest rates of work related injuries and fatalities, expansion of employment in Canada and the EU's agriculture and food processing sectors could expose a greater number of workers to working conditions that are more unsafe than average. This could, in turn, produce negative consequences for the level of work-related stress of employees in both Canada and the EU.

Under a full removal of tariffs, the CETA will likely have an **environmental impact** in the agriculture and PAs sector by increasing output of Canadian products. This higher demand will require an intensification of agriculture to be achieved by increasing chemical inputs, changing the distribution of crop production, and potentially encroaching onto marginal or other productive lands. These changes will affect land usage and quality, water usage and quality, air pollution, biodiversity and waste creation. Under less ambitious liberalisation scenarios, the expected overall environmental impact from CETA would be limited. Liberalisation of beef and pork, in particular, have potential to lead to greater herd size in Canada,

potentially leading to increased release of methane as a by-product. Moreover, if increases in crops like wheat are produced using more sustainable practices, such as no or reduced till, the negative environmental impact can be mitigated because of reduced emissions and chemical inputs. This trend towards more beneficial agricultural practices can potentially be further supported under CETA through Canadian-European cooperation and European preferences for sustainable products.

For fisheries, the primary environmental risk is that the CETA could lead to a reduction in fish stocks in certain parts of the Atlantic and increased reliance on aquaculture. Fish farms are associated with a number of environmental impacts, from reductions in water quality to negative interactions with surrounding wild species. Increased Canada-EU collaboration could also provide greater impetus for the development of more sustainable fishery practices, such as the use of separate containment tanks in aquaculture, maintaining sustainable Total Allowable Catch levels and sustainable fishing practices.

Note on liberalisation scenarios

A special feature of the modelling scenarios is the use of a 'sensitive' sectors approach to liberalisation. Here, products flagged as being particularly sensitive in terms of trade were not liberalised in Scenarios A and B. Sensitive sectors were based on the observance of tariff peaks present in the EU and Canada and were applied with the goal of modelling a 95% overall reduction in existing tariffs applied on EU-Canada trade.

With all scenarios assuming 100% liberalisation in manufactured products, achieving a 95% overall reduction in tariffs in Canada and the EU implied that only two product groups (according to the GTAP aggregation) could be kept as sensitive. The products which were kept as sensitive in scenarios A and B are as follows:

- Canada: 'Dairy products' and 'other foods nec'
- EU: 'Meat: cattle, sheep, goats, horse' and 'meat products nec' (e.g. pig meat)

All other products are fully liberalised in Scenarios A and B, while all products, including those listed above, are fully liberalised in Scenarios C and D.

4.1 EU & CANADA

4.1.1. Agriculture & PAPs

ECONOMIC ASSESSMENT

Grains and Oilseeds

INDICATOR: Output and trade

BASELINE

Canada is a major global producer of grains (particularly wheat) and oilseeds (canola and linseed), with 27% of Canadian farms devoted to their production, accounting for over one-fifth of Canadian farm market receipts.¹⁶ The industry plays a role in every province in Canada, though its highest concentration is in Saskatchewan and Manitoba, where 57% and 35% of farms, respectively, grow grains and/or oilseeds. **Wheat** serves as the largest crop with over 26 million tonnes produced in 2009 and with exports that make Canada the third largest exporter of wheat behind the United States and Australia.¹⁷ Other major grains produced in Canada are barley (with approximately 11.8 million tonnes produced) and oats (4.3 million tonnes).

In the EU, cereals are the most widely produced crop with wheat accounting for 46 percent of all cereal production in 2007. With over 138 million tonnes produced in 2009, the EU is the world's largest producer of wheat. Germany and France together account for nearly half of all production of non-durum wheat within the EU, while Italy, France, Spain and Greece account for nearly all production of durum wheat.¹⁸ In 2009, the EU-27 exported almost 18 million tonnes of wheat with France alone contributing 6.8 million tonnes to export markets.¹⁹

Table 10: Production of grains and oilseeds in Canada and the EU, 2009 (MT)

Product	Canada	EU
Non-durum wheat	21.4	130.9
Durum wheat	5.4	8.6
Barley	9.5	62.4
Total grains	49.3	294.5
Canola/rape	12.4	21.5
Total oilseeds	16.9	29.1

¹⁶ CAFTA (2008)

¹⁷ Agriculture and Agri-Food Canada

¹⁸ Eurostat

¹⁹ Ibid.

Though less prominent, **barley** is also a widely produced grain in Canada and the EU, accounting for approximately a fifth of the total volume of grains produced in each in 2009 (Table 10). Due to its importance in beer and whiskey production, barley has particular importance in the beverage sectors within each economy. Hereto, approximately 70% of all barley produced in Canada's main barley producing region – the three Prairie Provinces of Manitoba, Saskatchewan and Alberta – is malting barley (two-row and six-row).²⁰ While malting barley production in the EU takes up a far less significant share of overall barley production, the EU is still the world's largest producer with nearly 45% of the world's total malting barley resulting in 9 million tonnes – nearly sufficient to satisfy the EU's annual malting demand of 11 million tonnes.²¹ Over 60% of all barley grown in the EU occurs within France, Germany, the UK and Spain with the former three also possessing over half of the EU's total malting capacity. Both Canada and the EU maintain surpluses in trade of barley and malt and are among the world's leaders in trade of these products. Although the EU accounts for nearly two-thirds of world exports of malt, Canada is one of the EU's primary competitors serving as the second largest exporter after the EU. Bilateral trade is therefore limited with the two instead competing primarily in third markets.

Similarly, both Canada and the EU are the world's top two producers of **oilseeds**, with Canada being the single largest producing country though with less overall production than the 27 combined members of the EU. Canada's production of oilseeds is predominantly in Canola, a Canadian innovation which is an abbreviation of 'Canadian oil' and is trademarked and licensed by the Canadian Canola Council.²² Production is concentrated in Western Canada, with the three Prairie Provinces together with the Peace River region of British Columbia accounting for 99% of the total seeded area.²³ Canola has become an increasingly important crop for Canada's agricultural sector with production increasing 174% from 2002 to 2009 making it Canada's second most valuable crop after wheat. Production is mainly geared towards export with Canada accounting for 75% of global exports, and with exports of canola seed, oil and meal valued at over C\$3 billion.²⁴ Within the EU, oilseeds production is primarily in rapeseed, which accounted for almost three-fourths of all oilseeds production in 2009, though sunflower production is also a significant source of production accounting for almost the entire remainder of production (by volume). Production is less concentrated than in Canada. In terms of rapeseed, France and Germany are the two largest producers accounting for nearly half of the volume of all production, though the New Member States of Poland, Hungary, Romania, Bulgaria and the Czech Republic are also significant producers together accounting for 30% of all EU production.

Bilateral trade of grains and oilseeds between Canada and the EU is generally classified as moving from the former to the latter with wheat and oilseeds (including soybeans) serving as the two largest exported agricultural products from Canada to the EU. Due to its importance in pasta making, Italy is the primary destination for Canadian exports of durum wheat to the EU, while the UK serves as the top destination for milling wheat.²⁵ Table 11, below further highlights that of the top four Canadian agricultural exports to the EU in 2009, each falls under the category of wheat or oilseeds, with these four alone making up over 55% of the total value of agri-food exports from Canada to the EU.²⁶

²⁰ Agriculture and Agri-Food Canada. <http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1171560813521>

²¹ Euromalt. <http://www.coceral.com/cms/beitrag/10011989/248433>

²² Casseus, L. (2007)

²³ Ibid.

²⁴ Canola Council of Canada.

²⁵ Government of Canada. http://www.canadainternational.gc.ca/eu-ue/policies-politiques/trade_stats_commerciales.aspx?lang=eng

²⁶ Agriculture and Agri-Food Canada (2010). 'Agri-Food Regional Profile: European Union 27'. <http://www.ats.agr.gc.ca/eur/4148-eng.htm>

Table 11: Top 4 Canadian agri-food exports to the EU in 2009 (millions of CAN\$)

Product	Export value
Durum wheat	\$456.9
Soybeans	\$327.0
Wheat nes and meslin	\$245.0
Linseed, whether or not broken	\$102.0
Total Agri-food exports	\$2,046.2

Source: Agriculture and Agri-Food Canada

Box 1: Pulse crops

Over the past several decades, Canada has emerged as a global leader in the production and export of pulse crops such as peas, beans and lentils. Growing demand in Asian markets, in particular, has helped fuel this transformation, with the Canadian Prairies (most notably Saskatchewan) being the leading producers and exporters in Canada. The potential for further growth in the sector in Canada remains strong, particularly given the growing wealth and sizeable population of Asia as well as the accompanying environmental benefits from growth and consumption of pulse crops.

While there is significant potential for growth within the industry, there are several reasons to believe that the CETA will not have a pronounced impact on the sector. First, the main market for Canadian pulse crops is not the EU, but rather Asian and African markets, with the latter expected to serve as an important engine of export growth over the next several decades. Canadian exports of pulse crops to the EU have been steady in recent years while demand in the EU has also been largely unchanged.²⁷ Second, as noted by the Government of Canada, 'there are few market access issues for Canadian pulse exports to the EU', with peas, beans, chickpeas and lentils already able to be imported into the EU duty free, with Canadian grown pulses also not requiring a phytosanitary inspection certificate from the Canadian Food Inspection Agency (CFIA) in order to be imported into the EU.²⁸ While it is the case that the EU's biofuel policies impact Canadian pulse crop production through its impact on global demand and price of crops, it is not expected that the CETA will have a significant role in this regard. Given these factors mitigating the potential impact on Canadian pulse crops under the CETA, the sector is not assessed in the SIA.²⁹

²⁷ Clancey, B. (2009).

²⁸ Government of Canada. http://www.canadainternational.gc.ca/eu-ue/policies-politiques/reports_pulse-legumineuse_rapports.aspx?lang=eng

²⁹ This is supported by CGE modelling results presented in Tables 1-6 in Annex 6. Here, pulse crops are included in the GTAP sector of 'vegetables & fruits' which as seen in the aforementioned tables are not expected to be significantly impacted by the CETA. Specifically, the simulation results project limited changes in output and overall exports as a result of the CETA.

ANALYSIS

Canada

Overall, liberalisation under the CETA is likely to have a limited impact on Canadian growers of grains and oilseeds, with the degree and direction of this impact expected to depend on the level of liberalisation reached under the Agreement as well as external factors influencing global production and price.

For **wheat**, tariff liberalisation under the CETA is expected to positively impact Canadian production and exports over the long-term under the scenarios modelling full removal of all tariffs (Scenarios C and D), though production is expected to increase less than 0.25% across all scenarios while overall exports are estimated to increase less than 0.2%. These increases in exports would likely have a small positive effect on Canada's trade balance of wheat, with the overall balance estimated to increase by nearly \$5 million and the balance with the EU by a mere 0.46%.

Conversely, less ambitious removal of tariffs (Scenarios A and B) is estimated to result in decreases in output of wheat by as much as -1.53% over the long-term and declines of total exports of -1.64%. Given that tariffs for wheat remain unchanged between the four scenarios, the outcome is likely contingent on the sector's linkages with the livestock industry, particularly with reference to animal feed.

The limited gains/moderate declines estimated for Canada – one of the world's largest producers and exporters of wheat – stem largely from the already low MFN tariffs in the EU. While wheat entering the EU is generally subject to a series of tariffs and TRQs depending on the type (non-durum or durum) and quality (high, medium or low), tariffs on durum and high quality non-durum wheat (i.e. wheat having a minimum protein content of 14% according to EU measurement standards) are currently suspended due to significant increases in global price after a tightening of supply. With the modelling adjusting to this by eliminating all tariffs on wheat in the EU, the impact from liberalisation under the CETA has been significantly reduced.³⁰

This does not, however, imply that the CETA could not have a more pronounced impact on the Canadian wheat sector over the long term. The zero tariffs on durum wheat and high quality wheat have only been suspended and could be reintroduced in the future with increased global production and lowered prices. To this end, earlier simulations that modelled a reduction in tariffs as a result of the CETA projected sizeable increases in wheat production and exports in Canada.³¹ While these results were viewed to be overstated given the de facto zero tariffs currently in place in the EU, there is reason to believe that were the CETA to make these reduced tariffs permanent, the Agreement could have a noticeable positive impact on Canadian wheat growers. Further, low and medium quality non-durum wheat continues to be subject to a TRQ, with Canada's reserve being 38,853 tonnes, as well as an in-quota duty of 12€/tonne and an out-of-quota duty of 95€/tonne.³² For these grades of non-durum wheat the CETA could have a positive impact on Canadian producers – particularly organic farmers whose wheat is more prone to being labelled as medium or low quality according to EU measurements – if the CETA leads to an increased TRQ.³³

³⁰ The GTAP model aggregates all wheat and does not separate based on type or quality. This requires eliminating all tariffs or none at all. Based on discussions with the contracting authority, it was decided that the former path was the more appropriate.

³¹ See Interim Report

³² Government of Canada. http://www.canadainternational.gc.ca/eu-ue/policies-politiques/reports_wheat-ble_rapports.aspx?lang=eng

³³ It is, however, difficult to quantitatively assess the impact given the lack of specific data on wheat of the grade. Wheat, according to quality, is listed at the 8-10 digit HS code, for which data is not readily available.

As a final point regarding wheat, there is potential for the impact to be influenced by the CETA's effect on the Canadian Wheat Board (CWB), which is argued by the EC and others as being a non-competitive seller (see box below).

Box 2: State-trading in Canada's wheat sector The Canadian Wheat Board

One area within Canada's wheat producing sector that has received particular attention is that of the Canadian Wheat Board. Established in 1935 by the Canadian Parliament as a means of controlling the price of grains, the CWB is a state-run trading company that is granted monopsony status as the country's only exporter of wheat and barley. With Canadian farmers in the Western Prairies³⁴ being required to sell their wheat and barley to the CWB, the CWB is the largest wheat and barley marketer in the world, accounting for 20% of the world's wheat and barley sales.³⁵

Although the CWB was reformed to meet free market conditions under NAFTA and WTO agreements, it continues to receive complaints from the US and EU through claims that its exclusive rights over the export of wheat and barley from Canada make it non-competitive. The EU in particular has expressed negative views towards supply management practices used by such state-trading enterprises as the CWB, maintaining their provision of an unfair competitive advantage.

The role that the CETA has on trade in wheat and barley between Canada and the EU may therefore be influenced by its impact on the CWB.

Modelling results suggest that Canadian producers of **barley** will likely see limited gains over the long-term as a result of tariff liberalisation under the CETA. While it is difficult to discern the model's specific estimates for barley due to its grouping with all non-wheat grains, results suggest negligible changes in output and exports over the long-term.

Given the nature of restrictions on barley, it is expected that any gains would mostly accrue to producers of malting barley. Imports of barley into the EU, as with low and medium quality wheat, are controlled by quota with separate TRQs for feed barley and malting barley. The TRQ for feed barley is significantly larger at 306,250 tonnes and an in-quota tariff of 16 €/tonne, while the TRQ for malting barley is smaller (50,000 tonnes and an in-quota duty of 8%) and mandates that the barley meet a number of criteria.³⁶ Given that the EU requires annual imports of roughly 2 million tonnes of malting barley to satisfy domestic demand in the brewery sector, there is potential for Canadian producers to realise gains in the form of a satisfactory reservation for Canadian exporters.

Despite its increasing importance in recent years, it is expected that the impact of the CETA on **oilseeds** will be limited over the long-term. Modelling results show that the CETA will lead to minor changes in production (-0.57% to 0.32%) and minor to moderate declines overall exports (-1.14% to -0.06%). As

³⁴ Farmers in Eastern Canada and in most of British Columbia are not under the Board's authority and may market their grain on the open market

³⁵ Statistics Canada

³⁶ Government of Canada. http://www.canadainternational.gc.ca/eu-ue/policies-politiques/reports_barley-orge_rapports.aspx?lang=eng

observed with wheat, the changes appear to be tied to the impact on Canada's livestock sector, due to the role oilseeds play in animal feed.

With most of its canola being of GM varieties, one of the greatest barriers to Canada's trade of oilseeds with the EU has been the EU's approval process for GMOs, which is argued by Canada to have led to 'de facto moratorium on approvals' since its implementation in 2003.³⁷ The role the CETA could play in this regard appears to have been lessened, however, with Brussels reportedly approving the last GM canola seed used by Canadian farmers in March 2009 and with both sides agreeing in July of the same year to meet bi-annually to discuss issues pertaining to GM products.³⁸ Further, Canadian canola is more deeply impacted by North American and Asian demand, further calling into the question the impact the CETA is likely to have on Canadian growers.

EU

Overall, liberalisation under the CETA is likely to have a limited impact on EU growers of grains and oilseeds, with the degree and direction of this impact expected to depend on the level of liberalisation reached under the Agreement as well as external factors influencing global production and price.

The EU maintains a negative trade balance with Canada in trade of wheat, barley and oilseeds and it is unlikely that the CETA will improve the existing deficits in these products. Modelling results suggest that the overall impact, while negative, will likely be negligible with limited changes in production of wheat (-0.05% to 0.06%), other grains (-0.04% to 0.02%) and oilseeds (-0.03% to -0.04%) projected. These changes in production will similarly translate into limited changes in overall exports and the balance of trade of these products – both with Canada and overall.

With respect to **wheat** and **barley**, the EU has raised concerns over the existence of a discriminatory tariff system that favours imports from Canada's NAFTA partners (the U.S. and Mexico). Hereto, out-of-quota duties for the U.S. and Mexico remain preferential while being significantly higher for non-NAFTA members such as the EU.³⁹ As noted, the CGE simulations do not generally support the view that the CETA may lead to sizeable gains in exports of wheat and barley from the EU to Canada. Bilaterally, the modelling suggests that the EU will experience minor increases in exports of wheat (2.3%) and barley (2.9%) to Canada with the full removal of tariffs, but given the low level of existing trade these bilateral increases are negligible and not expected to result in a noticeably positive impact for EU producers.

Further, while EU MFN duties and quotas on durum wheat and high quality non-durum wheat have been suspended, their permanent removal under the CETA could potentially have negative long-term impacts on EU producers. Hereto, earlier CGE simulations which treated tariffs on wheat as changing from the previous rates to zero show that the CETA could lead to sizeable decreases in output and overall exports in the EU over the long-term, suggesting that limited protection from Canadian producers in a global market where excess supply drives down prices could have a negative economic impact on EU growers of wheat.

³⁷ DFAIT (2009). 'Trade Barrier Fiche: Canola'. <http://w01.international.gc.ca/CIMAR-RCAMI/fiche-detail.aspx?id=1449&lang=eng>

³⁸ International Centre for Trade and Sustainable Development (2009).

³⁹ Market Access Database (2009). 'TRQ on wheat and barley and their products'. http://madb.europa.eu/madb_barriers/barriers_details.htm?barrier_id=960046&version=4

INDICATOR: Employment**BASELINE**

In 2006, 81,990 Canadian farm operators were involved in grain and oilseed farming, with the following breakdown: Soybean (8,390), other oilseeds (13,505), corn (4,880), dry peas and beans (1,590), Wheat (15,480), and other grains (38,145). This constitutes a sharp increase of 73.3% for oilseed (except soybean) operators from 2001. In contrast, the number of operators involved in the production of grain production decreased between 2001 and 2006, with the wheat sector experiencing a decline of 21.3%.⁴⁰

ANALYSIS***Canada***

In general, the modelling results suggest that the CETA's impact on employment in Canada's grains and oilseeds sector will depend on the level of liberalisation. As shown in Appendix 6, minor gains are expected under the full removal of all tariffs, with declines in wheat and oilseeds estimated to arise in the scenarios where meat products are not liberalised in the EU. These declines are expected to be partly offset by greater increases in employment within the other grains sector, though overall it appears that less liberalisation would have a more detrimental impact on employment for Canada's grains and oilseeds.

As noted earlier, earlier simulations that accounted for the permanent removal of tariffs and quotas in the EU on durum wheat and high quality non-durum wheat suggest that the CETA could lead to far greater increases in the demand for labour of wheat, increasing employment in the sector. However, such an outcome would require that the EU reinstate TRQs on durum and high-quality non-durum wheat while at the same time allowing Canadian producers to be able to export to the EU duty free.

EU

Within the EU, it is not envisaged that the CETA will have a pronounced impact over the long-term on employment within the grains and oilseeds sector. CGE estimates suggest that under full removal of tariffs, the CETA may lead to a very minor decline in the demand for growers of wheat (-0.05%) and oilseeds (-0.04%) over the long-term and a very minor increase in the demand for growers of other grains (0.02%). This situation is, however, reversed under a scenario where certain sectors are kept sensitive. Regardless, the impact on employment is expected to be negligible across all scenarios.

As noted elsewhere, these results are largely contingent on the continued tightened global supply of wheat and the maintenance of a zero duty in the EU on durum wheat and high-quality non-durum wheat. In instances where i) changing global circumstances lead to the EU reinstalling the TRQs on these wheat products; while ii) Canada has gained preferential access to the EU from the CETA and is either not subject to these duties or granted a larger reservation within the TRQ – there is potential for the CETA to have a more adverse effect on employment in the EU's wheat sector over the long-term. This, however, would also likely be contingent on the continued inability to conclude Doha negotiations, making it questionable whether such an outcome is likely over the longer term.

⁴⁰ Statistics Canada

Beef & Pork⁴¹

INDICATOR: Output and trade

BASELINE

Accounting for nearly one-quarter of all farms (90,000 primary producers) and one-fifth of all annual farm cash receipts (C\$26 billion), the **beef** industry serves as Canada's single largest agricultural commodity.⁴² Of all cow-calf farms in Canada, 72% are located in the western Provinces with almost half being in Alberta, where dependence on cattle production is highest with approximately 44% of its total farm receipts generated by beef and over 40% of its farms devoted to its production.⁴³ Additionally, the processing of red meat, pork, lamb and horse is Canada's 11th largest manufacturing industry and its single largest sector within Canadian food manufacturing with revenues of over C\$16.3 billion per year.⁴⁴ The industry has become significantly concentrated in recent years with the top 4 slaughter houses and processing plants account for 75% of the total slaughter.⁴⁵

Canada is a major exporter of beef and beef products and has become increasingly export oriented as a result of the restructuring that has occurred in the Canada/US market under NAFTA. In 2008, exports totalled 37% of domestic production allowing Canada to maintain its consistent and healthy trade surplus in cattle and beef.⁴⁶ Cattle numbers in Canada have swelled to record heights and with minimal growth potential domestically, export markets have taken on an increased importance. While the EU could potentially serve as a growth market for the Canadian industry, the EU's stance towards hormone treated beef (Box 3) has instead forced producers to look towards markets such as Mexico, Japan, China and Southeast Asia.

⁴¹ Poultry is not included in this report. Although considered during the screening and scoping exercise within the initial phases of the SIA and determined to have a number of sensitivities, the scope for an impact under the CETA was determined to be minimal. Both Canada and the EU have TRQs for poultry, with both seeking to maintain import restrictions. For Canada, this includes a desire to maintain the system of supply management (see section on Dairy for more information on supply management), which has been publicly defended in the context of the CETA by a number of Canadian policymakers. Specifically, Canada operates under a system designed to limit production so as to balance supply with domestic demand, limiting its excess supply that can be exported while controlling the amount of imports. In recent years, Canada has increased exports to foreign markets, though this has been primarily to Asia and been in response to the low demand in Canada for certain chicken parts (which are subsequently also in relatively low demand in the EU). As such, and with it unlikely that the CETA will lead to the removal of supply management in the poultry sector, it is unlikely that the Agreement will negatively impact the poultry sectors in either Canada or the EU. For the latter, improved and permanent duty-free access to Canadian animal feed could help EU poultry producers stabilise production costs over the long-term, though it is not envisaged that defensive interests in the sector will be compromised.

⁴² CAFTA (2008).

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Agriculture and Agri-Food Canada

⁴⁶ Canada Beef Export Federation

Box 3: Hormone-treated Beef

The EU ban on hormone treated beef has been in place since the early 1980s. Canada and the US challenged the EU's non-discriminatory ban at the WTO in 1996. The WTO Appellate Body found in 1998 that the rules were not consistent with one provision of the WTO Agreement on Sanitary and Phytosanitary Measures and in 1999 Canada and the US were given permission to impose sanctions in the form of additional tariffs.

While a new EC Hormones Directive was issued in 2003, based scientific findings that one hormone (oestradiol 17) had been found to cause and promote cancer and harm genes, Canada and the US rejected the evidence underpinning this directive and maintained their sanctions. In 2004 the EU challenged these sanctions. In November 2008, the Appellate Body ruled that it was unable to complete the analysis of the WTO-compatibility of the EU legislation due to mistakes made by the Panel in gathering factual information, and consequently did not give a definitive view on the legality of the Canadian and US sanctions. It did however clarify certain aspects of the SPS agreement. Furthermore, it recommended that the EU, Canada and US start compliance proceedings to see if the current EU legislation remedied the breaches that the WTO had identified in 1998, and as a result Canada and US should end their sanctions.

Recent negotiations between the EC and the US, whose beef exports were subject to the ban, have resulted in the opening by the EU of a duty free hormone free erga omnes tariff quota. A similar deal has recently been reached between the EC and Canada.

In the EU, beef production reaches about 7.5 million tonnes per year and accounts for approximately 10% of total agricultural production. Production occurs in all Member States, but is most prominent in Spain, France and Italy. Pasture based production is practiced particularly in the Northern and Western regions plus the UK with cereal based production favoured in Central, Eastern and Mediterranean regions. The EU's annual consumption exceeds domestic production by over 500,000 tonnes, making the country reliant on imports. Given its wealth and size, the EU is a major market for beef and beef products, with Germany, the UK and France serving as the leading consumers.⁴⁷

The EU operates a TRQ on imports of beef with the Canadian reserve being 11,500 tonnes of high quality beef.⁴⁸ Tariffs on this reserve are generally viewed as being prohibitive with in-quota duties of 20% and out-of-quota tariffs ranging from 12.8% + 176.8€/100kg to 12.8% + 303.4 €/100kg depending on cut and product.⁴⁹ Late in 2010, however, Canada was granted access to an erga omnes duty-free 20,000 tonne quota on beef,⁵⁰ which the Canadian Beef Export Federation estimates may generate more than C\$10 million annually for the industry.⁵¹ With this MFN quota set to increase by an additional 25,000 tonnes by 2012 and with a Memorandum of Understanding (MOU) between the Government of Canada and the EC likely to lead to the expansion of this quota by an additional 3,200 tonnes, it appears Canadian producers will ultimately be granted access to a 48,200 duty-free quota. These developments will have a positive impact on the Canadian beef industry.

⁴⁷ Government of Canada. http://www.canadainternational.gc.ca/eu-ue/policies-politiques/reports_beef-boeuf_rapports.aspx?lang=eng

⁴⁸ HQB refers to beef graded Canada A, AA, AAA, Choice and Prime.

⁴⁹ Government of Canada. http://www.canadainternational.gc.ca/eu-ue/policies-politiques/reports_beef-boeuf_rapports.aspx?lang=eng

⁵⁰ Joining the US and Australia as those who have access to this quota

⁵¹ Agriculture and Agri-Food Canada (2010b).

Canada is also one of the world's leading **pork** producing nations. While Canada's more than 6,000 pork producers represent only 2.6% of Canada's total farms, they account for more than 10% of total farm gate receipts (C\$3.4 billion in 2006).⁵² The sector is active throughout Canada, but takes on greater importance in Quebec and Manitoba where it accounts for 6.3% and 4%, respectively, of total farms and 15.5% and 27% of total farm gate receipts. In addition to primary production, the industry consists of value-added processors which increase the sector's total economic contribution to nearly C\$10 billion annually.

Canada is the world's third largest exporter of pork and pork products behind the US and EU, but with more the half of annual hog production exported to foreign markets Canada's industry is far more export oriented. While exports in 2009 exceeded C\$2.6 billion (more than four times the value of imports) the EU serves an almost negligible role, ranking as the 17th most important export market for Canadian pork in 2009 (0.3% of the total value of pork exports). Similarly, Canada receives few imports from the EU.

Pork is the most widely consumed meat in the EU, with average annual consumption three times that of beef and twice that of poultry.⁵³ As such, production is widespread throughout the EU with output in 2008 reaching 22.4 million tonnes (260m pigs). Germany is the largest producer of pork in the EU with about 40 million pigs slaughtered each year, followed by Spain, France, Denmark and the Netherlands. While being the second largest exporter, the EU is far less export oriented than Canada with only 8.5% of total production (by volume) exported in 2008.⁵⁴

ANALYSIS

Canada

Given the wealth and size of the EU market, there is significant potential for Canadian meat producers to realise gains from improved market access. Overall, the assessment shows that the CETA could result in considerable gains to producers of both beef and pork over the long-term. The size of these gains, however, stems largely from removal/reduction in two types of market access barriers: i) tariffs/quotas and ii) non-tariff barriers (most notably TBT/SPS measures).

Results from the CGE model shows that that tariff liberalisation under the CETA would have a positive impact on the Canadian beef industry over the long-term. Simulations show that full elimination of tariffs could raise output by over 1.5% (Tables 9-16 in Annex 6) while also leading to a 5% increase in overall exports and an \$80 million improvement to the sectoral balance of trade. Increased bilateral exports to the EU would be the leading cause of these gains with exports of beef to the EU-27 increasing by approximately 220%, leading to a \$100 million improvement to the bilateral trade balance in beef.⁵⁵ It should be noted that these exports would be expected to be hormone free beef, as it is not expected that the EU will lift its ban on genetically modified beef. To this end, it is envisaged that if significant increases in market access are granted to Canadian producers, they could be induced to increase their hormone free production over the long-term, allowing them to realise the estimates from the model.

⁵² CAFTA (2008).

⁵³ Government of Canada. http://www.canadainternational.gc.ca/eu-ue/policies-politiques/reports_pork-porc_rapports.aspx?lang=eng

⁵⁴ European Commission. http://ec.europa.eu/agriculture/markets/pig/index_en.htm

⁵⁵ The discrepancy observed between the value of the bilateral trade balance and that of the overall balance of trade suggests that 3rd countries will likely experience reduced imports from Canada as beef is diverted to the EU.

Conversely, Scenarios A and B (which do not liberalise beef) suggest that maintaining sensitivities in the EU on the import of beef would likely lead to moderate declines in output (-0.22% to -0.25%) and overall exports (-2.02% to -2.34%) of beef and beef products

The potential impact on the Canadian industry would also be affected by the degree to which a number of non-tariff barriers are addressed. As discussed in Box 3 above, the ban on genetically modified beef serves to reduce exports from Canada to the EU, with it being the Canadian perspective that such SPS measures serve as an NTB to Canada's trade in beef with the EU.⁵⁶ Nevertheless, it appears highly unlikely that the CETA would eliminate this ban, requiring instead that Canadian producers fill this increased quota with hormone-free beef. One problem herein is that it would be difficult for Canadian producers to rapidly increase exports given that the majority of Canadian cattle would not qualify as hormone free. This being said, improved access through reduced tariffs and/or larger quotas could induce Canadian producers to shift an increased amount of their production towards hormone-free cattle over the long-term. This would similarly lead to increased investment in slaughterhouses that were dedicated to hormone-free production in line with EU protocol. Given that demand in the EU exceeds production, significantly greater access to the EU could lead to aggressive expansion in the Canadian Prairies as domestic producers would be provided with greater ability to fill this demand. To this end, the Canadian Cattlemen's Association believes Canada could produce significant herds of hormone-free cattle within 5 to 10 years of the conclusion of a CETA (60,000 to 100,000 tonnes) with more room for expansion over the longer-term.⁵⁷

An additional SPS/TBT barrier facing Canadian exporters includes the EU's Third Country Meat Directive, which places strict requirements on the standards of processing plants, production methods and meat hygiene. Hereto, exports to the EU require that beef is slaughtered, processed and stored in approved abattoirs, packing plants and cold stores. Canadian exporters feel that the EU's BSE-related measures affecting livestock and meat and its Maximum Residue Limits for various compounds are issues which inhibit the flow of beef to the EU.⁵⁸ While the study feels that it is unlikely that the CETA would lead to the removal of these issues, the Agreement could create greater cooperation and dialogue, improving Canadian producers' ability to comply with these issues.

Box 4: Bison, the other red meat

In addition to beef, producers and exporters of bison meat could realise gains from the CETA. As a red meat without a separate tariff line in the EU, bison meat imported into the EU is subject to the TRQ for beef.⁵⁹ The Canadian industry and the Western Provinces would like to diversify their production and look at CETA as a way to achieve that.⁶⁰ While the possible gains may take some time to materialise (due to a limited market in the EU), greater access could allow Canadian producers of hormone-free bison meat to establish a niche market in the EU provided adequate demand exists.

⁵⁶ Government of Canada. http://www.canadainternational.gc.ca/eu-ue/policies-politiques/reports_beef-boeuf_rapports.aspx?lang=eng

⁵⁷ <http://albertabeef.org/news/archived-news/?issue=286>; <http://www.cattle.ca/market-access-status-europe>

⁵⁸ Canadian Association of Importers and Exporters (2010).

⁵⁹ Viju et al. (2010).

⁶⁰ Ibid.

With respect to **pork**, it appears that the CETA could produce even more pronounced gains for Canadian producers, though again this depends on the level of liberalisation established under an agreement. Imports of pork into the EU are controlled by three separate TRQs: 2 open to all WTO members and 1 for Canadian exporters only (Table 12).⁶¹ These TRQs are generally held to be overly restrictive, limiting the amount of pork that would otherwise be able to be exported from Canada.⁶²

Table 12: Pork TRQs in the EU

TRQ	Quota size (tonnes)	Product description	Tariff rate
'GATT Quotas'	70,390	35,625t boned loins and hams, fresh chilled or frozen 5,000t tenderloin, fresh, chilled or frozen 3,002t sausages, dry or for spreading, uncooked and others 6,161t other prepared or preserved meat, meat offal or blood 15,067t carcasses and half-carcasses, fresh, chilled or frozen 5,535t cuts, fresh, chilled or frozen, boned and with bone-in, excluding tenderloin	Varies by tariff line. €233/t to €434/t
'Oilseed Quota'	7,000	Fresh or chilled loins and cuts thereof, with bone in; and frozen bellies and cuts thereof	0%
Canada-only Quota	4,624	Cuts, fresh, chilled or frozen, boned and with bone in, excluding tenderloin presented alone	Varies by tariff line. €233/t to €434/t

Source: Government of Canada

Results from the CGE simulation support these assertions, with the model showing that full removal of tariffs would have a significant and positive impact on output and exports in Canada's pork industry over the long-term (See Annex 6).⁶³ Output of pork could increase by over 6% according to the model with exports likewise having the potential to grow by over 12%, leading to a significant increase in the overall balance of trade (\$300 million). These gains would be driven primarily by increased exports to the EU, as full removal of tariffs could lead to increases in bilateral exports of over 550%, improving Canada's bilateral balance of trade by nearly \$400 million.⁶⁴ Again, it should be noted that these estimates are operating under the assumption that Canada would, if granted significantly improved access to the EU, be able, over the long-term, to adjust production to meeting specific SPS requirements in place in the EU.

Conversely, Scenarios A and B – which model the continued existence of current tariffs and TRQs on pork – show that maintaining sensitivities on pork in the EU could cause the CETA to potentially lead to

⁶¹ Government of Canada. http://www.canadainternational.gc.ca/eu-ue/policies-politiques/reports_porc_porc_rapports.aspx?lang=eng

⁶² Nickel, R. (2009).

⁶³ As a note, the GTAP model groups together all non-cattle meats into one sector. The results therefore entail the impact on other products and should not be taken as solely referring to pork and pork products.

⁶⁴ Again, this larger increase to the bilateral balance of trade than the overall balance of trade occurs as a result of exports being diverted away from third countries and to the EU.

reduced output (-1.12% to -1.33%) and overall exports (-1.75% to -2.09%) in Canada, worsening Canada's balance of trade in pork and pork products – both with the EU and overall. In this regard, the model suggests that liberalising other sectors while keeping pork sensitive would stimulate the movement of resources out of pork and into alternative, expanding sectors over the long-term.

Other barriers to Canada's trade in pork with the EU include the EU's strict approval process for foreign processing plants. In 2005, Canada and the EU agreed to a sub-agreement for pork equivalency under the 1999 *EU-Canada Veterinary Agreement*, leading to mutual recognition of domestic food safety measures for pork between the two sides. While this agreement has eased the burdens associated with exporting pork from Canada to the EU, the limited market access fostered by the EU's TRQs has limited investment in Canada in upgrading processing plants and procedures. As such, only one processing plant had received EU approval as of 2009.⁶⁵ Under a scenario where the CETA sufficiently improves market access for Canadian producers, it is likely that greater investment in plants that meet EU standards would occur, benefitting the Canadian pork industry.

Another important aspect which is likely to influence the CETA's impact on the Canadian beef and pork industries are the **rules of origin** that are ultimately agreed to. While the EU tends to advocate that origin should be traced back to birth, Canada prefers that origin be determined by where the animal was slaughtered. Were the CETA's RoO resemble those of Canada, this would likely benefit Canadian producers as many of the animals slaughtered in Canada are born in the US.⁶⁶ Under such an outcome, the ultimate gains for Canadian producers of beef and pork would be greater.

EU

Overall, the impact on the EU beef and pork industry will depend largely on the level of liberalisation reached under the CETA. With greater market access provided to Canadian producers, the likelihood of reductions in output and overall exports in the EU increases. The beef and pork sectors are particularly sensitive in the EU, with nearly all EU interests in the sector being defensive ones. Canada is viewed as a serious potential competitor in both the pork and beef sectors and it has been expressed by stakeholders⁶⁷ that utmost caution must be taken when negotiating any tariff or quota liberalisations pertaining to these products. These concerns are validated by the CGE modelling results which show that if sensitivities are maintained, the CETA will have a limited impact, but that if the Agreement liberalises beef and pork, it will have a negative impact on output, exports and the balance of trade in the EU over the long-term.

In **beef**, the modelling suggests that the EU will experience moderate declines in output and exports over the long-term if the Canada is allowed duty-free access to the EU market. Over the long-term output is predicted to decrease by 0.15% and overall exports by more than 0.55%, resulting in a worsening of the trade balance by nearly \$90 million (See Tables 9-16 in Annex 6). Conversely, scenarios that do not model a reduction in tariffs on beef show that under such an outcome, the CETA would not change EU production of beef, while having a negligible impact on overall exports (-0.03% to -0.04%) and the EU's overall balance of trade in beef and beef products (-\$5m to -\$7m) over the long-term.

As with beef, the EU **pork** industry is particularly sensitive. Canada, as a major competitor and exporter of pork has historically been unable to penetrate the EU market due to restricted TRQs and the limited incentive to meeting EU SPS requirements. Results from the CGE analysis generally validate these

⁶⁵ Nickel, R. (2009).

⁶⁶ Canadian Association of Importers and Exporters (2010).

⁶⁷ European Livestock and Meat Traders Union (UECBV) and the Danish Meat Industry Federation

concerns and predict that fully removing tariffs on Canadian imports of pork would sizeable declines in output (-0.44%) and exports (-0.92%) within the EU (See Annex 6).⁶⁸ While exports to Canada would be expected to increase (by perhaps as much as 25%), these would be expected to be dwarfed by imports from Canada, potentially worsening the EU's total balance of trade in pork and pork products by as much as \$360 million. Conversely, scenarios that model the maintenance of tariffs on pork in the EU suggest that the present system's continued existence would be expected to further safeguard the industry from competition with Canadian imports. Under such a scenario, output and exports are expected to show almost no change (both increasing by 0.02% over the long-term in Scenarios A and B), leading to almost no change in the overall balance of trade (\$1m to \$2.3m).

These estimates are further influenced by the assumed continued existence of EU rules on GMOs as well as SPS requirements regarding slaughtering, processing and additives. To the degree that these were relaxed – which is unlikely – imports from Canada could increase further.

For both beef and pork, an important factor that will influence output and exports in the EU would be the **rules of origin** that are ultimately agreed to under the CETA. As noted in the section on Canada, the EU's stance is generally that origin is determined by where an animal is born, while Canada prefers origin being determined by at the point of slaughter. As a large number of animals slaughtered in Canada are born in the United States, rules of origin that take the Canadian preference, would most likely increase the potentially adverse effect for EU producers. Where EU rules are maintained and Canadian access to the EU market is significantly improved, the EU industry would likely be shielded from short-term increases in imports from Canada. However, with such improved access, it is envisaged that Canadian producers could adjust production over the long-term to meet EU RoO.

INDICATOR: Employment

BASELINE

More than 90,000 primary beef producers operate in Canada with a further 6,000 involved in the breeding of pigs. The processing sector for beef and pork is a substantial source of rural employment employing more than 46,000 people.⁶⁹

ANALYSIS

Canada

With the EU largely maintaining defensive interests, the impact on employment in Canada is largely contingent on the level of liberalisation afforded Canadian producers and exporters under the CETA. Under a scenario of full removal of tariffs in both the beef and pork sectors, the CGE model estimates that the CETA will have a positive and significant impact on employment in Canada. Hereto, the demand for labour in Canada's beef sector is estimated to increase by as much as 1.3%, with skilled and unskilled labour being similarly impacted. The projected effect on the pork sector is expected to be even more pronounced, with full removal of tariffs potentially leading to an increase in employment of over 6% (Table 16 in Annex 6).

⁶⁸ It is important to note that the GTAP model groups together all non-red meat into a single grouping, making it difficult to determine the precise estimates for pork.

⁶⁹ CAFTA (2008).

Alternatively, where the CETA does not lead to liberalisation in beef or pork in the EU, employment is expected to be negatively impacted over the long-term. Specifically, beef is estimated to see a decline in the demand for labour by as much as -0.4%, while employment in the pork sector is expected to decrease by as much as -1.4%.

EU

The degree to which sensitivities on beef and pork are maintained within the EU will ultimately determine the impact on employment in these sectors. Where Canadian access is only mildly improved, it is likely that the industry will avoid any impactful decreases in employment as a result of the CETA. This is supported by results from Scenarios A and B within the CGE model, which show that employment in the EU will not change over the long-term if sensitivities for the beef and pork sectors are maintained. However, where Canadian access is significantly increased, there is potential for overall employment in the industry to show noticeable declines. This is further supported in the CGE estimates where full removal of tariffs is shown to decrease demand for labour in Canada's beef sector by as much as -0.17% and in the pork sector by perhaps -0.4%. This impact would be expected to become exacerbated under a more liberalised scenario and where rules of origin adhere to Canadian preferences.

Dairy

INDICATOR: Output and trade

BASELINE

With total net farm receipts of C\$5.2 billion in 2008, the **Canadian dairy sector** is the third largest agricultural industry in Canada behind grain and red meat. At the retail level, dairy products are valued at C\$9 billion, accounting for 15% of all sales in the food and beverage industry. Ontario and Quebec serve as largest suppliers of dairy products, representing nearly 70% of dairy cash receipts in 2009.⁷⁰

Stability of supply and price has been a fundamental goal in the Canadian dairy industry, with supply management being the primary means of obtaining these ends (See Box 7). Supply management has, however, greatly inhibited export performance with Canada accounting for only 1-2% of dairy products traded internationally.⁷¹ Exports in 2009 totalled only \$221.9 million, which, despite prohibitive TRQs on imports, resulted in a trade deficit of \$123.8 million.⁷²

⁷⁰ Government of Canada (2009).

⁷¹ Agriculture and Agri-Food Canada

⁷² UN Comtrade

Box 7: Supply management in the Canadian dairy sector

Canada's dairy industry operates under a system of supply management according to three pillars: i) import control, ii) producer pricing, and iii) production discipline. The system's main goal is the stabilisation of revenues for dairy farmers and the avoidance of costly surpluses. In carrying out these objectives, the Canadian Dairy Commission (CDC) determines the quantity of milk to be produced at the national level and uses a series of production quotas in an attempt to balance production and consumption throughout the year. The CDC then delegates production shares to each province, with milk marketing boards at the provincial level tasked with promoting, controlling and regulating production, transport, packing, storing and marketing of milk and dairy products. These boards are also tasked with licensing producers, transporters and processors as well as regulating prices (based on support prices published by the CDC) that are negotiated with producers.

Proponents of supply management in Canada's dairy sector argue that the system ensures fairness and income security for producers; requires no government subsidy or support; and promotes long-term investments by dairy farmers.⁷³ Opponents, however, argue that supply management only avoids subsidies by passing higher prices onto consumers; limits the industry's ability to expand into export markets; and serves as a highly protectionist measure that hurts Canada's position in trade negotiations.⁷⁴

The **EU dairy sector** is active in each Member State and is one of the most prominent sectors in many regions of the EU, including in remote areas with limited industrial diversification. The dairy industry gives many rural areas their distinctive character and, as such, is important for both the economy and employment in many Member States. Annual revenues for the European dairy industry generally exceed \$100 billion and account for approximately 13% of total turnover in the EU food and beverage industry.⁷⁵ Within the industry, the leading producers include Germany, France, the Netherlands, Italy and the UK, while cheese serves as the most lucrative sector, accounting for over 30% of the market's overall value.⁷⁶

In terms of trade, the EU is a major net exporter of dairy products with total exports in 2009 of \$7.47 billion and a surplus of \$6.68 billion.⁷⁷ Germany, France and the Netherlands serve as three of the world's largest exporters of dairy products, cumulatively accounting for nearly 40% of global exports in dairy in 2009.⁷⁸ Cheese and milk/milk products serve as the two largest sources of exports, together accounting for 93% of the total value of dairy exports. Many Member States are globally renowned for their cheese production and, in many instances, are the predominant producer of certain speciality cheeses protected within the EU by GIs (See Box 8 for further discussion). While this has allowed the cheese industry to become more export oriented in recent years, the vast majority of the EU's

⁷³ Dairy Farmers of Canada. <http://www.dairyfarmers.ca/what-we-do/supply-management/the-benefits-of-supply-management>

⁷⁴ Simpson. J. (2010).

⁷⁵ Datamonitor (2009); Euromilk. http://www.euromilk.org/eda/content_html.aspx?cid=426

⁷⁶ Datamonitor (2009).

⁷⁷ UN Comtrade

⁷⁸ Government of Canada (2009).

production continues to be consumed domestically, with only 6% of production (by volume) exported in 2009.⁷⁹

In terms of bilateral trade, the EU controls a significant share of Canada's dairy imports (42%). However, prohibitive TRQs have largely restricted market access for all Canadian trade partners, limiting overall imports and causing Canada to serve as a minor market for EU dairy exports. As such, EU dairy exports to Canada in 2009 totalled only \$138.8 million representing less than 2% of the EU's total exports.⁸⁰ Exports of cheese serve as the primary export product, accounting for nearly 97% of the value of total EU dairy exports to Canada in 2009. Trade, however, is largely one-sided with Canada's dairy exports to the EU being only 15% of the value of dairy imports from the EU. Under the CETA, interests in Canada remain defensive while expanding the export market is viewed as a primary goal for the EU.

ANALYSIS

Canada

The impact of the CETA on Canada's dairy sector will likely be largely determined by the degree of liberalisation reached. Dairy serves as arguably the most sensitive agricultural sector for Canada, making it appear that the CETA could result in three (broadly defined) potential outcomes:

1. Elimination of supply management in Canada, resulting in sizeable reductions in import controls and increases in the quota for imports
2. Maintenance of sensitivities for dairy, resulting in the continued system of supply management and limited to no concessions on minimum access commitments for EU imports
3. Improved minimum access commitments for certain products from the EU (e.g. specialty cheeses), resulting in a limited adjustment in the dairy sector's system of supply management.

The Canadian dairy sector has clear defensive concerns with respect the CETA, with the industry seeking a CETA whose outcome closely resembles the second of these three options and ensures the maintenance of the supply management system and its pillar of import controls.

Industry concerns hereto are reflected within the CGE simulations, with two scenarios (A and B) modelling an outcome similar to point 2 above and a further two scenarios (C and D) modelling one similar to point 1. Under the two scenarios that retain sensitivities on dairy in Canada and continue to apply existing tariffs on imports from the EU, estimates suggest that the CETA would lead to significant increases in output (7.7%) and exports (117%) over the long-term, leading to improvements in the sectoral balance of trade by as much as \$470 million.

Alternatively, the two scenarios that model a full elimination of tariffs on EU imports of dairy project that the CETA will lead to substantial declines in output (over 12%) in Canada's dairy sector over the long-term (Table 17 Annex 6). While liberalising the sector would stimulate its expansion into international markets – leading to increases in overall dairy exports of approximately 180% over the long-term – imports would be expected to rise by a significantly larger amount resulting in a \$1.2 billion reduction in the overall sectoral balance of trade. This imbalance in trade would almost entirely be due to increased imports from the EU, which are estimated to increase by over 770% with the removal of tariffs. It should be noted, however, that while significant degrees of liberalisation would likely

⁷⁹ Euromilk. <http://www.euomilk.org/upload/docs/EU%20Dairy%20Market%20summary%202006-2009%20+%202010%20forecast.pdf>

⁸⁰ UN Comtrade

negatively impact Canadian dairy producers, it could benefit consumers by providing wider supply and lower prices.

It is, however, unclear whether the CETA will lead to full liberalisation of the dairy sector. The dairy industry has been vocal in its opposition to liberalisation under the CETA, maintaining that tariffs and TRQs must be maintained in order to ensure that Canadian producers are not competing against 'subsidised producers from the EU'.⁸¹ With the government increasingly voicing its support of supply management in terms of the CETA negotiations, it therefore appears that a scenario such as that modelled in the CGE analysis is unlikely. Further, with import controls serving as one of the three pillars of supply management in Canada's dairy sector, it becomes increasingly improbable that supply management is maintained and significant levels of liberalisation are achieved. As such (and with the government in apparent support of the system), it is unlikely that the first outcome outlined above will be reached under the CETA.

Although the study believes that full removal of tariffs for the sector may be an unrealistic outcome of the CETA and the maintenance of sensitivities for dairy appears possible – Canada has, after all, protected supply management in all previous trade agreements – there remains the possibility that the EU could achieve some concessions. These would most likely take the form of improved minimum access commitments for certain products (i.e. specialty cheeses), resulting in a limited adjustment in the dairy sector's system of supply management.⁸² Further concessions to the EU could be made in the form of granting EU producers protection for certain geographical indications (GIs) as discussed in Box 8 below. In both cases, the impact on Canadian dairy producers would be negative, resulting in reduced output and a further worsening of the sectoral balance of trade with the EU (though likely far less severe than that predicted by the CGE model). Such an outcome would, however, likely benefit Canadian consumers through reduced costs.

EU

As noted in the analysis on Canada, the assessment has identified three broad potential outcomes for the dairy industry as a result of the CETA. The impact on the EU is largely contingent on the level of market access granted, and hereto, to the degree that the CETA's outcome resembles one of the following:

1. Elimination of supply management in Canada, resulting in sizeable reductions in import controls and increases in the quota for imports
2. Maintenance of sensitivities for dairy, resulting in the continued system of supply management and limited to no concessions on minimum access commitments for EU imports
3. Improved minimum access commitments for certain products from the EU (e.g. specialty cheeses), resulting in a limited adjustment in the dairy sector's system of supply management.

Imports into Canada of dairy products are limited by restrictive TRQs, with prohibitive out of duty-quotas averaging 251.3%. The TRQ for cheese, for example, is set at 20,412 tonnes with out-of-quota duties of 245.6%.⁸³ With the EU being a major source of Canadian cheese imports, there appear to be

⁸¹ Dairy Farmers of Canada. <http://www.dairyfarmers.ca/what-we-do/international-trade/international-trade-negotiations/negotiations-between-canada-and-europe>

⁸² Viju et al (2010).

⁸³ European Commission and Government of Canada (2008)

significant opportunities for the EU under an outcome resembling the first listed above. The results from the CGE model support this view, with full removal of tariffs on dairy in Canada estimated to increase output in the EU by nearly 1% over the long-term (Tables 17-24 in Annex 6). This projected increase in output would likely result from increased export opportunities as the model predicts an increase of overall exports of nearly 6% in the EU, leading to an improvement to the sector's overall balance of trade of nearly \$1.6 billion. Increased exports to Canada would be the primary driver of the industry's expansion, with full elimination of tariffs projected to increase bilateral exports by up to 770% over the long-term, leading to a gain of over \$1.6 billion in the bilateral balance of trade in dairy products. These gains would likely be further enhanced through the granting of protection in the Canadian market of a number GI protected EU speciality cheeses (Box 8).

As noted in the assessment of Canada, it is, however, highly unlikely that the CETA will lead to full reduction of tariffs for dairy products in Canada. Although the CETA negotiations have proceeded under an 'everything is on the table' mantra, it has appeared increasingly unclear that the Agreement will lead to a removal of supply management, as the Government of Canada has repeatedly claimed that it 'strongly supports supply management and will defend the system with the same vigour as in all of its previous trade agreements'.⁸⁴ Given that it appears nearly impossible to reconcile protection of supply management with significant degrees of liberalisation, the potential for the CETA to reach an outcome such as that modelled in the CGE analysis is questionable. Further, the continued maintenance of supply management also calls into question the ability of the CETA to obtain significant degrees of liberalisation, casting doubt on the likelihood of the first outcome being reached.

Scenarios A and B in the CGE model attempt to capture a CETA where existing tariffs on EU dairy imports into Canada are maintained. The results show that such an outcome would negatively impact EU producers by instead leading to moderate declines in output (-0.26%) and exports (-1%) over the long-term, ultimately leading to a worsening of the sectoral balance of trade by as much as \$470 million.

While this would be a worst case scenario for EU producers, there is still potential for gains to be realised under the CETA – even if these are likely to remain modest. This would most likely take the form of improved minimum access commitments for certain products (i.e. cheeses) with the Agreement thereby resulting in a limited adjustment in the dairy sector's system of supply management.⁸⁵ Further, the EU could realise gains from concessions in the form of extending GI protection of certain EU cheeses into the Canadian market (Box 8). Additionally, EU exporters would stand to benefit from improvements in the procedures from obtaining veterinary certificates, which have been identified by stakeholders as being overly burdensome while increasing costs.⁸⁶

Apart from prohibitive tariffs, numerous non-tariff barriers hamper EU dairy exports to Canada. One example is the Canadian measure imposing new compositional standards for cheeses, which establishes two basic criteria to define and limit protein sources used in cheese production. The first criterion is to prescribe a minimum level of casein in different varieties of cheese which must be derived from (and as a consequence necessarily domestic) raw milk. These protein values are set at 63%, 83% and 95% depending on the cheese variety. The regulations allow the remainder of the protein content of cheese (respectively 37%, 17% and 5%) to be derived from "milk products" of "constituents of milk" such as imported MPCs. The second criterion of the regulations is that the relative proportion of whey protein and casein protein in any cheese must not exceed the whey to protein ratio in milk. The effect is to limit

⁸⁴ Gauthier, A. and M. Holden (2010a).

⁸⁵ Viju et al (2010).

⁸⁶ EC. http://madb.europa.eu/madb_barriers/barriers_details.htm?barrier_id=075089&version=4

the use of "milk products" in cheese production, in favour of a minimum content of fresh (and thus necessarily Canadian) milk proteins.

Box 8: Extending EU GIs on cheese in Canada

An additional potential area of impact within the dairy sector concerns geographical indications. Geographical indications (GIs) have become an important component of the EU's agricultural policy with its stance being that GI protection encourages the diversification of agricultural production, protects products names from misuse and imitation while providing information to consumers on the specific characteristics of the product. The welfare enhancing effect of GIs for agricultural producers has led to their taking a greater role in EU trade agreements, with EU negotiators seeking to ensure greater protection for GI designated producers in foreign markets.

Along with wine and spirits, cheeses have been one of the primary food products that the EU has sought additional GI protection for in international markets. Canada is no exception, with the EU having targeted GIs as an issue of concern in trade relations with Canada, making it possible that EU negotiators will seek to use the CETA to extend protection into Canada for a number of cheeses.⁸⁷

INDICATOR: Employment

BASELINE

Canada has 12,965 dairy farms with over 81% of these located in Quebec and Ontario.⁸⁸ These farms employ approximately 30,000 people with a further 21,000 employed at the primary processing level.⁸⁹ Approximately 1 million farms in the EU are engaged in the production of milk with the dairy industry as a whole responsible for around 10% of employment in the entire EU food and beverage industry.⁹⁰

ANALYSIS

Canada

As with output and trade, the extent of the CETA's impact on employment within the Canadian dairy sector is likely to be largely contingent on the degree of liberalisation provided under an agreement. It would, therefore, be expected that greater degrees of liberalisation would negatively impact employment in Canada's dairy sector leading to workers being forced to shift into other areas. This is supported by the CGE model which suggests that full elimination of tariffs in the dairy sector would lead to decreases in employment in the dairy sector of upwards of 13% over the long-term (Table 24 Annex 6), while retaining existing tariffs could lead to gains in employment of 7.5%.

⁸⁷ EC. http://madb.europa.eu/madb_barriers/barriers_details.htm?barrier_id=105371&version=1

⁸⁸ CDIC. http://www.dairyinfo.gc.ca/index_e.php?s1=dff-fcil&s2=farm-ferme&s3=nb

⁸⁹ Statistics Canada

⁹⁰ EDA. http://www.euromilk.org/eda/content_html.aspx?cid=426

Decreased employment of a mild to moderate degree may also occur either through increased minimal access commitments for the EU that raise the overall import quota or where the CETA leads to the granting of GI protection in Canada of heretofore generically used cheese names such as feta or parmesan.

EU

The effect of the CETA on employment within the EU dairy sector is similarly expected to be tied to the degree of liberalisation reached under an agreement. Where significant improvements to market access in Canada are achieved, it is likely that the EU would experience moderate increases in the demand for labour. This is supported by the CGE results which find that fully removing tariffs in Canada would lead to an almost 1% increase in employment within the dairy processing industry and a 0.3% increase in the milk production industry (Table 23 Annex 6). Conversely, scenarios which model a continuance of existing tariffs on dairy imports into Canada find that maintaining sensitivities would likely result in limited declines in employment (-0.27%) within the EU over the long-term.

Alternatively, improvements in market access either through increased minimum access commitments and/or extension of designated protections for holders of GIs would likely have a positive impact on employment within the industry, though likely to a more limited extent than observed under the full removal of tariffs.

Other PAPs⁹¹

INDICATOR: Output and trade

BASELINE

The processed agricultural products (PAPs) industry serves as Canada's second largest manufacturing sector, trailing only transportation equipment, generating turnover in excess of C\$74 billion in 2008.⁹² However, as Canada's transportation equipment manufacturing industry is predominantly concentrated in Ontario and Quebec, PAPs serve as the largest manufacturing sector in a number of Canada's provinces. Excluding meat processing, seafood and dairy (which are assessed separately in this report) the remainder of the PAPs sector accounts for C\$36.4 billion in turnover (Table 14). While meat and dairy comprise the two main sources of turnover for the sector, other areas of relative economic importance include animal feed, preserved fruits and vegetables and baked goods. As shown in Table 14, Canada maintains an overall trade surplus in PAPs though this becomes a trade deficit when excluding dairy, meat and seafood.

⁹¹ This subsector includes all other PAPs excluding beverages and tobacco, dairy products, processed meat and seafood products, which are discussed elsewhere in this report. As such, it entails manufactured and processed food products such as animal feed (including for pets), grain and oilseed milling (e.g. pasta, flour, breakfast cereals), sugar and confectionary products (e.g. chocolate, maple syrup), fruit and vegetable preserving (e.g. frozen vegetables, canned fruit, preserves), speciality foods, baked goods (e.g. bread, cookies), snack foods and coffee and tea.

⁹² Industry Canada

Table 14: Canada production of PAPs and trade overall and with the EU, 2009 (Mio. CAN\$)

Product	Share of CAN PAPs revenue	Total CAN exports	Exports to EU	Total CAN imports	Imports from EU
Animal feed	7.6%	518	55	751	20
Grain & oilseed milling	11.6%	3,585	23	2,915	235
Sugar & confectionary	4.7%	1,404	13	1,970	305
Fruit & vegetable preserving; specialty foods	7.8%	2,275	102	2,848	211
Baked goods	9.4%	1,647	18	1,207	177
Other	8.1%	1,446	47	2,944	263
Dairy, meat and seafood	50.8%	7,575	461	4,789	237
TOTAL	-	18,450	719	17,430	1,449
TOTAL (excl. dairy, meat and seafood)	-	10,875	258	12,641	1,212

Source: Industry Canada

The agri-food industry currently represents 2% of the EU's GDP and contributes greatly to providing consumers with a diverse range of safe and healthy products which meet their needs.⁹³ The EU operates a sizeable trade surplus in PAPs with total exports of approximately €21 billion in 2009 compared to imports of €8 billion. The four largest exporters and importers of PAPs in 2009 in the EU were France, the Netherlands, the UK and Germany with the sum of their exports totalling more than 60% of the total for the EU.⁹⁴

As in most areas, the US accounts for the majority of Canada's exports and imports (51% in 2009) in other PAPs making the EU a relatively minor trade partner. And while Canada maintains overall trade surpluses in grain and oilseed milling products and baked goods, it has trade deficits with the EU in nearly all PAPs except animal feed, though total bilateral trade in this product is negligible. So, while the EU accounts for only 6.3% of all of Canada's trade in other PAPs, it accounts for 54% of its trade deficit in these products. Hereto, it should be noted that other PAPs serve as one of main agricultural exports from the EU to Canada, trailing only alcoholic beverages and cheeses in overall value, with the most popular exports (listed in Table 15) accounting for over 16% of the total value of agricultural exports from the EU to Canada in 2009.⁹⁵

⁹³ Eurostat

⁹⁴ Ibid.

⁹⁵ Government of Canada. www.canadainternational.gc.ca/eu-ue

Table 15: EU's leading exports to Canada of other PAPs, 2009

Product	Imports into Canada from the EU 2007 (in mio. CAN\$)
Bread and pastries	\$164.96
Olive oil	\$110.80
Chocolates	\$90.03
Black tea	\$62.80
Sugar products	\$37.60
Pasta, couscous	\$46.85
Sugar candy	\$34.00
Pizza	\$33.56

Source: Government of Canada

ANALYSIS

Canada

As in other areas, the extent of the impact of the CETA on Canada's PAPs sector depends on the degree of liberalisation reached. Hereto, estimates suggest that the industry would benefit under an agreement that sought greater degrees of liberalisation.

Specifically, CGE estimates suggest that while Canada could see minor increases in output and exports of vegetable oils and sugar under full removal of tariffs, the primary gains for manufacturers of other PAPs would likely be concentrated in such areas as frozen and preserved vegetables and fruits, prepared foods of the milling industry and preparations of cereals (Tables 25 to 32 in Annex 6). Precise CGE estimates for the sector, while difficult to precisely decompose,⁹⁶ suggest that these products could potentially witness substantial increases in output and overall exports over the long-term under the full removal of tariffs, leading to sizeable improvements to the overall balance of trade in these products. At the same time, it would be expected that increased imports from the EU would outpace bilateral exports, implying that gains to the industry would likely arise as a result of increased competition stimulating overall efficiency gains that increase the sector's ability to compete in third markets.

Several factors, however, are likely overstating the gains projected by the CGE model. First, a number of seafood products are included in the GTAP sector (see below footnote), inflating gains for the sector on account of the GTAP's sectoral aggregation. Second, these estimates do not take into account **rules of origin**, which may serve to increase the gains for the industry in Canada. Specifically, RoO on sugar are more stringent in the EU, making many fruit preserves or confections produced in Canada unable to qualify as Canadian-produced under EU rules.⁹⁷ Therefore, if the CETA adopts a more relaxed set of rules of origin on sugar, it is likely that the estimates would be increased, as a number of Canadian products would be unable to qualify for preferential tariffs.

⁹⁶ The GTAP sector 'ofd' ('other food') is a combination of a wide range of processed agricultural products including cocoa preparations, frozen and preserved fruits and vegetables, coffees and teas, confectionaries, prepared foods of the milling industry and preparations of cereals and flours. Many of these products have high tariffs and/or TRQs, making it difficult to isolate the shock from tariff liberalization. **Specifically complicating the assessment is the GTAP sector's further inclusion of all frozen fish/seafood products, which are almost certainly overstating the gains for the 'other PAPs' sector when they should be accrued to the fisheries sector.** This should be kept in mind when reading the results from the CGE simulations.

⁹⁷ Gauthier, A. and M. Holden (2010a).

Nevertheless, the industry stands to benefit under the CETA's ability to address a number NTBs. Requirements under food labelling of ingredients and nutritional information continue to be under review and subject to change. Canadian food and beverage manufacturers argue that one of the challenges facing their industry is the lack of harmonisation between Canada and the EU on certain food ingredients and labelling regulations. The CETA has the potential to further improve cooperation on these issues and ensure greater transparency and harmonisation, facilitating trade in other PAPs.

EU

With a high degree of liberalisation in other PAPs, the CETA could potentially lead to moderate gains for EU producers. These overall gains are likely to be increased under more restrictive rules of origin on sugar and improved regulatory cooperation in such areas as labelling and packaging.

With low applied tariffs on cocoa preparations and coffees and teas in Canada, it appears that the CETA will have a limited impact on the EU's trade of these products. The EU would, therefore, most likely experience gains for its preparations of cereals and flours (e.g. pastas, bread and biscuits) as well as frozen and preserved fruits and vegetables. Given the existence of high tariff peaks on a number of prepared food products in Canada, the modelling framework applied a 'sensitive list' approach on the GTAP sector of 'other food nec' and employed two scenarios in which tariffs were not liberalised in Canada.

The results from these scenarios suggest that EU producers will be negatively impacted if current sensitivities are maintained and positively impacted if tariffs are fully removed. Specifically, the simulations project that a CETA that fully removes tariffs will lead to limited to moderate increases in output (0.11%) and overall exports (0.68%) of prepared foods in the EU over the long-term (Tables 25 to 32 in Annex 6). This would have a positive impact on the EU's overall balance of trade in these products, with the majority of these gains being derived from increased trade with Canada, with exports of these products outpacing imports from Canada by as much as \$340 million over the long-term.

Conversely, restricting these products from liberalisation (Scenarios A and B) is estimated to lead to minor declines in EU output (-0.09%) and overall exports (-0.56%) over the long-term, leading to a worsening of the EU's sectoral balance of trade by as much as \$685 million.

EU exporters have also raised concerns with respect to labelling and packaging requirements (e.g. nutritional labelling and product description requirements), maintaining that overly burdensome requirements raise costs for EU producers and exporters.⁹⁸ Further, Canada continues to maintain compulsory container size requirements – a practice abandoned in the EU over a decade ago – with highly regulated requirements for canned fruits and vegetables in particular, which raise costs for EU exporters.⁹⁹ Where the CETA improves harmonisation of standards between the two sides, it is likely that the EU other PAPs sector could realise further gains through reduced compliance costs.

⁹⁸ Guerin S.S. and C. Napoli (2008).

⁹⁹ Canadian Association of Importers and Exporters. http://www.iecanada.com/ienow/2010/may_10/inside_1.html

INDICATOR: Employment**BASELINE**

The PAPs sector represents 1.5% of total employment in Canada, with Quebec and Ontario accounting for 64% of the sector's workforce.¹⁰⁰ Modernisation and rationalisation in the workforce has resulted in some large scale workforce reductions in the past few years.¹⁰¹

The manufacturing of food products and beverages employed 4.9 million persons in the EU-27 in 2008, accounting for approximately 8% of EU industrial employment and 2% of the total workforce. Within the sector, 43.8% of employment takes place in the bread, sugar, confectionary and other food products. In absolute terms, Germany, France and the United Kingdom top the list with almost 60% of the EU's agri-food jobs.¹⁰² These countries, together with Italy and Spain, account for almost four out of every five jobs in the European PAPs sector.¹⁰³ In terms of relative importance, the PAPs sector serves the greatest role in Ireland and Denmark where it accounts for more than 3% of all jobs.¹⁰⁴

ANALYSIS***Canada***

Employment in Canada's other PAPs sector has the potential to be positively impacted by the CETA, with the magnitude of this impact positively correlated with the degree of liberalisation reached under the Agreement. This assertion is supported by the CGE estimates which predict significant increases (upwards of 3%) in the demand for labour over the long-term in Canada's manufacturing of other PAPs under a CETA that fully removes tariffs in the EU. This, however, is likely an ambitious estimate with it unclear whether full removal of tariffs on all products can be reached, and as the EU's more stringent RoO on sugar could potentially reduce the ability of a number of Canadian products from qualifying for preferential tariffs.

EU

The CETA's impact on employment in the EU's other PAPs industries will likely be contingent on the level of liberalisation. Scenarios which model a full removal of tariffs in Canada suggest that the CETA will lead to a limited increase in employment over the long-term (0.1%), while scenarios that model a continuation of current tariffs in Canada estimate that the Agreement would lead to minor decreases in employment over the long-term (-0.1%). At the same time, however, the ability of the CETA to improve regulatory harmonisation in such areas as labelling and packaging could place upward pressure on employment by increasing the overall gains for the EU.

¹⁰⁰ Statistics Canada, Labour Force Survey

¹⁰¹ Statistics Canada

¹⁰² Eurostat

¹⁰³ Ibid.

¹⁰⁴ Ibid.

Beverages¹⁰⁵

INDICATOR: Output and trade

BASELINE

Canada's beverages manufacturing sector generated C\$10.1 billion in 2008 with the majority of this produced within the soft drinks (40%) and breweries subsectors (44%). While spirits make up the largest export product for Canada's beverages sector (50% of all exports), limited production in wineries or distilleries make Canada heavily reliant on imports from other countries to meet its domestic demand. As such, Canada operates a heavy trade deficit in the beverages sector (C\$2.9 billion in 2009) with this extending to trade in all subsectors of beverages: soft drinks (C\$466m), brewery products (C\$390m), wine (C\$1,733m) and spirits (C\$317.6m).¹⁰⁶

The **EU**, as a leading producer of beverages – particularly wine and spirits – serves as a major import source for Canada, being the largest external source for wine (46.8% of imports), beer (55.7% of imports) and spirits (44.6% of all imports). In fact, according to trade data at the HS 4-digit level, EU exports of agriculture and agri-foods to Canada are predominantly in beverages, spirits and vinegar, with this sector representing 49.2% of the value of all EU agri-food exports to Canada in 2007.¹⁰⁷ As such, the EU maintains a significant trade surplus with Canada in trade of beverages, with the total in 2009 reaching C\$1.72 billion.¹⁰⁸ Canada is also an important export market for the EU, particularly in wine where it serves as the fourth largest importer of EU produced wine.¹⁰⁹

While tariff liberalisation may produce some benefits to EU exporters, the CETA's greatest potential impact on the EU wine and spirits industry rests in its ability to resolve disputes regarding practices within Canada's Provincial Liquor Control Boards (see Box 9).

Box 9: Provincial Liquor Control Boards in Canada

In Canada, each province and territory has a body that oversees control, distribution and sale of alcoholic beverages within its jurisdiction. With the exception of Alberta, which is the only Canadian province to have privatised its alcohol distribution system, each of these liquor boards are granted a quasi-monopoly position over the import, supply and distribution of alcoholic beverages. These liquor boards operate under two primary objectives: profit maximisation for revenue generation and limitation of abusive/excessive alcohol consumption.

Operating independently (i.e. not at a federal level), these liquor boards establish 'reference' or 'floor' pricing standards, which set the minimum retail price for each product category. These prices are enforced within the retail and distribution system operated by these liquor boards, with the aim being to encourage profits and collect tax. Where off-site point of sale is allowed, e.g. in licensed bars and private outlets, the retailer is required to purchase their products through the liquor board outlet.

The EU has taken issue with the provinces' monopoly control over distribution and retail, arguing that

¹⁰⁵ The results of the CGE analysis include bottled water, soft drinks, breweries, wineries and distilleries, while the impact assessment is directed primarily at wineries and distilleries.

¹⁰⁶ Industry Canada

¹⁰⁷ Statistics Canada

¹⁰⁸ Industry Canada

¹⁰⁹ Eurostat

liquor boards 'appear discriminatory and substantially hinder the access of European alcoholic beverages to the Canadian market.'¹¹⁰ Garnering particular contention from the EU has been the complaint of discriminatory listing procedures, pricing and quota systems that favour domestic over imported products. The liquor boards' listing procedures require any supplier of beer, wine or spirits wishing to sell their product(s) in a province to first obtain a listing from the provincial marketing agency. The EU has complained that decisions by the boards pertaining to listing requests lack transparency, while such decisions have seemed to discriminately exclude entry of imported products.¹¹¹ Further, it is claimed that the monopoly status of these boards, which for example has made the Liquor Control Board of Ontario the world's largest purchaser of alcoholic beverages, has allowed these provincial liquor boards to leverage their position to inflict further 'onerous commercial conditions on suppliers, once an imported product is listed.'¹¹² In addition, the EU claims that some provincial liquor boards apply discriminatory cost of service differentials on imported EU wines.¹¹³

In reference to the quota systems placed on imported products, it is important to note that liquor board purchasing groups have strict sales quotas for all brands listed. Brands not reaching their quota are discounted at the supplier's cost, sold out and denied future access to the retail network. The EU has claimed that this system imposes discriminatory quota systems for imported wines that make it difficult for EU products to meet the quota and therefore maintain the ability to be sold in state-run retail stores.

While these concerns have, in part, been addressed bilaterally through the 1989 EC-Canada Agreement on trade and commerce in alcoholic beverages and the 2004 EU-Canada Wine and Spirits Agreement, the issue remains unresolved due to continued concern from the EC over lack of enforcement/compliance at the provincial level and continued ongoing discriminatory behaviour. As such, resolving these issues either through greater enforcement or a significant reduction in the provincial boards' monopoly status stands to be an important means of ensuring greater access for Europe's alcoholic beverages industries. With these products being the most widely exported processed food products into Canada and exhibiting sizeable demand in Canada, such an outcome by the CETA could produce significant gains for the European industry.

For further analysis on this issue see the Competition Policy section.

ANALYSIS

The issue of liberalisation as it pertains to the beverages sector is primarily non-tariff related, with the CETA's impact to be determined largely by its ability to resolve EU disputes pertaining to discriminatory practices alleged to exist in Canada's liquor control board system.

While tariffs do exist on alcoholic beverages in both Canada and the EU, the CGE model predicts that their elimination will only stimulate minor gains for the industries on both sides of the Atlantic. With

¹¹⁰ Market Access Database. http://madb.europa.eu/madb_barriers/barriers_details.htm?barrier_id=960047&version=6

¹¹¹ Market Access Database

¹¹² Ibid.

¹¹³ This includes: (1) 'minimum (and maximum) price requirements on certain imported products'; (2) 'the waiver or reduction of various charges to the domestic industry (e.g. freight, direct delivery mark ups, costs of marketing programmes) not available to imported products'; (3) 'Ontario, authorizes the Liquor Control Board of Ontario to apply an additional reduction of 5% on all sales of Ontarian wines to restaurants and bars'; (4) 'British Columbia allows the BC Liquor Board to practise a mark-up discount on the province's wines, which obviously would not benefit imported wines'.

respect to **Canada**, the CGE model projects that fully removing tariffs on beverages will have a low to moderate impact, with production estimated to increase by approximately 0.45% and overall exports by as much as 3.1% over the long-term (Tables 33-40 in Annex 6). These increased exports would be expected to be smaller than increases in imports, however, leading to a very minor reduction in the sectoral balance of trade. It is expected that increased trade with the EU would be the primary driver of these effects.

Similarly, the CGE model predicts that fully removing tariffs in the CETA would have only a limited impact on the **EU** beverages industry, with output expected to increase by as much as 0.09% over the long-term and overall exports by 0.3%. Driven largely by increased exports to Canada (nearly 19%), the CETA would be expected to lead to an improvement of the EU's balance of trade in beverages by as much as \$85 million over the long-term.

As noted, however, the potentially larger impact is in the CETA's ability to improve enforcement/compliance at the provincial level, thereby eliminating alleged discriminatory practices implemented by liquor control boards. While difficult to quantify, it would be expected that the removal of these practices would lead to even greater gains for the EU than currently projected by the CGE model, while lowering gains for Canada. An example of the impact on the EU could potentially be found by examining the privatisation of the retail and distribution network that took place in Alberta throughout 1993. With all of Alberta's LCBs closed and all retail privatised throughout the year, the impact on imports was fairly pronounced. The value of Alberta's imported alcoholic beverages, which averaged C\$61.2 million between 1990 and 1993, climbed to C\$100.9 million in 1994, marking a far more significant increase than observed elsewhere in Canada.¹¹⁴ While it is not clear that the CETA would lead to a removal of LCBs throughout Canada, the example highlights the potential impact that elimination of their control in imports could have on EU market share.

INDICATOR: Employment

BASELINE

Employment in the EU's beverage manufacturing sector is just under half a million, with the Member States of Germany, Spain, the UK, France and Italy accounting for 56% of total EU employment in the sector.¹¹⁵ In Canada, employment in the beverage manufacturing sector was nearly 24,000 in 2008, with the majority of employment concentrated in Ontario, British Columbia and Quebec.¹¹⁶

ANALYSIS

It is not expected that the CETA will have a pronounced impact on employment in the beverages industries of Canada or the EU over the long-term. According to the CGE results, tariff liberalisation under the CETA will stimulate limited changes in the demand for labour with full liberalisation estimated to lead to limited changes in the demand for labour in the EU and Canada. At issue, however, is largely whether the CETA will address discriminatory practices by provincial control boards in Canada. If the CETA is able to fully ensure provincial enforcement and compliance, it is likely that the EU will be able to realise greater gains from the CETA through increased exports to the EU. While this would likely place upward pressure on the demand for labour in the EU's beverage industry, it is not expected that the

¹¹⁴ Industry Canada, Trade Data Online

¹¹⁵ Eurostat. http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-BW-09-001-03/EN/KS-BW-09-001-03-EN.PDF

¹¹⁶ Industry Canada. <http://www.ic.gc.ca/cis-sic/cis-sic.nsf/IDE/cis-sic3121empe.html>

overall impact would increase greatly in significance. Conversely, the full removal of these practices in Canada would likely have the opposite effect, as increased domestic market share for EU producers would imply decreased domestic sales for Canadian producers and likely downward pressure on the demand for labour in Canada's beverages industry. Nevertheless, evidence does not support that such an outcome would be significantly negative.

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

Overall, the economic assessment suggests that the CETA will likely have a positive impact on employment in Canada's agriculture and PAPs industries with greater degrees of liberalisation, while maintaining sensitivities will create greater possibilities that workers will be displaced. Specifically, CGE estimates suggest that full removal of tariffs would place upward demand on labour in nearly all sectors, with the notable exception of dairy, which would be expected to see significant decreases in labour. Conversely, maintaining sensitivities on dairy and prepared foods in Canada and on meat products in the EU is expected to lead to declines in labour in nearly all agricultural sectors except for dairy, other PAPs, fisheries and other grains.

The impact of full removal of tariffs would largely be positive with the CETA likely to generate employment in a number of sectors, benefitting provinces across the country. For Canadian crops (i.e. wheat, barley, oilseeds and fruits and vegetables), the impact would be marginal with full removal of tariffs only expected to lead to very minor increases in labour. Alternatively, the cattle/beef and pig/pork producing sectors would be expected to expand noticeably over the long-term creating new employment opportunities, with rural areas in Alberta, British Columbia, Manitoba and Quebec expected to be the most directly impacted. Food manufacturing industries across Canada would also stand to benefit from full removal of tariffs under the CETA as increased market access for Canada's processed agricultural products would likely stimulate expansion of the industry, providing a boost for employment in a number of sectors, particularly in rural areas where food manufacturing remains an important source of employment.

The expansion of these industries would help to offset potentially sizeable contraction in Canada's dairy sector that would be expected to occur with removal of the system of supply management and increases in imports from the EU. Supply management has historically provided Canada's dairy farmers with security and its removal would almost certainly result in structural changes, requiring producers to shift into other areas of employment. While the short- to mid-term impact would be detrimental, there would be opportunities for those displaced to shift into expanding areas within the agriculture and PAPs sectors or in industrial product manufacturing or services, mitigating the negative impact over the long-term; particularly as older dairy producers exit the workforce. The impact, however, would likely be concentrated in the provinces of Quebec and Ontario, making any elimination of supply management more difficult on rural areas in these two provinces.

Those employed in Canada's beverages sector may also be negatively affected with structural shifts facilitated by the CETA's potential removal of discriminatory practices implemented by Canada's

provincial liquor control boards. Compliance at the provincial level and an end to these practices would potentially increase EU market share, to the partial detriment of Canadian producers. Under such an outcome, demand for labour in the industry may decrease, though this could likely be offset by expansion in production of other PAPs across Canada.

Table 16: Agriculture, PAPs and Fisheries sectors in Canada estimated to exhibit a change in employment over the long-term

Sector	Impact on employment using sensitive lists approach (Scenarios A & B)	Impact on employment from full removal of tariffs (Scenarios C & D)
Wheat	-	+
Other grains	+	+
Oilseeds	-	+
Vegetables & fruit	-	+
Cattle/beef	-	+
Other animal products/meat	-	++
Other PAPS	++	++
Fisheries	+	+
Dairy	++	--
Beverages	-	-

+ denotes marginal increase, ++ denotes significant increase, - denotes minor decline, -- denotes significant decline

Source: CGE model

These outcomes are, however, largely the result of an ambitious CETA that assumes full removal of tariffs for agricultural products. While maintaining tariffs and the supply management system would likely benefit Canadian dairy farmers, helping to maintain employment in areas that lack industrial diversification, failure to liberalise beef and pork in the EU would likely engender declines in employment in a number of agricultural sectors across Canada, forcing workers to shift into alternative areas of employment over the long-term.

EU

The CETA's effect on worker displacement in the EU's agriculture, PAPs and fisheries sectors is likely to be determined by the degree of liberalisation achieved under an agreement. Nevertheless, no matter the outcome, the overall impact on the EU is expected to be far less pronounced than what is likely to occur in Canada given smaller expected percentage changes in output and employment in the former.

CGE estimates suggest that full removal of tariffs would place upward demand on labour in sectors in which the EU owns a comparative advantage vis-à-vis Canada: dairy, prepared foods and beverages. Expansion of these industries would, therefore, generate employment in some of the higher value-added sectors within the EU's agriculture and PAPs sectors, while also serving to benefit a number of

rural areas. This is particularly the case in the dairy industry, which is an important source of employment in rural areas throughout the EU and where gains for employment under the CETA have the greatest potential.

Member States that could potentially realise the greatest creation of employment from economic gains to the dairy sector include France, Italy, Poland, Germany and Spain as well as the Netherlands and Ireland, which enjoy high levels of dairy production relative to the size of the population.¹¹⁷ SMEs could benefit from the removal of onerous listing procedures in Canada's provincial run liquor boards, with wine and spirit producers in France, Spain, Italy and Germany poised to benefit.¹¹⁸ In terms of other PAPs, increased employment could particularly benefit Germany, France, Italy, the UK and Poland, which together account for nearly 55% of EU employment in other food manufacturing, with gains also potentially accruing to Ireland which is relatively more reliant on food production as a source of national output.¹¹⁹

Conversely, full removal of tariffs would likely lead to decreased demand for labour in a number of sectors within the EU, most notably in the beef and pork sectors. These sectors maintain defensive interests with respect to the CETA and it is likely that significant improvements in access for Canadian producers would lead to displacement for a number of workers employed in primary production and processing. The negative impact on these workers would be most significant in the short-term as labour market frictions increased jobs search times and in some instances, could require relocation in order to find employment in an alternative, expanding industry. With estimated declines in employment most pronounced in the pork sector, it is here where the CETA stands to most negatively impact EU agriculture and PAPs workers. The outbreak of a 'pork crisis' in late 2010/early 2011, resulting from increased production costs and likely to persist throughout 2011, could stand to amplify the associated negative impact, if liberalisation were to take effect in 2012. Within the EU, the Member States of Poland, Germany, France, the UK and Denmark could be particularly affected given their share total EU pig processing. Liberalisation in the beef sector, which would likely have a less pronounced impact than in pork, could nevertheless negatively affect Ireland, France and Italy. Ireland, in particular, which is particularly reliant on exports to the UK market, could stand to be negatively impacted by greater competition from Canadian exports over the short-term.

¹¹⁷ Eurostat (2009a) and Wijnands et al. (2007).

¹¹⁸ Wijnands et al. (2007)

¹¹⁹ Eurostat (2009a) and Wijnands et al. (2007).

Table 17: Agriculture, PAPs and Fisheries sectors in the EU estimated to exhibit a change in employment over the long-term

Sector	Impact on employment using sensitive lists approach (Scenarios A & B)	Impact on employment from full removal of tariffs (Scenarios C & D)
Other grains	-	+
Dairy	-	++
Other PAPs	-	+
Beverages	+	+
Wheat	+	-
Oilseeds	-	-
Beef	0	-
Pork	0	--

+ denotes marginal increase, ++ denotes significant increase, - denotes minor decline, -- denotes significant decline, 0 denotes no change

Source: CGE model

Alternatively, the assessment finds that keeping tariffs on beef and pork in the EU in place would minimise any potential adverse effect on workers in the EU's meat processing sector, though similarly failure to liberalise dairy in Canada could eliminate potential gains for workers in these areas.

INDICATOR: Quality and Decency of work

BASELINE & ANALYSIS

Canada

Within the agriculture and PAPs sector, only workers employed in grain elevators, feed and saw mills are regulated at the federal level and subject to the *Canada Labour Code*; all other agricultural and agri-food workers are subject to provincial regulation. Standards vary across provinces with agricultural workers in a number of Provinces being regulated differently from workers in other sectors. In many provinces, agricultural workers involved in certain types of production and processing may be exempted from minimum employment standards and may not be legally required to receive weekly rest, meal breaks, paid holidays, paid vacation or overtime pay and may not be subject to provincial standards for minimum wage or hours of work.¹²⁰

To the degree that increased processing of PAPs such as beef, pork or other PAPs leads to increased output and employment in primary production (e.g. grains or cattle/hog production), it is conceivable that more Canadians will find employment in these temporary, seasonal positions, exposing them to conditions where employment standards are below the level enjoyed in other sectors. At the same time, Canada's agricultural workforce is aging with younger workers increasingly moving into off-farm employment in the manufacturing and services sectors. To deal with shortages of labour experienced during peak periods, a number of provinces participate in Canada's Seasonal Agricultural Worker Program (SAWP), which allows foreign workers from countries that have signed bilateral agreements

¹²⁰ Hacault (2009): p. 118-119. Also, see: Commission for Labor Cooperation, 'Guide to Minimum Employment Standards, Pay Deductions and Employment Insurance in Canada'. http://www.naalc.org/migrant/english/pdf/mgcanmes_en.pdf

with Canada to temporarily enter Canada to assist in harvesting and planting periods.¹²¹ Given these shortages and increased movement off-farm, it is therefore unclear whether Canadians would be significantly subjected to issues relating to quality and decency of work in the agricultural sector; or if, instead, increased demand for labour could be largely filled by non-Canadian temporary workers.

Employment in agriculture and agri-foods also contains heightened safety issues, which could impact quality and decency of work along the dimension of work environment safety. While fatalities and injuries in Canada's agricultural sector are far less prevalent than in most countries, the sector continues to serve as one of the country's most dangerous professions. Injuries and fatalities generally arise either as a result of accidents resulting from use of machinery (i.e. machine rollover, runover or entanglement) or from farm animals.¹²² Farmers can also be subject to a number of ambient risks including exposure to dangerous chemicals (such as from pesticides), toxic gases (primarily in manure storage facilities) and farmers lung.¹²³

Over the long-term, Canada is likely to continue its trend of reducing the number of work-related fatalities and injuries in the agricultural sector. Nevertheless, increased employment in the sector would likely expose a greater number of workers to employment that is more dangerous on average, affecting the quality of working conditions that those who move into the sector are exposed to. As cattle and dairy cows have been found to double the likelihood of work related injuries on Canadian farms, there is potential for expansion/contraction in these sectors to particularly influence worker safety.¹²⁴ With dairy poised to contract under liberalisation and beef production to expand, there is, however, also potential for the effects to cancel each other out.

EU

Agricultural work in the EU is subject to many of the same concerns as outlined in the section above on Canada. While safer than most countries, the agriculture and PAPs sector has one of the worst incidence rates for non-fatal accidents in the EU and has the worst rate for women.¹²⁵ While the main causes of accidents can vary by Member State, the majority of injuries and fatalities tend to result from machinery and livestock. While data could not be located for each individual EU Member State, the following examples illustrate the problems faced within Member States:

- Czech Republic: workers in agriculture are far more likely to be subject to chronic health problems;¹²⁶
- Denmark: the meat and meat processing sector has the highest incidence of accidents¹²⁷;
- Hungary: a larger proportion of agricultural workers are exposed to high degrees of work-related stress¹²⁸;

¹²¹ These countries include: Jamaica, Barbados, Trinidad-Tobago, Antigua, Grenada, St. Kitts, St. Lucia, St. Vand Montserrat and Mexico. http://www.rhdcc-hrsc.gc.ca/eng/workplaceskills/foreign_workers/ei_tfw/saw_tfw.shtml

¹²² CAISP (2008).

¹²³ Farm Safety Association. 'Manure Gas Dangers: Factsheet'. http://www.farmsafety.ca/factsheets/manure_gas.pdf; and 'Farmer's Lung: Factsheet'. http://www.farmsafety.ca/factsheets/farmer_lung.pdf. Farmers lung is when farmers are exposed to air 'contaminated with particulate matter or toxic gases', usually resulting from breathing in dust from moldy hay, grain or feed.

¹²⁴ Maltais (2007): p. 7.

¹²⁵ http://osha.europa.eu/en/sector/agriculture/index_html/women

¹²⁶ <http://www.eurofound.europa.eu/ewco/studies/tn0612036s/cz0612039q.htm>;

¹²⁷ <http://www.eurofound.europa.eu/ewco/2007/10/DK07100191.htm>

¹²⁸ <http://www.eurofound.europa.eu/ewco/2009/02/HU09020191.htm>

- Ireland: the most common cause of non-fatal accidents on farms are from livestock, trips and falls and tractors and machinery;¹²⁹
- Poland: agriculture results in more accidents than construction, with underage workers also overly exposed to unsafe conditions¹³⁰;
- Portugal: falling and/or crushing is one of the most prevalent types of preventable accidents and is most common in the food and beverage manufacturing sector;¹³¹
- UK: in 2009, agriculture accounted for 0.9% of total employment but 1.4% of reported work-related injuries.¹³²

Greater risk of injury tends to subject these workers to higher levels of stress and has resulted in agricultural workers being subjected to some of the highest levels of work-related stress in the EU.¹³³ Musculoskeletal disorders are also a particular problem in the agriculture industry with a majority of workers frequently subjected to painful positions, carrying of heavy loads and exposure to repetitive hand movements.¹³⁴ Similarly, workers in the EU's food and beverage manufacturing sector are subject to greater levels of ergonomic risk, non-standard work hours, lower levels of control over the work process, and lower levels of skilled work: all negatively impacting the overall quality/decency of work.¹³⁵

With potential expansion of the dairy, beverages and other PAPs sectors, it is possible that an increasing number of EU workers could shift into a position that places them at greater risk of injury. This could arise through machine-related injury in the manufacturing of food, and also from injuries caused by greater exposure to dairy cows if greater production of dairy products leads to expansion of primary milk production. The impact would likely occur across a number of Member States, but given the far greater importance the agriculture and agri-foods industry has as a source of employment in the EU's New Member States, the effects could be more concentrated here. Regardless, it is not expected, that the impact would be significant with the EU already exhibiting high levels of workplace safety and with it unlikely that significant degrees of liberalisation in dairy will be reached.

Box 10: Canada's Liquor Control Boards and the social impact from the CETA

Opponents of the CETA claim that should the Agreement lead to the dismantling of provincial liquor boards, it would ultimately undermine the government **social policy space** and limit its ability to 'implement policies that reduce the substantial social and economic harm caused by alcohol consumption'.¹³⁶ Herein, these opponents cite increases in drunk driving convictions and sales to minors following privatisation in Alberta.¹³⁷ Additional concerns over the potential negative social impact revolve around employee benefits derived through the liquor board owned distribution system's usage of union employees. Specifically, concern has been raised over the impact on Alberta's employees in the

¹²⁹ <http://www.eurofound.europa.eu/ewco/2006/10/IE0610019I.htm>

¹³⁰ <http://www.eurofound.europa.eu/ewco/2007/02/PL0702019I.htm>

¹³¹ <http://www.eurofound.europa.eu/ewco/2008/05/PT0805029I.htm>

¹³² <http://www.hse.gov.uk/statistics/industry/agriculture/index.htm>

¹³³ European Agency for Safety and Health at Work (2009)

¹³⁴ <http://osha.europa.eu/en/sector/agriculture/msds>

¹³⁵ Eurofound (2008a)

¹³⁶ Grieshaber-Otto, J. (2010).

¹³⁷ National Union of Public and General Employees. <http://www.nupge.ca/content/3387/canadas-liquor-board-unions-join-fight-save-lcbo>

alcohol industry who have seen privatisation lead to lower pay and benefits as well as decreased job security.¹³⁸

However, there is evidence that these concerns are likely unfounded. For one, it is not dismantling of the liquor boards which the EU seeks, but rather an end to what it deems are discriminatory practices that favour domestic producers. Hereto, it is possible to address EU concerns through greater enforcement of already agreed to measures, allowing the liquor control boards to continue to operate. Evidence suggests that such an outcome would not necessarily undermine public health and safety objectives as the Canadian government would retain the most important policy tools for reducing over-consumption of alcohol, i.e. being able to set price floors and impose taxes on beer, wine and spirits. As a note, the Systembolaget liquor control board system in Sweden is maintained as a means of ensuring public health by reducing the abuse and excessive consumption of alcohol;¹³⁹ however, differences between Sweden and Canada exist in Systembolaget's expressed mandate of being brand-neutral and selecting its products based on consumer demand.¹⁴⁰ As such, opponents' concerns that CETA cannot put an end to discriminatory practices while ensuring public health are likely unfounded.

For further analysis on this issue see the Competition Policy section.

ENVIRONMENTAL ASSESSMENT

INDICATOR: Land and soil usage

BASELINE

Canada

In Canada, agriculture represents an important portion of land cover, with 4.57% of total land consisting of arable land and 0.65% for permanent crops.¹⁴¹ Over the last three decades, land in Canada has increasingly been used for crops with the intensification of agriculture in turn causing less land to be devoted to pasture and to idle land in eastern Canada, and less land used for summerfallow in western Canada.¹⁴²

At the same time, agricultural soil land quality in Canada has improved over the past 25 years,, with improvements occurring in the levels of soil erosion, soil carbon change and soil salinisation. This has largely been the result of improved land management practices, moving towards no-till agriculture and increasing the levels of forage and permanent crop cover. Most of this has occurred in the Western Provinces through emphasis on cereal and oilseeds agriculture, which lends itself to reduced till

¹³⁸ Ibid.

¹³⁹ Swedish National Institute of Public Health (2009).

¹⁴⁰ Systembolaget.se

¹⁴¹ CIA WorldFactbook. 2005.

¹⁴² Eilers et al. 2010

agriculture.¹⁴³ Agricultural soil quality in eastern provinces, namely Quebec, Ontario and the Atlantic Provinces have experienced minimal improvements due to continued reliance on conventional tilling.¹⁴⁴

Central and Atlantic Canada rely more heavily on chemical inputs to increase crop yield, as the precipitation conditions make this more viable compared to Western Canada, where low levels of precipitation and a short growing season reduce the yield benefits of chemical fertiliser and pesticide inputs. Thus, this region of the country sees less chemical input per hectare than the U.S. and certain European countries.¹⁴⁵ Overall, around 75% of farms apply fertiliser to their crops. These chemical inputs can reduce the quality of soil.

EU

Agriculture in the EU utilises a significant portion of land, and soil degradation is a significant issue that has been exacerbated by unsustainable farming practices and land use. According to the European Commission Directorate-General for Agriculture, half of the EU's land is farmed.¹⁴⁶ Specifically, the utilised agricultural area is 38% of the total EU-27 area in 2009: 24% being considered arable land, 3% of land being permanent crop, and 14% land being permanent grassland.¹⁴⁷ Member countries' share of this agricultural land varies greatly, with, for example 65% of the United Kingdom's land area being utilised in agriculture, but only 2% in Latvia.¹⁴⁸ Using FAOSTAT figures for all EU member countries, in 2008 the EU had 119 Mha of arable and permanent crops from a total land area of 428 Mha (about 28%), representing little change since 1980.¹⁴⁹

Soil erosion is particularly prevalent in Spain, Portugal, Greece and Italy. Risk of soil erosion is higher where the organic carbon content of the soil is low (0 to 1%), which occurs mostly in Southern Europe. As most of the arable land (about 80%) is covered by crops between 70-80% of the time, the prevalence of erosion is limited. Soil quality can be further reduced by excess chemical inputs and nutrients surpluses. Low input farms have grown in importance in the EU-12, while nitrogen and phosphate usage in the EU-15 has decreased noticeably over the past several decades. Part of these decreases in chemical inputs can be explained by a rise in organic farming.¹⁵⁰

Livestock levels have remained fairly constant, however, livestock density has increased in certain areas over the last two decades.¹⁵¹ Specialist livestock farms in particular lead to nutrient surpluses because of excess manure. On the other hand, specialist crop holdings can lead to a nutrient deficit, meaning that nutrients need to be imported and applied in the form of mineral fertilisers.¹⁵² Between 2003 and 2007, the distribution of livestock specialist (22%), crop specialist (40%), and mixed farming (38%) has stayed fairly constant in the EU.¹⁵³

The EU in recent years has sought to address these issues with rural development planning policies, among other policies, that institute soil management practices to minimise soil erosion. The EU's 2003

¹⁴³ Ibid.

¹⁴⁴ Ibid.

¹⁴⁵ Korol, M. (2004)

¹⁴⁶ Agriculture and the environment- Factsheet. European Commission Directorate-General for Agriculture. 2003.

¹⁴⁷ EUROSTAT Pocketbooks. Agricultural statistics. Main results 2008-2009. 2010 edition. European Commission.

¹⁴⁸ EUROSTAT Pocketbooks. Agricultural statistics. Main results 2008-2009. 2010 edition. European Commission.

¹⁴⁹ FAOSTAT. 2008.

¹⁵⁰ Agriculture and environment in EU-15 – the IRENA indicator report. European Environment Agency. Report No 6. 2005.

¹⁵¹ Ibid.

¹⁵² EUROSTAT Pocketbooks. Agricultural statistics. Main results 2008-2009. 2010 edition. European Commission.

¹⁵³ Ibid.

Common Agricultural Policy (CAP) reform aims to minimise soil erosion and protect soil quality, including organic content and structure, through reinforced cross-compliance.¹⁵⁴

ANALYSIS

Canada

As demand increases, intensification of agricultural practices to attain higher crop and livestock yields could have increasing environmental impacts by encroaching further onto marginal lands and by increasing the chemical inputs (for fertilisers, pesticides and herbicides) which can degrade the quality of soil.¹⁵⁵

Certain crops, like wheat, are more amenable to practices that favour reduced tillage and greater cover crops. Thus, where CETA leads to replacing cropland to grow these crops, there can be an environmental benefit. However, more production of red meats and pork typically leads to a reduction in the quality of soil because of the problems surrounding surplus manure. Through better management of manure, livestock access to surface water and usage of pesticides can potentially offset this impact.¹⁵⁶

The results of the CGE model suggest that the CETA will lead to increase in wheat output and wheat exports (both overall and to the EU). These could become more significant if CETA makes the zero tariffs, which have been implemented because of unprecedented high wheat prices, permanent. Although Canadian wheat farming is already mature and operating at scale, such an outcome as a result of the CETA's agricultural provisions would likely have some impacts on land and soil usage in the Prairie Provinces of Manitoba, Saskatchewan and Alberta, where the Canadian wheat production is concentrated. There could be some negative impacts in terms of increased concentrated land and soil usage if increased wheat production and land usage come at the expense of other agricultural activity such as the production of other grains, fruits & vegetables and oilseeds. However, should land be converted to cropland to increase production, greater soil degradation and erosion as well as organic matter loss may occur.¹⁵⁷

The quota proposed under the CETA for Canadian hormone-free beef is expected to be large enough to increase production. Under a full liberalisation scenario, CGE simulations estimate that Canadian beef output and export to the EU is expected to increase. However, as it is the opinion of the study team that it is unlikely that the NTBs such as the ban on hormone beef will be removed, whatever increase in beef production is likely to come from hormone-free beef. This would then alter the CETA's impact on land and soil usage with potentially more land converted into pasture for cattle. Pasture has a lower degree of soil degradation than cropland, and can be suitable as a habitat for certain species, which could improve biodiversity.¹⁵⁸ What impact production of hormone free beef will have on soil depends greatly on whether an increase in output will be the result of a conversion of cropland to pasture, in which case it could have some environmental benefits. To realise this benefit, cattle must be graze-fed rather than factory farmed, something that is more likely if it is hormone free. However, if increases in production are achieved by turning marginal land into pasture land, this would result in a negative environmental impact.

¹⁵⁴ Agriculture and the environment- Factsheet. European Commission Directorate-General for Agriculture. 2003.

¹⁵⁵ Agriculture and Agri-Food Canada (2009a)

¹⁵⁶ Eilers et al. (2010)

¹⁵⁷ Agriculture and Agri-Food Canada (2009a)

¹⁵⁸ Ibid.

For Canada's pork sector, the preliminary CGE model shows a significant impact only where pork is liberalised in the EU. Under such an outcome, it is expected that there would be a substantial increase in overall production in Canada. Yet, even under a more comprehensive level of liberalisation it would not be expected that the CETA will lead to significant pressure on land and soil usage in Canada. It should be added however that land usage for pork production is a hotly debated issue in Canada and even a moderate percentage change in the demand on land use to this effect could lead to some social turmoil.

The CETA's environmental impact that can be attributed to beef and pork production will inevitably be tied to the liberalisation achieved under the Agreement. In this respect, alternative scenarios that kept beef and pork as sensitive in the EU, show that such an outcome would likely lead to declines in output of beef and pork in Canada over the long-term, limiting the potentially negative environmental impact.

Upon liberalisation, Canada's dairy industry would be expected to witness significant declines in output, thus leading to important decreases in land and soil usage related to farming in the provinces of Ontario and Quebec. Again, however, this outcome is likely only to the degree that dairy is liberalised.

EU

In the EU, the results of the CGE model suggest that CETA will lead to minor changes in output of wheat, with full liberalisation projected to lead to minor decreases of land usage for wheat in the EU, a minimal increase in barley, and a minimal decrease in oil seeds.

The EU's beef and pork industries are expected to decrease output and exports under a full liberalisation scenario. The CGE model estimates that beef output will decrease by 0.15% over the long-term and pork output by 0.4%. If the CETA achieves full liberalisation of this sector, there is potential for benefits to soil quality as specialised livestock production tends to create nutrient surpluses. However, it also depends on where the change in production would occur, as northern Europe, western Europe and the UK are more reliant on pasture for livestock, while central, eastern and Mediterranean Europe are largely cereal based. Pasture and graze fed cattle tend to be better for soil quality. At the same time, alternative scenarios that model the maintenance of tariffs on beef and pork and the EU, estimate that retaining sensitivities will not alter output in the EU over the long-term, implying that the environmental impact will be largely tied to the level of liberalisation achieved under the CETA.

For dairy, the outcome is similarly dependent on the level of liberalisation achieved. Under full liberalisation dairy output is expected to increase 1% according to the CGE model, while maintaining current tariffs on imports into Canada is estimated to lead to declines in EU output. With it apparently unlikely that the CETA leads to the full removal of tariffs on dairy, more limited degrees of liberalisation that include improvement in terms of geographical indicators for cheese could lead to minor increases in output in the EU. The environmental impact on soil usage and quality is not expected to be significant, as change in farm structure is not anticipated.

INDICATOR: Water usage and quality**BASELINE****Canada**

Irrigation is used on 8% of Canadian farms, with crops such as fruit and vegetables being the main use of irrigation on farms in Canada over half of farms relying on irrigation.¹⁵⁹ Currently, the most commonly used kinds of irrigation systems, such as sprinkler and gun systems, are also the most water inefficient.¹⁶⁰ In Canada, nutrients and bacteria have been found to exceed acceptable limits on some occasions in water affected by agricultural run-off. Nitrate can be found in virtually all groundwater around agricultural land, though levels are typically within safe limits.¹⁶¹ Though maintaining reasonable performance, water quality in Canada resulting from agricultural practices has decreased since 1981.¹⁶² The primary culprits for this decline were usage of inputs like nitrogen and potassium through fertiliser and manure. This change is present throughout Canada, though regions like British Columbia and the eastern provinces found larger declines because greater rainfall has led to higher rates of infiltration to groundwater and run-off of surface water. Generally, there is less application of nitrogen in the Prairies than in the rest of the country.¹⁶³

When considering contamination of water from coliforms, the decline in water quality has been more important in the Prairies, where there has been a rise in quantity of animals raised.¹⁶⁴ As a note, because 60% of grazing livestock in Canada do not have access to surface water, and less than 10% of livestock feed near surface water, some of the impacts on water quality are mitigated.¹⁶⁵

Managing wastewater from agricultural sources has in the past consisted of little more than dispersal with minimal treatment. There is increasing awareness of the importance of using additional technologies, such as engineered wetlands¹⁶⁶ which can reduce the concentration of wastewater pollutants by 70-98%¹⁶⁷

EU

On average, 44% of total water abstraction in Europe is used for agriculture. Southern European countries use the highest amount of abstracted water for agriculture, constituting around two-thirds of total abstraction.¹⁶⁸ As in other countries, water usage for agriculture irrigation depends on climate, soil characteristics, water quality, cultivation practices and crop type. Between 2003 and 2007, the total irrigable area in the EU27 (except Germany and Estonia), saw a decrease of 8%.¹⁶⁹ Overall, the areas with the highest water usage can be found in southern Europe. The South uses about 50% of the

¹⁵⁹ Grimard, J. (2007).

¹⁶⁰ Ibid.

¹⁶¹ Agriculture and Agri-Food Canada (2009a)

¹⁶² Eilers et al (2010)

¹⁶³ Ibid.

¹⁶⁴ Eilers et al (2010)

¹⁶⁵ Grimard, J. (2007).

¹⁶⁶ Canadian Journal of Civil Engineering. New technologies for on-site domestic and agricultural wastewater treatment. 2001. Joy, D., Weil, C., Crolla, A., Bonte-Gelok, S., 28(S1):115-123.

¹⁶⁷ Constructed Wetlands for the Treatment of Agricultural Wastewater in Atlantic Canada. 2005. Atlantic Committee on Land and Engineering.

¹⁶⁸ EC Agriculture and Rural Development. URL: http://ec.europa.eu/agriculture/envir/water/index_en.htm

¹⁶⁹ EUROSTAT Pocketbooks. Agricultural statistics. Main results 2008-2009. 2010 edition. European Commission.

agricultural water, while the North uses about 7%.¹⁷⁰ The environmental impacts of this range from soil erosion, salinisation of groundwater, harm to habitat and water pollution. Crops that are very water intensive include potatoes and cotton in northern Europe, and grain maize, rice and fruit in southern Europe.¹⁷¹ Field crops, horticulture and permanent crops, represent nearly 70% of total irrigable area.¹⁷²

Regions with higher concentrations of livestock generally represent areas of higher nutrient surpluses because of manure. Beef, pork and dairy farms reduce the environmental quality of water because of the excessive accumulation of manure, which can lead to contamination of water from bacteria. Pig and dairy production are intensive in Germany, the Netherlands, Belgium, northern Spain, Denmark, western UK and southern Ireland among others.¹⁷³

Protecting water quality is a key issue in the EU Common Agricultural Policy, specifically to avoid water pollution from agricultural activity by encouraging sustainable usage of fertilisers and pesticides. The EU's 1991 nitrate directive aims to reduce water pollution from nitrates.¹⁷⁴ Some of the measures included monitoring, establishing vulnerable zones, creating codes of practice, and action programmes. The water framework directive looks at assessing, monitoring and managing surface and groundwater with respect to ecological and chemical status. This reduces the discharge of hazardous substances from pesticides for example.¹⁷⁵ The European Commission also adopted the communication 'Pricing policies for enhancing the sustainability of water resources' in 2000.¹⁷⁶

ANALYSIS

Canada

As demand increases in Canada, intensification of agricultural practices to attain higher crop and livestock yields could have increasing environmental impacts, by increasing water usage and have higher levels of inputs which can lead to reductions in the quality of water.¹⁷⁷

By further concentrating Canadian livestock production, large surpluses of manure are likely to cause some degradation of surrounding water quality due to run-off of nutrients and bacteria.¹⁷⁸ Under the full liberation scenario, dairy production in Canada would decrease, resulting in less negative impacts of water quality from this segment of agricultural industry. However, pork and beef production would increase, which adversely affect water quality.

EU

In the EU, the impact is expected to be minimal. With liberalisation, it is likely that the negative environmental impact associated with livestock manure would decrease in the EU given the potential for decreased output. Conversely, expansion in the dairy sector could worsen the impact on water quality from this sector.

¹⁷⁰ Agriculture and environment in EU-15 – the IRENA indicator report. European Environment Agency. Report No 6. 2005.

¹⁷¹ EUROSTAT Pocketbooks. Agricultural statistics. Main results 2008-2009. 2010 edition. European Commission.

¹⁷² Ibid.

¹⁷³ Agriculture and environment in EU-15 – the IRENA indicator report. European Environment Agency. Report No 6. 2005.

¹⁷⁴ Agriculture and the environment- Factsheet. European Commission Directorate-General for Agriculture. 2003.

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

¹⁷⁷ Agriculture and Agri-Food Canada (2009a)

¹⁷⁸ Ibid.

As fruit crops in Southern Europe are more water intensive, the extent to which certain processed agricultural products like fruit preservatives are favoured in Europe under a full liberalisation scenario (especially if labelling and packaging requirements are simplified for European exporters to Canada) could result in greater water usage. Full liberalisation is only expected to have a minimal increase in output for beverages according to the CGE model. However, the real change in output would come from a resolution of the dispute over the provincial Liquor Control Boards in Canada. This could increase water usage for irrigation of fruit crops like grapes, but also during production of wine, beer and spirits.

INDICATOR: Biodiversity

BASELINE

Canada & EU

Natural lands and unimproved pasture offer the best conditions to support higher levels of biodiversity.¹⁷⁹ As land is converted from wetland to cropland, habitat capacity is deteriorated. Agricultural production hinders biodiversity by reducing the quality and diversity of habitats for different species and forcing wild flora and fauna to compete with agricultural species for resources. In cases where they are successful, this can harm crop performance.¹⁸⁰ Monoculture creates habitats that reduce the capacity for biodiversity.

There is significant controversy over the purported environmental impacts of genetically modified crops. As many of these GM crops have been modified to be resistant to certain chemical inputs, such as pesticides and herbicides, there is a risk that the breed could become a weed that would be difficult to eradicate because of its resistance to herbicides. The other oft-stated risk is the possibility that a hybrid offspring become more harmful or invasive, thus harming wild plant species and the surrounding ecosystem. For example, one study found that Bt corn was harmful to monarch butterflies, though the study was criticised for not replicating natural conditions. Further, use of GM crops which have been created to produce insecticides result in less insecticides being applied to crops, which is often cited as an environmental benefit.¹⁸¹

In Canada, nearly 600 species of birds, mammals, reptiles and amphibians rely of agricultural land in Canada for their habitats. Habitat capacity has decreased from 1986 to 2006.

As farmland in the EU makes up roughly 40% of land, agriculture thus plays an important role in providing habitats for wildlife in the EU. Commercial production in EU agriculture, as in many other developed countries, has resulted in intensive, large-scale, high-input and heavily mechanised farmlands. The impacts on biodiversity come from farm intensification and abandonment. Farm intensification, with higher use of chemical and other inputs, can negatively affect the local ecosystem, negatively affecting its capacity to support biodiversity. However, the trend for intensification in the EU-15 has stabilised over the course of the 1990s. By reducing the diversity on the farm itself, the capacity to support ecological biodiversity is also diminished. Farms that support biodiversity and landscape quality are considered high nature value farmland. These are mostly found around the Mediterranean, upland UK and Ireland, and mountainous regions of Scandinavia. Overall, high nature value land represents 15-25% of the utilised agricultural land in the EU-15.¹⁸² Most of the high nature value farmland is not under

¹⁷⁹ Canada's 4th National Report to the United Nations Convention on Biological Diversity.

¹⁸⁰ Agriculture in harmony with nature: Strategy for environmentally sustainable agriculture and agri-food development. Agriculture-Agri-Food Canada. <http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1239884188282&lang=eng>

¹⁸¹ Genetically Modified Foods. Science and Technology Division. 1999. Depository Services program. Government of Canada.

¹⁸² Agriculture and environment in EU-15 – the IRENA indicator report. European Environment Agency. Report No 6. 2005.

a protected area within the CAP framework, while the rest is protected under Birds and Habitats Directions.¹⁸³

EU legislation of GMOs has been in place since the 1990s, which emphasizes the assessment of risk, monitoring, public disclosure, labelling and traceability of GMOs. Since Directive 1990/220, only 18 GMOs have been authorised for commercial release in the EU, with no authorisations granted since 1998.¹⁸⁴

ANALYSIS

Canada

Though the Canadian agriculture industry is already mature and operating at scale, full liberalisation may increase output and export of agricultural products to the EU. This intensification could cause further harm to biodiversity, where marginal lands are converted to croplands. However, to the extent that crops allowing for greater surface cover and pasture are favoured, such as for grazing of cattle, the agricultural landscape could benefit biodiversity.

Regarding GM crops, the CETA is unlikely to reverse the EU labelling policy of GMOs and the Advance Informed Agreement under the Cartagena Protocol. As such, the environmental impacts of GM crops in Canada are likely to remain unchanged as greater export of GM crops to the EU is unlikely to be encouraged.

EU

Full liberalisation in the EU could lead to a decrease in output of beef and pork. If this decrease comes from regions of Europe that use mostly pasture land for production (Northern and Western Europe and UK, as opposed to central, eastern, and Mediterranean Europe that are more cereal based) this could harm biodiversity where it is replaced with specialised cropland. However, this is unlikely to occur, as even under a full liberalisation scenario, the decrease in output is only likely to be 0.15% for beef output. Since the EU agriculture industry is already mature and operating at scale, the impact of CETA on biodiversity in the agricultural sector is expected to be relatively minor. Greater intensification, specialisation and abandonment of crops are not likely to be further extended by CETA, even by a full liberalisation scenario.

INDICATOR: Air pollution

BASELINE

Canada

GHG emissions from agriculture increased by 27% between 1990 and 2008, rising to 71Mt in Canada.¹⁸⁵ The emissions came from livestock, crops and on farm-fuel use. However, the majority, 62%, comes from animal production. Most of this is the result of food digestion, though about one-fifth is from manure and one quarter from nitrous oxide which is released from manure disposal.¹⁸⁶ Non-dairy cattle

¹⁸³ The European environment. State and Outlook 2010.

¹⁸⁴ Agriculture and the environment- Factsheet. European Commission Directorate-General for Agriculture. 2003.

¹⁸⁵ Environment Canada (2010b)

¹⁸⁶ Ibid.

have the largest impact on GHG emissions, representing over 80% of all enteric fermentation emissions.¹⁸⁷ Dairy cattle generate more milk today than they used to, but they also produce more GHG emissions. However, in Canada, emissions from dairy cattle has decreased overall since population of dairy cattle decreased on account of higher milk productivity.¹⁸⁸ Emissions that come from crops result from decomposing crop residues and emissions from chemical nitrogen fertilisers. Emissions from this latter category have gone up to 13Mt from 9Mt in 1998. However, better agricultural practices, like reduction of summerfallow and more conservation tillage have mitigated this effect.¹⁸⁹

Processed foods and beverages are larger consumers of energy, which results in more GHG emissions. Specifically, grain and oilseeds milling, sugar and confectionary products require more energy than meat, dairy and seafood. Of course, the quantity of GHG emissions depends on the source of energy, which varies across the country.¹⁹⁰

EU

GHG emissions from agriculture in the EU have decreased since 1990, though agricultural land remains a carbon sink. Most of the GHG emissions come in the form of nitrous oxide and methane.¹⁹¹ Nitrogen fertilisation of soil increases nitrous oxide emissions, and intestinal fermentation from livestock produces methane emissions. In fact, over 40% of all methane emissions are the result of agriculture.¹⁹² Soil denitrification causes 1.3 tonnes of GHG emissions per hectare (almost half of total agricultural emissions in the EU27, or 226 million tonnes CO₂e), fermentation in ruminants cause 1.9 tonnes per livestock unit (almost a third of total agricultural emissions, or 145 million tonnes CO₂e), while manure management causes 0.6 tonnes per livestock unit (a fifth of agricultural emissions, or 88 million tonnes CO₂e).¹⁹³ When compared across livestock production, beef production represents 29% of GHG emissions, 29% for cow milk, and 25% for pork production, while all others (poultry, eggs, sheep, goat) account for 17% together. Ruminants produce the most emissions per amount of meat (between 20 and 23 kg CO₂e/kg of meat).¹⁹⁴

Carbon dioxide emissions from agriculture occur because of fossil fuels burned during farm operations.¹⁹⁵ Direct energy usage has decreased by 7% between 2005 and 2007, going from 29.9 thousand kilotonnes of oil equivalent to 27.8 thousand kilotonnes oil equivalent (OE)¹⁹⁶. The energy consumed per hectare tends to be less in new Member states than old Member states. For example, the Netherlands has by far the highest energy intensity with 2166Kg OE/ha because it is highly dependent on glasshouses.

Certain practices to reduce GHG emissions from agriculture are being explored by Commission Working Groups, including efficient fertiliser application (which is already included under the EU Nitrates directive in 1991), composting and production of biogas, conservation tillage and organic farming among others. Biomass for renewable energy production is being encouraged under the 2003 Common

¹⁸⁷ Ibid.

¹⁸⁸ Ibid.

¹⁸⁹ Ibid.

¹⁹⁰ Agriculture and Agri-Foods Canada (2009a)

¹⁹¹ Agriculture and environment in EU-15 – the IRENA indicator report. European Environment Agency. Report No 6. 2005.

¹⁹² Agriculture and the environment- Factsheet. European Commission Directorate-General for Agriculture. 2003.

¹⁹³ EUROSTAT Pocketbooks. Agricultural statistics. Main results 2008-2009. 2010 edition. European Commission.

¹⁹⁴ Evaluation of the livestock sector's contribution to the EU greenhouse gas emissions (GGELS). Final Report. Administrative Arrangements AGRI-2008-0245 and AGRI-2009-0296. Joint Research Centre. European Commission.

¹⁹⁵ Agriculture and environment in EU-15 – the IRENA indicator report. European Environment Agency. Report No 6. 2005.

¹⁹⁶ EUROSTAT Pocketbooks. Agricultural statistics. Main results 2008-2009. 2010 edition. European Commission.

Agricultural Policy (CAP) reforms with carbon credits.¹⁹⁷ For manure management in particular, composting can reduce methane emission by 30 to 70%, especially when straw content is increased.

ANALYSIS

Canada

By further concentrating livestock production, large surpluses of manure are likely to increase emissions of greenhouses like methane and nitrous oxide.¹⁹⁸ Under full liberalisation, it is expected that animal product output would increase, requiring larger herd sizes and leading to larger production of methane as a by-product. In fact, between 1990 and 2008, output from the beef industry increased 30%, the swine industry increased 24% and the poultry industry increased 31%. The impact on GHG emissions was a 10Mt rise, from 30 to 40Mt in 2008.¹⁹⁹ Thus, higher amounts of cattle could still cause a rise in GHG emissions, as would an increase in swine production. Under full liberalisation, the E3MG model predicts a 0.75% to 0.76% rise in methane emissions by 2020 and a 0.61% to 0.72% rise in NOx emissions by 2020.

Emissions associated with transportation can be expected to rise with the increase in shipment of agricultural commodities across the Atlantic between Canada and the EU as a result of CETA.

EU

Since the EU agriculture industry is already mature and operating at scale, the impact of the CETA on air pollution in the agricultural sector is expected to be minor. As beef and pork output is expected to decrease under a full liberalisation scenario, GHG emissions associated with fermentation in ruminants and manure management would be expected to decrease. Dairy output would increase under full liberalisation, though because of the unlikely elimination of the supply management system in Canada, a decrease in output, or an increase in only certain products such as cheese is much more likely. Where increase in dairy output is the result of more milk farms, GHG emissions could increase. This overall limited impact on GHG emissions is reflected in the E3MG results, which sees no change in CO2 emissions in either a limited or ambitious tariff liberalisation for food, drink, and tobacco by 2018. Any change in GHG emissions in the EU is much more likely to come from changes in manure management, supported by various CAP policies, than from decrease in output caused by the CETA.

INDICATOR: WASTE

BASELINE & ANALYSIS

Canada & EU

One of the main environmental impacts of PAPs is an increase in solid waste disposal from packaging. Canadian output is expected to see moderate increase under full liberalisation, which could result in higher levels of packaging waste created because of increased consumption.

¹⁹⁷ Agriculture and the environment- Factsheet. European Commission Directorate-General for Agriculture. 2003.

¹⁹⁸ Ibid.

¹⁹⁹ Environment Canada (2010b)

In the EU, processed agricultural products that require packaging, such as beverages, pasta, bread, biscuits, fruit and vegetable preserves, are expected to see some gains in output under a full liberalisation scenario, which could cause an increase in waste.

Farms produce toxic waste because of the need to dispose of pesticide containers and products, veterinary products and used oil among others.²⁰⁰ Over half of Canadian farms use specialised recycling programs and 40% return toxic waste to suppliers. About 10% of farms use unsustainable practices like disposal at local dumps and burning.²⁰¹

Manure is an important form of waste on Canadian farms. A 1995 survey in Canada showed that 60% of farms stored manure on their land. Of these, 11% stored liquid manure, mostly on dairy, hog and poultry and egg farms. The most common liquid manure storage system was lagoons (33%) and open tanks (31%). Moreover, 40% of farmers can store over 250 days of liquid manure. 96% of farms store liquid manure more than 30 meters from any water source. Nearly all, 95%, of farms storing manure stored solid manure. The most popular storage method was an open pile without a roof (60%).²⁰² Overall, this kind of waste is expected to increase in Canada along with increase in livestock output.

Most dairy milk farms in Mediterranean regions use liquid manure storage system using an intensive system. Dairy farms in pasture areas typically use 100% liquid manure in the EU. Farms where cereal is not grown use 100% liquid manure to avoid buying straw for litter, which is the case in Ireland, Scotland, West England, Wales, parts of Denmark, the Netherlands, and most of northern Scandinavia. Mixed farming areas see more solid manure management because litter is available. This is present in northern France, eastern Netherlands, and mixed farms in Denmark. Industrial farms under the former Soviet collectivism use liquid manure storage because these dairy farms do not employ grazing. Small farms with less than 100 cows use solid manure management.²⁰³ Means of improving manure management in the EU were explained in the section on air pollution, particularly in terms of reducing GHG emissions. However, because beef and pork production are expected to see a decrease in output under full liberalisation, waste in the form of manure should decrease, though not significantly.

²⁰⁰ Grimard, J. (2007).

²⁰¹ Ibid.

²⁰² Manure, Fertilizer and Pesticide Management in Canada. Results of the 1995 Farm Inputs Management Survey. Economic and Policy Analysis Directorate Policy Branch. 1998.

²⁰³ Evaluation of the livestock sector's contribution to the EU greenhouse gas emissions (GGELS). Final Report. Administrative Arrangements AGRI-2008-0245 and AGRI-2009-0296. Joint Research Centre. European Commission.

4.1.2. Fisheries

ECONOMIC ASSESSMENT

INDICATOR: Output and trade

BASELINE

Bordering three oceans and possessing numerous lakes and rivers, Canada has direct access to a wealth of fishing sources. Capture fishery accounts for approximately 76% of total fish and seafood production in Canada, with lobster, crab and shrimp comprising 67% of the landed value of all fish and shellfish harvested.²⁰⁴ The seafood industry in the Atlantic is the country's largest, with its value driven by lobster, crab, shrimp and scallops. The Pacific industry is instead led by salmon, clams, groundfish and herring roe. Freshwater fisheries make a minor contribution to the industry contributing only 4% of total revenue from the fisheries sector.²⁰⁵ Aquaculture, though still minor within the Canadian industry, continues to increase in importance with key products including farmed salmon, trout, steelhead, Arctic char, blue mussels, oysters and manila clams.

In 2009, total exports in fish, crustaceans and molluscs (SITC 03) from Canada were \$3.21 billion, providing it with a trade surplus of \$1.31 billion.²⁰⁶ Canada's main seafood exports are shellfish (frozen snow crabs, live lobsters, frozen lobsters and frozen prawns and shrimp) and fresh Atlantic farmed salmon, with the former representing 56.6% of the value of all fisheries exports.²⁰⁷ As would be expected, trade in seafood is particularly important for the coastal provinces, with Nova Scotia, British Columbia, Newfoundland and New Brunswick accounting for 87.1% of all exports in 2007.²⁰⁸ The US is the leading international market for Canadian fish and seafood, receiving 61.8% of all exports in 2007, followed by the EU with 14.8%.

With imports more than six times the value of its exports and a trade deficit in 2009 of \$17.67 billion, the EU is heavily dependent on external sources for fish and seafood.²⁰⁹ While the most widely imported fish and seafood products in the EU are pacific salmon, frozen shrimp, tuna, Alaska Pollack, frozen octopus and frozen cod, it is noteworthy that Canada is a relatively minor contributor to the EU of these products.²¹⁰ Instead, Canada's major exports to the EU are in shrimp and prawns, which represent almost 30% of Canada's total fisheries exports to the EU. Other important Canadian exports consist of prepared salmon and lobster, with the EU importing approximately 90% of all its frozen lobster and 41% of all fresh lobster from Canada in 2007.²¹¹ Within the EU, Denmark and the UK are the two largest export markets for Canadian fish and seafood followed by France, Germany and Spain.²¹² The EU does not play a predominant role in Canadian imports of fish and seafood contributing only 2.1% of the value

²⁰⁴ Agriculture and Agri-Food Canada

²⁰⁵ Statistics Canada

²⁰⁶ UN Comtrade

²⁰⁷ Fisheries and Oceans Canada

²⁰⁸ Statistics Canada

²⁰⁹ UN Comtrade

²¹⁰ DG Trade website

²¹¹ DG Trade; UN Comtrade

²¹² Fisheries and Oceans Canada

of all fisheries imports in 2009.²¹³ From 2006-2008, Canada ran a trade surplus of €320 million with the EU in the fisheries trade.²¹⁴

Box 11: Non-Tariff Barriers in Fisheries

A defensive area of great concern amongst EU stakeholders is the fair application of Sanitary and Phytosanitary (SPS) measures to fisheries products. Internal trade of fish and seafood products within the EU Member States is subject to regulations specifically related to sanitary conditions aimed at consumer's health. As a result, imported products should comply with the same standards. It is a minimum expectation of the EU stakeholders that any agreement reached with Canada would require imports to meet the EU standards. Among other issues, the allowance of Canadian Genetically Modified (GM) salmon into the EU is of particular interest to the Canadians.

In terms of offensive measures, the EU could potentially realise some benefits by the removal of NTBs in Canada's laws and regulations pertaining to licensing for purchasing, processing and transporting fish as well as removal of restrictions stipulating fishing enterprises with foreign ownership levels of more than 49% are prohibited from holding Canadian commercial fishing licenses.

ANALYSIS

Canada

With over 80% of its fisheries products exported into foreign markets, the Canadian fisheries sector could potentially experience significant gains from the removal of tariff and non-tariff barriers under the CETA. In terms of tariffs, the EU operates high MFN rates on a number of fish and seafood products, serving to restrict exports from Canada and disadvantaging it in the EU market vis-à-vis major competitors such as Norway and Iceland.²¹⁵ While difficult to properly decompose,²¹⁶ CGE estimates appear to suggest that full elimination of EU tariffs on fish and seafood would have a positive impact on output and trade in Canada.

Specifically, the CGE model projects that fully removing tariffs on fish and seafood under the CETA will lead to limited increases in production of fisheries products in Canada (0.5% to 0.65%) over the long-term. While the CETA would not be expected to lead to an increase in exports of fresh fish and seafood from Canada, it would likely lead to at least low to moderate increases in overall exports of frozen fish and seafood products (Tables 41-48 Annex 6). For both fresh and frozen seafood products, exports to the EU would increase – with the greater gains likely to occur in the latter – producing an improvement to Canada's bilateral balance of trade and the overall balance of trade in fish and seafood.

²¹³ UN Comtrade

²¹⁴ EC (2008b)

²¹⁵ DFAIT. <http://w01.international.gc.ca/CIMAR-RCAMI/fiche-detail.aspx?id=1419&lang=eng>

²¹⁶ These difficulties stem from the nature of the GTAP database's aggregation. While it includes a sector for fisheries products this omits all frozen fish and seafood products, which are instead aggregated into the 'other foods' sector. Problematic is that this aggregation also includes a number of variegated PAPs such as cocoa preparations, coffee and tea products, cereal products and preparations, frozen and preserved fruits and vegetables, etc. At the same time, some of these products are also levied with higher than average tariffs in both Canada and the EU, making it unclear to what degree tariff shocks are impacting the frozen fisheries products included in this sectoral grouping.

The aquaculture industry could also realise significant gains with it serving as a major growth industry in Canada. An aquaculture product which Canadian exporters are eager to bring to the EU market is genetically modified (GM) salmon. Canada has proposed that proper labelling should resolve any consumer issues, but at this time GM salmon is not permitted to be sold in the EU although it is under consideration. Any resolutions within the CETA that facilitates access for GM salmon is likely to lead to substantial growth for the industry in Canada, benefitting output and exports while also providing EU consumers with lower costs.

EU

The EU is highly reliant on imports to meet its demand for fish and seafood and could therefore benefit from increased imports from Canada with greater levels of liberalisation under the CETA. CGE results suggest that full removal of tariffs under the CETA would have a limited impact on production in the EU fishing industry while perhaps benefiting processors (Tables 41-48 Annex 6). As the wild fisheries industry has a limited supply chain, lowering and/or removing tariffs will allow the import process to become less cumbersome with harvesters, exporters, importers and processors not having to juggle their timing with respect to storage and quotas. This will ultimately benefit the consumer.

The EU industry could further see benefits from investment liberalisation brought by the CETA. As Canada's restrictions on investments in its fisheries sector are among the highest out of any sector there may be an opportunity for increased investment in both the fish processing and aquaculture sectors, especially with regards to R&D. Canada maintains several restrictions on investment in the fisheries sector, whereas the chief constraint is the policy that fishing enterprises having a foreign ownership level of more than 49% are prohibited from holding Canadian commercial fishing licenses (although there is no limit on foreign ownership of fish processing companies that do not hold a fishing licence). Although the policy allows minority ownership of Canadian fish harvesting companies by foreign investors, majority ownership would require forfeiting any existing licenses held by that company.

INDICATOR: Employment

BASELINE

The fishing and incidental industries employ 0.2% of the overall labour force in Canada.²¹⁷ Newfoundland and Nova Scotia are the two provinces with the highest proportion of jobs in the fishing and incidental services industry in Canada with over 55% of the workers in the sector.

The fisheries sector serves a relatively minor source of employment for the entire EU. As part of the 2002 Common Fisheries Policy (CFP) reform,²¹⁸ the EU proposed a dramatic reduction in the fishing efforts by enforcing mandatory cuts in days at sea of between 30% and 60%.²¹⁹ This led to voluntary cuts in overall EU fleet capacity of about 18% and resulted in a large reduction in the numbers of fishermen as they left the industry in search of alternative employment. Approximately 130,000 are employed in the processing and preserving of fish, with Spain, the UK, France, Poland and Germany accounting for over 60% of this total.²²⁰

²¹⁷ Statistics Canada

²¹⁸ Note: a newer round of reforms to the Common Fisheries Policy is now underway

²¹⁹ Nerheim, M, (2004).

²²⁰ Eurostat (2009a)

ANALYSIS

Canada

Where the CETA leads to significant levels of liberalisation in the fisheries sector, it is expected that the Agreement will have a positive impact on employment in Canada's fisheries sector. This would include both gains in the fishing industry as well as in the processing of fisheries products. CGE estimates support these assertions, with the simulations modelling full removal of tariffs projecting that the CETA could lead to an increase in employment greater than 1% (Scenarios C and D) in the fishing sector over the long-term. While it is difficult to decompose the effect on the fish processing industry, data suggests that the impact would be larger, but still likely be only limited overall.

EU

Overall, it does not appear likely that the CETA will have a pronounced impact on employment in the EU's fisheries sector. CGE estimates suggest that full removal of tariffs would have almost no noticeable impact on the fishing sector in the EU. Further, while difficult to decompose from other impacts, it is possible that increased access to seafood products from Canada may have a positive – albeit likely negligible – impact on employment in the food processing industry.

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

The fishing industry is primarily made up of a number of independent operators who sell their produce as independent contractors to fish processing plants; it is also made up of fishermen and fishing boat crews working for commercial fleets some of which belong to processing companies. While the industry serves a relatively minor role in terms of national employment, it is particularly important in Canada's Atlantic Provinces, where it is a major source of livelihood for a number of regions.

With full removal of tariffs, it is likely that the fishing and processing industries in Canada would see increased employment, generating jobs in the Coastal provinces and generating opportunities in food manufacturing companies that process fish. Such an outcome would likely have a positive social impact as improved livelihoods increased the standard of living in these areas and ensured the continued existence of rural areas revolving around a system of production that has been in place for several generations. Such an outcome is, however, largely tied to the CETA's ability to eliminate tariffs on fish and seafood, with its failure to do so likely to limit the impact.

EU

The overall impact arising from the CETA is likely to be negligible. Increased access for Canadian producers would likely negatively impact employment in the EU's fishing industry, though the declines in labour would likely be offset by gains for the processing industry which would benefit by better access to Canadian fish and seafood products.

INDICATOR: Quality and Decency of work

BASELINE & ANALYSIS

Canada

While it is expected that the CETA will lead to increases of exports of seafood to the European market, the problems in the fisheries sectors are largely structural and the CETA is unlikely to impact on the quality of life on the Canadian fisheries workforce.

EU

The EU has one of the largest fishing fleets in the world, and although most of it operates within community waters, a significant part of the fishing sector depends on access to non-community resources. Similar to Canada, the CETA is not expected to have an impact on this indicator in the EU's fisheries sector.

ENVIRONMENTAL ASSESSMENT

INDICATOR: Resources depletion

BASELINE & ANALYSIS

In fisheries, the main environmental concern is that the CETA could potentially lead to an decrease in fish stocks in certain parts of the Atlantic, although increased Canada-EU collaboration could provide greater impetus for the development of more sustainable fishery practices.

Canada

Full removal of tariffs are expected to increase Canadian exports as tariffs are listed as a main limiting factor to exports.²²¹ Because full liberalisation under CETA is expected to increase output and export of fisheries products, there is a risk that Canadian fish stocks could be reduced if fisheries are improperly managed. The environmental impact of the fisheries sector is highly dependent on the method of its catch. SeaChoice ranks trap Atlantic shrimp as 'best choice', meaning that it has limited negative environmental impact, while Atlantic shrimp caught from trawlers as 'some concern'. In that case, the primary source of its environmental impact is the severe deterioration done to seafloor habitats by trawlers.²²² Full removal of tariffs would increase Canadian exports as tariffs are listed as a main limiting factor.²²³ This could mean greater reliance on trawlers, which are better equipped for processing and exporting to the EU, and thus greater environmental impact, as well as possible resource depletion if improperly managed.

Atlantic shrimp has seen its total allowable catch (TAC) more than double between the late 1990s and 2006 to 150,000 tonnes. If a rise in output due to CETA is achieved through unsustainable increases in

²²¹ Profile of the Atlantic Shrimp Industry. 2006. Atlantic Council of Fisheries and Aquaculture Ministers – Task Group on Northern Shrimp.

²²² Seachoice

²²³ Gardner Pinfold Consulting Economists Ltd. (2006)

TAC, or if it results in greater reliance on trawlers, which are better equipped for processing and exporting to the EU, resource stocks could be adversely affected.

Lobster fishery has average landings of 45,000 and 50,000 tonnes per year. Several management practices are implemented to limit the environmental impact of lobster catch, such as minimal carapace size to allow young to reproduce and protection of eggs on females.²²⁴ Thus, unsustainable increases in TAC for Canadian lobster producers and negative changes in resource management would be necessary to have dramatic resource impacts.

Aquaculture has important environmental impacts on surrounding ecosystems, including nutrient enrichment, habitat alteration, and harming of wild fish stocks. Aquaculture produces wastes, mainly metabolic fish waste and excess feed, which are released into the surrounding ecosystems. The farming of fish also causes an increased risk of introducing disease to wild fish populations, which can potentially harm wild fish stocks.²²⁵ Chemicals are also added to the ecosystem, through pesticides (such as anti-sea lice pesticides), drugs (antibiotics), persistent organic pollutant and metals, many of which may harm benthic fauna diversity, accumulate in certain species, be lethal, or have other effects (such as moulting of lobster shells).²²⁶ All of these impacts reduce biodiversity and biomass in wild ecosystems.²²⁷ Because prepared salmon is an important export to the EU, increases in output of farmed open net salmon under full removal of tariffs could create many environmental issues in terms of impacts on wild species. Farming salmon in closed containment tanks, rather than in open nets, can reduce these impacts. This aquaculture practice eliminates the interaction of farmed species with wild species. However, use of wild species for feed of farmed species continues under this management practice.

The transportation of fisheries products from Canada to the EU will also have an environmental impact in terms of the increase in greenhouse gases associated with shipping exports.

EU

CETA fisheries provisions are not likely to impact fish stock depletion or have any other environmental impacts in the EU.

²²⁴ Canada's Lobster Fisheries. Fisheries and Oceans Canada. <http://www.dfo-mpo.gc.ca/fm-gp/sustainable-durable/lobster-homard-eng.htm>

²²⁵ A scientific review of the potential environmental effects of aquaculture in aquatic ecosystems . Fisheries and Oceans Canada. <http://www.dfo-mpo.gc.ca/science/enviro/aquaculture/sok-edc/volume5/pademski-blanchfield-eng.htm>

²²⁶ Ibid.

²²⁷ Ibid.

4.2. USA, MEXICO & OTHER THIRD COUNTRIES

USA

BASELINE

The United States is rich in fertile farm soil and also enjoys a moderate climate. There are more than 2.2 million farms in the U.S. and the country is a net exporter of agricultural products. By volume the top agricultural products are corn, cattle meat and cow's milk. By value, the top products are corn, soy and wheat.²²⁸

Output from U.S. farms has grown dramatically, allowing consumers to spend an increasingly smaller portion of their income on food and freeing a large share of the population to enter nonfarm occupations that have supported economic growth and development.²²⁹ While the more broadly defined food and agriculture sector continues to play a strong role in the national economy, farming has progressively contributed a smaller share of GDP (1.2%) and employed a smaller share of the labour force.²³⁰

As of 2008, approximately 2-3 percent of the population is directly employed in agriculture. Of the 145 million employed workers in the U.S., 834,000 of them held jobs as agricultural workers with 83% of these jobs being as farm workers.

The United States has the largest feed-cattle industry in the world, and is the world's largest producer of beef, primarily high-quality, grain-fed beef for domestic and export use.²³¹ The retail value equivalent of U.S. and beef cattle industry amounted to \$73 billion in 2009.²³² The United States exported 7.2% of its beef production in 2009, for a value of \$2,828 billion. Over 90% of the U.S. beef exports markets are sent to, in order, Mexico, Canada, Japan and South Korea.²³³ With the partial EU ban on hormone-treated beef, the EU constitutes a small market in this sector.

At the beginning of 2009, the U.S. had nearly 67 million hogs and pigs, with the majority located in the Midwest and a further 15 percent in North Carolina.²³⁴ The United States is the third-largest producer and consumer of pork and pork products and the largest exporter and fifth largest importer.²³⁵ The largest export markets for American pork products were Japan (28.36%), China/Hong Kong (18.24%) and Mexico (14.44%). It should be noted that the EU and Canada are the two most important U.S. competitors in the pork export market.

Dairy has the second largest value of production in the United States behind beef. Dairy farms are generally family-owned and managed, with most maintaining membership in cooperatives.²³⁶ As a member of the WTO, the United States, along with many other dairy-trading countries, established tariff rate quotas (TRQs) for dairy products. The TRQs allow imports at very low tariffs up to fixed amounts.

²²⁸ USDA-NASS Reports

²²⁹ Dimitri et al (2005)

²³⁰ Ibid.

²³¹ USDA. <http://www.ers.usda.gov/Briefing/Cattle/>

²³² ERS-USDA

²³³ Ibid.

²³⁴ USDA. <http://www.ers.usda.gov/Briefing/Hogs/>

²³⁵ Ibid.

²³⁶ USDA. <http://www.ers.usda.gov/Briefing/Dairy/>

Any additional imports are subject to very high tariffs. Many of the individual TRQs are administered through licenses for imports of specific products from specific countries or regions. The United States has not been a major exporter of dairy products on a sustained basis, while being a relatively large importer of cheese.²³⁷

Enjoying an extensive coastline on both the Atlantic and Pacific Oceans, as well as on the Gulf of Mexico, the Great Lakes and surrounding Alaska, the fishing industry is also a large contributor to the U.S. economy at 0.5% of GDP.²³⁸ According to the FAO, in 2005 the United States harvested 4,888,621 million tonnes of fish from wild fisheries and another 471,958 tonnes from aquaculture. This made the United States the fifth leading producer of fish after China, Peru, India and Indonesia, with 3.8 percent of the world total.²³⁹ As with other countries, the 200 nautical miles (370 km) exclusive economic zone (EEZ) off the coast of the United States gives its fishing industry special fishing rights. It covers 11.4 million square kilometres (4.38 million sq mi). This is the largest zone in the world, exceeding the land area of the United States.²⁴⁰

ANALYSIS

The CETA's impact on the U.S. agriculture, PAPs and fisheries sector is likely to be minimal, with the extent largely tied to the level of liberalisation achieved under the Agreement. The most prominent general impact will be the erosion of preferences with Canada as the EU achieves preferential access to the Canadian marketplace for a number of its agricultural products.

Dairy stands out as a sector in which the U.S. may lose Canadian market share should the CETA lead to increases in EU market access. However, as noted in the Canada assessment, it appears unlikely that the Agreement will lead to anything more than improvements in the minimum access commitments bestowed on the EU, limiting the negative impact likely to befall the U.S.

With significant reduction in tariffs on both sides, it appears that the CETA could lead to reduced exports of U.S. **processed foods** (e.g. preparations of cereals and milling products, preserved/frozen fruits and vegetables, etc.), as increased EU access to the Canadian market leads to reduced imports of U.S. agri-food products in Canada. Minor decreases in employment within food manufacturing industry within the U.S. could lead to marginal amounts of displacement, leading to a minor negative social impact.

An additional sector that may be negatively impacted as a result of the CETA is the U.S. **alcoholic beverages** sector as increased access to the Canadian markets would allow EU producers to take an increased share of the market previously held by U.S. imports. The degree of this impact would likely be largely influenced by the degree with which the CETA is able to lead to a resolution of what the EU deems are discriminatory practices in Canada's provincial liquor control boards.

Finally, the meat sector stands to be negatively impacted by improved EU market access for Canadian **beef and pork** producers, particularly given the likelihood that this would likely require that cattle and hogs be raised in Canada in order to qualify for preferential access to the EU. Significant improvements in market access would, over the long-term, likely lead to some disruption in the level of integration between the U.S. and Canada as it relates to meat production, leading to less exports from the U.S. to Canada and less production in the former as Canadian producers would be incentivised to increase

²³⁷ US Dept of Agriculture

²³⁸ Bureau of Economic Analysis, Department of Commerce, 2006.

²³⁹ FAO: Fisheries and Aquaculture – 2008 Statistics

²⁴⁰ FAO: Profile for the USA

domestic production of hogs and cattle so as to ensure i) hormone free production and ii) ability to qualify as ‘Canadian-produced’ under EU rules of origin.

The **environmental impacts** of a CETA for this sub-sector are likely to be very limited because of the minimal economic impacts that predict very little change in national output. Specific to GHG emissions, the E3MG model results predict 0% difference in GHG emissions by 2018 under both a limited and ambitious tariff liberalisation. If as suggested there is a reduction in beef and pork production in the U.S. because of incentives to Canadian producers to increase production locally, there could be a reduction in environmental impact from this sector on water quality and GHG emissions.

Box 12: Regulatory Concerns

A specific concern addressed by U.S. stakeholders in the Agriculture, PAPs and fisheries sector, is that CETA represents an effort by the Europeans to ‘export’ EU standards and regulatory regimes across a wide range of trade issues including health and safety mechanisms. The belief is that the CETA is part of a much broader strategy to target existing North American standards and regulations established in the NAFTA. As a result, it can be expected that the CETA will provide a template for future negotiations with the U.S.

With many multinationals already operating inside the regulatory system of the EU through investments or partnering, the U.S. is keeping a close eye on CETA negotiations with regards to increased administrative and compliance burdens imposed by EU regulatory schemes. Both the U.S. and Canada have concerns that SMEs will not be able to cope with programs such as REACH – the Registration, Evaluation, Authorization and Restriction of Chemical substances. U.S. trade officials consider the inability of Canadian and U.S. companies to cope with the regulations will encourage greater investment and see production moving to Europe.

MEXICO

BASELINE & ANALYSIS

Mexico has the world’s 14th largest economy, and agriculture, PAPs and fisheries account for 4.3% of Mexico’s GDP. With 18% of the labour force employed in the sector, agriculture and agri-food serves as an important source of jobs for Mexico. However, agriculture as a percentage of GDP has been steadily declining as Mexico’s economy becomes more developed.

Crop production is the most important agricultural activity in Mexico, accounting for fully 50% of agricultural output. With limited projected impact in Canada or the EU as a result of the CETA, it is unlikely that Mexico will experience any significant effect in crop production over the long-term.

Mexico has some 11,500 kilometres of Pacific, Gulf of Mexico, and Caribbean coastline, and its inland waters cover more than 2.9 million hectares. The country’s coastal fishing grounds offer a rich variety of fish and other seafood. In 2008 the fishing subsector employed 328,000 people.²⁴¹ The fishing industry

²⁴¹ OECD

in Mexico is largely handled by cooperative societies, which are granted monopolies on the most valuable species of fish. Most fish processed in Mexico's canneries are consumed domestically. Generally it is not expected that the CETA will impact the industry in Mexico. Again, it is not expected that Mexico's fisheries industry will be significantly altered by a CETA between the EU and Canada.

Overall then, it does not appear that a CETA will have a pronounced economic impact on the agriculture, PAPs and fisheries sectors of the Mexican economy. While Mexico may experience some erosion of preferences presently held due to separate trade agreements with the EU and Canada, it is not likely that agriculture will be adversely or positively impacted to any significant degree. As a result, the environmental and social impacts of CETA from this sub-sector are likely to be very limited as well. Specific to GHG emissions, the E3MG model results predict 0.2% difference in GHG emissions by 2018 under both a limited and ambitious tariff liberalisation.

Overseas Countries & Territories

While not specifically 'third countries', Overseas Countries and Territories (OCTs) associated with EU Member States²⁴² can be impacted by EU trade agreements such as the CETA. Associate status for the 21 OCTs was conferred upon them by the Treaty of Lisbon, with the principal aim being to contribute to their economic and social development.²⁴³ This aim has been reinforced through the Overseas Association Decision (OAD), which allows all goods originating in OCTs to be exported to the EU duty and quota free. As such, a preferential trade agreement between the EU and a non-OCT has the potential to weaken terms of trade for OCTs by eroding their preferential access to the EU market.

In terms of the CETA specifically, the two North American OCTs of Saint-Pierre-et-Miquelon (SPM) and Greenland have been flagged as being potentially prone to such an outcome given their proximity to Canada and its role as a major competitor in exports of fisheries products. This section will outline the potential impact of the CETA on Saint-Pierre-et-Miquelon and Greenland, particularly from the vantage point of its impact on the fisheries sector.

Modelling the impact of the CETA on Saint-Pierre-et-Miquelon & Greenland in the CGE Model

While it is desirable to analyse the impact of the CETA on SPM and Greenland through the CGE framework, the GTAP database unfortunately does not provide individual data specific to these OCTs. As such, it is impossible to provide isolated outputs for either SPM or Greenland, compromising the study's ability to perform a rigorous, quantitative analysis of the CETA's impact on these two OCTs. Where relevant, quantitative data is provided, though the assessment on SPM and Greenland is predominantly qualitative in nature, employing existing studies and stakeholder consultations to gather evidence and inform opinions.

²⁴² There are presently 21 OCTs, with all associated with one of four EU MS: Denmark, France, the Netherlands or the UK.

²⁴³ http://europa.eu/legislation_summaries/development/overseas_countries_territories/index_en.htm

Saint-Pierre-et-Miquelon

INDICATOR: Population

BASELINE

The French overseas collectivity of Saint-Pierre-et-Miquelon (SPM) is the only remaining French territory in North America, located only 25 km from Newfoundland.²⁴⁴ The archipelago, consisting of eight islands, has a total area of only 242 km². The most recent estimates from 2006 cite the population of SPM as 6125 which marks a decrease of 3% since 1999.²⁴⁵ Outward migration of young adults is a significant problem currently facing the archipelago: stakeholders report that between 1999 and 2006, 30% of the males between the ages of 25 and 35 left the island, with fewer rates of returnees given the limited economic prospects provided on SPM.²⁴⁶ This issue poses to significantly threaten economic and social sustainability.

INDICATOR: Output

BASELINE

Fishing and its incidental services have historically been the most important industry on SPM, though the industry collapsed in the early 1990s with the ruling by the New York arbitral tribunal in 1992 to restrict SPM's Exclusive Economic Zone (EEZ) to an area of approximately 21 nautical miles around the archipelago.²⁴⁷ Today, SPM's GDP is largely reliant on the tertiary sector. The economy is driven predominantly by public investment, which accounts for approximately 39% of the archipelago's GDP and 45% of its value added.²⁴⁸ Other major contributors to output include commerce (14% of GDP) and construction (11%), though this is also largely contingent on government-led investments in infrastructure.²⁴⁹ The fisheries sector contributes about 4% of SPM's GDP and roughly 2% of the archipelago's total value added.²⁵⁰ While GDP per capita in 2004 was €26,073 – only slightly below the average of France and above the average of its other OCTs – residents of SPM are largely dependent on transfers from the French government.²⁵¹

The preservation of fishing rights is an important issue for the archipelago's fisheries sector.²⁵² The fishing industry is subject to quotas for cod, shrimp, redfish and halibut, regulated by NAFO, with tuna and swordfish quotas managed under the framework of the International Commission for the Conservation of Atlantic Tunas (ICCAT). Management of fish resources within SPM's territorial waters is managed by the French State with support from IFREMER and the Service des affaires maritimes.²⁵³

²⁴⁴ IEDOM. <http://www.outre-mer.gouv.fr/?presentation-saint-pierre-et-miquelon.html>

²⁴⁵ IEDOM (2010)

²⁴⁶ Herran 2011; Consultations with Stakeholders.

²⁴⁷ Another key factor includes a 5 year moratorium on cod fishing implemented by Canada in the same year.

²⁴⁸ IEDOM 2009

²⁴⁹ Herran 2011.

²⁵⁰ IEDOM 2009

²⁵¹ IEDOM 2009

²⁵² IEDOM. <http://www.outre-mer.gouv.fr/?presentation-saint-pierre-et-miquelon.html>

²⁵³ Territorial Council of Saint-Pierre and Miquelon. <http://www.profilspm.fr/>

SPM's cod quotas: 1999-2009 (in tonnes)

1999	2000	2001	2006	2007	2008	2009
5616	3120	2340	2158	2210	2028	1794

Source: IEDOM 2010

Despite continued reductions in quotas, the majority of Saint-Pierre-et-Miquelon's landed fish (by volume) continues to be cod (45%), with lumpfish (14%), scallops (10%) and snow crab also serving an important role in fisheries production.²⁵⁴ Industrial fishing is conducted by SPM Seafood International, with 52% of its total catch in 2007 consisting of crustaceans (primarily shrimp and snow crab), 30% pelagic, 12% groundfish and 6% shellfish (scallops and mussels).²⁵⁵

Given the reduction in fishing rights and the moratorium on cod implemented by Canada to replenish natural cod stocks, the processing industry (particularly of imported fish) has taken on greater importance. Within SPM, processing of cod plays an important role, though processing of snow crabs, whelk and lumpfish is also important. The industry is populated by only four companies:

1. SPM Seafood International, which transforms the entire catch allocated to the SPM fishing industry: mainly cod, but also rockfish, halibut and flounder.
2. SNPM, which specialises in processing cod into salted cod
3. Les Nouvelles Pêcheries, which primarily processes snow crab.
4. Pêcheries Paturel, which is focused on packaging fresh fish, crab and lumpfish roe as well as smoked products (salmon, shark, cod, scallops, etc).²⁵⁶

Aquaculture has been flagged as a key development industry, with it being viewed as a means of diversifying the economy and reviving the fishing industry in light of reduced quota allocation for cods and other fish. At present, however, the industry is still in its early stages with projects to develop the cod and scallops aquaculture industries not yet reaching wide scale commercial viability.²⁵⁷

Agriculture has not had a long commercial history on SPM, with subsistence farming being the primary mode of production until the moratorium on cod fishing in the 1990s created a need to diversify economic activity.²⁵⁸ SPM's harsh climate and narrowness of land restricts the development of large-scale agriculture and livestock and requires wide usage of greenhouses in production. At present, more than 30 different agricultural products are grown on the archipelago, though lettuce and tomato serve as the two main products in terms of value. Livestock production is generally limited.

²⁵⁴ SODEPAR. <http://www.sodepar.com/>

²⁵⁵ Territorial Council of Saint-Pierre and Miquelon. <http://www.profilspm.fr/>

²⁵⁶ IEDOM 2010

²⁵⁷ IEDOM

²⁵⁸ Ibid.

INDICATOR: Trade**BASELINE**

As a small, insular economy, SPM is heavily reliant on trade. Given its lack of resources, however, the archipelago is limited in what it can produce and export, making trade largely unbalanced. As such, exports in 2009 were only 6.2% of the value of imports, resulting in a trade deficit for the archipelago of €60.21 million.²⁵⁹ In total, exports' contribution to SPM's GDP is around 2%.²⁶⁰

Exports in 2009 were valued at €3.86 million: their lowest level since 2000. After recording exports of fisheries products in excess of €6 million in 2007 and 2008, total exports of fisheries products decreased sharply, partly as a result of a processing plant's closure for several months.²⁶¹ Despite the industry's decline, fish and seafood remain SPM's leading export, comprising nearly all of the value of exports from the archipelago. While the United States and Asia continue to serve as important export markets, the decline in the value of the dollar vis-à-vis the Euro (which is the official currency of SPM) has made the archipelago increasingly reliant on the EU for its exports. As a result, the EU is the leading destination, with Spain and France accounting for 24.2% and 14.3%, respectively.²⁶²

Exports of fisheries products (2009)

Product	Value (€)	Percentage of total
Fresh or frozen fish	1,626,000	42.1
Salted, smoked, dried fish and fish eggs	165,000	4.3
Fresh or refrigerated crustaceans	520,000	13.5
Fresh or refrigerated shellfish	53,000	1.4
Warehouse output	1,496,000	38.8
Total Exports	3,860,000	100

Source: Herran 2011

INDICATOR: Employment**BASELINE**

The labour force on SPM is comprised of approximately 3185 workers (2006). Unemployment in 2009 was 7.7% and the three year average 2007-2009 was 7.87%.²⁶³ The labour market is characterised by high degrees of seasonality, particularly in fishing, agriculture and construction. While nearly 63% of the long-term unemployed are women, they have played an increasing role in SPM's labour force and as

²⁵⁹ IEDOM 2009

²⁶⁰ Herran 2011

²⁶¹ IEDOM 2010

²⁶² Territorial Council of Saint-Pierre and Miquelon. <http://www.profilspm.fr/>

²⁶³ IEDOM 2010

more young adults have migrated out of SPM, women have increasingly entered the workforce to fill this void.²⁶⁴

SPM Labour statistics: 1990, 1999 and 2006

	1990	1999	2006
Labour force	2981	3198	3185
- Men	- 1893	-1826	-1747
- Women	-1088	-1372	-1438
Employed	2695	2790	2867
-Men	-1740	-1604	-1575
-Women	-955	-1186	-1292

Source: IEDOM 2010

Sectoral employment has changed significantly since the collapse of the fishing industry in the early 1990s. The tertiary sector has taken on increased importance, accounting for 86% of employment in 2006, compared to 72% and 81% in 1990 and 1999, respectively.²⁶⁵

SPM had 528 companies in 2009. Artisanal craft enterprises and shops make up 28.2% and 23%, respectively, while 15% are engaged in business services and 12% in construction. The fisheries and aquaculture sector is comprised of only 24 companies, together accounting for approximately 5%-7% of all employment.²⁶⁶ Traditional fishing is comprised of approximately 30 small and medium-sized vessels, while processing, as mentioned, consists of four plants.

Processing plant	Employment (approximate)
Saint-Pierre-et-Miquelon-Seafood International	60 full-time works and 10 seasonal workers
Les Nouvelles Pêcheries	5 full time employees and 30 seasonal workers
Pêcheries Paturel	four full-time staff and one seasonal employee
SNPM	15 seasonal workers

Source: IEDOM 2010, Territorial Council of SPM

ANALYSIS (All indicators)

As an OCT of the EU, SPM enjoys a number of economic advantages with regards to trade. Under the *Overseas Association Decision (2001/822/EC)*, goods can be shipped duty-free from SPM (and other OCTs) to the EU (provided they qualify as originating in SPM) and are not subject to quantitative restrictions such as quotas. Combined with derogations on rules of origin, Saint-Pierre-et-Miquelon has thus dually benefitted from improved competitiveness of processed products such as lobster vis-à-vis Canada as well as the ability to source certain products from Canada and ship them to the EU with only limited processing. It is, therefore, the case that the CETA could directly impact SPM by reducing the industry's competitiveness in exports to the EU vis-à-vis Canada should tariffs on products such as cod, lobster, scallops, mussels and snow crabs be eliminated or reduced under the Agreement.

With the collapse of the fishing industry in the early 1990s, SPM's private economy has suffered, forcing the archipelago to remain heavily dependent on financial transfers from France and public investment.

²⁶⁴ IEDOM 2010; consultations with local stakeholders.

²⁶⁵ IEDOM 2010

²⁶⁶ Consultations with local stakeholders.

In an effort to revitalise the private economy, the Territorial Council has recently adopted the *Schéma de Développement Stratégique 2010-2030* (SDS). Included in this, is the realisation that if the economy is to improve, diversification will be an important path towards development and greater sustainability. While greater development of the services sector (particularly e-services) and tourism have been targeted as a means of achieving this goal, a cornerstone of the agenda is the development of a fish and seafood processing industry that focuses on exports to the EU.²⁶⁷

In essence, the realisation of this goal would appear to be reliant on the continued preferential access to the EU vis-à-vis Canada as well as continued/expanded derogation of rules of origin on fisheries products and cumulation with Canada. The underlying premise is that since SPM's fisheries sector is not as competitive as Canada's, the continued existence of tariffs on certain products is required in order to ensure the continued survival of the fisheries industry. Tariffs are claimed to be essential in offsetting higher shipping and handling costs faced by SPM processors, with one study estimating that the 20% tariff applied on Canadian lobster imported into the EU provides cost savings of C\$1.12 per pound when processed in SPM and savings of C\$0.54 when reducing the tariff to 16%.²⁶⁸ Similarly, the same study estimates that tariffs of 8% on scallops provide savings of C\$0.16 per pound, placing SPM processors on equal footing with their Canadian competitors.

Therefore, if the CETA leads to the removal or reduction of tariffs on Canadian imports of certain fisheries products (e.g. lobster or scallops) it appears probable that SPM's industry will experience a reduction in its competitiveness. While this would certainly affect local processors such as SPM Seafood International (which is responsible for processing all domestically harvested fish and seafood), it would also likely significantly undermine objectives in the SDS to transform SPM into a transshipment hub for Canadian landed fish and seafood.

SPM is strategically hoping to utilise its preferential access to the EU market to transform itself into a gateway, whereby – through extended derogations of RoO and cumulation with Canada – greater amounts of Canadian fisheries products would pass through SPM for processing before being shipped to the EU. Under such an outcome, it is hoped that the archipelago can attract greater foreign investment (predominantly from Canada) as Canadian processors seek to capitalise from the reduced tariffs that shipping through SPM could provide. However, should the CETA lead to significant reductions in tariffs on Canadian imports of processed fish and seafood, it is likely that this plan would be compromised, limiting the ability of SPM to attract FDI into its fish processing industry. While not conclusive, consultations with stakeholders have noted that the uncertainty involved in the CETA negotiations have been at least partially responsible for a recent withdrawal of a planned investment in SPM's processing sector by Canadian investors.

Additionally, the elimination of preferential tariffs vis-à-vis Canada and the loss of competitiveness it confers on SPM's fish processing industry could nullify the utility of other measures incidental to the establishment of SPM as a transshipment hub. This includes: (i) the hope to develop niche markets in the EU through effective branding of high-end seafood products processed in and associated with SPM; (ii) plans to improve competitiveness and attractiveness as a transshipment hub through measures to improve trade facilitation (i.e. e-clearing functions and certification facilities); and (iii) ensuring greater compliance with EU SPS measures (i.e. for fish products and molluscs and living bivalves).²⁶⁹ In short, it could seriously undermine present development plans, forcing the archipelago to make adjustments to its recently adopted 20-year SDS.

²⁶⁷ Herran 2011; Consultations with local stakeholders.

²⁶⁸ Herran 2011

²⁶⁹ Herran 2011

Based on the analysis thus far, it would appear that there is notable potential for the CETA to significantly and negatively impact the fisheries sector in SPM, with the negative outcome being to potentially: (i) reduce competitiveness of the existing industry, impacting exports and employment in SPM; and (ii) limit the industry's future development by transformation into a transshipment hub for Canadian fisheries products entering the EU.

Taking these outcomes under consideration, it is pertinent to examine what the outcome might be if the CETA maintained tariffs on fisheries products sensitive to SPM. To begin, it is likely that under such a scenario, the gains estimated to accrue to the Canadian industry would likely not materialise. To recall, the CGE model projects fairly sizeable gains for Canada's fisheries sector under the full removal of tariffs, with these gains expected to occur largely in products such as those that are undergirding competitiveness of the industry in SPM.²⁷⁰ By continuing to uphold these tariffs, it is likely that Canada's fisheries sector would not be able to capture those gains, with the most directly impacted being the Atlantic Provinces that border SPM. At the same time, there are gains for EU consumers that would likely also be forgone should tariffs be maintained.

This being said, it is likely – as pointed out by a local stakeholder – that Canada's fisheries sector would continue to be a viable industry in the absence of the CETA; though the failure of the Agreement to remove tariffs on all fisheries products would leave it less well-off than it otherwise could be. When it comes to the industry in SPM, it is highly questionable if, under the removal or reduction of tariffs on Canadian fisheries products entering the EU, the SPM fisheries sector could be sustained over the long-term. Therefore, from the perspective of sustainability, it would appear that the CETA could significantly injure SPM's fisheries sector and do so in a way that is relatively (though not nominally) disproportionate to the benefits observed in Canada.

Nevertheless, it is important to recall exactly what would be sustained by failing to liberalise tariffs in the fisheries sector. As outlined in the Baseline, the fisheries sector in SPM employs only around 150-200 people. The four processing plants employ even fewer, with the majority being only temporary workers. The export industry is currently only 4% of imports and 2% of GDP. Given these figures, it is also relevant to question whether the industry is sustainable even under the continuation of current preferences. To this end, the EC itself notes that it is 'a fact that the theoretical benefits offered to the OCTs by the current OCT-EC trade regime in terms of preferential access to the Community market are eroding as a result of progressive trade liberalisation on a global and regional scale'.²⁷¹ Given the expected continued proliferation of bilateral and multilateral trade agreements (most notably in the Doha Round), the long-term effectiveness of building a development model that revolves around preferential tariffs becomes questionable given the likeliness that these preferences will erode over time even in the absence of the CETA. As such, for SPM to grow as a transshipment hub, preferential tariffs alone are likely not sufficient. The archipelago would almost certainly require expanded derogations of RoO and cumulation with Canada in order to attract investment into the industry and allow it to significantly expand. In short, there are serious questions as to the sustainability of the current situation regardless of the outcome of the CETA.

As a third point, it is pertinent to examine the alternative possibilities for development in the absence of a continued processing industry. Here, it is recalled that the SDS 2010-2030 highlights other areas of focus in addition to the fisheries sector. Specifically, emphasis is placed on developing the services sector (notably e-services) and tourism. On the first point, stakeholders have pointed out that SPM is

²⁷⁰ These include frozen cod and lobster as well as processed snow crabs, mussels and scallops. Similarly, as outlined below in the section on Greenland, many of the gains would also likely arise by the removal of tariffs on shrimp and Greenland halibut.

²⁷¹ EC (2008f)

currently trying to develop its e-services industry from scratch and that any headway into the sector will undoubtedly take time. In this regard, while the long-term sustainability of the fisheries sector is perhaps not essential, it is perhaps required in order to sustain the economy while the industry develops. On the second point, stakeholders have pointed out that the development of the tourism industry is inextricably linked to the survival of the fisheries sector. The archipelago is positioning itself as a destination – primarily for Canadians in the neighbouring provinces – where one can experience a unique culture that combines elements of its French heritage and fishing history, and which is tied to the culinary experience that revolves around a merger of these two aspects. In short, if the fishing industry contracts further, there are questions as to whether tourism can flourish and become a viable alternative. There is also the critical issue of demography and the impact that a collapse of the industry could have on outward migration. Presently, SPM is already suffering from increased outward migration as it struggles to retain its younger population in the face of dwindling economic prospects. To the degree that SPM's tourism is built on its unique culture, any increase in outward migration facilitated by the further collapse of the fisheries sector could limit the prospects of fostering a viable tourism sector.

Additional prospects for development seem limited as well. The aquaculture sector, like the development of an e-services industry, requires time and is still in its infancy. Further, while there were hopes of developing oil and gas reserves located in SPM's EEZ and neighbouring Canadian provinces, these appear to have been significantly diminished with decreased interest among exploration companies in light of the difficulties in exploiting these reserves. Further, any prospects of attracting investment by transforming SPM into a tax haven is limited since such a move would require approval from Paris, which appears uninterested in making any such concessions at this time.²⁷²

In summary, there are notable grounds to suspect that the CETA could have a pronounced negative impact on the economy of Saint-Pierre-et-Miquelon. The Canadian fisheries sector is more competitive, and without the incentive to conduct processing on SPM in order to gain preferential access to the EU, it would not appear that the archipelago could diversify its fisheries industry and meet its developmental goals of serving as a 'gateway' for Canadian fish and seafood into the EU. Given the inter-linkages of the fisheries sector with the rest of the economy, the further collapse of the industry could potentially have pronounced effects on the economy of SPM and its residents. It is therefore recommended, that the following actions be taken:

1. In terms of the CETA negotiations, EU negotiators for the fisheries sector should seek input from representatives of SPM and discuss which products are the most sensitive. Research and consultations with stakeholders suggest that the SPM fisheries sector would like the maintenance of preferences for frozen cod fillets, frozen lobster, and processed scallops, mussels and snow crabs. Negotiators should weigh potential impacts on SPM, Canada as well as processors and consumers in the EU.
2. While perhaps radical, a compromise to balance the competing interests of EU consumers, the Canadian fisheries sector, and the SPM fisheries industry could be for the CETA to lead instead to a substantial expansion of limits on non-originating materials that may be sourced from Canada for certain products. Allowing for significant improvements in SPM's cumulation with Canada could potentially provide the dual benefit of (i) providing de facto tariff reductions to Canada's fisheries products, while (ii) allowing SPM (and Greenland) to directly and significantly

²⁷² Consultations with local stakeholders

benefit from the CETA. This would need to coincide with improved regulatory cooperation between Canada and the EU/SPM and relevant trade facilitation measures.

3. Conduct further, in-depth analysis on the potential impact. While it may not be feasible to conduct further ex-ante assessments due to the advanced stages of negotiations, it is strongly recommended that an ex-post assessment of the impact on the CETA on SPM be conducted.
4. Any liberalisation of sensitive fisheries products should be accompanied by a suitable phasing-in period to allow the industry adequate time to adjust and formulate new strategies. Given the results of an ex-post assessment, this may include adjustment funds to mitigate the negative impacts incurred in SPM as a result of the Agreement.
5. Include a mechanism for regular dialogue between stakeholders in SPM and the EC. Included in this mechanism should be facilitation of greater cooperation between the two sides, particularly with respect to development projects for alternative industries.
6. The CETA could include greater cooperation between Canada and SPM in areas of mutual economic importance, such as the potential exploration of energy deposits and tourism.

Greenland

INDICATOR: Output

BASELINE

With an area of 2,175,600 km², Greenland – an OCT of the Kingdom of Denmark – is the largest island in the world. However, given its Arctic climate, only 15.7% of the island is ice-free, making it home to only 56,615 people.²⁷³ The combination of the vast territory, small and dispersed population and Arctic climate present unique challenges for Greenland's economic and social development and limit what can be profitably produced on the island. As such, only a handful of industries are responsible for contributing to Greenland's GDP, which in 2009 was approximately €1,464.55 million.²⁷⁴

The most important industry in Greenland is by far the fisheries sector. Greenland is endowed with a wealth of coastline and waters that are among the most productive in the world. Output in the fisheries sector in 2008 reached 214 million tonnes with the most important products being shrimp and Greenland halibut, which accounted for 63.1% and 18.7%, respectively, of the total volume.²⁷⁵

²⁷³ Grønlands Statistik (2010)

²⁷⁴ Statistics Greenland 2009 (10,924m DKK)

²⁷⁵ Statistics Greenland 2010

Output of fish harvested in Greenland waters, 2003-2008 (1,000t)

	2003	2004	2005	2006	2007	2008
Total shellfish	103.5	144.7	143.5	138.1	131.4	138
Islandic scallop	2.6	2.7	1.4	1.9	1.4	0.7
Northern prawn	89.6	137.8	137.6	132.5	127.9	135.1
Snow crab	11.3	4.3	4.5	3.6	2.2	2.2
Total fish	184.3	114.3	68.4	75.5	73.4	76.1
Atlantic cod	4.6	5.5	6.6	10.6	16.3	25.3
Lumpfish	7	8.2	9.7	10	8.8	6.5
Capelin	117.9	45.6	0	0	0	0.1
Greenland cod	1.3	0.9	1.1	1	0.6	0.6
Greenland halibut	39.3	43.1	41.9	44.9	43.6	40.1
Redfish	13.3	10.2	8.3	7.9	3.2	2.2
Catfish	0.4	0.4	0.5	0.8	0.9	1.2

Source: Statistics Greenland 2009, Statistics Greenland 2010

The importance of the shrimp industry has grown significantly in recent years and today contributes more than €160 million to Greenland's economy.²⁷⁶ Expansion of the industry has been facilitated by drastic increases in the Total Allowable Catch (TAC), which has risen from 50,000 tonnes in 1990 to over 130,000 by 2004. Current estimates are that production has reached the maximum sustainable yield, making it unlikely that future production will notably exceed 135,000 tonnes.²⁷⁷

Shrimp quotas for Greenland's fleet 2000-2008 (thousand tonnes)

2000	2001	2002	2003	2004	2005	2006	2007	2008
104	119	118.2	129	136.7	136.7	136.7	135.4	128.7

The industry has experienced greater concentration in recent years, leading to the emergence of a few major players and fewer vessels. Within this development has been greater usage of trawlers that can process shrimp onboard. Generally, rules allow up to 75% of the catch to be processed on board, with the remainder required to be processed onshore in Greenlandic facilities. Smaller vessels are responsible for harvesting shrimp inshore, and continue to be the main source of raw materials for the processing industry, providing about two-thirds of the 60,000 tonnes processed onshore in 2006.²⁷⁸

The majority of shrimping is conducted by Greenlandic companies, though EU vessels are allotted up to 11,000 tonnes per year for the period 2007-2012. The *Greenland Treaty* of 1985, under which Greenland withdrew from the European Community, provided for a fisheries agreement between the EU and Greenland in which the former would be allowed to maintain its fishing rights in Greenlandic waters in exchange for continued provision of financial aid to the latter and tariff free access to the EU for

²⁷⁶ Rasmussen 2008

²⁷⁷ Consultations with local stakeholders

²⁷⁸ Consultations with local stakeholders

Greenlandic fisheries products.²⁷⁹ Currently, EU fishing vessels are allowed approximately 80,000 tonnes, for which a compensation of DKK 133 million (€17.8 million) is disbursed to Greenland.²⁸⁰

The majority of the fishing industry in Greenland is managed by the wholly state-owned Royal Greenland A/S, which is the largest company in Greenland and one of the 10 largest fishing and processing companies in the world. Its main product is peeled prawns, which are sold in northern Europe. Its trawlers primarily produce unpeeled cooked or raw shrimp, which is frozen at sea. Of its four industrial vessels operating in Greenland, three are directed towards shrimp.²⁸¹ Additionally, the private company Polar Seafood A/S manages a number of trawlers and processing plants, with a specific emphasis on shrimp.²⁸²

With the depletion of cod stocks, Greenland halibut has taken on significant importance for Greenland's fisheries industry and today is the second largest source of revenue after shrimp. Accounting for nearly one-fifth of all fish output, Greenland halibut contributed more than €67 million to Greenland's economy in 2006.²⁸³

Outside of the fishing industry, Greenland's industrial structure is fairly limited. One of the major future growth sectors is the extraction industry, which has expanded in recent years. With significant deposits of raw materials (offshore oil, gold, niobium, tantalite, uranium, iron, molybdate and diamonds), there are strong prospects for future development, which would greatly assist with Greenland's diversification efforts. While likely to become increasingly important in the future, the industry's development is still in its early stages and complicated by difficulties posed in extraction.

The arctic climate and lack of arable land, limit the presence of commercial agriculture on the island, relegating the industry primarily to hunting and sheep farming. The latter has developed into a viable industry, though it is largely relegated to the more fertile areas of southern Greenland and, as such, remains a relatively minor source of economic activity. There are approximately 50 farms with production of around 20,000 sheep annually – mostly for domestic consumption.²⁸⁴

INDICATOR: Trade

BASELINE

With limited industrial diversification, Greenland is heavily reliant on imports. As a result, Greenland is a net importer with a trade deficit in 2009 of €238.1 million.²⁸⁵ This imbalance is largely compensated for by the 'Block Grant' from the Danish government, which in 2009 was €468 million (DKK 3,643 million).²⁸⁶ Greenland's trade takes place largely with the EU (predominantly Denmark) with it accounting for over 90% of the island's exports and imports.

Fisheries products make up the overwhelming majority of Greenland's exports, accounting for 88.1% of the total value in 2009. Prawns (54.3%) and Greenland halibut (20.7%) are the two leading sources of export revenue and account for three-fourths of all exports. Given the dependence of export revenues on world prices of fish and seafood, total exports generally fluctuate from year to year.

²⁷⁹ This was further reinforced by the OAD. <http://eu.nanoq.gl/Emner/EuGI/The%20Greenland%20Treaty.aspx>

²⁸⁰ Rasmussen 2008

²⁸¹ Consultations with Megapesca

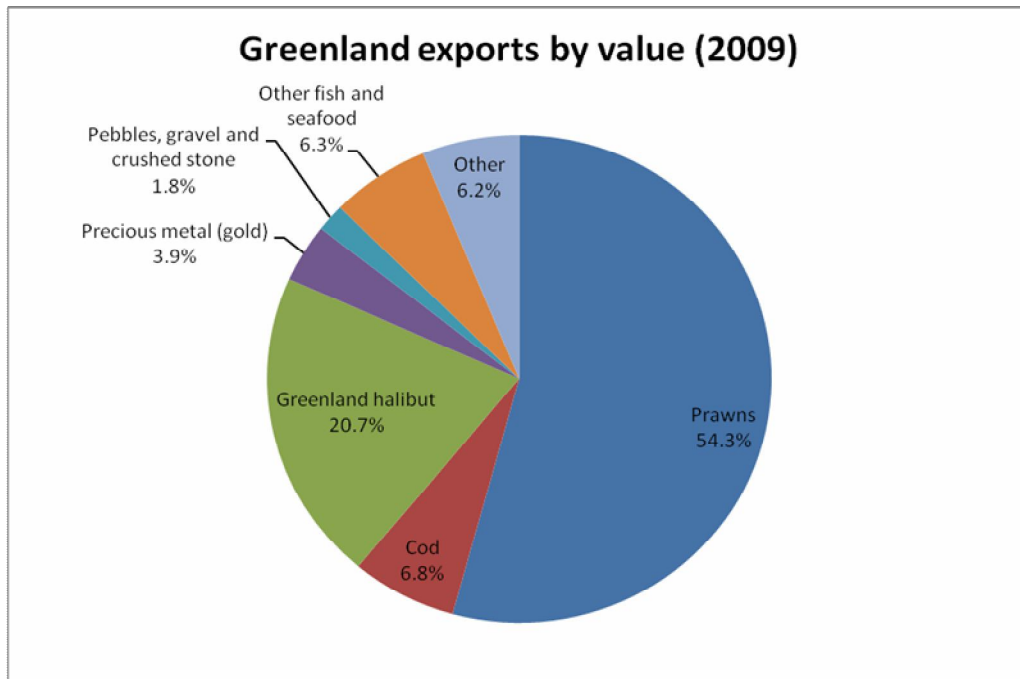
²⁸² Rasmussen 2008

²⁸³ Ibid.

²⁸⁴ Ibid.

²⁸⁵ Statistics Greenland 2010

²⁸⁶ Statistics Greenland 2010



Source: Statistics Greenland 2010

INDICATOR: Employment

BASELINE

Given its Arctic climate and industrial structure, the labour market in Greenland is subject to a high degree of seasonality. Unemployment was 7.1% in 2009, which marked a rise over 2007 and 2008 when the rate fell to as low as 5.5%.²⁸⁷ The largest sector of employment is public administration and services, which employs over 44% of all full-time workers. Fishing employs approximately 4.9% of the Greenlandic workforce, though when accounting for those who rely on the sector as a source of seasonal income, the industry is considered a far more important provider of employment and provides income for roughly 6,500 Greenlanders.

Royal Greenland A/S is the largest employer in the fisheries sector with approximately half of its 2000 total employees located in Greenland. In addition, it employs approximately 1,500 seasonal workers while supporting 1,100 artisanal fishermen.²⁸⁸ Polar Seafood Greenland A/S is the largest privately owned employer in the fisheries sector, providing jobs for approximately 400 workers in Greenland.²⁸⁹

²⁸⁷ Statistics Greenland 2010

²⁸⁸ Consultations with Megapesca

²⁸⁹ <http://www.danishexporters.dk/scripts/danishexporters/investingGreenland.asp?landekode=GB>

Greenland's Labour force, by sector (2006)

Sector	No. Employed	Share (%)
TOTAL	29,472	100%
Agriculture and hunting	14	0.05%
Fishing	1442	4.89%
Mineral extraction	160	0.54%
Industrial services	924	3.14%
Energy supply	420	1.43%
Construction and building	2904	9.85%
Trade and repairs	5003	16.98%
Hotel and restaurants	859	2.91%
Transport	2582	8.76%
Financial and insurance services	165	0.56%
Real estate, rental etc.	1281	4.35%
Public admin and service	13063	44.32%
Education	50	0.17%
Health and social affairs	86	0.29%
Other collective and social services	515	1.75%

Source: Statistics Greenland 2009

ANALYSIS (All indicators)

As with Saint-Pierre-et-Miquelon, it is not expected that the CETA will engender sizeable nominal changes in output, exports and employment in Greenland's fisheries sector. However, given the small size of Greenland's economy and its reliance on the fisheries sector, there remains significant potential for Greenland to be significantly impacted in relative terms.

The primary issue for Greenland is again the potential for the CETA to lead to an erosion of preferences with the EU. In contrast to Saint-Pierre-et-Miquelon, however, the issue is not primarily one of transshipment, but rather the loss of competitiveness that the industry would suffer vis-à-vis Canada, which is one of its primary competitors. Greenland's two major sources of export revenue are cold-water shrimp and Greenland halibut, both of which are major export products for the Canadian fisheries sector.

With the *Greenland Treaty* of 1985 and the subsequent preferential access it has conferred upon Greenland's fisheries products, Greenland's fisheries sector has become strategically oriented towards the EU market. Greenland's largest company, the wholly state-owned Royal Greenland A/S, has made significant investments in processing plants in the EU (primarily Denmark, but also Germany and Poland) and while it does not rely entirely on products sourced from Greenland, the linkage between the two is

an important component of the company's business model. As such, further erosion of preferences with the EU could lead to losses for Greenland's fisheries sector.

As with Saint-Pierre-et-Miquelon, lack of data has made the inclusion of Greenland into the CGE model impossible, forcing this analysis to forgo a rigorous quantitative assessment of the CETA's impact on output, trade and employment. Nevertheless, research that has been conducted for the government of Greenland suggests that the removal of tariffs under the CETA could generate losses of more than €5 million annually for Greenland's shrimp and Greenland halibut industries.²⁹⁰ In context, as these industries generate roughly €230 million annually, this equates to about 2.2% of the industry's value, 2.3% of exports, and about 0.34% of GDP. This impact would be expected to arise exclusively from the erosion of preferential tariffs on Greenland halibut and deep sea shrimp and the loss in export revenues it could engender.

As such, the potential impact that could arise from the CETA could be significant for Greenland. Nevertheless, it is unlikely that the Greenlandic fisheries sector will be as negatively impacted as that in SPM. Even in the absence of the preferential tariffs, Greenland would likely sustain its fishing industry, with it continuing to be a major source of employment and exports. This being said, there appears to be significant potential for losses with further erosion of preferences as the EU market operates the highest returns for Greenland's fisheries exports, while the tariffs applied on imports from other trade partners (most notably Canada) serve to improve competitiveness and compensate for higher operating costs present in Greenland (imported inputs and wages).²⁹¹

It should be further noted, however, that several factors could potentially mitigate the overall adversity of the impact. As noted, Greenland is endowed with a wealth of untapped natural resources – including offshore oil, gold, niobium, tantalite, uranium, iron, diamonds and rare earth elements – that could potentially serve to offset any losses that occur in the fishing industry. However, the development of this industry is not guaranteed and is still in its early stages, making it possible that impacts could be more pronounced in the short- to mid-term. Further, stakeholders have pointed out that a reduction in the competitiveness of the industry would harm diversification efforts, even with the development of extractive industries, hindering sustainability of the economy. At the same time, if the improved access were to lead to declines in output, exports and employment in Greenland's fishing industry, and, subsequently, greater reliance on extractive industries, it could have a negative environmental impact.

Given the potential impacts, the following actions are recommended:

1. In terms of the CETA negotiations, EU negotiators for the fisheries sector should seek input from representatives of Greenland and discuss which products are the most sensitive. Research and consultations with stakeholders suggest that the Greenland fisheries sector would like the maintenance of preferences for deep sea shrimp and Greenland halibut. Negotiators should weigh potential impacts on Greenland, Canada as well as processors and consumers in the EU.
2. Conduct greater assessment on the potential impact. While it may not be feasible to conduct further ex-ante assessments due to the advanced stages of negotiations, it is strongly recommended that an ex-post assessment of the impact on the CETA on SPM be conducted. From the viewpoint of Greenland, it is felt that the erosion of preferences is against the spirit of the *Greenland Treaty*, and as such, any losses incurred under the CETA should be duly compensated by the EC. Based on the results of the assessment, compensation measures and adjustment funds should be considered.

²⁹⁰ OS Consulting 2010

²⁹¹ Consultations with Megapesca

3. Any liberalisation of sensitive fisheries products should be accompanied by a suitable phasing-in period to allow the industry adequate time to adjust and formulate new strategies.
4. Include a mechanism for regular dialogue between Greenlandic stakeholders and the EC. Included in this mechanism should be facilitation of greater cooperation between the two sides, particularly with respect to development projects for alternative industries.

OTHER THIRD COUNTRIES

Modelling estimates suggest that the most notable impact of the CETA in the Agriculture, PAPs and Fisheries sectors is the redirection of Canadian exports of fish towards the EU, and away from Third Countries. Further, as the EU is not expected to grow its overall imports, this would likely be accompanied by a corresponding reduction in EU imports of fish and seafood from third countries. The result is likely to be a change in trade patterns within the EU, Canada and their more important trade partners (the US and Mexico), rather than in trade with other Third Countries. However, in the short run, while adjustments occur, some countries may try to gain competitiveness in order to keep their export share in the EU market. This may create some incentives for overfishing in countries where environmental regulation is not strict, though such an outcome would be expected to be limited.

Table 18 below outlines the Third Countries that are trading partners with the EU in terms of Fish products.

More affected countries in the fisheries sector would likely be Norway, China, Iceland, Vietnam, India, Thailand, Ecuador, Russian Federation, Argentina, Faeroe Islands, Chile and Bangladesh, which currently have higher shares of exports than Canada in the EU market. In LDCs the risk of losing market share might push them to increase their competitiveness by intensification, which could lead to predation.

Table 18: Fish Products

Partner Country		Cumm %	Imports US \$	%
Norway	1	29.5	3412326208	29.5
China	2	39.1	1099755848	9.5
Iceland	3	45.4	735753460	6.4
Viet Nam	4	50.8	615588765	5.3
United States	5	56.0	602847053	5.2
India	6	59.6	416748326	3.6
Thailand	7	62.6	352668856	3.1
Ecuador	8	65.3	301707701	2.6
Russian Federation	9	67.6	266669382	2.3
Argentina	10	69.7	252463349	2.2
Faeroe Islands	11	71.9	252001876	2.2
Chile	12	74.0	234143243	2.0
Bangladesh	13	75.9	224368427	1.9
Canada	14	77.6	199561854	1.7
Indonesia	15	79.1	168545855	1.5
Senegal	16	80.5	163096107	1.4

Morocco	17	81.9	156601807	1.4
Sri Lanka	18	83.2	153547145	1.3
South Africa	19	84.4	141013974	1.2
Turkey	20	85.6	135395920	1.2
Madagascar	21	86.5	111566242	1.0
Peru	22	87.4	95832236	0.8
Uganda	23	88.2	92100387	0.8
Tanzania, United Republic of	24	88.9	90404146	0.8
Namibia	25	89.6	77379322	0.7

Source: Based on OECD data (best available data for most recent year between 2007-2009)

Note: EU imports by country in cumulative percentage, US dollars and simple percentage

In other Agriculture and PAPs subsectors, although the decrease of output will be insignificant, it will affect all third countries other than Mexico and the USA discussed above (see Annex 6).

In the wheat subsector, while the decrease of output in the EU is minor and the increase of exports from Canada limited, a substitution effect between wheat and other cereals in third countries could also occur, in particular if shortages of other cereals (such as rice) increase their price and the price of wheat decreases.

Main EU partner countries affected in the cereals subsector (dominated by wheat and rice) would likely be Thailand, India, Australia, Chile, Pakistan, Serbia and Montenegro, Ukraine, Croatia and Argentina (see Table 19). If production increases in these countries to respond to eventual increase of EU imports, some positive economic and social effects can be expected. The environmental effects can be positive or negative if countries try to increase their competitiveness by intensification.

Table 19: Cereals

Partner Country		Cumm %	Imports US \$	%
Canada	1	20.5	649992226	20.5
United States	2	30.9	330945668	10.4
Thailand	3	41.2	329707476	10.4
India	4	49.7	268211358	8.4
Australia	5	55.1	171714126	5.4
Chile	7	63.8	112673184	3.5
Pakistan	8	67.2	110346864	3.5

Source: Based on OECD data (best available data for most recent year between 2007-2009)

Note: EU imports by country in cumulative percentage, US dollars and simple percentage

In the beef industry, the increase of Canadian production and the redirection towards the EU market may reduce Canadian exports to third countries. According to the CGE results, this will not have significant impact on the output of third countries; however it may reduce imports from Canada as beef is diverted to the EU. Eventual reduction of market share for third countries will potentially affect Brazil and Argentina and other LDCs to a marginal degree. While this may hinder the economies of these countries, it might have a positive effect on the environment.

5. INDUSTRIAL PRODUCTS ASSESSMENTS²⁹²

Summary

*In terms of industrial products, the **economic assessment** finds that the CETA is unlikely to have a pronounced impact on the **mining, metal manufacturing, oil, coal or forest-based industries** in either Canada or the EU. While Canada is imbued with a significant stock of metallic ores, oil, coal and lumber, the low or complete absence of duties on these products within the EU, limits the impact that the CETA is likely to have. Investment liberalisation – notably through the extension of national treatment provisions – could lead to greater levels of EU investment in these sectors within Canada (perhaps stimulating greater levels of output); though given the fact that the EU's existing FDI in these Canadian sectors – particularly in mining and oil – is already fairly robust, it does not appear that existing barriers have not been overly restrictive to capital inflows from the EU.*

*The CETA could have an impact on the **transportation equipment** manufacturing sectors within Canada and the EU. The assessment finds that the elimination of tariffs could lead to increased output and exports in the automotive industries on both sides of the Atlantic. Given Canada's high degree of integration with the U.S. auto industry, the rules of origin that are ultimately agreed to will be a key factor determining the extent of the CETA's impact. Specifically, rules of origin that require a higher percentage of a product's value be produced within the country would likely limit the ability of Canadian producers to qualify for preferential tariffs, reducing gains from the Agreement. Additionally, differences in emission standards between Canada and the EU could serve to further reduce estimated gains for the Canadian auto industry. This is largely dependent, however, on the level of market access granted to Canadian auto manufacturers under the CETA, with significant improvements in market access likely to stimulate Canadian producers to make necessary investments in order to meet the stricter EU standards. EU manufacturers would not be expected to be hindered by the differences in standards and would likely see greater gains under an agreement that adopts more stringent rules of origin. While Canada is expected to see increased output and exports among its manufacturers of other transportation*

²⁹² **Introductory notes:** This section contains an analysis of the CETA's impact on industrial products in the EU and Canada as well as in third countries across the economic, social and environmental pillars of sustainability. The scoping exercise conducted in the initial phases of the study flagged 6 sub-sectors within industrial products that will be individually assessed for the EU and Canada, including: (i) mining and metals, (ii) oil and petroleum, (iii) coal, (iv) forest-based industries, (v) transportation equipment and (vi) textiles. These separate sub-sectoral analyses for Canada and the EU are followed by a broader assessment on other third countries such as Mexico and the United States which addresses only those areas within industrial products that are likely to be impacted.

The economic assessment is derived largely from a CGE model that estimates the impact of the CETA on output, exports, balance of trade and employment. Four liberalisation scenarios were modelled in the final simulations, with all four modelling 100% reduction in tariffs of industrial products. Differences in the scenarios relate to the level of liberalisation in agricultural products as well as the assumed degree of services liberalisation.

It is important to note that results (located in Annex 6) should be interpreted as reflecting the impact of the CETA itself on these indicators and does not necessarily imply overall changes in the country's output or exports, which could be further affected by exogenous factors. All estimated impacts are to be understood as occurring over the long-term (e.g. in 10+ years) after final implementation of an Agreement. As data limitations made it impossible to incorporate investment effects into the CGE model, the results take into account the impact of trade liberalisation only and do account for the impact from investment liberalisation, which is instead assessed qualitatively.

More information on the CGE model, its assumptions and the scenarios employed can be found in Annex 1.

equipment (non-automotive), the modelling projects declines within the EU, worsening its balance of trade in these products.

The CETA would likewise be expected to have a positive economic impact on the **textiles** industries of Canada and the EU over the long-term. For Canada, the greatest gains would be expected to arise under an Agreement that obtained the greatest liberalisation of tariffs, with the modelling projecting increases in output and exports in its textiles and apparel sectors; though there could be some deterioration in its balance of trade in these products. While Canada is expected to experience declines in these indicators within its leather manufacturing sector, the EU is projected to see increases in output, exports and its balance of trade in all three sub-sectors over the long-term. Further gains for the EU would arise if the CETA leads to the removal of barriers to the free circulation of goods in Canada as well as improved enforcement of IPR. The impact on Canada and the EU will likely be significantly influenced by the rules of origin ultimately adopted. Canada stands to benefit from less restrictive rules while the EU would exhibit greater gains under a more stringent set of rules.

The CETA has the potential to have a positive **social impact**, particularly with respect to quality and decency of work. Given the relatively high level of labour standards in Canada and the EU, the CETA does not carry with it the general concerns of social dumping, which are associated with agreements negotiated between two countries that possess significant variation in their level of standards. As such, it is not envisaged that the CETA will promote the erosion of labour standards in either Canada or the EU, limiting its ability to have a negative impact on Core Labour Standards (CLS) in each.

The CETA does, however, have potential to improve the ratification of CLS in Canada while fostering greater implementation of CLS in both Canada and the EU. Probably the greatest impact would arise under a CETA that requires the ratification of all 8 Conventions that constitute the ILO's Core Labour Standards as Canada has thus far failed to ratify 3 conventions pertaining to forced labour, the right to freely associate and bargain collectively and minimum age requirements. Given the large number of complaints by Canadian labour organisations made before the ILO, such an outcome would likely have the greatest impact on Canada's rights to associate and collectively bargain. Nevertheless, such an outcome may be too ambitious to be realised given the need to reach approval from Canada's Provinces, who would likely need to make adjustments to their provincial labour laws to make them conform to ILO standards.

Nevertheless, the CETA can foster greater implementation of the existing CLS that both Canada and EU Member States have ratified. This could be achieved by a stand alone chapter on labour and trade that includes provisions on increasing awareness of legal rights and obligations, fostering social dialogue, and ensuring oversight and enforcement while also creating an impartial review panel that can hear and rule on complaints. Such a Chapter in the Agreement could also include provisions to improve implementation of the ILO's Decent Work Agenda and foster greater levels of corporate social responsibility, creating a positive social impact for labour on both sides of the Atlantic.

The **environmental impact** is likely to be heavily influenced by the CETA's impact on industrial production within Canada and the EU. Based on the limited expected impact on the most environmentally harmful sectors – oil, coal, forestry and mining – it is not expected that the CETA will engender significant output-related environmental impacts in either the EU or Canada. Further, to the degree that the CETA reaches significant levels of liberalisation within the services sectors of Canada and the EU, it is possible that, over the long-term, output within certain industrial sectors may see minor declines in production, creating a positive environmental impact by shifting resources towards the less-environmentally harmful services sectors.

At the same time, it should be noted that the model does not take into account the impact of investment liberalisation, particularly with respect to its ability to increase output in certain sectors. This could be particularly relevant should measures be included that stimulate significant increases in investment in Canada's oil sands and mining industries over the long-term.

A negative environmental impact is likely to arise as a result of projected increases in production within the automotive industries of the EU and Canada. While this could lead to greater GHG emissions in the transport equipment sector, it is expected that improvements in energy intensity can help offset these gains and mitigate the environmental impact.

5.1. EU & CANADA

5.1.1. Mining & Metal Manufacturing

ECONOMIC ASSESSMENT²⁹³

Mining

INDICATOR: Output, trade and investment

BASELINE

While Canada is a major producer and supplier of a number of metals and non-metallic minerals (Table 20), the EU is heavily reliant on external sources for a number of metals and minerals important to domestic downstream and end users. Mining of metals is largely absent in most Member States with only marginal activity occurring in Austria, Finland, Greece, Ireland, Poland, Portugal and Sweden, with only a limited number of ores being extracted (e.g. chromium, copper, lead, silver and zinc).²⁹⁴

²⁹³ Specifically, CGE results for the mining, metals and minerals sector are reported according to the groupings of the GTAP database which divide the industry across: mining and quarrying of metal ores, uranium and gems (*mining*); iron and steel; manufactured non-ferrous metals and metal products; and fabricated metal products. The results of the simulations can be found in Tables 49-56 in Annex 6.

²⁹⁴ DG Enterprise

Table 20: Canadian production of select metals & minerals (2007)

Mineral	Production	World share of production (overall rank)
Uranium	9,500,000t	23.0% (1 st)
Potash	11,000,000t (K ₂ O equivalent)	33.3% (1 st)
Nickel	255,000t	15.9% (2 nd)
Cobalt	8,261t	13.3% (2 nd)
Titanium	816,000t (ilmenite)	14.6% (3 rd)
Platinum group metals	23,042kg	4.4% (3 rd)
Aluminium	3,083,000t	8.1% (3 rd)
Gypsum	9,500,000t	7.5% (4 th)
Chrysotile	185,000t	8.1% (5 th)
Zinc	623,000t	5.6% (5 th)
Molybdenum	6,841t	3.7% (5 th)
Salt	15,000,000t	6.0% (5 th)

Source: Natural Resources Canada

Canada's natural endowment of raw materials has led it to become a major exporter of metals, with exports in 2009 of \$8.51 billion and a trade surplus of \$4.61 billion.²⁹⁵ Conversely, the EU is a consistent net importer of ores with a deficit of \$10.89 billion in 2009. The dynamic of this relationship has led to Canada playing an increasing and significant role in helping the EU meet its demand for raw materials. In 2009, for example, Canada was the 3rd largest exporter to the EU of ores and other minerals (\$805.83 million), contributing 8.1% (by value) of total EU imports of these products. In particular, Canada provides a major share of EU imports of uranium (55.2% of total EU uranium imports in 2007) and nickel ores and concentrates (52.5%), while also being a significant source of iron ore and concentrates (7.7%), zinc ores and concentrates (7.5%), manufactured nickel products (7.6%) and ores and concentrates of molybdenum, niobium, tantalum, titanium, vanadium and zirconium (6.8%). Similarly, the EU is an important export market for Canadian producers of zinc ores and concentrates (61.7% of total Canadian zinc exports in 2007), molybdenum (53.8%), iron ore and concentrates (45.5%), nickel ores and concentrates (38.6%), manufactured platinum group metal (PGM) products (37.7%), and copper ores and concentrates (17.3%).²⁹⁶

The EU's reliance on imports to obtain many important raw materials as well as rising global prices in recent years has prompted the EC to take steps towards securing and improving access to raw materials.²⁹⁷ Herein, the EC has identified a list of critical raw materials that are essential for the European economy and whose supply is relatively insecure.²⁹⁸ Of the 14 listed in a DG Enterprise and Industry report, Canada is a significant global supplier of 3: cobalt, PGM and indium. In a fourth, tungsten, Canada has the capacity to serve as a significant supplier and could potentially revive the industry in the long-term, particularly in light of China's quasi-monopoly on global production.²⁹⁹

²⁹⁵ UN Comtrade

²⁹⁶ UN Comtrade

²⁹⁷ See for example, EC (2008c)

²⁹⁸ EC (2010a)

²⁹⁹ Estimates by the USGS place Canada as having the 2nd largest reserves of tungsten after China with 260,000 tonnes. See: U.S. Geological Survey (2009).

Although Canada has historically been a relatively minor contributor of EU imports of PGM³⁰⁰ and indium, it has played a significant role in supplying the EU with cobalt. Canadian exports of *Cobalt mattes and other intermediate products of cobalt metallurgy* (HS 8105), for example, reached as high as \$987.5 million in 2008 (before the global recession led to a drastic fall in the price of raw materials) accounting for 6.8% of total EU imports of this product group.³⁰¹

ANALYSIS

Despite the existing situation where Canada is a major producer and global exporter of metals and the EU a major importer, the prospect of tariff liberalisation under the CETA is unlikely to have a noticeable economic impact on mining in either Canada or the EU, largely as a consequence of the zero tariffs already in place on imports of these products into the EU. Nevertheless, the CETA could still lead to an impact through investment liberalisation in Canada, particularly in the case of uranium, which is subject to foreign investment restrictions.

Canada

As noted, **trade liberalisation** will likely have a limited impact on output and exports from Canada, as an absence of duties in the EU on a number of metallic ores and manufactured metals is expected to limit the impact of tariff liberalisation under the CETA. This is supported by the CGE model results which suggest that the full removal of tariffs under the CETA could potentially increase output in Canada by only 0.15% (See Tables 49-54 in Annex 6). Alternatively, it is interesting to note that less ambitious liberalisation of tariffs (in Scenarios A and B) is projected to lead to very minor declines in output. In terms of trade, it is not expected that the CETA would lead to increased exports – either with the EU or third countries – suggesting that any change in output would be in response to changed demand from domestic downstream users.

It is, however, important to note that the estimates from the CGE model do not take into account the potential impact associated with **investment liberalisation** in the mining sector in Canada. Canada's wealth of metals and minerals, as outlined in the baseline, together with its strong investment protection, have helped it become a major destination for outward investment, making it the world's leading recipient in 2006 with 19% of global mining investment.³⁰² The EU has been a leading investor in the sector with 22% of its total FDI stocks in Canada in 2007 residing in the mining sector.³⁰³

Investment liberalisation is likely to positively impact on FDI in the sector, in turn potentially leading to increases in output and exports. Although data limitations have made it impossible for the modelling framework to quantitatively reflect the precise impact that investment liberalisation is likely to have on output and exports in Canada's mining sector, results from the gravity modelling suggest that a reduction in investment restrictiveness (as measured by the OECD) is likely to have a positive impact on investment in Canada's mining sector. It could, therefore, be expected that provisions within the CETA may be able to help facilitate increased investment by the EU in Canada's mining sector.

³⁰⁰ In imports of *Platinum, unwrought or in semi-manuf. Forms, or in powder form*(HS Code 7110), Canada provided only 1.6% of the total value of EU imports in 2008.

³⁰¹ UN Comtrade

³⁰² Mining Association of Canada (2008).

³⁰³ OECD.stat

Specifically, provisions that grant national treatment in Canada's mining sector to EU investors could eliminate or reduce burdens associated with Canada's 'net benefit test'. While Canada has not regularly invoked the net benefit test to deny investments in the mining sector, the recently failed attempt by BHP Billiton to take a controlling interest in Potash Corporation of Saskatchewan highlights the potential uncertainties foreign investors may face. To the degree that national treatment to EU investors is granted and enforced, it is likely that the investment environment will be strengthened, increasing EU FDI in the sector over the long-term (See section on Investment for further discussion). While difficult to quantify, it would appear that this would lead to greater increases in output and trade than presently estimated by the CGE model.

One area in particular where the CETA could spur investment by the EU is in uranium, where the Non-Resident Ownership Policy (NROP) in the Uranium Mining Sector prevents non-Canadian residents from acquiring more than a 49% ownership interest in a uranium mining property or facility for producing uranium concentrate unless it is Canadian controlled. While exemptions to this policy are possible where it can be demonstrated that no Canadian partners can be found, the NROP nevertheless subjects EU investors to restrictions in the uranium sector.³⁰⁴ With several EU Member States having competitive nuclear industries, the removal or relaxation of such restrictions could result in greater levels of investment while also impacting output, particularly given the fact that Canada has a relative abundance of high quality uranium deposits.³⁰⁵

EU

Given the limited role the mining sector plays within the EU it is not expected that tariff liberalisation within the CETA will have an economic impact. This is supported by the CGE model, which shows that output and exports are not expected to change over the long-term (Tables 49-54 Annex 6).

The greatest impact to the EU would be expected to arise through investment liberalisation in Canada's mining sector. This would be contingent, however, on the extension of national treatment to EU investors, as well as potential removal of ownership restrictions in the uranium sector. Investment liberalisation, as discussed in the preceding section on Canada, would be expected to facilitate increased investment by the EU in the sector, particularly as it pertains to uranium. With increased investment subsequently leading to increases in output, it would be expected that the economic impact on the EU would be positive. While it should not be assumed that increases in output would necessarily lead directly to increased exports to the EU for use in manufacturing, the impact could still be indirectly positive by ensuring increased supply in global markets, placing downward pressure on world prices.

INDICATOR: Employment

BASELINE & ANALYSIS

Canada

With limited expected changes in output and exports within Canada's mining sector, the impact on employment is expected to be minor. Estimates from the formal modelling suggest that under the scenarios that model full removal of tariffs for all products (C and D), the demand for labour will exhibit modest increases. Alternatively, in scenarios that maintain sensitivities on certain products, very minor

³⁰⁴ Uranium exploration is not subject to foreign ownership restriction.

³⁰⁵ McFetridge, D.G. (2008).

declines in labour are estimated to occur in the long-term. Employing approximately 53,000 in 2007, such minor percentage changes in sectoral employment would lead to very limited changes in overall employment. However, although the sector serves as a minor source of national employment, mining is an important source of economic activity for a number of remote areas across a number of provinces and territories and a significant employer of Canada's aboriginal peoples, making it possible that any gains in employment could disproportionately benefit these groups.

EU

Due to a limited effect on output and exports, it is expected that employment within the EU's mining sector will not be significantly impacted. CGE estimates support this claim and project that over the long-term the demand for labour in the EU's mining sector will change by 0% to -0.02%.

Metal manufacturing

INDICATOR: Output and trade

BASELINE

Both Canada and the EU exhibit heavy downstream usage of metal ores with each serving as a leading global manufacturer of ferrous, nonferrous and fabricated metal products. With 16% of global output and turnover of approximately \$200 billion, the EU is the world's second largest producer of steel, excelling in the production of high-end products for downstream users. The EU is also the world's largest consumer of nonferrous metals and has substantial processing and scrap capacity which generates over \$190.5 billion in turnover. Though smaller in terms of overall size, Canada is likewise a major manufacturer of metallic products with turnover in 2007 of \$47.5 billion and \$33.2 billion in primary metal manufacturing (including both ferrous and nonferrous metals) and fabricated metal manufacturing, respectively.³⁰⁶

While historically a net exporter of steel and other manufactured metal products, the EU has become a net importer in recent years. Further, as the EU relies on outside sources for 90% of its inputs, the industry has come under increasing competition for key inputs from emerging steel producing nations such as the BRIC countries.³⁰⁷

Canada, conversely, consistently maintains an overall trade surplus in ferrous and nonferrous metal manufacturing, though this fell to approximately \$6.2 billion in 2009 as external demand in the US declined. As of 2006, Canada has also maintained a trade surplus with the EU, though this also fell in 2009, dropping to approximately \$280 million. Within this bilateral relationship, Canada's main advantage is in trade of nonferrous metal products, as their processing industries in Ontario and Quebec are well positioned to utilise Canada's healthy endowment of metallic ores. In terms of fabricated metal products, Canada typically operates a trade deficit well in excess of \$5 billion and with the EU of approximately \$1 billion.³⁰⁸

ANALYSIS

³⁰⁶ Industry Canada

³⁰⁷ DG Enterprise

³⁰⁸ Industry Canada

Canada

The CGE modelling results suggest that the CETA will have a limited economic impact on the metal manufacturing industry over the long-term. In all instances, tariff liberalisation under the CETA is not expected to produce significant changes in output or trade in Canada's metal manufacturing sector, largely due to the fact that many products can already be imported into the EU duty free.

In **output**, it is estimated that the tariff liberalisation under the CETA would likely produce different outcomes for ferrous, non-ferrous and fabricated metals. Given its healthy endowment of nonferrous metals, the CETA would be estimated to lead to slight increases in output with the full removal of tariffs ranging from 0.3% to 0.48% (Tables 49-54 Annex 6). Alternatively, under scenarios where sensitivities are maintained on certain products (A and B), the model estimates minor declines in output over the long-term, ranging from -0.2% to -0.39%.

This is in contrast to production of fabricated metal products which is estimated to decrease across all scenarios, ranging from -0.04% in Scenario C to -0.56% in Scenario B. Production of iron and steel would not be expected to see noticeable changes in production under a less ambitious liberalisation of services and full removal of tariffs (Scenario C), but this is estimated to show a decrease across all other scenarios, ranging from -0.11% in Scenario D to -0.61% in Scenario B.

In all three of these products, it is not expected that the CETA will stimulate increases in overall **exports**. Overall exports of iron and steel and fabricated metals are projected to decrease by as much as -0.91% and -1.12%, respectively, in Scenario B, with the lowest declines observed in a scenario that provides the greatest removal of tariffs and less ambitious liberalisation of services.³⁰⁹ Exports of nonferrous metals are estimated to increase by as much as 0.57% in Scenario C, with less ambitious cuts in goods estimated to lead to minor declines in overall exports over the long-term (Scenario A and B). Across all three products imports would be expected to increase by a larger amount than exports, leading to a slight decrease in the **balance of trade**. Tariff liberalisation is further expected to have only a limited impact on **bilateral trade** with the EU in these products as exports to and imports from the EU in ferrous and non-ferrous metal products see limited change under the simulations.

EU

The estimated impact on the EU's metal manufacturing sector resulting from the CETA, while negative, is expected to be limited. In general, the CGE model estimates that the removal of tariffs under the CETA would have limited to no impact on the EU's production and trade of fabricated and ferrous metals, with only a limited negative impact expected for its nonferrous metal manufacturing industry.

Specifically, output and exports of ferrous and fabricated metals are estimated to exhibit little change as a result of the CETA regardless of the scenario. Output and exports of nonferrous metal products are expected to decrease by as much as 0.13% and 0.2%, respectively, in scenarios C and D, suggesting that increased imports from Canada would stimulate declines in domestic production over the long-term. This would be expected to worsen the EU's overall balance of trade in these products (by as much as \$140 million), with increased imports from Canada (\$113 million) accounting for the majority of this reduction in the balance of trade. These increased imports, while perhaps leading to contraction in

³⁰⁹ It should be noted that simultaneously providing lower levels of liberalisation for goods (i.e. tariffs and NTBs) while providing more liberalization for services would stimulate more movement of resources away from the goods' sectors (such as fabricated metals and iron and steel) and into the services sector over the long-term.

domestic output, would likely benefit downstream producers in the EU that rely on nonferrous metals in the production process.

INDICATOR: Employment

BASELINE & ANALYSIS

Canada

With the model estimating limited changes in output or exports as a result of tariff liberalisation under the CETA, it is expected that there will also be a limited impact on employment in Canada's metal manufacturing industry over the long-term. This is supported by CGE model estimates which generally project minor decreases in demand for employment (Table 54 Annex 6). Within the industry, the model projects that demand for employment will be most greatly affected in the ferrous and fabricated metal sectors, with the greatest declines estimated to occur under Scenario B (-0.7%).

With over 74,000 directly employed within primary metal manufacturing (ferrous and non-ferrous) and a further 177,000 in fabricated metal manufacturing, declines would likely lead to limited nominal shifts in employment.

EU

It is similarly expected that declines in output and exports will lead to declines in employment within the EU's metal manufacturing industry. Specifically, CGE model results project declines in the demand for labour by as much as -0.06% in ferrous metal manufacturing and -0.15% in nonferrous metal manufacturing (Table 55 Annex 6). As such, even with approximately 1.84 million employed in metal manufacturing in the EU, it is not expected that there will be a sizeable shift in employment into other sectors as a result of the CETA.

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

The preceding economic assessment estimates that, over the long-term (i.e. 10 years after the signing of an agreement), trade liberalisation under the CETA will lead to minor declines in employment in (i) ferrous metal manufacturing, (ii) fabricated metal manufacturing; and (iii) non-ferrous metal manufacturing (though only under certain scenarios). Conversely, it is estimated that the CETA will lead to minor increases in employment within the mining sector and in manufacturing of nonferrous metals provided the Agreement takes a less ambitious approach to services liberalisation and fully liberalises tariffs across all products. Across each of these industries, greater liberalisation of services and limited removal of tariffs on certain products is expected to place downward pressure on the demand for labour in these sectors.

These sectors directly employ over 300,000 people, with the majority employed in fabricated metal manufacturing (Table 21). Generally, it should be noted that all of the sectors listed below are relatively

minor contributors to employment in Canada. Given these employment figures, potential increases of 0.11% in mining and quarrying and 0.16% in nonferrous metal manufacturing, would generally be expected to generate only marginal increases in employment for these sectors.

Table 21: Employment in Canada’s mining and metal manufacturing sectors (2007)

Sector	Number employed
Mining & quarrying (excl. coal, oil and gas)	52,877
Primary metal manufacturing	74,009
Fabricated metal manufacturing	176,642
Total	303,528

Source: Industry Canada, Natural Resources Canada

With over 200,000 employed in Canada’s fabricated and ferrous metal manufacturing, estimated declines in employment of over -0.70%, while not substantial, could lead to short- to mid-term displacement of workers as a result of the CETA. While these workers would be expected to either shift into alternative professions or cycle out of the workforce over the long-term, they could potentially experience difficulties associated with their displacement over the short- to mid-term.

Under the prospect of displacement for those employed in fabricated metal manufacturing, the severity of the impact is largely contingent on:

- 1) how well areas particularly reliant on the sector adjust and shift towards alternative forms of economic activity; and
- 2) how well displaced workers are able to shift into new areas of employment

Focusing on the second point, Table 22 highlights the sectors expected to experience increased demand for labour in Canada as a result of the CETA as well as their average wages relative to those employed in fabricated metal manufacturing. As can be seen, the prospects of transitioning into an expanding sector that offers higher wages are more reasonable under a CETA that provides the greatest degree of liberalisation, with scenarios that model a full removal of all tariffs generating employment in a number of sectors that provide higher wages on average than in fabricated metal manufacturing. Exceptions could arise for workers who shifted into construction, trade, apparel, textiles or recreation services.

Table 22: Sectors in Canada expected to increase employment, by degree and liberalisation scenario and wage compared to fabricated metal manufacturing

Sector	Scenario A	Scenario B	Scenario C	Scenario D	Salary Compared to average wage in fabricated metal manuf.
Mining			+		>
Textiles			+		<
Apparel			+		<
Non-ferrous metal manuf.			+		>
Automotive manuf.	+		+	+	>
Other Transport manuf.			+	+	>
Construction	+	+	+	+	<
Trade	+	+	+	+	<
Maritime transport	+	++	+	++	=
Air transport	+	+	+	+	>
Communication services	+	+	+	+	>
Recreation services	+	+	+	+	<
+ denotes marginal gain, ++ denotes significant gain, <,> denotes less than, equivalent or greater than					

Source: CGE model, Statistics Canada

Alternatively, under less ambitious liberalisation (Scenarios A and B), decreases in employment would be expected to be greater, while the prospects for alternative employment would be largely limited to the services industries. In such instances, workers may have difficulty locating employment that provides comparable salaries .

In further assessing the magnitude of the social impact, the relative skills of the workers employed metal manufacturing should be taken into account and cross-referenced with those generally required within the expanding sectors. With educational attainment in the metal manufacturing sector generally below the national average (particularly in terms of the number who have graduated from university), the average displaced employee would likely find herself under-qualified for those jobs that require a higher level of skills and education. At the same time, displaced workers would be potentially well suited to transition into nonferrous metal manufacturing which could provide them with higher wages over the long-term, mitigating the potentially negative impact on these workers as a result of the CETA.

Overall, however, the prospects for displacement in Canada's metal manufacturing sector are limited, with minor declines in employment likely to arise from the CETA and with the sector being a minor source of employment within Canada. As such, it should not be expected that any significant negative social impact hereto should be expected to arise.

Box 13: Mining and Canada's aboriginals

Based on the economic assessment, it is expected that the impact on Canada's mining industry will be positive. While CGE estimates project very minor increases in employment as a result of trade liberalisation, it is possible that provisions leading to increased EU investment (i.e. national treatment or removal of equity restrictions on uranium) could result in greater levels of employment than presently estimated.

These potential gains in employment could benefit Canada's aboriginal communities in particular. The Minerals and Metals Policy of the Government of Canada, through the 1994 Whitehorse Mining Initiative Leadership Council Accord (WMI), specifically sets out a strategic vision for sustainable development within the mining industry with particular intentions of ensuring that opportunities created by the industry are shared with aboriginal peoples. This includes:

- Ensuring participation of Aboriginal peoples in mining;
- Recognising and respecting Aboriginal treaty rights;
- Settling aboriginal land claims; and
- Guaranteeing stakeholder participation³¹⁰

To the extent that the principles laid out in the WMI are implemented and enforced, greater investment in Canada's metals and minerals industry as a result of the CETA could produce positive social gains for aboriginal communities. However, such an outcome is contingent on inclusion of these communities where exploration encroaches upon their areas of residence and the successful resolving of land disputes.

EU

The economic assessment suggests that the CETA will lead to minor decreases in employment in the EU's mining and metals manufacturing sectors. These declines in employment are generally expected to worsen under a scenario that provides greater liberalisation of services and full removal of tariffs for all products.

With current employment in mining and metal manufacturing in the EU at approximately 2.1 million (Table 23), it is not expected that the decreases in employment predicted by the CGE model will lead to more than a limited number of workers being displaced. With estimated declines in employment of as high as -0.15% for the nonferrous metal manufacturing industry in the EU, it would be expected that this sector would see the largest number of workers displaced. Overall, however, the total impact is expected to be limited.

³¹⁰ <http://www.nrcan-mcan.gc.ca/mms-smm/poli-poli/gov-gov/wmi-imw-eng.htm>

Table 23: Employment in the EU's mining and metal manufacturing sector (2007)

Sector	Number employed (2007)
Mining & quarrying (excl. coal, oil and gas)	295,000
Iron & steel manufacturing	410,000
Nonferrous metal manufacturing	334,700
Fabricated metal manufacturing	1,100,000
Total	2,139,700

Source: Eurostat, DG Enterprise

While wages may see limited downward movement due to decreases in demand for labour in these sectors, increases in productivity in the sector may potentially mitigate this effect. As the impacted industries discussed herein are predominantly populated by male workers, it is not expected that there will be an impact on gender equality or poverty.

INDICATOR: Quality & decency of work

BASELINE & ANALYSIS

Canada

The labour market for mining, unlike in most other sectors, is particularly volatile with high rates of turnover and seasonality. Employment tends to fluctuate with metal prices, implying limited security and few career prospects, particularly with respect to lower skilled positions. While it is probable that workers transitioning into mining would be advantaged by higher wages, the high rate of turnover implies a low degree of stability and security in employment. As such, the degree with which the CETA leads to greater degrees of employment in Canada's mining sector (particularly under greater levels of investment) workers may find themselves more generally exposed to insecure and unstable employment, negatively affecting this degree of quality and decency of work.

Whereas the high degree of seasonality and demanding conditions generally lead most mining employees to seek alternative forms of employment at some point in their careers, this is not the case in metal manufacturing, where the vast majority are fulltime, permanent employees. Strong degrees of unionisation – particularly in the primary metal manufacturing sector – imply that the collective power of unions could be impacted by the CETA's effect on employment: positively if it leads to increased employment (as projected for nonferrous metal manufacturing) or negatively if it leads to reductions in employment (as in ferrous and fabricated metal manufacturing).

Collective bargaining and the rights of association could, however, be strengthened by the CETA's ability to reaffirm the ILO's core labour standards (CLS) and under provisions that require Canada to ratify the ILO's *Right to Organise and Collective Bargaining Convention, 1949* (C.98). For detailed discussion on the social ramifications of the CETA as it pertains to core labour standards and the ILO's Decent Work Agenda see Box 14.

EU

Due to the limited expected effects on employment and displacement of workers, it is not expected that quality and decency of work will be significantly impacted. Shifts out of metal manufacturing and mining and into other areas could improve these workers' overall work environment, though the impact is expected to be minor. Workers could however, be impacted by the CETA's ability to foster greater implementation of the ILO's Core Labour Standards and Decent Work Agenda (See Box 14).

Box 14: Cross-sectoral social issue

The CETA's potential impact on (i) the implementation of the ILO's Core Labour Standards, (ii) promotion of the ILO Decent Work Agenda, and (iii) Corporate Social Responsibility

INDICATOR: Implementation/ratification of ILO Core Labour Standards

BASELINE & ANALYSIS

Within bilateral trade negotiations, concerns over labour standards are most often invoked as a result of significant disparities in the labour standards between the two sides. Hereto, the concern is that providing the lower standards country (usually the economically lesser developed of the two) with preferential access to the higher standards country (usually the more developed) could create an unlevel playing field, leaving the higher standards country disadvantaged by having to uphold higher (i.e. more costly) standards. This in turn could lead to exploitation of workers in the country with lower standards and reduced wages in the country with the higher standards (the much publicised 'race to the bottom', or what the ILO terms 'social dumping').

In order to avoid this outcome, and in an attempt to provide a framework for advancing labour principles and rights, both Canada and the EU have included labour components in their trade agreements.³¹¹ Labour clauses such as these not only create a 'social floor' through the listing of minimum commitments, but also generally establish an enforcement mechanism as well as a means of promoting cooperation and dialogue.³¹² It is noteworthy, however, that in contrast to many trade agreements previously negotiated by Canada and the EU, the CETA is not an agreement between two parties that possess drastically different levels of labour standards. Both Canada and the EU are generally regarded as having relatively high labour standards and both have expressed a strong commitment to ensuring core labour standards are adhered to in trade agreements. As such, it would appear that the CETA would be largely precluded from typical concerns of social dumping as intrinsic in many other negotiations.

Given the commitment to and enforcement of core labour standards by each, it is difficult to conceive of an outcome where the CETA leads to an erosion of labour standards and or social dumping in Canada or the EU. This being said, it is not necessarily the case that the CETA cannot have an impact on labour

³¹¹ ILO. http://www.ilo.org/global/standards/information-resources-and-publications/free-trade-agreements-and-labour-rights/WCMS_115822/lang-en/index.htm

³¹² ILO. <http://www.ilo.org/global/standards/information-resources-and-publications/free-trade-agreements-and-labour-rights/lang-en/index.htm>

standards simply because there is an obvious lack of disparity in labour standards between the two sides. One area of particular interest is the Agreement's ability to foster the ratification and implementation of the International Labour Organisation's (ILO) Core Labour Standards.

Specifically, the ILO's Core Labour Standards (CLS) consist of 8 Conventions, which focus on 4 key areas:

- i) Freedom of association and collective bargaining (C.87 & C.98)
- ii) Elimination of forced and compulsory labour (C.29 & C.105)
- iii) Elimination of discrimination in respect of employment and occupation (C.100 & C.111)
- iv) Abolition of child labour (C.138 & C.182)

While each of the EU's 27 Member States have ratified all eight of these Conventions, Canada has not yet ratified the Forced Labour Convention, 1930 (C.29), the Right to Organise and Collective Bargaining Convention, 1949 (C.98) or the Minimum Age Convention, 1973 (C.138).

It should be noted, however, that while Canada is in the minority³¹³ of countries to have not ratified these Conventions, it should not necessarily be taken to imply that its standards are significantly low in respect to forced labour, collective bargaining or underage workers. As an ILO member, Canada is still required under the 1998 ILO *Declaration on Fundamental Principles and Rights at Work* 'to respect, to promote and to realise, in good faith and in accordance with the [ILO] Constitution, the principles concerning the fundamental rights'³¹⁴ which are embodied in these conventions, even though they have not been ratified. Further, it is not necessarily its opposition to the contents of these conventions, but rather Canada's different approaches to labour policy among its 13 Provinces and Territories and difficulties in coordinating them that have limited the conventions' ratification. To this end, in order for Canada to ratify these three conventions and make them legally binding at the national and international level, it is first necessary for the government to ensure compliance at the provincial level: something that is complicated by the legal difficulties involved.

A particularly impactful outcome would therefore be if the CETA contains provisions that require **ratification of the ILO's 8 conventions of the CLS**. Obviously, this would require Canada to ratify the Forced Labour Convention, the Right to Organise and Collective Bargaining Convention and the Minimum Age Convention. Specifically, such an outcome could have particular relevance for collective bargaining and freedom of association in Canada. The number of complaints submitted to the ILO's Committee of Freedom of Association³¹⁵ (CFA) that have originated from Canada is greater than those from any other ILO member state. A total of 78 ILO complaints were filed against Canadian federal and provincial labour legislation from 1982-2008, with over 90% found to have been in violation of freedom of association principles.³¹⁶ As noted by the European Economic and Social Committee (EESC), these complaints often originate over disputes at the provincial level as different legal systems 'impose restrictions on trade union rights throughout the country' despite the existence of rights to join trade

³¹³ Canada is 1 of only 9 ILO members that haven't ratified C.29, 1 of 29 that haven't ratified C.98 and 1 of 58 that haven't ratified C.138.

³¹⁴ ILO. <http://www.ilo.org/declaration/thedeclaration/textdeclaration/lang--en/index.htm>

³¹⁵ The CFA examines complaints pertaining to violations of freedom of association, whether or not the country has ratified the relevant conventions. In terms of the ILO's core labour standards, this would pertain to C.87 and C.98.

³¹⁶ <http://www.labourrights.ca/ilocomplaints.htm>

³¹⁷ EESC (2010).

³¹⁸ Shaheed, Z. (2007).

³¹⁹ EESC (2010).

³²⁰ EESC (2010).

³²¹ ILO. Decent work agenda. <http://www.ilo.org/global/about-the-ilo/decent-work-agenda/lang--en/index.htm>

unions in place at the federal level.³¹⁷

The frequency of complaints by Canadian labour organisations suggests that ratifying C.98 could lead to improvements in Canadian workers ability to freely associate and collectively bargain, benefitting employees across a number of professions. As confirmed by Table 24, the majority of the complaints to the CFA made by Canadian labour organisation have been against legislation implemented at the provincial level, making it likely that the impact on workers may vary depending on the province. Given the nature of the majority of recent complaints, it would further appear that government employees may stand to benefit the most by limiting the government's ability to restrict the right to strike or impose salary freezes on its employees.

Table 24: Number of complaints to the ILO's CFA by Canadian labour organisations, 1982-2008

Legislation challenged	No. of complaints (1982-2008)	No. of complaints (2000-2008)
Government of Canada	10	0
Government of Quebec	20	7
Government of British Columbia	14	6
Government of Ontario	13	5
Government of Saskatchewan	3	2
Government of Alberta	3	1
Government of Newfoundland & Labour	3	1
Government of Nova Scotia	3	0
Government of Manitoba	3	0
Government of New Brunswick	2	1
Government of Prince Edward Island	2	0
Government of Yukon	2	0

Source: Labourrights.ca

At the same time, the very fact that C.98 would need to be coordinated with provincial labour laws in Canada, likely reduces the ease with which a CETA can require ratification. Ratifying C.98 (as well as C.29 and C.138) would require Canada to comply with its technical requirements – both at the national and provincial levels – making it mandatory that it be incorporated into law so that it supersedes any existing state statutes that conflict with the Convention's legal requirements. As such, ratifying the ILO conventions could (and likely would) come into conflict with provincial labour laws, requiring that they be altered to conform to ILO standards. The CETA's ability to obtain consensus from the provinces is likely to be difficult, particularly as ongoing procedures implemented by the Government of Canada have yet to lead to ratification of these conventions. Nevertheless, the EU is in the advantageous position of being able to do so since the CETA has brought Canada's provinces to the negotiating table.

With or without mandatory ratification of the ILO's 8 fundamental Conventions, it is possible for the CETA to include a number of additional/alternative provisions that can support and promote labour standards in Canada and the EU while also helping to strengthen implementation of CLS. **Improvements in implementation of CLS** in Canada and the EU could, specifically, be realised by the CETA's ability to: (i) promote awareness by workers and employers of their rights and obligations under the law; (ii) provide a mechanism for social dialogue; (iii) establish a mechanism for dispute resolution; and (iv) ensure

adequate oversight and enforcement.³¹⁸

As a first step, a stand alone chapter within the CETA devoted to trade and labour would be beneficial. Within this chapter, both sides could reaffirm their commitment to maintaining and promoting core labour standards within trade agreements by issuing firm support for the ILO's *Declaration on Fundamental Principles and Rights at Work* and declaring their unequivocal commitment not to lower labour standards or protection in order to encourage trade or investment.³¹⁹

This chapter could also include a number of provisions in relation to the four areas noted above that serve to improve implementation of CLS. Specifically, the CETA's chapter on trade and labour could include provisions for fostering social dialogue on labour matters, using a tripartite structure to ensure involvement of workers, employers and government. Civil Society could also be encouraged to partake in the process of adopting labour standards. Additionally, the CETA could include provisions to promote public awareness of the labour laws and standards that are affected by the CETA, while ensuring future changes that arise will also be adequately disseminated to the public.

Cooperation and enforcement could be enhanced under the CETA with the inclusion of provisions that call for regular exchange of information, including reports on progress in making advancements in labour standards.³²⁰ This could include dialogue on best-practice approaches based on the experiences of Canada and the EU. Additionally, provisions that put in place an inspection regime could further enhance enforcement, particularly provided the regime is accessible and responsive to relevant stakeholders and is imbued with the power to take action when violations are found. To this end, inspections and enforcement would be significantly strengthened by the establishment of a conflict resolution mechanism that can allow stakeholders to take action against infringements of labour laws. This impartial review panel would be tasked with hearing complaints regarding issues of trade and labour and making rulings.

Beyond the core labour standards of the ILO, both Canada and the EU could agree to take similar **measures to promote additional standards** that may positively impact workers on both sides. These could include mutual commitments on working to prevent workplace injuries, on non-discrimination of migrant workers, and on minimum standards for wage earners.

Overall, the CETA's ability to harmonise standards and ensure adequate compliance on both sides will help establish a 'social floor', safeguarding an appropriate level of labour standards in both Canada and the EU while ensuring that no form of social dumping arises. Additional provisions that call for dialogue and the further advancement of labour standards could contribute to improved labour standards in both Canada and the EU, causing the CETA to have a positive social impact over the long-term. Cooperation on labour issues between Canada and the EU could be further extended to international fora such as the ILO and WTO, leading to the international promotion of improved labour standards and ratification of the ILO's CLS in third countries.

INDICATOR: Promotion of the ILO Decent Work Agenda

BASELINE & ANALYSIS

The ILO's Decent Work Agenda (DWA) is designed to help foster the development of decent work across the globe through the implementation of four key objectives: creating jobs, guaranteeing rights at work, extending social protection and promoting social dialogue.³²¹ While the CETA's chapter on trade may not be able to obtain binding commitments for further implementation of the DWA's key objectives, it could, nevertheless, contain provisions which explicitly express both sides' commitment to decent work

under the ILO framework.

Further, the EU and Canada could provide a cooperative framework for further advancing the DWA on both sides of the Atlantic by fostering regular meetings to discuss priorities, commit to targets and share information on best-practices in realising components of the DWA. This cooperation could extend into international fora and in dealing with third countries, including commitment to including DWA promoting components in future FTAs.

INDICATOR: Corporate Social Responsibility

BASELINE & ANALYSIS

A Chapter on trade and labour within the CETA could have a positive impact on the promotion of corporate social responsibility (CSR) within Canada and the EU, which could further support efforts to strengthen labour standards and decent work on both sides and in third countries. Specifically, the CETA could include provisions that call for Canada and the EU to make efforts to encourage the adoption of CSR by private stakeholders, particularly by multinational enterprises (MNE). Hereto, the CETA could include a mutual commitment to the *OECD Guidelines for Multinational Enterprises* and the ILO's *Tripartite Declaration on Multinational Enterprises and Social Policy*.

INDICATOR: Health

BASELINE & ANALYSIS

Canada

Mining and manufacturing, respectively, have above average rates of work-related fatalities and injuries. With employment in nonferrous metal manufacturing and mining poised to increase under the CETA, workers in Canada could, on average, be subjected to more occupational injuries.³²² At the same time, a mechanism that fosters regular dialogue and cooperation between Canada and the EU could include commitments to and exchanges on reducing occupational injuries, perhaps fostering improved safety over the long-term (See Box 14 for more discussion).

EU

Metal manufacturing and mining in the EU, though safer than in most countries, remains subject to higher rates of work related injuries and physical health risks than most professions. Therefore, movement out of these occupations may improve overall worker health. However, due to the limited displacement of workers, the impact is expected to be minor.

³²² Statistics Canada, Workplace and Employee Survey 2003

ENVIRONMENTAL ASSESSMENT³²³

INDICATOR: Rate of depletion of minerals

BASELINE

Canada

Canada's base metal reserves (at mines in production or committed to production) have declined continuously for almost 30 years. As a result of this prolonged decline, reserves in 2008 were equal to 45% of the 1980 level for copper, 43% for nickel, 40% for molybdenum, 18% for zinc, 17% for silver and 7% for lead. Canada's reserves of base metals decline at an annual average rate ranging from -2.5% for nickel to -8% for lead (from 1980 to 2008). High prices from 2001 to 2007 were not sufficient to reverse this overarching trend by stimulating exploration and discovery of new proven reserves. The recent economic recession (which caused large reductions in commodity prices) has reduced production levels, thus also reducing the rate of decline.

Many marginal mines were put on hold or shut down entirely. The only metal whose proven reserves increased in 2008 were molybdenum (+4%). As of 2008, there were 947t of gold (4% decrease from 07), 5665t of silver (17% decrease from 2007), 5.0Mt (-16%) of zinc, 636,000t (-7%) of lead, 7.456Mt (-1.4%) of copper, 222,129t (+4) of molybdenum and 3.605Mt (-4.5%) of nickel. The apparent life indices for major metals in Canada at the end of 2008 were 12 years for nickel, 10 years for copper, 9 years for gold, 7 years for molybdenum, 6 years for zinc, 6 years for silver, and 4 years for lead. Nonetheless, land staking and claiming continues, with 19 million hectares of land staked and claimed in good standing in 2008, covering 7.9% of Canada's total landmass.

EU

EU mineral production experienced strong variations in its output over the past decade (Table 25).

³²³ Notes: The predicted environmental impact of the CETA is much larger for Canada than for the EU (where it is in most cases negligible or marginal). Therefore the environmental assessments in the following sections expand more on Canada than on the EU.

Canada and the EU apply different statistical definitions and procedures to gather, process and analyse data on the environmental impact of their industries. For the following environmental assessments it was intended to use the most comprehensive and detailed data available for each region. As a result, the content and extent of the respective environmental assessment sections on the EU and Canada may appear uneven.

Also, the mining and minerals sector in both regions is highly fragmented, comprising largely varying size of enterprises and operations, operational techniques, production volumes, etc. While there is some data available on the economics of the sector and on environmentally relevant outputs, a notable lack of data on prevailing business processes and techniques makes it virtually impossible to specify a single environmental profile for the whole sector in each region.

Table 25: EU mineral production³²⁴

	EU Production in thousand tonnes, 2007	% change since 2002	% of world production, 2007
Feldspar	7833	+57	35
Perlite	1266	0	34
Bentonite, fuller's earth, attapulgite, sepiolite	3898	+10	20
Gypsum (natural)	30317	+11	20
Kaolin	5051	-4	20
Salt	48180	-4	20
Diatomite (including moler)	326	-18	16
Talc	1330	+6	16
Sillimanite minerals	65	+5	15
Strontium minerals	142	-7	15
Potash (K ₂ O content)	4597	-2	14
Magnesite	2949	-5	13
Mica	36	-9	12
Sulphur	8189	+3	12
Titanium minerals (TiO ₂ content)	441	+3	7
Wollastonite	46	-2	7
Fluorspar	237	-34	4
Lithium minerals (Li content)	744	+41	4
Barytes	279	-32	3
Bromine	0.1	-100	<1
Graphite	3	-77	<1
Phosphate rock	831	+4	<1
Asbestos	no production	-100	0
Borates	no production		
Iodine	no production		
Natural sodium carbonate	no production		
Nepheline syenite	no production		
Rare earth minerals	no production		
Vermiculite	no production		

³²⁴ Hetherington et al. 2008

ANALYSIS

Canada

Scenarios A and B predict marginal declines in mining output while scenarios C and D predict a marginal increase in output for the mining sector over the long-term. These changes are both too small to significantly affect the depletion rates of most minerals. However, should CETA lead to increased investment and mining capacity in Canada, depletion rates could accelerate as a result of the Agreement.

EU

The past and current changes in EU mineral output are caused more by international commodity markets than by depletion of the resources.³²⁵ Therefore, and due to uncertain market conditions, the future rate of depletion cannot be predicted.

The CGE model shows a limited decrease in the output of non-ferrous metals in scenarios C and D and no change in output in scenarios A and B. All other subsectors show insignificant change. Therefore, and due to the market uncertainties stated above, it is expected that a CETA will not have an impact on the rate of depletion of mineral resources in the EU.

INDICATOR: Rate of overall land use of biodiverse areas

BASELINE

Canada & EU

Mining can negatively affect biodiversity by reducing habitat areas and quality such that they no longer support the same population sizes. Certain types of mines, like pit mines, can disturb large surface areas. Infrastructure, like access roads, is also important to the exploration of new mines and can break up habitat as well. Economic incentives can lead to the creation of new roads and highways into virgin areas. A significant amount of funding for these projects comes from public and private partnership or individual ventures. More money for further infrastructure projects could potentially further encroach on currently undeveloped lands, with related impacts on biodiversity.

Half of **Canada's** national parks, which are an example biodiverse lands, have mining occurring in or around their park boundaries now or in the past. 90% of mines identified are outside park boundaries, although 39% are within 10km of park boundaries.³²⁶ The primary impacts of mines identified by National Parks are the impact on wildlife due to habitat fragmentation, loss of habitat, decrease in habitat effectiveness, and direct and indirect mortality risk.

In the **EU**, mineral extraction uses relatively little land, as listed in Table 26:

³²⁵ Hetherington et al. 2008

³²⁶ AXYS Environmental Consulting LTD (2002).

Table 26: land use by mineral extraction in the EU³²⁷

Year	area (km ²)	area (% of EU area)
2000	6177	0.11
2006	6678	0.12

From 2000 to 2006 the area used for minerals extraction increased from 6177km² to 6678km² (+8.1%). This increase converted mostly agricultural, forest and semi natural areas, as listed in Table 27:

Table 27: Sprawl of mines and quarrying areas in the EU 2000-2006³²⁸

Previous land cover	km ² converted to mineral extraction
Artificial surfaces	0
Agricultural areas	537
Forest and semi natural areas	393
Wetlands	5
Water bodies	3
Total	938

In 2000 non-urban industrial and commercial sites covered 20 480km² of land (0.38% of EU area), rising to 21 887km² (0.40% of EU area) in 2006, an increase by 6.9%.³²⁹ It is not known how much of this land use can be attributed to the metal processing industry.

ANALYSIS

Canada

Factors that would contribute to further exploration and deposit appraisal activity include strength of the price of minerals, capital infusions, favourable equity markets, and also greater demand outlook for base metals and interest in commodities like potash, uranium and REE, which are important traded commodities in the context of Canada-EU trade. Increased investment in the mining sector following the CETA may create incentives for further exploration and access to remote resources that are located in virgin areas of the Canadian boreal or arctic regions (in line with Canadian regulations), thus intensifying the rate of land use of these fragile, biodiverse areas.

EU

Since the CGE model shows only minor impact of a CETA on the output of the EU mineral and metals industries, no impact on land use for these industries in the EU is expected.

³²⁷ EEA data service 2010: land accounts data viewer

³²⁸ Ibid.

³²⁹ Ibid.

INDICATOR: Water depletion / Contamination of water from chemicals and wastes / Discharge of untreated effluents**BASELINE****Canada**

Water can also be affected by mining activity through water withdrawals, treatment of tailing, and the use of chemicals and local water sources for processing activities. Primary metal industries represented 28% of surface water withdrawal intake by Canadian manufacturing industries in 2005, equating to 2178 million cubic meters used for this industry.³³⁰ For the mining industry, 459 million cubic metres were withdrawn, three quarters of which went to metal mines. Gross water use was 2516 million cubic metres for mining industries, but over 2000 cubic metres of this was recycled, for a recycling rate of 448%. The sum of the water discharged was 630 million cubic metres. The volumes of water are this large because mining operations must often remove groundwater to carry out extraction activities. Most of the water intake comes from self-supplied surface freshwater (76%), though nearly 20% comes from groundwater. The large majority, 82%, is used in processing; cooling, condensing and steam is used for 8% while the rest is for sanitation purposes. Most of the effluent, 71%, is released back into surface freshwater, while 16% goes into tailing ponds. The water in the tailing ponds arises from water that was in the metal mines. Only 8% is sent to groundwater. Of all these effluents, 61% is not treated before being discharged. 30% of water goes through a primary or mechanical treatment. Minor quantities, around 4%, go through biological or advanced treatments.³³¹

According to the National Pollutant Release Inventory, metal ore mines release 54% of Canadian reportable substances in tailings, while iron ore mines produce 25%. Other mines for diamonds, asbestos and phosphate are smaller generators of pollutant substances, responsible for 5% of the total.³³² Other causes of decreases in water quality may arise from pollutants spilling directly from mining operations, chemical spills and sedimentation effects. The metal industry is responsible for 9.62% of total BOD (organic water pollutants)³³³ emissions.

Quantity reported in tailings (tonnes) of reported substances by mining industry in Canada for 2009³³⁴

Arsenic and compounds (as As)	13013 t
Cadmium and compounds (as Cd)	189 t
Chromium and compounds (as Cr)	10719 t
Copper and compounds (as Cu)	57616 t
Mercury and compounds (as Hg)	15 t
Nickel and compounds (as Ni)	36495 t
Lead and compounds (as Pb)	24399 t

The Environmental Code of Practice for Metal Mines sets out guidelines for wastewater management. This code of practice supports the Metal Mining Effluent Regulations under the Fisheries Act. However, the guidelines act only as a means of encouraging best practices. For example, during mine operations,

³³⁰ <http://www.statcan.gc.ca/pub/16-401-x/2008001/5003964-eng.htm>

³³¹ Ibid.

³³² Vanderklippe, N. (2010).

³³³ World Development Indicators Online. World Bank.

³³⁴ Environment Canada. Pollution and Waste. 2009 NPRI Reviewed Facility Data Release: Overview of Tailings and Waste Rock Data for 2009.

mine water and seepage should be monitored and mine effluent should be treated so that it is physically and chemically stable.³³⁵

EU

The EU mineral and metal processing industries release significant amounts of pollutants into water. For both industries these are mostly inorganic chlorides and nitrogen, organic carbon compounds, and various heavy metals. However, the discharge from the metal industry contains higher amounts of toxic contaminants, especially heavy metals, than from the minerals industry (Table 28; for details see the European Pollutant Release and Transfer Register).

Table 28: Heavy metals releases into water by the EU metal processing industry, 2008³³⁶

Arsenic and compounds (as As)	5.22 t
Cadmium and compounds (as Cd)	1.86 t
Chromium and compounds (as Cr)	480 t
Copper and compounds (as Cu)	34.6 t
Mercury and compounds (as Hg)	96.2 kg
Nickel and compounds (as Ni)	71.3 t
Lead and compounds (as Pb)	29.3 t
Zinc and compounds (as Zn)	168 t

The mining and minerals industry in the EU is subject to comprehensive environmental regulation, most importantly the mining waste directive (Directive 2006/21/EC on the management of waste from the extractive industries).³³⁷ This is complemented by Best Practice advice to the sector, e.g. for the management of tailings and waste-rock in mining activities.³³⁸ Most recently, in February 2011 the raw materials initiative, taken forward by DG Enterprise and Industry, was adopted by the Commission. It specifically calls for fostering sustainable supply within the EU as one pillar of a European raw materials policy, and for recycling and resource efficiency as another. It also includes various environmentally relevant guidelines, e.g. for resolving land use conflicts between mining and environmental interests.³³⁹

ANALYSIS

Canada

Given that water withdrawals and discharges are directly correlated with production (assuming technology is constant), any marginal increase in mining output caused by the CETA (as predicted in Scenarios C and D) could lead to increased contamination and untreated discharges in this sector. Furthermore, if the CETA leads to increases in investment and production capacity in the mining sector, these impacts could be more pronounced. This could be especially important in the uranium sector.

³³⁵ Environmental Code of Practice for Metal Mines. Environment Canada.

³³⁶ European Pollutant Release and Transfer Register

³³⁷ http://europa.eu/legislation_summaries/environment/waste_management/128134_en.htm

³³⁸ <http://ec.europa.eu/environment/waste/mining/index.htm>, <http://eippcb.jrc.ec.europa.eu/reference/>

³³⁹ European Commission: Communications from the commission to the European Parliament, the council, the European Economic and Social Committee and the Committee of The Regions tackling the challenges in commodity markets and on raw materials. Brussels, 2.2.2011. COM(2011) 25 final

However, investment could accelerate the introduction of cleaner technologies, thereby reducing water discharges. Overall, the CETA is not expected to have a major effect on water withdrawals, discharges and contamination but could nevertheless have more pronounced effects in certain sectors or regions.

EU

Since the CGE model shows that the CETA will only have a marginal impact on the output of the EU mineral and metals industries, no significant effect on water resources used by these industries in the EU are expected. Regulation measures, currently in place, should help to reduce any impact that were to arise.

However, a marginal decrease in the EU production of non-ferrous metals will marginally reduce the industries' environmental impact in terms of water depletion and contamination.

It is notable that the mining and minerals sector in the EU is highly fragmented, largely varying in terms of sizes of enterprises and operations, operational techniques, production volumes, etc. While there is some data available on the economics of the sector and on environmentally relevant outputs, a notable lack of data on prevailing business processes and techniques makes it virtually impossible to specify a single environmental profile for the whole sector in the region.

INDICATOR: Rate of other waste output / Rate of hazardous waste output

BASELINE

Canada

Mining activity currently creates significant quantities of waste outputs. For instance, in order to separate the metal from the non-metal elements found in ore, high temperature processes are applied which create a non-metal by-product called slag, a granular rocky material. Depending on the slag form, some of it can be sold as a by-product for use in asphalt, concrete, fill, etc.

Another example is waste generated by potash production. For every tonne of potash product produced, about 1.5 tonnes of residue is created. Canada produces 24.8 Mt of residue from potash operations annually. Most residues are disposed of in engineered dams and ponds, while some salt is used for de-icing roads.

Overall, 7 billion tonnes of metal-mine and industrial tailing plus a further 6 billion tonnes of surface waste rock have been accumulated over many years from mine waste. When considering mine wastes that are known or potential sources of acid, these figures drop to 1,878 Mt for tailings and 739Mt for waste rock. Acid generation can occur from waste rock and from acid mine drainage.

The Environmental Code of Practice for Metal Mines sets out guidelines for management of waste rock. This code of practice supports the Metal Mining Effluent Regulations under the Fisheries Act. However, the guidelines act only as a means of encouraging best practices. For example, during mine operations, waste rock should be used as backfill such that it will reduce the volume of waste accumulated in waste rock piles. First, the waste rock needs to be assessed for suitability as backfill. Moreover, the waste rock should be monitored for leaching, acidity levels, and groundwater contamination.³⁴⁰

³⁴⁰ Environmental Code of Practice for Metal Mines. Environment Canada.

EU

Mining and quarrying activities give rise to the single biggest waste stream at 29% of the total quantity of waste generated in EEA countries.³⁴¹ However, this waste is comprised mostly of materials that must be removed in order to extract the mineral resource (such as topsoil, overburden and waste rock). This waste is mostly inert, causing no environmental hazard, but is a concern in terms of the large areas of land required for its disposal. A minor portion of mining waste has the potential to present hazardous substances into the waste stream and for causing environmental pollution if not properly controlled. In response to these concerns, the EU has put in place initiatives that are designed to improve mining waste management.³⁴²

While waste from the mineral industry is larger in volume than waste from metal production and processing (Tables 29 and 30), the environmental impact of the latter is much higher.

Table 29: Waste transfers from mineral extraction, 2008³⁴³

	Recovery	Disposal	Total quantity
Non hazardous	43,067,003 t (78.0%)	12,166,820 t (22.0%)	55,233,823 t
Hazardous	146,548 t (7.8%)	1,720,942 t (92.2%)	1,867,490 t

Table 30: Waste transfers from metal production and processing, 2008³⁴⁴

	Recovery	Disposal	Total quantity
Non hazardous	33,698,512 t (65.3%)	17,942,998 t (34.7%)	51,641,509 t
Hazardous	3,771,365 t (47.7%)	4,133,696 t (52.3%)	7,905,061 t

ANALYSIS

Canada

The CETA could result in an increase in waste outputs equivalent to the increase in production predicted by the CGE model. Given the limited increase in output predicted in scenarios C and D and limited declines projected under scenarios A and B, it is expected that these increases will not be significant. As mentioned previously, increased investment as a result of CETA could amplify this effect and lead to increased waste outputs, or alternatively lead to the introduction of waste-reduction technologies.

EU

Since the CGE model shows only a marginal impact of a CETA on both output and exports for the EU mineral and metals industries, no significant effect on the waste production of the mineral and metal processing industries in the EU are expected.

However, any minor decrease in the EU production of non-ferrous metals will marginally reduce the industries' environmental impact in terms of waste production.

³⁴¹ EU EIONET, <http://scp.eionet.europa.eu/themes/waste/#5>

³⁴² EC (2001).

³⁴³ European Pollutant Release and Transfer Register

³⁴⁴ Ibid.

INDICATOR: Air Quality / GHG emissions**BASELINE****Canada & EU**

Air quality can be affected by increased particulate emissions due to dust and coal. Processing plants and the burning of hydrocarbons to run heavy equipment can release chemicals and hydrocarbon by-products into the air. The metal and mining industries also release contaminants into the air.

According to the National Pollutant Release Inventory (NPRI), Canada's GHG emissions for mining and metal manufacturing industries are as follows:

- the aluminium industry: 11,043 tonnes of total particulate matter (TPM), 68,190 tonnes of SO_x, 384,014 tonnes of CO, 30 kg of mercury, 19,388 kg of B(b)f among others;
- the iron and steel industries: 6,622 tonnes of TPM, 26,976 tonnes of SO_x, 12,736 tonnes of NO_x, 1,126 tonnes of VOC, 35,562 tonnes of CO, as well as 5,934 kg of lead, 313 kg of cadmium, 915 kg of mercury, 151kg of B(a)p, 160 kg of B(b)f among others; and
- iron ore mining: 12,468 tonnes of TPM, 18,300 tonnes of SO_x, 14,561 tonnes of NO_x, 23,204 tonnes of CO. Mining and rock quarrying release 180,250 tonnes of TPM, 4,903 tonnes of SO_x, 15,451 tonnes of NO_x, 2,467 tonnes of VOC, 8,883 tonnes of CO.³⁴⁵

Mining and oil and gas extraction in Canada increased markedly, from 6,190 kt CO₂e in 1990 to 23,900 kt CO₂e in 2008. Manufacturing of iron and steel remained fairly stable, with 6,480 kt in 1990 and 6,170 kt in 2008. Non ferrous metals emitted 3,480 kt CO₂e in 2008. Emissions stem from combustion of fossil fuels during manufacturing processes. Metal production processes together went from 19,500 kt CO₂e in 1990 to 15,300kt CO₂e in 2008. 7,440kt CO₂ came from iron and steel production, 7,400 kt CO₂ came from aluminium production. Iron and steel decreased its economic emissions intensity by 13% between 1990 and 2008. The steel industry did so by altering its consumption of fossil fuels and the use of electric arc furnaces. This method uses recycled steel scraps to avoid reducing iron ore into pig ore. This cuts emissions by about half. Steel production also decreased because of foreign competition, as there was a downturn in the automotive industry, the largest consumer of steel.³⁴⁶

Smelting and refining produced 15.6 Mt of CO₂e in 1990, which dropped to 8.46Mt CO₂e in 2008. Its emissions intensity decreased 66% over the same time period. This improvement was thanks to changes in technology, such as computerised sensors and automated alumina feeders reduced the anode effects, helped to cut down on perfluorocarbon (PFCs), which are used as cooling and heating agents.³⁴⁷

Mining emitted 6.05 Mt of CO₂e in 1990, which stayed fairly stable with 6.69Mt in 2008. However, over the same time, its contribution to GDP increased 53%, meaning that its intensity reduced 28%.³⁴⁸ This rise in GDP is attributed to the growth of the diamond mine production, and a rise in commodity price for minerals like uranium and potash. Increases in heavy vehicles in mining operations contributed 1Mt of emissions from 1990 to 2008.

Table 31 lists the GHG emissions and air pollution caused by the EU mineral and metal processing industries.

³⁴⁵ National Pollutant Release Inventory (2008)

³⁴⁶ Environment Canada (2010b)

³⁴⁷ Ibid.

³⁴⁸ Ibid.

Table 31: GHG emissions and air pollution for the EU mineral and metal processing industries, 2008³⁴⁹

	mineral industry	metal processing industry
Greenhouse gases	202,325,336 t	187,975,720 t
Methane (CH ₄)	878,182 t	10,649 t
Carbon dioxide (CO ₂)	186,579,000 t	178,656,000 t
Carbon dioxide (CO ₂) excluding biomass	14,866,000 t	9,308,000 t
Hydro-fluorocarbons (HFCs)	19.2 t	12.4 t
Nitrous oxide (N ₂ O)	2,135 t	731 t
Perfluorocarbons (PFCs)	-	312 t
Sulphur hexafluoride (SF ₆)	242 kg	13.9 t
Confidential greenhouse gases	-	2.09 t
Other gases	1,983,066 t	3,095,682 t
Chlorofluorocarbons (CFCs) e	105 kg	16.6 kg
Chlorine and inorganic compounds (as HCl)	3,331 t	3,851 t
Carbon monoxide (CO)	1,358,560 t	2,589,000 t
Fluorine and inorganic compounds (as HF)	3,111 t	2,329 t
Halons	-	7.40 kg
Hydrochlorofluorocarbons(HCFCs)	7.04 t	89.0 t
Hydrogen cyanide (HCN)	21.6 t	63.3 t
Ammonia (NH ₃)	8,665 t	1,985 t
Non-methane volatile organic compounds (NMVOC)	6,182 t	38,630 t
Nitrogen oxides (NO _x /NO ₂)	435,557 t	165,590 t
Sulphur oxides (SO _x /SO ₂)	166,626 t	294,145 t
Confidential other gases	1,005 t	-

ANALYSIS

Canada

The E3MG model predicts a marginal increase in air pollutants and GHG emissions generated by the mining and metal manufacturing sectors. These increases range from 0.14% to 0.18% for iron and steel, from 0.01% to 0.24% for non-ferrous metals, and from 0.16% to 0.19% for ore-extraction. It should be noted that with increased European investment driven by world demand and higher prices, capacity could conceivably grow beyond the levels projected from trade liberalisation alone, thereby leading to a slight increase in GHG and other pollutants emissions. Although the metal manufacturing sector has reduced its GHG emissions intensity over time, the lack of GHG regulations or carbon pricing mechanisms in Canada significantly reduces incentives to improve energy intensity or reduce emissions. The introduction of a mandatory carbon pricing mechanism could more than offset the impacts of any growth on this sector's GHG emissions.

³⁴⁹ European Pollutant Release and Transfer Register

EU

Since the CGE model shows only marginal impact of a CETA on both output and exports for the EU mineral and metals industries, no significant effect on the GHG production and air pollution caused by these activities in the EU are expected.

However, the minor decrease in the EU production of non-ferrous metals will reduce the subsector's GHG emissions correspondingly, resulting in saving of 225,000 t GHG.

The E3MG modelling also predicts only marginal effects on CO2 emissions (0% in the minerals subsector, -0.02% in the iron & steel subsector, -0.01% in the non-ferrous metals subsector).

5.1.2. Oil & Petroleum products

ECONOMIC ASSESSMENT³⁵⁰

INDICATOR: Output, trade and investment

BASELINE

With oil and gas extracted from 12 of its 13 provinces, Canada is the world's seventh largest producer of oil.³⁵¹ Production has nearly doubled since 1980 with Canada currently producing over 2.6 million barrels of oil per day.³⁵² Of Canada's 175 billion barrels of estimated oil reserves, 97% are located in the oil sands situated in three deposits in Alberta and Saskatchewan.³⁵³ Whereas this availability would make Canadian reserves the second largest in the world behind only Saudi Arabia, a number of challenges are present in extraction. Technology requires improvements and additional sources of investment and R&D, while the present methods carry a heavier environmental impact (see environmental assessment).

With a large endowment of oil resources, Canada's exports of petroleum and petroleum products are substantial and in 2007 reached \$52.3 billion, resulting in a trade surplus of \$22.3 billion. The EU, conversely, is devoid of any significant reserves and therefore heavily reliant on outside sources to provide it with crude oil to meet its energy needs. This reliance on imports of oil, gas and petroleum products results in the EU running a consistent and substantial trade deficit (\$272.1 billion in 2007).

With the overwhelming majority of Canada's oil exports directed towards the United States, oil plays only a limited role in EU-Canada bilateral trade with only 3% of exports from Canada shipped to the EU. Therefore, of the EU's more than \$350 billion in petroleum imports in 2007, Canada provided less than 1% of the total value.³⁵⁴

³⁵⁰ Specifically, CGE results for the oil and gas industry are reported according to the product groupings of the GTAP database which divide the industry across: extraction of crude petroleum (*Oil*); extraction of natural gas (*Gas*) and refining and processing of petroleum products (*Petroleum products*). The results of the simulations can be found in Tables 57-64 in Annex 6.

³⁵¹ Canadian Association of Petroleum Producers

³⁵² Natural Resources Canada

³⁵³ The remaining oil deposits are outside the oil sands and found primarily in Alberta, Saskatchewan and offshore of Newfoundland and Labrador.

³⁵⁴ UN Comtrade

ANALYSIS

Although Canada is a major producer and net exporter of oil and the EU a heavy importer, it is unlikely that tariff liberalisation from the CETA will significantly alter the existing conditions where the EU is only a minor market for Canadian oil. This is due largely to the fact that the MFN duties on crude in the EU are either low or at zero, limiting the impact tariff liberalisation is likely to have on the sector.

Results from the CGE model suggest that tariff liberalisation under the CETA would induce negligible changes in the current levels of **output** (Tables 57-54 in Annex 6). Specifically, the modelling projects that Canada's output of oil would increase by 0.04% to 0.05% over the long-term with full removal of all tariffs (Scenarios C and D), while less ambitious liberalisation (Scenarios A and B) is projected to lead to minor declines in output over the long-term (-0.05%). Any change in output would likely result from changes in domestic downstream demand and would therefore not be expected to influence exports.

With limited oil exploration and reserves within the EU as well as a heavy reliance on imports, it is not expected that the CETA would impact oil production and exports in the EU. This is reflected within the results of the CGE model, which suggest that liberalisation under the CETA would not significantly alter domestic production or trade.

Nevertheless, the CETA could stimulate increased production in Canada's oil industry through **investment** liberalisation. The Canadian oil sands in Saskatchewan and, primarily, Alberta have already been a major recipient of global investment, with capital spending of in situ, mining and upgrading of \$16.9 billion in 2007 and a further \$8.8 billion in 2009 despite a global tightening of capital.³⁵⁵ With respect to the EU, investment in oil and natural gas constitutes one of the largest forms of investment in Canada, representing 18.4% of the EU's total FDI stocks in Canada at the end of 2007.³⁵⁶ Each of the three major EU petroleum companies – Shell, BP and Total – presently has some form of investment in the Canadian oil sands, either through a subsidiary or joint venture. Investment in the oil sands is expected to increase dramatically over the long-term with the Canadian Energy Research Institute estimating that investments will reach \$192 billion over the next 25 years.³⁵⁷ Combining this with the significant revenue generating potential of the oil sands makes it highly possible that EU investment in this sector will increase over the long-term.

While data limitations have made it impossible for the modelling framework to quantitatively reflect the precise impact that investment liberalisation is likely to have on output and exports in Canada's oil sector, gravity model estimates designed to capture the impact from investment liberalisation in the coal, oil and gas industry predict that a reduction in investment restrictiveness (as measured by the OECD) is likely to lead to increases in investment within the sector in Canada. Hereto, Canada does not generally maintain overt restrictions on foreign investment in its domestic oil industry. Foreign investments are, however, subject to net benefit tests, and although these have not been proven to significantly limit investment by the EU, their removal could have a positive impact on FDI in the sector. Specifically, extension of national treatment to EU investors could lead to minor increases in the stock of EU FDI in the sector, leading to higher levels of output in Canada's oil sector over the long-term. There is limited data, however, to suggest that national treatment in investment would significantly increase EU investment in Canada's oil industry, particularly as EU investment in the sector is already robust.

³⁵⁵ Canadian Association of Petroleum Producers; Government of Alberta

³⁵⁶ OECD.stat

³⁵⁷ Canadian Association of Petroleum Producers

INDICATOR: Employment**BASELINE**

In 2009, Canada employed 66,800 in oil and gas extraction and a further 16,400 in manufacturing of petroleum products.³⁵⁸ The vast majority of those employed in extraction are located in Alberta; largely in the oil sands. Estimates suggest that over the next 25 years, employment in the oil sands industry will increase substantially, making it a significant source of employment.³⁵⁹ In addition to Alberta, processing of petroleum finds the majority of employment within Ontario and Quebec, though the sector is a relatively minor source of overall employment in these provinces.

ANALYSIS

The modelling estimates that tariff liberalisation under the CETA will have almost no impact on employment in Canada's oil industry. Consequently, any employment impact will be associated with investment, with the extension of national treatment to EU investors likely to place upward pressure on the demand for labour in Canada. While this investment would likely lead producers to upgrade their labour-saving technologies, increased FDI would not be expected to have a significant impact on employment, limiting the overall effect of the CETA on this indicator.

Employment in the EU's oil and petroleum industry is not expected to be impacted to any significant degree as a result of the CETA.

SOCIAL ASSESSMENT**INDICATOR: Worker displacement****BASELINE & ANALYSIS*****Canada***

As outlined in the economic assessment, the CGE model predicts that the CETA will lead to a negligible decrease in employment in Canada's oil industry over the long-term. With approximately 67,000 employed in oil extraction within Canada and estimated declines ranging from -0.01% to -0.16%, it is therefore estimated that the number of workers who would be potentially displaced as a result of trade liberalisation under the CETA would be very limited. Further, as the estimates do not take into account the potential upward pressure on employment which could result from investment liberalisation, it would appear unlikely that the CETA will lead to displacement within Canada's oil industry.

EU

Based on current employment figures for the oil sector in the EU as well as the limited projected changes in output and employment as a result of the CETA, it is expected that any impact on worker displacement will be negligible.

³⁵⁸ Statistics Canada (2010).

³⁵⁹ Government of Alberta

INDICATOR: Quality & decency of work**BASELINE & ANALYSIS*****Canada***

Given a limited direct impact on employment, wages and worker displacement expected from the CETA, there is a limited envisaged impact on quality and decency of work. Labour standards for those employed in Canada's industrial products sector could be strengthened by the CETA's ability to reaffirm the ILO's Core Labour Standards (CLS) and under provisions that require Canada to ratify all 8 of the ILO Conventions that underscore the CLS. Hereto, rights pertaining to collective bargaining and association could be specifically improved. For detailed discussion on the social ramifications of the CETA as it pertains to core labour standards and the ILO's Decent Work Agenda see Box 14 in the social assessment on mining and metal manufacturing.

EU

Based on the expected negligible impact on employment, wages and displacement, it is not envisaged that quality and decency of work will be impacted within the sector. As in Canada, commitment to greater implementation of the ILO's Core Labour Standards could contribute to greater protections and rights among those employed in the EU's oil industry over the long-term (Box 14).

INDICATOR: Health, education & culture**BASELINE & ANALYSIS*****Canada***

It is not envisaged that the CETA's effect on the oil industry will lead to a significant impact on health, education or culture in Canada. Increased investment and its contribution to rapid development of boom towns in the oil sands areas of Alberta and Saskatchewan could, however, result in some short-term negative impacts pertaining to health (Box 16), though the association with the CETA is likely to be minimal.

Box 16: Oil sands development and the impact on local Canadian communities

While it should not necessarily be expected that investment liberalisation resulting from the CETA will lead to substantial increases in investment in Canada's oil sands, extension of national treatment to EU investors could lead to greater investment, contributing to development of rural areas surrounding the oil sands.

Areas that are already heavily impacted by the oil sands such as Wood Buffalo have developed 'Sustainable Community' indicators to track the social impact of oil sands development in these regions. The preliminary data suggests that local communities have seen substantial increases in wages and median income, but also rising costs of living that in some instances outpace growth in incomes, disadvantaging those households living on low or modest incomes.³⁶⁰ Further, rapid development and

³⁶⁰ Regional Municipality of Wood Buffalo (2006)

the creation of 'boom towns' such as Fort McMurray tends to create infrastructure and housing challenges as towns cope with rapid migrations threatening healthcare provision (e.g. lower physicians per capita) and quality and availability of services, while raising instances of crime.

While it is possible that increased investment arising from the CETA could contribute to these negative trends, there is also possibility for local governments and communities to leverage investments in a manner which could improve the sustainability of their communities. Further, including binding commitments in the chapter on trade and labour toward ensuring that provincial governments will not lower standards to attract investment could also allow the CETA to take steps towards avoiding the negative social outcomes attached to oil sands development.

At the same time, other areas of impact that may accompany increased investment and development of the oil sands include government revenue as well as aboriginal groups that hold rights over land rich in bitumen. In terms of the former, it is noteworthy that oil sands are owned by the people of Canada through their governments and that revenue is generated as companies purchase rights to access these resources and pay royalties to government with respect to production. In 2007, for example, provincial royalties derived from the oil sands were C\$3.4 billion. As such, it is likely that increased investment would benefit government revenue and provide greater funding for schools, healthcare and police in the areas affected.³⁶¹

EU

Based on the limited impact on employment, wages and displacement, it is not envisaged that there will be a significant impact on health, education or culture in the EU.

ENVIRONMENTAL ASSESSMENT

INDICATOR: Natural resource stocks Fossil fuel usage / Rate of depletion of fossil fuels

BASELINE

Canada

The Athabasca oil sands, and the oil sand deposits in Peace River, Wabasca, and Cold Lake have an in-place bitumen content of some 270,000,000,000m³ (1.7trillion barrels), with about three-quarters of this coming from the Athabasca oil sands. The other large deposit is in Melville Island, one of the Arctic islands in Nunavut, which has 500 billion barrels of in-place bitumen. Together, these account for more than double the world's total current reserves of conventional crude oil. The amount that is economically recoverable is much smaller, and depends on production costs and crude oil prices.³⁶²

As of 2009, Canadian production of crude oil was 433,300 m/d (2.73MMb/d). This represents a growth of less than 1% from 2008. Though reserves are reduced by production extraction every year, new discoveries, extensions to current projects, and revisions of past estimates replace much of what is lost.

³⁶¹ Canadian Association of Petroleum Producers.

<http://www.capp.ca/library/statistics/basic/Pages/default.aspx#o0UUcs9n8u3V>

³⁶² History of mining.

For instance, from 2004 to 2007, 87% of light and heavy crude that was extracted from production was replaced by new discoveries. In 2008, new discoveries replaced approximately 80% of conventional crude oil production. However, estimates of remaining crude oil reserves began to lower, which can largely be attributed to production significantly outpacing reserves additions. Crude bitumen reserves decreased moderately.

Table 32: Conventional Crude Oil Reserves, Additions and Production, 2004-2008
(million cubic metres)

	2004	2005	2006	2007	2008	Total
Additions	66.9	134.7	27	50	62.5	341.1
Production	82.7	78.8	82.1	76	77.9	397.5
Total remaining reserves	640	696	640	614	599	
Total remaining reserves (mio. of barrels)	4,027	4,382	4,033	3,871	3,774	

Source: Provincial Energy Agencies, Offshore Petroleum Boards, NEB.

Table 33: Oil sands reserves³⁶³

Proven Amount in Place	8.7 billion tonnes
Proved Recoverable Reserves	6.6 billion tonnes 3.5 billion tonnes of bituminous 3.1 billion tonnes of sub-bituminous and lignite
Additional Resources in Place	192 billion tonnes 92 billion tonnes of bituminous 100 billion tonnes of sub-bituminous and lignite
Recoverable Resources	120 billion tonnes

EU

A high proportion of EU oils (82%) and gas (60%) demand is covered by imports. All EU countries have high oil import shares, mostly 90-100% with the only notable exceptions being Denmark (as a net exporter), the UK (0.9% imports) and Romania (54% imports). With natural gas, most EU countries also depend on imports to provide 80-100% of demand, with only Denmark and the Netherlands being net exporters.³⁶⁴ These figures show that the EU is extremely dependent on oil and natural gas imports.

In terms of the EU's own production, total oil production in Europe amounted to more than 300 million tonnes in 2002, which represents a share of more than 40% of the total oil consumption, while total gas production amounted to more than 200 million tonnes in 2002, which is equivalent to a share of more than 60% of the total European gas consumption. However, production in the North Sea is declining or expected to decline (UK, Netherlands, Denmark) over the next 10 years, or to be maintained at current levels (gas in Norway).³⁶⁵

³⁶³ Stone, K. (2008)

³⁶⁴ EC (2010b)

³⁶⁵ European Technology Platform on Sustainable Mineral Resources (2007)

ANALYSIS

Canada

By increasing investment in the development of oil sands extraction facilities, CETA could contribute to increasing the rate of depletion of oil reserves in Canada. However, world demand and world prices will remain the key determinant of oil sands development.

EU

Oil production in the EU is already experiencing resource depletion. Given that a CETA has no impact on the production, there also is no direct impact on rate of depletion of the EU oil resources.

Resources for the marginal increase in EU production of petroleum based products will be covered by trade diversion, also not affecting the EU resource stock and rate of depletion.

INDICATOR: Rate of overall land use of biodiverse areas

BASELINE

Canada

Oil sands are allegedly one of most important industrial undertakings in the world. The Athabasca oil sands deposit is situated wholly within Canada's boreal forest, with the oil sands in Alberta covering 140,000km². As of June 2009, oil sands extraction leases cover 60% of this area. Mining uses 9.4 hectares of land per million barrels, while in situ uses 1.4 hectares per million barrels. However, in situ operations create disturbances through seismic lines, roads, pipelines, power lines and well pads. Moreover, the land leased for in situ is 16 times larger than for mining oil sands. Fragmentation over such a large area could reduce the ecosystem functions of the boreal forest.³⁶⁶ An example of the disturbance to the ecosystem is the expected disappearance of caribou from North-eastern Alberta.³⁶⁷

Land reclamation is promoted as only 1.04 km² of 600km² of land disturbed by oil sands mining has been certified by the government as being reclaimed. Mine operators state that an additional 54km² has been reclaimed, but there is a lack of public data to support this.³⁶⁸ Under current reclamation plans, a dramatically different landscape than the one that appeared before production began will appear. Wetlands will decrease 10%, more lakes will be created, and no peatlands will remain. Whether the proposed reclamation plans will succeed in their efforts is the subject of debate, as is the expectation that tailing ponds can be reclaimed into biologically productive lands.³⁶⁹

EU

Specific data on the amount of land used for production of oil and of petroleum products in the EU is not available.

³⁶⁶ Dyer, S. and M. Huot (2010)

³⁶⁷ Ibid..

³⁶⁸ Ibid.

³⁶⁹ National Energy Board (2006)

ANALYSIS

Canada

In terms of trade liberalisation, the results from the economic modelling suggest that the CETA's impact on land use and biodiversity will be limited as it will not contribute to a significant increase in output. By increasing investment in the development of oil sands extraction facilities, however, it is possible that the CETA could contribute to greater expansion of the oil sands industry, but that expansion would continue to be concentrated in the existing area of industrial activity. The overall area is not expected to expand significantly, but the extension of the network of in situ extraction could contribute to further habitat fragmentation and eventually to the disappearance of vulnerable species such as the Caribou in Northern Alberta. While the impact of the CETA is expected to be minor, it could contribute to surpassing important habitat fragmentation thresholds for caribou and other species.

EU

Given that the CETA has no impact on the EU oil output, no impact on the oil industry's use of biodiverse areas is expected. The marginal increase in EU production of petroleum based products could be absorbed by existing overcapacities in EU refineries, thus not requiring additional land resources either.

Indicator: Water usage and quality / Contamination of water from chemicals and wastes / Rate of depletion of ground water

BASELINE

Canada

Freshwater is needed during in situ extraction, which is the only way that 82% of Alberta established oil sands reserves can be extracted.³⁷⁰ As in situ oil extraction becomes more important, the freshwater needed to produce it will increase more than two-fold between 2004 and 2015, going from 5 million cubic litres to 13 million cubic litres. During steam assisted gravity drainage (SAGD), an oil recovery technology used to produce heavy crude oil and bitumen, 90 to 95% of the water used as steam is recycled. However, groundwater gets depleted. For every cubic metre of bitumen produced, 0.2 cubic metres of groundwater is extracted. In an effort to cut down on the amount of freshwater depleted from aquifers, SAGD projects combine freshwater from aquifers with saline groundwater. The downside of this approach is that large volume of solid waste is generated when treating saline groundwater. Release of contaminants, such as acids, hydrocarbon residues, trace metals and others, poses a threat to surrounding soil and groundwater when this waste ends up in landfills.³⁷¹

Oil sands mining uses significantly more water per barrel of oil extracted than in-situ oil sands. For every barrel of synthetic crude oil (SCO), it is necessary to use 2 to 4.5 barrels of freshwater. This water is mostly withdrawn from the Athabasca River. Licensing currently allows 370 million cubic metres of freshwater to be withdrawn from the Athabasca River. However, this figure should rise to 529 million cubic metres if currently planned oil sands mines are implemented. If all these planned oil sands operations go forward, the amount of freshwater requirements extracted could surpass what the Athabasca River flow can provide. If adequate river flows are not maintained, the ecological

³⁷⁰ Dyer, S. and M. Huot (2010)

³⁷¹ National Energy Board (2006)

sustainability of the river will be seriously hampered, especially during times of reduced precipitation.³⁷²

Oil sands tailings ponds are of significant concern. The surface area of these tailing ponds was 130 square kilometres in 2009. The Energy Resources Conservation Board issued Directive 74, Tailing Performance Criteria and Requirements for Oil Sands Mining Schemes in February 2009, which calls for fluid tailings to be reduced, located in approved areas, and transformed into trafficable deposits. These trafficable deposits means that the areas must be firm enough to withstand heavy equipment.³⁷³

The environmental impact on the Athabasca River has been significant. Tailing lakes endanger surface water and groundwater through seepage and cause mortality of waterfowl.³⁷⁴ Concerns are also increasingly expressed on the potential contamination of the Athabasca River and its impacts on downstream ecosystems and on the health of Mikisew Cree and Athabasca Dene First Nation communities.

According to the National Pollutant Release Inventory, bitumen mines released most of Canada's emissions of acenaphthene, a polycyclic aromatic hydrocarbon, and their emissions of these toxic substances have increased 42% in 2009 since 2006.³⁷⁵ Most of the PAC chemicals found are known for their embryotoxicity³⁷⁶, as well as being carcinogenic, causing tumours in lungs, skin and the bladder.³⁷⁷ Downstream residents in Fort Chipewyan are concerned that high cancer rates are the result of these pollutants.³⁷⁸ Moreover, a study by Environment Canada found that toxic mercury found in eggs of waterbirds downstream of oil sands has gone up close to 50% over the last three decades³⁷⁹.

Arsenic and lead that ends up in tailing ponds has increased by 26% in four years according to new tailing data gathered by the National Pollutant Release Inventory in 2009. In 2009, 322 tonnes of arsenic were produced, 651 tonnes of lead, and quantities of mercury, chromium, vanadium, hydrogen sulphide and cadmium. Oil sands caused 10% of total substances released in tailing, contributing a little less than 50,000 tonnes of substances.³⁸⁰

Groundwater is also impacted from oil sands. It is used in combination to Athabasca River water in the in situ and mining processes in rising quantities. Groundwater levels must also be reduced to prevent flooding of mine pits. This can reduce groundwater levels from larger areas, and have impacts on nearby peatlands, wetlands and other aquatic ecosystems.³⁸¹ This is also a source of concern in the context of the expansion of oil sands production.

EU

Table 34 shows the amounts of major pollutants released into water by the EU oil production and refineries sector.

³⁷² Ibid.

³⁷³ Ibid.

³⁷⁴ Simieritsch, T. and S. Dyer (2009).

³⁷⁵ Vanderklippe, N. (2010).

³⁷⁶ Kelly et al. (2009).

³⁷⁷ Vanderklippe, N. (2010).

³⁷⁸ Kelly et al. (2009).

³⁷⁹ The Canadian Press (2010).

³⁸⁰ Vanderklippe, N. (2010).

³⁸¹ National Energy Board (2006).

Table 34: Release of major pollutants into water by the EU oil extraction and refineries sector, 2008³⁸²

	Extraction of crude petroleum	Manufacture of refined petroleum products
Chlorinated organic substances		
Halogenated organic compounds (as AOX)	5.13 t	12.8 t
Heavy metals		
Arsenic and compounds (as As)	4.18 t	1.08 t
Cadmium and compounds (as Cd)	969 kg	301 kg
Chromium and compounds (as Cr)	1.34 t	4.23 t
Copper and compounds (as Cu)	22.2 t	1.67 t
Mercury and compounds (as Hg)	59.6 kg	260 kg
Nickel and compounds (as Ni)	1.81 t	3.87 t
Lead and compounds (as Pb)	2.45 t	1.45 t
Zinc and compounds (as Zn)	21.2 t	16.3 t
Inorganic substances		
Chlorides (as total Cl)	-	143,750 t
Fluorides (as total F)	-	199 t
Total nitrogen	-	2,348 t
Total phosphorus	-	96.5 t
Other organic substances		
Anthracene	150 kg	1.10 kg
Benzene	1,747 t	3.11 t
Benzo(g,h,i)perylene	23.7 kg	
Ethyl benzene	86.4 t	275 kg
Fluoranthene	118 kg	9.44 kg
Naphthalene	185 t	97.7 kg
Phenols (as total C)	593 t	66.5 t
Polycyclic aromatic hydrocarbons (PAHs)	79.0 kg	703 kg
Toluene	1,199 t	1.72 t
Xylenes	231 t	2.46 t

ANALYSIS

Canada

As the current CGE analysis predicts a negligible increase of overall output from trade liberalisation, the CETA is unlikely to affect rates of water depletion. The impact of investment liberalisation in the development of oil sands extraction facilities, however, could cause the CETA to contribute to water withdrawals, groundwater depletion and freshwater contamination, especially in the Athabasca basin which is currently under stress. As mentioned before, world demand and world prices will remain the key determinant of oil sands development.

³⁸² See European Pollutant Release and Transfer Register

An independent review panel set up by Canada's federal minister of the environment concluded in December of 2010 that the current water monitoring systems in the oil sand industry had major flaws. The panel report says that the Regional Aquatics Monitoring Program (RAMP) was 'not producing world-class scientific output in a transparent, peer-reviewed format and it is not adequately communicating its results to the scientific community or the public'.³⁸³ Commenting on this report, Canada's minister of environment said that such a world-class monitoring system was urgently needed. Its implementation could result in diminished pressure from oil sand development on freshwater resources.

EU

Given that the CETA has no impact on the EU oil output, no impact on the oil industry's use of water, water contamination pattern, or ground water depletion is expected.

Oil and gas refineries already release marginal amounts of pollutants and will absorb the predicted limited increase in output with existing capacities, therefore it is expected that a CETA will have insignificant impact on use of water, water contamination pattern, or ground water depletion from these activities.

INDICATOR: Environmental quality Air pollution / GHG emissions

BASELINE

Canada

Energy industries account for 25% of GHG emissions in Canada (187 Mt CO₂e). Moreover, they release 70,658 tonnes of VOCs (volatile organic compounds) and 111,661 tonnes of sulphur dioxide into the air, among other emissions.³⁸⁴

Fossil fuel industries, including petroleum refining (up 3.9% from 1990 to 2008) and upgrading and fossil fuel production (up 45% from 1990 to 2008) emitted 68Mt of CO₂e in 2008, compared to 52 Mt CO₂e in 1990. Mining and oil and gas extraction produced 23900kt of CO₂e, fugitive sources from coal mining produced 800 kt of CO₂e and from oil produced 5520 kt of CO₂e in 2008. Emissions associated with gross exports of crude oil are 4008Mt of CO₂e, up 16% from 1990. However, emissions from unconventional crude oil associated with gross exports were 33 kt of CO₂e in 2008, up 248% since 1990.³⁸⁵

In terms of energy usage, petroleum and coal product manufacturing used 382 PJ of energy in 2007, this is 16% of the energy consumption of the manufacturing sector (third biggest). This is 30% more energy than in 1995.³⁸⁶ 21,454 million kwh were consumed by crude petroleum fields and 8112 million kwh by petroleum refineries in 2007.³⁸⁷

From 1990 to 2008, emissions stemming from oil sands increased more than two-fold. On current projections, GHG emissions will triple from 2008 to 2020. Oil sands related emissions represent approximately 5% of Canada's total greenhouse gas emissions. There has been improvement in GHG emissions intensity in the past, as the operations moved from coal and petroleum coke to natural gas to

³⁸³ Oil sands advisory panel (2010).

³⁸⁴ Vanderklippe, N. (2010).

³⁸⁵ Environment Canada (2010b)

³⁸⁶ Natural Resources Canada (2009)

³⁸⁷ Energy Statistics Database, United Nations Statistics Division

run their operations. Since then however, progress in emissions intensity has stagnated.³⁸⁸

EU

Table 35 shows the GHG emissions and air pollution caused by the EU oil production and refineries sector.

Table 35: GHG emissions and air pollution for the EU oil extraction and refineries sector, 2008³⁸⁹

	Extraction of crude petroleum	Manufacture of refined petroleum products
Greenhouse gases	14,906,990 t	209,202,491 t
Methane (CH ₄)	54,235 t	7,767 t
Carbon dioxide (CO ₂)	14,852,000 t	192,797,300 t
Carbon dioxide (CO ₂) excluding biomass	-	16,395,000
Hydro-fluorocarbons (HFCs)	735 kg	121 kg
Nitrous oxide (N ₂ O)	754 t	2,424 t
Other gases	94,213 t	831,585 t
Chlorofluorocarbons (CFCs)	1.00 kg	62.5 kg
Chlorine and inorganic compounds (as HCl)	-	140 t
Carbon monoxide (CO)	4,234 t	80,170 t
Halons	640 kg	-
Hydrochlorofluorocarbons(HCFCs)	38.7 t	29.3 t
Hydrogen cyanide (HCN)	-	2.01 t
Ammonia (NH ₃)	101 t	1,022 t
Non-methane volatile organic compounds (NMVOC)	37,244 t	147,910 t
Nitrogen oxides (NO _x /NO ₂)	50,798 t	156,549 t
Sulphur oxides (SO _x /SO ₂)	1,797 t	445,763 t

The CO₂ allowances of the petroleum refining sector decreased further by 10% between the first and the second EU ETS trading phase (from 2298 to 2081 Mio. t of CO₂ equivalent per year).³⁹⁰

ANALYSIS

Canada

The impact of trade liberalisation arising from the CETA is estimated to have a neutral impact on GHG emissions by contributing in a negligible way to a further increase of oil production in Canada. Increases in investment in the development of oil sands extraction facilities, however, could lead the CETA to contribute more significantly to the further expansion of the oil sands industry, thereby contributing to a

³⁸⁸ Huot, M. and D. Droitsch (2010)

³⁸⁹ European Pollutant Release and Transfer Register

³⁹⁰ EUROPA 2009 Activity Report

rise in GHG emissions in Canada. This could be offset by the introduction of more energy efficient technologies or processes. Canada's GHG emissions reduction target is 17 percent below 2005 levels by 2020.³⁹¹ However, in absence of a concrete plan to reach that target, growth in the oil sands industry is likely to set Canada off target. Canada's greenhouse gas emissions were 24% above 1990 levels in 2008. Although they constitute just about 2% of Canada's GHG emissions, Oil sands emissions are rising steadily and are responsible for a significant portion Canada's growing emissions. Mandatory carbon pricing mechanisms would significantly slow down this growth in emissions, should they be introduced in Canada.

EU

Given that the CETA has no impact on the EU oil output, no impact on the oil industry's GHG emissions or air pollution pattern is expected.

However, a marginal increase in the EU refinery output will increase the subsector's GHG emissions correspondingly.

The E3MG modelling does not provide sector specific results for this sector.

INDICATOR: Other wastes (outside hazardous waste) output / Rate of other waste output

BASELINE

Canada

One of the most important by-products of oil sands production is elemental sulphur. Its stockpiling is a challenge and by 2015 it is expected that sulphur recovery could create 5 million tonnes of residue a year. Companies have started marketing sulphur to external markets, such as China and India, as an alternative to burning pyrite in the production of fertiliser. In fact, China has already begun converting its fertiliser plants to use Canadian sulphur. Using this process instead of burning pyrite to extract the sulphur is estimated to have avoided the emission of 250,000 tonnes of CO₂. Sulphur can also be used in road asphalt and concrete.³⁹²

EU

The magnitude of waste transfers from petroleum extraction is higher than from refining, but the refining waste potentially causes higher environmental impact due to being mostly hazardous and non-recoverable (Tables 36 and 37).

Table 36: EU waste transfers from oil extraction of crude petroleum, 2008³⁹³

	Recovery	Disposal	Total quantity
Non hazardous	643,076 t (41.7%)	899,748 t (58.3%)	1,542,824 t
Hazardous	440,799 t (29.0%)	1,076,737 t (71.0%)	1,517,536 t

³⁹¹ National Energy Board (2010).

³⁹² National Energy Board (2006)

³⁹³ European Pollutant Release and Transfer Register

Table 37: EU waste transfers from manufacture of refined petroleum products, 2008³⁹⁴

	Recovery	Disposal	Total quantity
Non hazardous	688,610 t (92.1%)	59,191 t (7.9%)	747,801 t
Hazardous	9,391 t (16.8%)	46,367 t (83.2%)	55,758 t

ANALYSIS***Canada***

CETA impacts on the oil sands sulphur waste output is expected to be neutral or marginal.

EU

Given that the CETA has no impact on the EU oil output, no impact on the oil industry's waste transfers is expected.

The minor increase in the EU refinery output will marginally increase the subsector's hazardous waste transfers.

INDICATOR: Environmental policy space**BASELINE & ANALYSIS*****Canada & EU***

The environmental implications of trade and investment liberalisation have been discussed widely,³⁹⁵ and the evidence suggests that trade agreements can limit policy space or open new common policy arenas, e.g. for introducing more stringent environmental regulation.³⁹⁶ Within the context of the CETA, this issue is addressed in other parts of the report (see specifically the section on Investment and investor-to-state disputes below).

³⁹⁴ Ibid.

³⁹⁵ see Kirkpatrick et al (2004) for an overview

³⁹⁶ Burguet and Sempereb (2003)

5.1.3. Coal

ECONOMIC ASSESSMENT³⁹⁷

INDICATOR: Output, trade & investment

BASELINE

Canada has abundant coal resources, with the primary sources being the western provinces of Alberta, British Columbia and Saskatchewan which combined account for 99.8% of the 69,365 kilotonnes produced nationwide in 2007.³⁹⁸ Recoverable reserves are currently estimated at 6.6 billion tonnes, providing supply capable of meeting current production rates for a period of 100 years.³⁹⁹ Canada's current production is sufficient to meet domestic demand resulting in Canada being an overall net exporter of coal, with exports of coal, coke and briquettes reaching \$3.06 billion in 2007 and a trade surplus of \$1.91 billion.⁴⁰⁰

In 2007, the EU produced 154.8 million tonnes of coal, with the major producing Member States being Poland, Germany, the UK, the Czech Republic, Spain and Romania.⁴⁰¹ However, as the EU relies on coal to meet approximately one-third of its energy needs, it is heavily reliant on imports. The EU coal industry has been in decline for decades and this trend is estimated to continue over the foreseeable future as Europe moves increasingly towards cleaner forms of fuel and with subsidies for the domestic industry set to begin being phased out in 2014.

As a major importer of coal products, the EU accounts for a sizeable share of Canada's exports of coal (29.9% by value in 2007). In total, the EU had a trade deficit in coal trade of \$19.32 billion in 2007 with Canada providing 4.6% of the value of all EU imports.⁴⁰²

Investment in coal makes up a minor share of total outward investment for both Canada and the EU, where it accounted for 2.2% and 0.76%, respectively, of all FDI stocks abroad in 2007.⁴⁰³ Understandably then, the coal industry is a minor recipient of bilateral FDI.

ANALYSIS

Canada

Results from the CGE model suggest that full removal of tariffs under the CETA will have a negligible economic impact over the long-term. This is unsurprising given the low applied MFN tariffs already in

³⁹⁷ Specifically, CGE results for the coal industry are reported according to the GTAP database groupings which aggregate the sector to include mining and agglomeration of hard coal, lignite and peat. The results of the simulations can be found in Tables 57-64 in Annex 6.

³⁹⁸ Natural Resources Canada

³⁹⁹ Ibid.

⁴⁰⁰ UN Comtrade

⁴⁰¹ DG Energy and Transport

⁴⁰² UN Comtrade

⁴⁰³ OECD.stat

place in the EU on coal products (coal, briquettes, ovoids and similar solid fuels manufactured from coal can be imported duty free).

The CETA's impact on output and trade in Canada's coal sector is therefore likely to arise from investment liberalisation. Hereto, gravity model results suggest that reducing Canada's restrictiveness toward foreign investment (as measured by the OECD) is likely to have a positive impact on investment in the coal sector. However, the coal sector is not subject to overt limitations on foreign investment, making it likely that the CETA would be limited to affording national treatment to EU investors and allowing them to forego being subjected to Canada's net benefit test. While this may stimulate increased investment in Canada's coal sector, it is not expected that the increase would be pronounced, particularly given that the sector serves a minor role in EU outward FDI both in Canada and worldwide.

EU

The CETA is expected to have a negligible impact on coal production within the EU under all liberalisation scenarios, with demand continuing to be met largely by imports. A number of factors outside of the CGE model present the possibility, however, that output in the EU may decrease more than suggested. An end to subsidies for the industry, which are set to be phased out starting in 2014, will likely expedite the closure of mines, many of which are finding it increasingly difficult to continue operation without state funding. Further, movements away from fossil fuels such as coal are likely to place downward pressure on demand in the EU, further reducing output.

INDICATOR: Employment

BASELINE

In 2008, coal was a direct employer of more than 6,000 people in Canada.⁴⁰⁴ The majority of coal mines are in Western Canada with 10 in British Columbia, 9 in Alberta, 3 in Saskatchewan and 1 each in New Brunswick and Nova Scotia. It is therefore, expected that changes in employment would be concentrated in these areas – particularly the 3 Western Provinces.

ANALYSIS

Canada

Overall, it is not expected that the CETA will stimulate significant changes in the demand for labour in Canada's coal sector. These limited expected percentage changes in employment coupled with the small amount of people directly employed in the industry limits the overall impact.

EU

Employment in the EU's coal sector is not likely to be impacted to any significant degree regardless of the level of liberalisation.

⁴⁰⁴ Natural Resources Canada (2008)

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

As discussed in the economic assessment, output and employment in Canada's coal sector is expected to exhibit minor declines across all of the liberalisation scenarios modelled. Given direct employment of only 6,000 in Canada's coal sector as well as projected declines ranging from -0.07% to -0.22%, it should not be envisaged that any noticeable amount of displacement will occur as a result of the CETA.

EU

Based on the small and decreasing level of employment in the EU's coal sector as well as the expected neutral effect of the CETA, it is not envisaged that the indicators in this section will be significantly impacted.

INDICATOR: Quality & decency of work

BASELINE & ANALYSIS

Canada

With the economic impact of the CETA expected to be minor, it is not envisaged that quality and decency of work will be significantly impacted over the long-term. Collective bargaining and the rights of association could, however, be strengthened by the CETA's ability to reaffirm the ILO's core labour standards (CLS) and under provisions that require Canada to ratify the ILO's *Right to Organise and Collective Bargaining Convention, 1949* (C.98). For detailed discussion on the social ramifications of the CETA as it pertains to core labour standards and the ILO's Decent Work Agenda see Box 14 in the social assessment of the mining and metal manufacturing section.

EU

Based on the small and decreasing level of employment in the EU's coal sector as well as the expected neutral effect of the CETA, it is not envisaged that quality and decency of work will be significantly impacted. Labour standards could be positively impacted with the inclusion in the CETA of a chapter on trade and labour that makes mutual commitments to foster better implementation and ratification of ILO Core Labour Standards (See Box 14).

INDICATOR: Health, education & culture

BASELINE & ANALYSIS

Canada & EU

The expected impact on health is expected to be minor. Although both Canada and the EU maintain high levels of safety in their mining injuries, a mechanism within the CETA's chapter on trade and labour that

fosters regular dialogue and cooperation between Canada and the EU could include commitments to and exchanges on reducing occupational injuries, perhaps fostering improved safety over the long-term (See Box 14 for more discussion).

ENVIRONMENTAL ASSESSMENT

INDICATOR: Air quality – GHG emissions

BASELINE

The coal industry emits particulate matter (PM), sulphur dioxide (SO₂), nitrogen oxides (NO_x), mercury and greenhouse gases like carbon dioxide (CO₂).⁴⁰⁵ The emissions of SO₂ are a major contributor to acid rain, though the low sulphur coal mined in Alberta and B.C. emits less SO₂. Technological developments such as scrubbers in furnace stacks act to limit the amount of sulphur released into the atmosphere.⁴⁰⁶

Fugitive GHG emissions, created during coal mining and handling, decreased by 1.2Mt from 2Mt between 1990 and 2008. Most of the emissions from coal come from combustion for power generation. Between 2003 and 2008, GHG emissions from electricity production dropped by 16Mt, largely the result of a decrease in reliance on coal plants for energy production. For example, between 2007 and 2008, coal fired electricity dropped 18% in Ontario.⁴⁰⁷ In 2008, electricity and heat generation released 335,000ktCO₂e. The National Inventory Report does not distinguish how much of this came from the combustion of coal.⁴⁰⁸

During the mining process, methane is released into the atmosphere. In 2008, 800ktCO₂e of methane were released from coal mining.⁴⁰⁹ The rest of the process involved in bringing coal to production – from preparation, transportation, storage and processing – all emit methane emissions as well.

Canadian policies are moving towards the reduction in reliance on coal power largely as a result of its harmful environmental impact. The Ontario government, for example, is working on its policy target of fully phasing out coal power by 2014. Table 38 shows the GHG emissions and air pollution caused by the EU coal sector. Hard coal production accounts for only 26% of the coal mining sector's CO₂ emissions, while 74% arise from lignite mining.

Table 38: GHG emissions and air pollution for the EU coal sector, 2008⁴¹⁰

Greenhouse gases	11,796,313 t
Methane (CH ₄)	731,312 t
Carbon dioxide (CO ₂)	11,065,000 t
Hydro-fluorocarbons (HFCs)	1.14 t
Other gases	63,500 t
Chlorine and inorganic compounds (as HCl)	412 t

⁴⁰⁵ Environment Canada (2010a)

⁴⁰⁶ Ibid.

⁴⁰⁷ Environment Canada (2010b)

⁴⁰⁸ Ibid.

⁴⁰⁹ Ibid.

⁴¹⁰ European Pollutant Release and Transfer Register

Carbon monoxide (CO)	585 t
Hydrochlorofluorocarbons(HCFCs)	6.79 t
Non-methane volatile organic compounds (NMVOC)	10,034 t
Nitrogen oxides (NO _x /NO ₂)	26,231 t
Sulphur oxides (SO _x /SO ₂)	26,231 t

INDICATOR: Water usage and quality

BASELINE

During the combustion of coal, wet scrubbers are often used to reduce emissions of air pollutants. However, these wet scrubbers require large amounts of water, resulting in the creation of wastewater. Conversely, when wet scrubbers are not used, the rise in emissions creates long-range dispersal of acidic air pollutants and mercury that eventually find their way to surface and groundwater. Coal fired facilities also create wastewater effluents from drainage and storm-water runoff which makes its way through the plant site and ash landfill. These polluted waters are generally treated on-site at wastewater treatment facilities.⁴¹¹ The main water pollutants released by the EU hard coal mining sector are chlorides (1,617,110 t in 2008), organic carbon (1,010 t) and relatively small amounts of heavy metals (40 t of zinc, 3.8 t of chromium, 2.2 t of copper, 1.8 t of lead, 1.7 t of arsenic).⁴¹²

INDICATOR: Natural resource stocks – resource usage

BASELINE

Canada accounts for approximately 193 billion tonnes of the world's coal resources of which significant amounts (6.6 billion tonnes) are proven to be recoverable coal reserves that will provide for more than 100 years of production at the current production rate. Most large-scale coal mines are located in western Canada. In 2007 Canada produced 69.1 million tonnes of coal and 68.1 million tonnes in 2008. Of the total coal production, 26.7 million tonnes was metallurgical coal for export, about 5.6 million tonnes was bituminous thermal coal for export and 36.5 million tonnes was thermal coal for domestic coal-fired power generation use.⁴¹³ The EU has significant coal reserves (about 4.4% of the proven worldwide reserves). The largest hard coal reserves are located in Poland, with significant reserves also available in Czech Republic, United Kingdom, Germany and Spain.⁴¹⁴ Lignite (brown coal) reserves are located mostly in Germany. Over 97% of German coal resources are lignite, making it one of the world's largest lignite producers (20% of global output). In terms of production, Europe (without the former Soviet Union) presently accounts for about 315 Mtce coal output representing 12% of the world's total annual output (2550 Mtce). Germany and Poland are by far the largest coal producers in the EU as together they account for about two-thirds of all coal presently produced in the EU.⁴¹⁵

⁴¹¹ Natural Round Table on the Environment and the Economy (2010a)

⁴¹² European Pollutant Release and Transfer Register

⁴¹³ Coal Industry Advisory Board (2010).

⁴¹⁴ Euracoal (2005)

⁴¹⁵ Kavouridis, K. (2007)

INDICATOR: Wastes**BASELINE**

In order to reduce the quantity of suspended particulate matter, known as fly ash, released into the air, coal mine technologies use electrostatic precipitators to contain and collect this waste matter. It can be used as backfill in the course of mining operations, and can be used as an add-in in concrete production. Some is placed in dumping sites. The heavier bottom ash, which is found at the bottom of the coal furnaces, is brought to landfill sites that have been designed to reduce the leaching of pollutants.⁴¹⁶ The EU coal mining sector produces large amounts of waste (Table 39). However, this waste is comprised mostly of materials that must be removed in order to extract the coal resource (such as topsoil, overburden and waste rock). This waste is mostly inert, causing no environmental hazard. Furthermore, as 95% of non hazardous waste is recovered, it causes little concern in terms of land required for disposal.⁴¹⁷

Table 39: EU waste transfers from Mining of hard coal, 2008⁴¹⁷

	Recovery	Disposal	Total quantity
Non hazardous	20,968,281 t (95.0%)	1,098,030 t (5.0%)	22,066,311 t
Hazardous	24,341 t (57.2%)	18,218 t (42.8%)	42,559 t

INDICATOR: Land usage and quality**BASELINE**

The clearing and excavating of land undertaken in coal mining disrupts the landscape of large swaths of land, reducing its capacity for biodiversity. Surface mines in particular are responsible for environmental damage on this front.⁴¹⁸ There are efforts by various companies in the industry to reclaim these disturbed lands.⁴¹⁹ Land use in coal mining in the EU originates mostly from open cast lignite mining, predominantly in Germany. For example, in the “Rheinische Revier”, the most important German lignite mining area, 300 km² were consumed since the beginning of industrial mining in the 19th century until 2009. Over 69% of this area has been recultivated as natural areas, water bodies or for agricultural or leisure use. The remaining 31% (93 km²) still used for open cast lignite mining comprise pits, dump sites and storage areas⁴²⁰.

ANALYSIS (for all relevant indicators)

As the CGE model suggests that high levels of liberalisation under the CETA would have very limited effects on this sub-sector, the environmental impacts of coal from the CETA would also be minimal. Moreover, many of the environmental impacts associated with coal come from its combustion, the impacts of which occur in the country of power production (other than GHG emissions, the impacts of

⁴¹⁶ Environment Canada (2010a)

⁴¹⁷ European Pollutant Release and Transfer Register

⁴¹⁸ Coal. Environment Canada. 2010. <http://www.ec.gc.ca/energie-energy/default.asp?lang=En&n=21FAF93C-1>

⁴¹⁹ Ibid.

⁴²⁰ DEBRIV (2010), 125 Jahre DEBRIV – Braunkohle im Zeitraum 1985-2010, p. 88.

Statistik der Kohlenwirtschaft e.V, Zahlen zur Kohlenwirtschaft, Essen/Köln: June 2009.

which are global because of their role in climate change). As Europe works to meet its climate change targets of 20% reduction in GHG emissions by 2020 compared to 1990 levels, they will rely less on coal as a power source. This policy could potentially further reduce its import of coal from Canada.

Given that the CETA is expected to have a marginal impact on EU coal output, the associated environmental impact will also likely be limited on the EU. Based on present CGE model results, the CETA would lead to almost no changes in the EU coal sector's GHG emissions and emission of water pollutants, while not being expected to contribute to the depletion rate of EU coal resources, the sector's waste output or land use.

Investment liberalisation could potentially raise EU investment in Canada's coal sector over the long term. Where these investments increase output, the environmental impacts from coal, including polluted wastewater, land destruction from surface mining, and fugitive emissions, would rise. The E3MG model predicts a rise of 0.43-0.46% of SO₂, a rise of 0.61-0.72% in NO_x, a rise of 0.75-0.76% in methane, of which coal industry could be a contributing sector. CO₂ emissions from power generation, of which coal could be a component, are expected to rise 0.37% under less ambitious liberalisation and 0.33% under more ambitious liberalisation. Overall, the investment impact is not expected to be significant given coal's minor role in global investments.

5.1.4. Forest-Based Industries

ECONOMIC ASSESSMENT⁴²¹

INDICATOR: Output, trade & investment

BASELINE

As the world's second largest country in terms of size, Canada has an abundance of forested land. Its 294.84 million hectares (MHa) of non-reserve forest land represents 45.4% of Canada's total landmass and accounts for 10% of the world's forest cover and 30% of its boreal forest.⁴²² At the provincial level, Quebec, British Columbia and Ontario serve as the largest sources of forestry in Canada. In 2007, Canada's forest-based industries accounted for \$63.86 billion in revenue.⁴²³ Within this, pulp and paper manufacturing accounted for 43.4%, while wood product manufacturing and forestry and logging contributed 39.1% and 17.5%, respectively.⁴²⁴

The EU, for its part, has approximately 177 MHa of forest and wooded land, occupying 44% of its surface and representing 5% of the world's forests.⁴²⁵ In 2007, The EU's wood product manufacturing industry generated approximately \$240 billion in turnover.⁴²⁶ In both the pulp and paper and paper product

⁴²¹ Specifically, results for the forest-based industries are reported according to the groupings of the GTAP model which divides the industry across forestry, logging and related services (*Forestry*), wood and wood product manufacturing, and paper and paper products. The results of the simulations can be found in Tables 65-72 in Annex 6.

⁴²² Statistics Canada; National Forestry Database; Natural Resources Canada

⁴²³ Statistics Canada

⁴²⁴ Natural Resources Canada

⁴²⁵ DG Enterprise

⁴²⁶ Eurostat

manufacturing sectors, the EU provides a significant portion of the world output as in 2007 it accounted for 21.3% of global production in the former and was the world's largest manufacturer of the latter (26% of world output).⁴²⁷

Its abundance of forested land has allowed Canada to establish itself as the world's largest exporter of forest-based products with exports of \$31.4 billion in 2007 and a trade surplus of \$22 billion.⁴²⁸ Major export products include paper products excluding newsprint (26.8% of total forest-based exports), wood pulp (21.2%), softwood lumber (21.1%) and newsprint (11.9%).⁴²⁹ The EU, conversely, is a net importer of forest-based products and in 2007 had a trade deficit of \$707 million. Approximately 90% of the wood needed in manufacturing is sourced from sustainable forests within the EU, with the remaining 10% acquired through imports, primarily from Russia and North America.⁴³⁰

In terms of bilateral trade with Canada, however, the EU operated a trade surplus of \$71 million in 2007, predominantly in paper and paper products.⁴³¹ For Canada, the EU remains an important destination for exports of forest-based products, serving as the second largest destination after the United States and accounting for 6.4% of Canadian forestry exports in 2007.⁴³²

Overall, the forest-based industries serve as a minor recipient of EU and Canada outward FDI. In 2007, for example, forest-based industries accounted for only 2.1% and 0.63% of all FDI stocks abroad for Canada and the EU, respectively. These trends extend to bilateral investment, as outward FDI in Canada's forest based industries by the EU in 2005 (and vice versa for 2007) accounted for less than 0.4% (3.5%) of total FDI stocks.⁴³³

ANALYSIS

Modelling results suggest that the CETA will have a limited negative impact on Canada's forest-based industries. Specifically, the CGE model's simulations estimating a complete cut in tariffs suggest that output and overall exports in the forest-based industries would be expected to decline by a minor amount under the CETA, as expansion in other industries stimulates a minor movement of resources into other sectors (See Tables 65-72 in Annex 6). These declines become exacerbated in the scenarios that maintain existing tariffs on certain sectors (A and B). The absence of gains from cuts in tariffs is unsurprising given the low or non-existent duties on a number of forestry, wood and paper products in the EU.

Similar to Canada, the EU is expected to see limited changes in output and exports as a result of tariff liberalisation under the CETA, with the absence of duties on many forestry, wood and paper products in Canada limiting the potential gains for the EU.

Instead, the ability of the CETA to directly affect output and trade within Canada's forest-based industries is more likely to occur through investment liberalisation. Although data limitations have made it impossible for the modelling framework to quantitatively reflect the precise impact that investment liberalisation is likely to have on Canada's forest-based industries, results from the gravity modelling suggest that a reduction in investment restrictiveness (as measured by the OECD) is likely to have a positive impact on investment in Canada's manufacturing sector. At the same time, it should not

⁴²⁷ DG Enterprise

⁴²⁸ Natural Resources Canada

⁴²⁹ Ibid.

⁴³⁰ DG Enterprise.

⁴³¹ UN Comtrade

⁴³² Natural Resources Canada

⁴³³ Eurostat (2008); OECD.stat

necessarily be assumed that the CETA's provisions on investment will lead to significant increases in EU investment in Canada's forest-based industries. To begin with, overt restrictions are limited and while the CETA could extend national treatment to EU investors, the investment-inducing effect of this may be limited since it may only serve to eliminate net benefit tests. Further, as noted in the baseline, the forest-based industries make up a very minor portion of EU investment both worldwide and in Canada. Finally, EU investment in forest-based industries has in recent years shifted towards Latin America and while it is possible that the CETA could stimulate some increase in investment towards Canada, it should not be expected that it could easily reverse the role Latin America now plays for EU investment in the sector.

INDICATOR: Employment

BASELINE

Canada's forest-based industries directly employed 217,900 people in 2008, representing 1.6% of total employment (Table 40). While employment in the industry occurs in most provinces and territories, the majority of jobs are concentrated in Quebec, British Columbia and Ontario. Over the past several decades, employment in the sector has decreased, with the greatest percentage losses occurring in paper and paper product manufacturing which has seen employment decrease by almost 30% since 1998.

Table 4-: Employment in Canada and the EU's forest-based industries, 2008

Sector	Canada	EU
Wood product manufacturing	110,300	1,270,000
Paper manufacturing	73,600	715,000
Logging	34,000	490,000

Source: Natural Resources Canada; DG Enterprise

Employment in the EU's forest-based industries in 2008 was approximately 2.5 million. Within this, wood and wood product manufacturing serves as the single largest employer, followed by paper manufacturing and logging. Low-skilled workers make up a significant portion of the EU's workforce in both logging and wood manufacturing.

ANALYSIS

Canada

According to the modelling results, employment in Canada's forest-based industries is expected to experience limited declines across all sectors and skill levels as a result of liberalisation in the CETA. These declines are generally exacerbated under an Agreement that provides greater liberalisation in the services sector and that limits tariff liberalisation on all sectors, suggesting the declines are a result of employment and resources shifting toward expanding industries. Greater levels of investment liberalisation could serve to mitigate against potential movement of employment out the sector, however, limiting the potential impact on employment associated with the CETA.

EU

Results from the CGE model suggest that employment in the EU's forest-based industries will not be impacted by the CETA.

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

The economic assessment estimates that the CETA will lead to limited decreases in employment in Canada's forestry and logging, wood and wood product and paper and paper products sectors over the long-term, with more workers expected to be affected under a CETA that achieves greater liberalisation in the services sector and that maintains sensitivities in certain goods-producing sectors.

Across the forest-based industries in 2008, 34,000 were employed in forestry in logging with a further 110,000 and 74,000, respectively, in the manufacturing of wood and wood products and paper and paper products.⁴³⁴ Therefore, with estimated decreases in employment in these sectors of as much as 0.65%, -0.96% and -0.55%, respectively, it is not expected that the impact on displacement will be pronounced. Nevertheless, a number of workers could find themselves affected over the short- to medium-term, specifically in the wood manufacturing sector, with those potentially displaced facing adjustment costs as they search for alternative employment or cycle out of the labour force. Any displacement that were to arise – while likely minimal – would likely be concentrated in rural areas where the forest-based industries remain an important source of employment and economic activity and which are typically characterised by limited industrial diversity. Nevertheless, estimated declines in labour of at most -0.96% over the long-term (10 years after completion of the agreement) would imply a negligible impact as a result of the CETA.

EU

It is not expected that the CETA will lead to worker displacement within the EU's forest-based industries.

INDICATOR: Quality & decency of work

BASELINE & ANALYSIS

Canada

The forest-based industries are characterised by a high degree of seasonality, particularly in forestry and logging, resulting in temporary separation between employer and employee and creating instability in income. To this end, movement into other areas may lend itself to greater income stability, especially insofar as newly acquired positions are permanent.

⁴³⁴ Natural Resources Canada; Industry Canada

Labour standards could be strengthened under the CETA over the long-term, particularly to the degree that the CETA is able to improve the implementation and ratification of the ILO's Core Labour Standards (CLS). Hereto, Canadian employees could have their rights of association and collective bargaining strengthened by the ratification in Canada of the ILO's *Right to Organise and Collective Bargaining Convention, 1949* (C.98). For detailed discussion on the social ramifications of the CETA as it pertains to core labour standards and the ILO's Decent Work Agenda see Box 14 in the social assessment on mining and metal manufacturing.

EU

The CETA could contribute to improved labour standards with the inclusion of a chapter on trade and labour that makes commitments to better implementation of the ILO's Core Labour Standards and Decent Work Agenda (See Box 14).

INDICATOR: Health, education & culture

BASELINE & ANALYSIS

Canada

As forest-based industries have higher rates of work-related fatalities and injuries, movement into other sectors is likely to produce positive health benefits.⁴³⁵ Further, a mechanism that fosters regular dialogue and cooperation between Canada and the EU could include commitments to and exchanges on reducing occupational injuries, perhaps fostering improved safety over the long-term (See Box 14 for more discussion).

In terms of education, positive impacts may occur in several respects. First, workers transitioning into other sectors are likely to need to undertake additional education or training, increasing their educational attainment. Second, a study by Natural Resources Canada found that rural areas in Canada that are reliant on forest-based industries tend to have lower levels of education than other rural areas. Where these areas are particularly affected, its residents are likely to find additional incentive to attain higher levels of education.⁴³⁶

Overall, the impact on culture in Canada is expected to be negligible. Minor impacts may occur in rural areas that have historically been reliant on the forest-based industries. As decreases in employment could potentially result in migration to other areas there could be a disruption of social relations in affected areas.

EU

While generally lower than in other countries, workers in the EU's forest-based industries are still subject to a series of health risks including work-related injuries and exposure to excessive amounts of wood dust and adhesive constituents that may act as carcinogens under certain conditions.⁴³⁷ Greater dialogue and cooperation between Canada and the EU, if promoted under the CETA's trade and labour chapter, could help improve the sharing of knowledge of best-practices to avoid occupational injuries encountered in the sector.

⁴³⁵ ILO

⁴³⁶ Stedman et al (2005)

⁴³⁷ DG Enterprise

ENVIRONMENTAL ASSESSMENT

INDICATOR: Rate of depletion of forested land

BASELINE

Canada

As of March 2006, Canada had 6.84% protected forest area according to UN reports. About 19% of productive forest land is under policy constraint where it either cannot be harvested or is subject to legislative guidelines.⁴³⁸ With respect to forestry, it is notable that Canada has already implemented an ambitious sustainability agenda with legislation mandating that all harvested forestland must be successfully regenerated. 8% of Canada's forest is already under protection and 40% subject to various levels of protection through integrated land-use planning or defined management. Overall, less than 1% of Canada's forests are harvested annually.⁴³⁹ About 72% of harvested land owned by the Crown is regenerated through use of tree planting and direct seeding. The rest is regenerated naturally.⁴⁴⁰ Deforestation rates dropped from 68,000 hectares in 1990 to 45,000 hectares in 2008. Agriculture was the primary cause of deforestation, responsible for 24.6 thousand hectares, followed by industry and transportation (9.7 thousand hectares), municipal development (4.9 thousand hectares) and forestry (4.7 thousand hectares).⁴⁴¹

EU

In 2000 29.7% (1,608,475 km²) of the EU land surface was covered by forests, in 2006 the forest cover had decreased to 29.2% (1,586,121 km²), a loss of 22,354km² or 1.4%.⁴⁴²

ANALYSIS

Canada

Under the trade liberalisation scenarios modelled in the economic assessment, the CETA is expected to result in a marginal decline in the forestry and logging sector, thereby potentially reducing harvests and depletion rates. Overall, whereas the CETA does not undermine the sustainability goals already in place in Canada, it is likely that the environmental impact will not be significant.

EU

The CGE model suggests that a CETA will lead to minor increases in the output of all forest-based products in the EU, which consequently will lead to a minor increase in the area to be harvested. This increase will likely have a limited impact on the stock and depletion rate of forested land.

⁴³⁸ Canadian Council of Forest Ministers (2005)

⁴³⁹ Natural Resources Canada

⁴⁴⁰ Ibid.

⁴⁴¹ Ibid.

⁴⁴² EEA: Land accounts data viewer

INDICATOR: Rate of overall land use of biodiverse areas / Number of threatened/endangered species/rate of change of this number**BASELINE*****Canada***

Canada has 340 forest associated species at risk, which accounts for 55% of the COSEWIC listed species⁴⁴³, including the woodland caribou, wild ginseng, and various reptile species.⁴⁴⁴ The primary causes of their decline are habitat loss, climate change, predation, competition and invasive species.⁴⁴⁵ 152 species saw no change from 1999-2010, 65 were moved to a highest risk category, 6 to a lower risk category, and 117 were newly assessed.⁴⁴⁶ Woodland caribou are decreasing, as are American marten and this is seen as a sign of poor landscape connectivity in the boreal forest.

Canada has 58 native tree species that are in need of protection, and conservation plans have been enacted for these.⁴⁴⁷ Plant species represent 36% of forest associates species at risk. There are 53 forest associated fish species at risk, of which 32% are under endangered designation.⁴⁴⁸ There are 8 forest associated arthropods at risk, and nine molluscs. The state of forest associated species at risk has deteriorated from 1999 to 2004.⁴⁴⁹ Some of this can be due to deforestation and forest management, as some species rely of stand age, forest structure, ecological processes and stand composition of mature forests for survival and reproduction.⁴⁵⁰ The Breeding Bird Survey finds that there has been a decrease in population of certain bird species dependent on old forests.⁴⁵¹

EU

Wood production from managed forests and plantations (the common practice in Europe) mostly operates in monocultures, which reduces biodiversity and degrades soil fertility.

ANALYSIS***Canada***

While the Canadian forest industry has made significant progress in reducing deforestation rates, concerns remain as to the impact of forestry activities on threatened and endangered species. However, the CETA is not expected to significantly impact the rate of decline/recovery of these species given the limited expected impact on output in downstream sectors.

⁴⁴³ Ibid.

⁴⁴⁴ Forestethics (2006).

⁴⁴⁵ Natural Resources Canada (2010)

⁴⁴⁶ Ibid.

⁴⁴⁷ Canadian Council of Forest Ministers (2005)

⁴⁴⁸ Ibid.

⁴⁴⁹ Ibid.

⁴⁵⁰ Ibid.

⁴⁵¹ Ibid.

EU

With only marginal increases in the forest-based industries expected, the CETA will not have a significant impact on biodiversity in the EU.

INDICATOR: Water usage and quality / Contamination of water from chemicals and wastes**BASELINE**

Much of the contamination of water from chemicals and waste relating to forestry comes from the pulp and paper industry which is the third largest industrial polluter of air, water and land. 22.05% of total BOD (organic water pollutants)⁴⁵² emissions came from pulp and paper industry in 2002, while 5.38% of total BOD emissions came from the wood industry in 2002. A number of different wastes can be released, and effluents can include fibres, suspended solids, colour, turbidity, organic and nutrient enriching compounds. This is the result of debarking, pulp washing, bleaching, and regenerating cooking chemicals.⁴⁵³ However, the industry has implemented drastic improvements since the 1950s and 1970s, with end of pipe technologies and greater transparency⁴⁵⁴, while facilities must comply with regulations under the Canadian Environmental Protection Act and the Fisheries Act.⁴⁵⁵ Chlorinated dioxins and furans emissions have decreased by 99%. Moreover, industry has decreased the use of products that have nonylphenol and its ethoxylates (NPE), toxic substances, by 99.8%. Biochemical Oxygen Demand (BOD) discharges have dropped 94%, and total suspended solids have dropped by 70%.⁴⁵⁶ Nevertheless, toxic effluents continue to be discharged, and impacts on wildlife, such as alteration to endocrine and reproductive functions in fish, continue to occur.⁴⁵⁷ Another result can be eutrophication of water, which in certain instances can be severe. This has been seen to result in change of gonad and liver weights of fish, among other ecosystem impacts.⁴⁵⁸

Paper industries are also responsible for a huge portion, 45%, of the 7,778.9 million cubic meters of surface water withdrawn by Canadian manufacturing industries in 2005. 69% was used for processing and 28% for cooling, condensing, and steam generation.⁴⁵⁹

Table 42 shows the amounts of major pollutants released into water by the EU paper manufacturing sector.

Table 42: Release of major pollutants into water by the EU paper and paper products manufacturing sector, 2008⁴⁶⁰

Chlorinated organic substances	
1,2-dichloroethane (DCE)	46.5 kg
Halogenated organic compounds (as AOX)	2,321 t
Heavy metals	
Arsenic and compounds (as As)	1.84 t

⁴⁵² World Development Indicators Online. World Bank.

⁴⁵³ Environment Canada (2003)

⁴⁵⁴ Ibid.

⁴⁵⁵ Natural Resources Canada (2004).

⁴⁵⁶ Ibid.

⁴⁵⁷ Environment Canada (2003)

⁴⁵⁸ Ibid.

⁴⁵⁹ Statistics Canada (2005).

⁴⁶⁰ See European Pollutant Release and Transfer Register

Cadmium and compounds (as Cd)	1.37 t
Chromium and compounds (as Cr)	4.55 t
Copper and compounds (as Cu)	25.2 t
Mercury and compounds (as Hg)	157 kg
Nickel and compounds (as Ni)	8.16 t
Lead and compounds (as Pb)	3.14 t
Zinc and compounds (as Zn)	187 t
Inorganic substances	
Chlorides (as total Cl)	114,490 t
Fluorides (as total F)	8.42 t
Total nitrogen	7,743 t
Total phosphorus	1,080 t
Other organic substances	
Total organic carbon (TOC) (as total C or COD/3)	249,428 t

ANALYSIS

Canada

Results of the economic modelling predict that the CETA will not significantly affect output in the paper and paper products sector, which is the most water intensive in the forestry sector. Overall, it is unlikely that it will lead to negative impacts on water contamination. CETA should have a neutral effect on water discharges from the pulp and paper sector, assuming technology remains constant.

EU

The CGE model suggests that a CETA will lead to a minor increase in the output of the wood products industry and in the paper products industry. The corresponding increase in use and contamination of water is only marginal.

INDICATOR: Environmental quality Air pollution - GHG emissions

BASELINE

Canada

Forestry-related GHG emissions can be divided in two categories: (i) emissions resulting from land use change, and (ii) emissions resulting from energy consumption in the forestry industry. Managed forest land acted as an overall carbon sink, sequestering 18000 kt of CO₂e in 2008. Afforestation and reforestation sequestered 738 kt of CO₂e, while deforestation created 14,644 kt of CO₂e in emissions.⁴⁶¹

The forest sector is one of largest single industrial energy users in Canada⁴⁶², though energy use decreased 4% between 1990 and 2007.⁴⁶³ However, the industrial emission it causes is proportionally lower because of the industry's increasing use of bioenergy. In 1990, 38% of energy came from fossil

⁴⁶¹ Environment Canada (2010b).

⁴⁶² Natural Resources Canada (2010)

⁴⁶³ Ibid.

fuels, and this decreased to 26% in 2007, the difference coming from energy from bioenergy, hydro, and nuclear.⁴⁶⁴ Wood waste has been used as an energy source, and other efficiencies resulted from cogeneration and switching from fuel oil to natural gas.⁴⁶⁵

Direct emissions from the forest-based industries are the result of fossil fuel usage. Agriculture and forestry emitted 2.2Mt of CO₂e in 2008 from stationary fuel combustion, down from 2.4Mt of CO₂e in 1990.⁴⁶⁶ Pulp and paper industries emitted 4,540 kt of CO₂e in 2008, down from 13,700 kt of CO₂e in 1990.⁴⁶⁷ The Pulp and Paper Green Transformation Program, created in 2009 by the federal government, will help improve the environmental performance of the pulp and paper industry.⁴⁶⁸ Indirect emissions, mostly from fossil fuel electricity consumption approximately doubled, according to the Canadian Council of Forest Ministers.⁴⁶⁹

Other air contaminants are released as a result of pulp and paper production. Namely, 23,723 tonnes of total particulate matter (TPM), 41,082 tonnes of SO_x, 33,948 tonnes of NO_x, 15,853 tonnes of VOC, 65,838 tonnes of CO, 1,932 kg of Pb, 281 kg of Cd, 51 kg of Hg. The wood industry caused the release of 19,701 tonnes of total particulate matter (TPM), 2,251 tonnes of SO_x, 11,577 tonnes of NO_x, 60,878 tonnes of VOC, 337,799 tonnes of CO in 2008.⁴⁷⁰

EU

As with water use and pollution, air pollution and GHG emissions are attributed most directly to production and processing of paper, rather than to forestry and wood product manufacturing. Depending on the production technology used, the pulp and paper industry can require large amounts of energy and be responsible for the corresponding GHG effect. In 2007, the EU-27 pulp and paper industry accounted for only 0.61% of GHG emissions (31 out of 5045 million tonnes CO₂ equivalent). This occurs with large regional variation: in some EU countries the pulp and paper industries account for minimal emissions of CO₂, including in Germany with 0.0%; the highest shares are in Finland (5.6% of the country's CO₂ emissions), Sweden (2.7%), Austria (2.5%) and Slovenia (2.2%).⁴⁷¹

Table 43 shows the GHG emissions and air pollution caused by EU manufacturing of paper and paper products.

Table 43: GHG emissions and air pollution for EU manufacturing of paper and paper products, 2008⁴⁷²

Greenhouse gases	69,554,492 t
Methane (CH ₄)	228 t
Carbon dioxide (CO ₂)	67,627,000 t
Carbon dioxide (CO ₂) excluding biomass	1,926,467 t
Hydro-fluorocarbons (HFCs)	478 kg
Nitrous oxide (N ₂ O)	796 t

⁴⁶⁴ Ibid.

⁴⁶⁵ Environment Canada (2010b)

⁴⁶⁶ Ibid.

⁴⁶⁷ Ibid.

⁴⁶⁸ Natural Resources Canada (2010)

⁴⁶⁹ Forestethics (2006)

⁴⁷⁰ National Pollutant Release Inventory (2008)

⁴⁷¹ EC (2010b)

⁴⁷² European Pollutant Release and Transfer Register

Other gases	178,272 t
Chlorofluorocarbons (CFCs)	59 kg
Chlorine and inorganic compounds (as HCl)	1,032 t
Carbon monoxide (CO)	44,274 t
Fluorine and inorganic compounds (as HF)	350 t
Hydrochlorofluorocarbons(HCFCs)	2 t
Ammonia (NH ₃)	2,125 t
Non-methane volatile organic compounds (NMVOC)	28,129 t
Nitrogen oxides (NO _x /NO ₂)	104,485 t
Sulphur oxides (SO _x /SO ₂)	30,077 t

ANALYSIS

Canada

Given its limited impact on output in the forest-based industries, it is not expected that the CETA will significantly change emissions patterns or increase direct or indirect emissions. According to the E3MG model, the paper and pulp sector should see its emissions reduced by 0.19% to 0.22%. Overall it is not expected that the CETA will have significant impacts on GHG and other air pollutant emissions from the forestry sector.

EU

Given that a CETA has only marginal impact on the EU forest-based industries, only a marginal increase in the sector's GHG emissions is expected.

The E3MG modelling also predicts no impact on this sector.

5.1.5. Automotive & Other Transportation Equipment

ECONOMIC ASSESSMENT⁴⁷³

INDICATOR: Output, trade & investment

BASELINE

Manufacturing of transportation equipment in Canada is led by the automotive industry, which is the 8th largest in the world. In 2007, Canada's manufacturing of transportation equipment generated turnover of \$106.3 billion, representing growth of 12.5% since 1998 (Table 44).⁴⁷⁴ Herein, motor vehicle manufacturing (i.e. assembly of finished vehicles) accounts for 51.2%, though growth over the past decade has been relatively stagnant with rising input costs pushing down the total value added production in the industry. A further 4.2% of industry turnover is generated from motor vehicle body and trailer manufacturing and 25.2% in motor vehicle parts manufacturing. Aerospace product and parts manufacturing contributes 13.9%, though it serves as the fastest growing sector within Canada's transportation equipment industry.

Table 44: Turnover in Canada's transportation equipment industry

		Turnover (2007, bn. US\$)	Growth since 1998
Transportation equipment	Total	106.3	12.5%
	Motor vehicles	54.4	1.0%
	Motor vehicle parts	26.8	10.0%
	Aerospace products and parts	14.9	67.4%

Source: Industry Canada

Canada is engaged in a significant amount of trade in transportation equipment with total trade of \$164.15 billion in 2007 and a trade deficit of \$5.9 billion.⁴⁷⁵ Within this, trade in the automotive sector is the largest with total exports of \$63.04 billion in 2007. To that end, trade in motor vehicle manufacturing (50.2%), motor vehicle parts (30.5%) and motor vehicle body and trailer manufacturing (2.7%) accounted for 83.4% of all Canadian trade in the transportation equipment sector.⁴⁷⁶

⁴⁷³ CGE results for the transportation equipment sector are reported according to the groupings of the GTAP database which include the manufacturing of cars, lorries, trailers and semi-trailers as well as related parts and accessories (*Motor vehicle*) and all other transport equipment (e.g. aerospace and ship building). The results of the simulations can be found in Tables 73-80 in Annex 6.

⁴⁷⁴ Industry Canada

⁴⁷⁵ Statistics Canada

⁴⁷⁶ Ibid.

The transportation industry in the EU generated turnover of \$188 billion in 2008. As in Canada, the transportation equipment industry in the EU is led by the automotive sector, which accounts for approximately 25% of global production.⁴⁷⁷ In addition to the automotive industry, the EU's aerospace industry serves as an important hi-tech sector and is the world's second largest producer of civil aircraft. The sector is particularly export oriented with 56% of its turnover in 2008 generated through exports. In both the automotive and civil aviation sectors, the EU operates a trade surplus, as in 2009 exports exceeded imports by \$64.1 billion in the automotive sector and \$21.6 billion in civil aviation.⁴⁷⁸

Due to Canada's high degree of integration with its NAFTA partners, the EU is a relatively minor market for Canadian automotive exports having received just 0.7% by value in 2007. Of this, the EU accounted for 2% and 2.9% of Canada's motor vehicle parts exports and imports, respectively, and a miniscule 0.25% of all Canadian exports of assembled motor vehicles in 2007. The EU does, however, play a significant role in Canada's trade of aerospace and aerospace parts accounting for 21% of all Canadian exports (\$2.5 billion) and 21.9% of all imports (\$2.2 billion) in 2007.⁴⁷⁹

Foreign investment in transportation equipment makes up a relatively minor share of outward and inward investment in both Canada and the EU. The transportation equipment sector accounted for only 3.3% of Canada's total FDI stocks abroad in 2007, and only 1.51% of all EU stocks abroad.⁴⁸⁰ With 4.6% of Canada's total investment in the EU located in the transportation equipment sector, the sector plays a more important role for Canada outward bilateral investment than it does for the EU, where only 0.6% of stocks in Canada in 2005 were directed toward the transportation equipment sector.⁴⁸¹

ANALYSIS

Canada

Results from the CGE model suggest that the CETA could potentially lead to increases in output and trade of transport equipment in Canada, with the most beneficial outcome arising under full removal of tariffs and provisions that facilitate the inflow of FDI into the sector. Potential gains for the industry stand to be significantly reduced, however, under a less liberalised Agreement and where more stringent rules of origin for automotive products are adopted.

With respect to trade liberalisation, the model projects that the CETA will have a positive impact on the **automotive industry**, with the most beneficial outcome arising where all tariffs are removed and liberalisation in the services is less ambitious (i.e. Scenario C; see Tables 73-80 in Annex 6). The removal of tariffs is estimated to lead to increases in output of automotive products ranging from 0.21% to 0.86%. This increased output would be expected to stimulate increases in trade, with overall exports expected to increase for automotive products (0.36% to 1.11%). In all scenarios except Scenario B, the increase in exports would be expected to improve Canada's overall balance of trade in these products by as much \$359 million over the long-term. These gains can be primarily attributed to the removal of MFN tariffs in the EU, which are as high as 10% on motor vehicles and auto parts, with Canada's bilateral exports to the EU estimated to increase by as much as \$447 million (\$305 million in automotive products) over the long-term; though imports from the EU would be expected to be significantly larger than exports to the EU, worsening the bilateral balance of trade, Canada would be expected to witness

⁴⁷⁷ DG Trade website; DG Enterprise

⁴⁷⁸ DG Trade website

⁴⁷⁹ Statistics Canada

⁴⁸⁰ OECD.stat

⁴⁸¹ Eurostat (2008).

improvements in its trade with the EU of other transport equipment. Although it appears contradictory to expect the CETA to simultaneously lead to a worsening in the balance of trade in automotive products with the EU and improvements to the overall balance of trade in these products, it should be noted that this would be expected to occur as a result of i) increased Canadian exports of automotive products to third countries over the long-term as a result of expansion and upgrading fostered by the CETA; and ii) very minor changes in the value of imports from third countries.

In terms of **other transportation equipment**, the CGE model again predicts that Canada could experience increases in output and trade, but that this would be contingent on an Agreement being reached that provides the greatest degree of liberalisation (e.g. as in modelled in Scenarios C and D). Output is estimated to increase by as much as 0.85% in Scenario C, though less ambitious removal of tariffs is not projected to produce increases and in Scenario B is estimated to contract slightly (-0.2%) over the long-term. This is similarly the trend in terms of overall exports with Canadian exports of other transport equipment projected to rise by as much as 1.08% in Scenario C, with Scenario B projecting a minor reduction in exports (-0.15%) over the long-term. Where exports increase, Canada would be expected to experience an improvement to its sectoral balance of trade (as much as \$78m), though a reduction in exports would alternatively be expected to lead to a worsening of the trade balance (-\$44m).

Further to tariff liberalisation, the CETA could also lead to increased **investment** in Canada's transportation equipment industry, subsequently leading to greater increases in output and exports than estimated by the CGE model. Although attempted, data limitations have made it impossible for the modelling framework to quantitatively reflect the precise impact that investment liberalisation is likely to have on output and exports in Canada's transportation equipment sector. Nevertheless, results from the gravity modelling suggest that a reduction in investment restrictiveness (as measured by the OECD) is likely to have a positive impact on investment in Canada's manufacturing sector.

With respect to the auto industry, Canada does not maintain overt restrictions on foreign investment, making it unclear how provisions within the CETA can significantly alter EU investment in Canada. Inclusion of national treatment provisions could potentially stimulate investment by removing the screening procedures currently in place (i.e. net benefit tests), though it is not certain that such provisions would greatly increase the stock of EU FDI within Canada's auto industry. Extending national treatment to EU investments in Canada's aerospace industry could potentially lead to significant inflows of FDI over the long-term as the *Investment Canada Act* (ICA) allows foreign investments to be blocked on the basis of national security. At the same time, due to these national security concerns, it is questionable whether national treatment would be extended to include investments in the aerospace sector. Nevertheless, it is possible that the CETA continues to allow Canada the right to invoke security concerns over EU investments in the aerospace industry, while to some degree liberalising investment. In particular, the ICA does not provide a specific definition of what may be 'injurious to national security', leaving investment bids subject to a degree of uncertainty.⁴⁸² Hereto, it is possible that the CETA could increase EU investment in Canada's aerospace sector through the establishment of a dispute settlement body that could make impartial rulings on whether or not an investment qualifies as 'injurious' to national security as well as increased transparency on what an injurious investment would entail (See Chapter on Investment for more discussion).

Underlying the ability of tariff and investment liberalisation under the CETA to generate gains for Canada's automotive industry will be the rules of origin (RoO) that are ultimately agreed to. At issue is Canada's high degree of integration with the auto industry of the U.S., which would make it particularly

⁴⁸² Pawluch et al (2010).

difficult for Canada to realise the level of potential gains estimated should the CETA adopt a set of stringent RoO that are more in line with EU preferences. Specifically, the EU would likely prefer to maintain the 60% local content requirement that is used to confer origin, while Canada would likely prefer RoO that are closer to 30%.⁴⁸³ Given the noted high degree of integration with the U.S. it would appear – at least over the mid-term – that if the CETA adopts RoO that are more in line with EU rules, the impact of the agreement would be far less positive than that estimated under the CGE model, since a large portion of Canadian produced products would not be able to qualify for preferential tariffs. While it is difficult to quantify the exact impact from adopting such a set of RoO, it should be expected that the positive impact would at least be mitigated, with a more negative potential outcome being limited to moderate levels of reduction in output and Canada's balance of trade of automotive products.

Additionally, differences in emission standards between Canada and the EU could serve to further reduce estimated gains for the Canadian auto industry (See Box 17). This is largely dependent, however, on the level of market access granted to Canadian auto manufacturers under the CETA, with significant improvements in market access likely to stimulate Canadian producers to make the necessary investments in order to meet the stricter EU standards.

EU

The CGE model suggests that the CETA may produce mixed results for the EU's transportation equipment sector, with increases in output, exports and the balance of trade estimated for the EU's automotive industry and decreases projected for its other transportation manufacturing sectors. For both industries, the most beneficial outcome appears to be in the less ambitious scenarios (e.g. A and B).

For the EU's **automotive industry**, modelling projects minor increases in output ranging from 0.05% to 0.1%. The increases in production appear to be driven largely by increased exports, with total exports of automotive products estimated to grow by 0.08% to 0.17% over the long-term. Exports will likely grow more than imports, leading to improvements in the EU's total balance of trade in auto products, with modelling results suggesting the trade balance to see an improvement of \$194 million to \$608 million (Tables 73-80 Annex 6). While the CETA would also lead to significant percentage increases in imports from Canada, the existing low level of imports from Canada suggests that bilateral exports would be far greater, leading to an improvement in the bilateral balance of trade of upwards of \$870 million.⁴⁸⁴

These projected gains for the industry in the EU would likely be improved under a CETA that adopted more stringent rules of origin. As noted in the assessment on Canada, the inability of Canada to capitalise from RoO that favoured EU preferences would likely imply reduced imports from Canada, making the benefits from tariff liberalisation more one-sided and lead to greater gains in the EU's balance of trade. More stringent emission standards are not likely to negatively impact the EU's auto industry, though it could serve to more greatly improve the EU's bilateral balance of trade (see Box 17).

Conversely, these same scenarios project limited declines in the EU's output of **other transportation equipment** over the long-term (-0.06% to -0.17%) as well as in overall exports (-0.07% to -0.24%). In turn, this projected decline in exports arising from the CETA would be expected to lead to a worsening of the

⁴⁸³ Gauthier, A. and M. Holden (2010b)

⁴⁸⁴ As noted, the greatest gains for the EU industry appear to actually arise in the least liberalised scenario (Scenario A), with the most beneficial impact appearing to be when tariffs are not liberalised in certain sensitive sectors. While there is no direct difference in these scenarios with reference to the transport equipment industry, the different outcome is being largely driven by changing incentives and the implications it has for the allocation of resources, which over the long-term is stimulated in different ways given the different levels of liberalisation for goods and services.

EU's total balance of trade in these products of as much as \$300 million, making the overall impact on the balance of trade for transport equipment negative.

Box 17: Differences in EU-Canada automotive emission standards

Standards on automotive emissions in both Canada and the EU serve an important role in protecting the environment. While both have as its aim the reduction of harmful GHG emissions, the standards and systems employed in each differ.⁴⁸⁵ The problem herein arises from the potential for differences in standards to serve as an obstacle to trade and production, making it possible that the impact from the CETA could be altered based on emissions regulations.

At the same time, while differences in standards may serve to restrict trade, harmonisation of standards can help facilitate trade. It is largely in recognition of this that Canada has sought to ensure harmonisation of auto emission standards with the United States. The practice of harmonising emissions standards with those of the U.S. is a practice that has been in place since 1988, and which was most recently reaffirmed by Canada's decision to follow the U.S. lead in applying more stringent GHG emission standards for new passenger autos and light trucks for 2011-2016 model years. While the move is clearly beneficial from an environmental perspective, it also makes economic sense as the high degree of U.S.-Canada integration within the industry implies that harmonising standards can foster a level playing field while enhancing competitiveness.⁴⁸⁶ As beneficial to U.S.-Canada auto trade and production as the alignment of standards may be, it raises questions, however, over whether the continued difference in standards between Canada and the EU may serve to undermine potential gains for Canada under tariff and investment liberalisation provided by the CETA.

Under the U.S. proposal, Canada would impose a series of increasingly stringent regulations to ensure that an average fuel efficiency standard of 35.5 miles/gallon for passenger cars and light-duty trucks can be produced industry-wide by 2016.⁴⁸⁷ While this accelerates advancements in emission standards by requiring a GHG emission performance of 250 g CO₂e/mile (155.34 g CO₂e/km), it is less stringent than the legally binding standards implemented in the EU under the Euro 5 and Euro 6 emission limits. Hereto, Euro 5 and Euro 6 will ensure that the fleet of cars sold in the EU will be aligned with 130g CO₂/km, with 65% of a manufacturer's fleet obliged to comply with these standards by 2012 and 100% beginning in 2015.⁴⁸⁸

As Canadian standards are less stringent than the EU's (and phased in over a longer time horizon) there is potential for Canadian produced motor vehicles and parts to have added difficulties in capturing gains from liberalisation provided under the CETA (even if Canadian preferred RoO are adopted). The overall impact on Canada is, however, difficult to quantify as there appear to be a number of possible outcomes over the long-term. The first influencing factor would likely be the increased market access provided to Canadian producers under a CETA, with this largely determining whether the Agreement could be viewed as creating large enough revenue generating effects so as to shift production away from the U.S. market and towards the EU market. If large enough opportunities were created, it is likely the case that over the long-term, Canadian manufacturers would be inclined to make the necessary investments in ensuring that their products meet the stricter EU standards.

⁴⁸⁵ WTO. http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm4_e.htm#TRS; Swann, G.P. (2010). '

⁴⁸⁶ Government of Canada (2010).

⁴⁸⁷ Ibid.

⁴⁸⁸ Europa. http://europa.eu/legislation_summaries/environment/air_pollution/l28186_en.htm

At the same time, the existing regulatory changes requiring stricter emission standards in Canada would already be expected to stimulate changes in production and investment in the Canadian automotive industry. With added access to the EU market, these producers could deepen their already planned investments to ensure that they can also comply with EU standards, while perhaps viewing such a choice as rational under the likelihood of further amendments to emission standards in the U.S. and Canada in the future. On this note, to the degree that Canadian firms increased investment and enhanced their capacity to produce parts and vehicles that surpass the U.S. standards, they could potentially improve their competitiveness vis-à-vis U.S. manufacturers once standards move beyond those presently planned in the U.S.

Where the CETA limits ultimate access to the EU either through restrictive rules of origin and/or limited tariff reductions, the difference in standards may serve to further limit increased investment among Canadian producers so as to upgrade production to meet EU standards and will likely serve to exacerbate the potentially negative effect such a CETA could have on the Canadian industry. In this regard though, it would not be expected that differences in standards would play a prominent role, with the major impact likely to be derived from the restrictiveness of the RoO and/or limited tariff liberalisation.

From the standpoint of the EU, the difference in standards does not appear to be as detrimental to trade and production. This assessment stems largely from the acknowledgment that more stringent standards in place within the EU would likely allow EU automobiles and parts to more easily adhere to Canadian standards without requiring additional investment, limiting the difference in standard's ability to serve as a TBT.

INDICATOR: Employment

BASELINE

Canada's transportation equipment sector employed 209,880 in 2007, though this represents a decrease in employment of 10.7% since 1998.⁴⁸⁹ The automotive manufacturing sector accounts for the largest portion of this employment, providing jobs for 81% of all people employed in the sector. Of this, 80,324 are employed in manufacturing of motor vehicle parts, 46,970 in motor vehicle manufacturing and 20,778 in motor vehicle body and trailer manufacturing. Aerospace manufacturing employs a further 42,703, predominantly in Ontario and Quebec.⁴⁹⁰

Approximately 3.2 million are employed in the transportation equipment sector in the EU. Of this, more than 2.3 million are employed in the automotive sector, representing approximately 7% of all manufacturing employment in the EU. Germany represents the largest single source of this employment with approximately 36% of the total employment in the sector. A further 375,000 are employed in the EU's aerospace sector, though this is concentrated in a handful of Member States.⁴⁹¹

⁴⁸⁹ Industry Canada

⁴⁹⁰ Ibid.

⁴⁹¹ DG Enterprise

ANALYSIS

Canada

The impact on employment is likely to be tied to the degree of liberalisation achieved as well as the Agreement's rules of origin. Scenarios that model less liberalisation of tariffs project that the CETA will have a limited positive or negative impact on employment in Canada's auto industry (-0.07% to 0.09%) and other transport equipment (-0.45% to -0.16%) over the long-term. Alternatively, scenarios that model the full removal of tariffs on all goods (C and D) project that the demand for employment in Canada's transport equipment sector may increase by as much as 0.5% over the long-term. Improvements in employment of this magnitude would be concentrated in Ontario and Quebec. While the benefit could potentially be greater under a CETA that included provisions that increased the inflow of FDI into the sector, restrictive rules of origin could ultimately serve to eliminate these gains and could potentially lead to reduced demand for labour in the industry over the long-term.

EU

The impact on employment in the EU's transportation equipment sector is estimated to vary by subsector and degree of liberalisation, with the CGE model projecting a limited increase in the demand for labour in the EU's automotive sector over the long-term (0.03% to 0.09%) and a decrease in manufacturing of other transport equipment (-0.18% to -0.07%). While the percentage decrease in demand for labour in other transport equipment is greater than the estimated increases in the automotive sector, the much greater number of employed in the latter would generally imply that the two outcomes would largely cancel each other out, making the impact of tariff liberalisation under the CETA negligible. The overall impact on employment could shift to become more positive with the CETA adopting more stringent rules of origin and provisions that increased Canada's FDI in the sector. Further, unlike in Canada, any impact on employment in the EU is likely to be more dispersed given the lower degree of concentration in the EU.

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

As discussed in the economic assessment, the CETA is expected to have a positive impact on employment in Canada's transportation equipment sector, with gains contingent on the rules of origin that are ultimately agreed to. To the degree that rules of origin are not overly restrictive and employment is generated by the CETA, it is not likely that the agreement will engender any degree of displacement in Canada's auto industry. In turn, the social impact would be largely positive particularly as it would create manufacturing jobs that are higher paying than the Canadian average. The positive impact would likely be intensified given the regional concentration of the industry, with the auto industry that is clustered along the 260 mile corridor that stretches from Windsor to Oshawa particularly likely to benefit.

EU

The initial results from the CGE model suggest that the CETA will lead to minor increases in employment in the EU's automotive manufacturing sector with declines in manufacturing of other transportation equipment. Given that over 70% of sectoral employment is in automotive manufacturing, smaller percentage increases in employment within the industry should be expected to compensate for the larger estimated declines in labour within the other transport sector. While perhaps leading to some degree of displacement, the overall impact of the CETA is expected to be marginal.

INDICATOR: Quality & decency of work**BASELINE & ANALYSIS****Canada**

As Canada's automotive sector is heavily unionised, it is possible that increased employment in the sector could strengthen the collective bargaining of Canada's autoworkers while providing those who move into the sector with a high level of labour standards. Collective bargaining and the rights of association could be further strengthened by the CETA's ability to reaffirm the ILO's core labour standards (CLS) and under provisions that require Canada to ratify the ILO's *Right to Organise and Collective Bargaining Convention, 1949* (C.98). For detailed discussion on the social ramifications of the CETA as it pertains to core labour standards and the ILO's Decent Work Agenda see Box 14 in the social assessment on mining and metal manufacturing.

EU

The CETA could contribute to the further improvement of labour standards in the EU with the inclusion of a chapter on trade and labour that makes commitments to better implementation of the ILO's Core Labour Standards and Decent Work Agenda (See Box 14).

INDICATOR: Health, education & culture**BASELINE & ANALYSIS****Canada**

Work related accidents for the manufacturing industry are significantly above the Canadian average. A mechanism that fosters regular dialogue and cooperation between Canada and the EU could include commitments to and exchanges on reducing occupational injuries, perhaps fostering improved safety over the long-term (See Box 14 for more discussion). At the same time, employment in the transportation equipment sector provides workers with some of the highest rates of worker-provided health benefits, providing potential for the CETA to confer greater health benefits on the Canadian workforce.⁴⁹²

⁴⁹² Statistics Canada, Workplace and Employee Survey 2003

EU

The CETA's impact on the EU transportation equipment sector is not expected to significantly affect health, education or culture in the EU.

ENVIRONMENTAL ASSESSMENT

INDICATOR: Air Quality / GHG emissions

BASELINE

Canada

The vehicle manufacturing sector (including engines, parts, assembly and painting) emitted 741 tonnes of total particulate matter (0.0017 % of total industrial emissions), 826 tonnes of SO_x (0.0007%), 103 tonnes of NO_x (0.00015%), 8646 tonnes of VOC (0.0134%), 1824 tonnes of CO (0.0012%), 31 tonnes of NH₃ (0.0016%), 156 kg of lead (Pb), (0.00069%) in 2008.⁴⁹³

The Canadian automotive parts manufacturing sectors spends C\$930 million annually on energy expenses. The automotive parts manufacturing sector has a low energy intensity, with only 1% of manufacturing energy use (25,467 TJ)⁴⁹⁴ in 2002. The most energy intensive processes include assembly, plastics moulding, and surface coating/paintings. The fuel mix for these activities is 47% electricity, 45% natural gas, and 8% other.⁴⁹⁵ The transport equipment manufacturing sector has an energy intensity of 2MJ/\$GDP, which is low compared to the overall manufacturing average of 13Mj/\$GDP in 2007.⁴⁹⁶

EU

In 2009, the production of a motor vehicle in the EU caused approximately 2 800 kWh energy use, 3.6m³ water use, 0.9 tonnes of CO₂ equivalent, and 11kg of waste products.⁴⁹⁷

Table 45 shows the GHG emissions and air pollution caused by EU manufacturing of automotive and transport equipment.

⁴⁹³ National Pollutant Release Inventory (2008).

⁴⁹⁴ Natural Resources Canada (2005)

⁴⁹⁵ Ibid.

⁴⁹⁶ Natural Resources Canada (2009)

⁴⁹⁷ The Society of Motor Manufacturers and Traders (2010)

Table 45: GHG emissions and air pollution for EU manufacturing of automotive and transport equipment, 2008⁴⁹⁸

	Manufacture of motor vehicles, trailers and semi-trailers (NACE 29)	Manufacture of other transport equipment, incl., railway locomotives and rolling stock, aircrafts, ships (NACE 30)
Greenhouse gases	183,037 t	2,001,000 t
Carbon dioxide (CO ₂)	183,000 t	2,001,000 t
Hydro-fluorocarbons (HFCs)	21 t	-
Nitrous oxide (N ₂ O)	10 t	-
Sulphur hexafluoride (SF ₆)	6 t	-
Other gases	53,240 t	9,303 t
Chlorine and inorganic compounds (as HCl)	22 t	22 t
Hydrochlorofluorocarbons(HCFCs)	1 t	79 t
Hydrogen cyanide (HCN)	-	1 t
Non-methane volatile organic compounds (NMVOC)	50,736 t	7,045 t
Nitrogen oxides (NO _x /NO ₂)	2,207 t	1,785 t
Sulphur oxides (SO _x /SO ₂)	274 t	371 t

ANALYSIS

Canada

Ongoing improvements in energy intensity are likely to offset in part the increase in GHG emissions caused by the expansion in production in this sector. This is predictable in light of the major investments made in the past two years in the US and Canadian automotive sector to increase productivity and competitiveness. It is likely that the transport equipment sector will remain stable in this sector.

EU

The CGE model indicates that a CETA will have only marginal impact on the EU manufacturing of automotive and transport equipment, with all impacts on output, import, export, sales, and market prices being insignificant. The only noteworthy impact on sectoral output is in the production of other transport equipment, with estimates projecting a minor reduction of the sector's GHG emissions.

⁴⁹⁸ European Pollutant Release and Transfer Register

5.1.6 Textiles

ECONOMIC ASSESSMENT⁴⁹⁹

INDICATOR: Output, trade & investment

BASELINE

Canada's textiles, apparel and leather (including footwear) industries have experienced declines in output, revenue and market share over the past decade as increased competition from low-cost producers and the dismantling of the quota system has forced the domestic industry to undertake structural adjustments. Since 1998, turnover for these sectors has fallen substantially, while the domestic industry has increasingly lost market share to imports (Table 46).

Table 46: Turnover and market share for Canada's textile, apparel and leather industry

		Turnover (2007) Mio. US\$	Change since 1998	Domestic market share	
				2004	2008
Textiles	Total	4,115	-31.3%	42.1%	36.1%
	Textile mills	2,060	-46.3%		
	Textile product mills	2,060	-4.3%		
Apparel		3,930	-40.0%	40.2%	23.2%
Leather	Total	430	-51.7%		
	Footwear	250	-55.7%	14.3%	8.8%

Source: Industry Canada

With 47% of its revenue generated through exports, Canada's textile and apparel industry is highly export oriented. Nevertheless, the industry maintains large trade imbalances, largely with developing countries, resulting in substantial increases in the market's import share, which has risen from approximately 35% in 1992 to over 60%.⁵⁰⁰

The EU's textiles industry (including clothing and man-made fibres) generated approximately \$233 billion in turnover in 2009, though growth has been relatively stagnant since 2004. Within the industry, the textiles (54%) and clothing (41%) sectors account for the majority of this activity, with the largest producers being Italy, France, the UK, Germany and Spain, which together account for roughly 75% of production.⁵⁰¹ The EU is a global leader in upmarket and high quality textiles and clothing, and in 2009 maintained a 3.6% share of global textile exports (\$42.4 billion).⁵⁰² As with Canada, however, the EU

⁴⁹⁹ CGE results for the textiles industry are reported according to the product groupings of the GTAP database which divide the industry across: textiles and man-made fibres (*Textiles*); clothing, dressing and dyeing of fur (*Apparel*); and leather products (tanning and dressing of leather; luggage, handbags and footwear). The results of the simulations can be found in Tables 81-88 in Annex 6.

⁵⁰⁰ Industry Canada

⁵⁰¹ Eurostat. http://ec.europa.eu/enterprise/sectors/textiles/files/statistics/textiles_en.pdf

⁵⁰² DG Trade website

operates a sizeable trade deficit, particularly with developing nations, which has been increasing in recent years.

Trade in textiles, apparel and footwear between the EU and Canada is limited with trade in these products respectively reaching only \$338.68 million, \$601.18 million and \$228.75 million in 2007.⁵⁰³ This limited bilateral trade can likely be explained, in part, by the existing barriers between the two sides. Losses in domestic market share, output and employment have made Canadian producers of textiles, apparel and leather particularly sensitive to further liberalisation and this is reflected in Canada's high applied MFN tariffs on textiles, apparel and footwear, which average 6.2%, 16.3% and 13.5%, respectively, with tariff peaks as high as 18%.⁵⁰⁴ The EU also applies relatively high MFN rates that average 9.4% for textiles, apparel and footwear, with peaks of 17%.⁵⁰⁵

In addition to tariffs, the EU textile industry has expressed concern over NTBs such as the lack of transparency and harmonisation at the provincial level in Canada (e.g. in labelling requirements for textile products) and inadequate IPR enforcement (e.g. in border seizures of counterfeit goods).

ANALYSIS

Canada

The CETA could potentially benefit the Canadian textiles, apparel and leather manufacturing sector, with such an outcome largely contingent on an Agreement that agrees to ambitious as well as adoption of rules of origin that are not overly restrictive to Canadian exporters.

As noted, tariffs on textiles, clothing and footwear remain comparatively high in the EU, making it likely that Canada's industry could realise gains from the removal of these duties under the CETA. Such an assertion is supported by the CGE modelling results which show that the removal of tariffs would lead to increases in output for Canada's textiles and apparel sectors across almost all scenarios as well as overall increases in exports over the long-term (See Tables 81-86 in Annex 6).⁵⁰⁶ This increased production would stimulate overall increases in exports of up to 3.1%, though this would likely not translate into improvements in the balance of trade as estimates suggest that Canada's increase in exports to the EU would be offset by an increase in imports.

The estimated effect of tariff liberalisation on Canada's apparel sector is similar, with CGE results projecting increases in output (across all scenarios except Scenario B) and in overall exports. Despite this increase in exports, the CGE modelling predicts a worsening of the balance of trade in apparel by as much as \$72 million over the long-term. Again, Canada would be expected to experience sizeable growth in exports to the EU (by as much as 58%), but that this would be eclipsed in value by imports from the EU, worsening the bilateral balance of trade by as much as \$342 million. The wide discrepancy between the impact on overall balance of trade in apparel products and that with the EU stems largely from EU imports substituting for imports from third countries as well as increased exports to other countries such as the United States.

Within the leather manufacturing sector, the CETA is expected to lead to declines in output (as much as -1.21%), though it would be expected that exports would experience increases: both overall (4.9% to 6%)

⁵⁰³ Herein, the majority of bilateral trade occurs in exports from the EU to Canada with the former maintaining trade surpluses in both clothing and accessories (\$282.43 million in 2009) and footwear (\$160.97 million in 2009).

⁵⁰⁴ European Commission and Government of Canada (2008).

⁵⁰⁵ Ibid.

⁵⁰⁶ The lone exception is in Scenario B, which projects minor declines in output of textiles (-0.15%) and apparel (-0.07%)_over the long-term.

and with the EU (50%). Minor reductions in the Canada's balance of trade are estimated, both overall (-\$38m) and with the EU (-\$200m).

While the CGE model generally projects minor gains for the Canadian textiles and apparel industry as a result of the removal of tariffs, the rules of origin adopted under the CETA may serve to place downward pressure on these estimates and, in turn, lead to declines in output and overall exports over the long-term (See Box 18 for further discussion).

For both Canada and the EU, outward FDI in the textiles sector is limited both globally and bilaterally. Further, with few restrictions in Canada or EU it is not envisaged that investment liberalisation would significantly alter the impacts already reported.

Box 18: The CETA and rules of origin for textiles

An issue of concern for the textiles, apparel and footwear sector in both Canada and the EU will be the rules of origin adopted under the Agreement.

Under NAFTA, the rules ultimately agreed to, which are known as 'yarn forward' or 'triple transformation' (from yarn to fabric to clothing), represent perhaps the most protectionist RoO adopted under the Agreement. Except for fibres, it requires that all materials and transformation processes of textile products be of North American origin, making it so that a textile product is considered as 'originating' only if the material used in each of the successive stages of fabricating textile products – the yarn itself, the fabric, and the sewing thread – originate in a NAFTA country. While there are exceptions to these requirements,⁵⁰⁷ the NAFTA RoO for textiles and apparel generally went against the wishes of manufacturers in Canada, with Canadians originally aiming to extend CUSFTA rules which employed the less protectionist 'fabric forward' or 'double transformation' rule.⁵⁰⁸ Canada's preferences for such an approach in NAFTA stemmed largely from the fact that many of its products – such as its wool suits and high-priced, design-intensive apparel (mostly concentrated in Quebec) – relied on non-North American imports of special kinds of fabrics and other inputs for luxury clothing.⁵⁰⁹

Given this preference, it would appear that Canada would approach the CETA negotiations with the intention of adopting less restrictive RoO than those that presently exist in NAFTA. While EU rules of origin are less restrictive than those employed in NAFTA, they may still serve to be too restrictive to confer gains on Canadian manufacturers under the CETA. Historically the EU has maintained double transformation RoO on textiles and apparel, and while reforms to this policy have opened up the possibility of LDCs being allowed to use single transformation, it would appear unlikely that Canada – a

⁵⁰⁷ These include: (a) for many individual product categories, substantial transformation or change in tariff classification must occur; (b) NAFTA-made yarn, fabric, apparel not meeting strict NAFTA content requirements can be eligible for preferential duty treatment up to agreed annual levels. Further, on 1 July 2009, Canada and the US implemented measures to liberalise the NAFTA rules of origin applicable to certain textile goods which are made from acrylic staple fibres, that are not available from domestic producers in commercial quantities – the so-called 'short-supply' goods.

⁵⁰⁸ The US obtained Canadian approval by providing Canada with concessions that in practice represented an important exception for the Canadian industry regarding the rule of origin. This entailed annual quotas for yarn and fabric imports that "do not meet the rule of origin but still qualify for the preferential treatment". The text of NAFTA refers to this mechanism as 'tariff preference levels' and it allows Canadian apparel producers to keep importing the yarns and fabrics they need to maintain production in the market niche of design-intensive or luxury apparel goods.

⁵⁰⁹ Morgenstern et al (2007)

member of the G7 – would be able to receive such lenient RoO under the CETA; particularly as this may erode preferences bestowed on the world’s poorest countries.⁵¹⁰

It therefore would appear that the EU would push for the CETA to incorporate rules of origin that require a system of double transformation, which, as its name suggests, mandates that the exporting country (in this case Canada) transform the textile or clothing product across two distinct stages. In the case of textiles, this would therefore imply that Canadian manufacturers would be required to convert the fibre to yarn within Canada while also ensuring the conversion of yarn into fabric. In the case of apparel, Canadian producers would be required to convert the yarn into fabric and the fabric into clothing in order for exports to qualify for any reduced tariffs provided by the CETA.

The problem herein is that as a result of NAFTA, Canadian manufacturers of textile and apparel have been given an incentive to source inputs from NAFTA partners, making it uncertain (if not unlikely) that a number of Canadian products would be able to adjust to the competing incentives of the CETA and qualify as ‘originating’ under EU RoO. Further, with the global restructuring that has occurred as a result of the *Agreement on Textiles and Clothing* (ATC), Canadian manufacturers have been under intense pressure to ensure that they source inputs in the most cost effective means possible, making it increasingly unlikely they would be able to both adjust to the incentives fostered under NAFTA and be able to qualify under EU RoO as the former has, as noted, led to increased sourcing from Mexico and U.S.

The issue, therefore, is one where under more restrictive rules of origin, the impact on Canadian manufacturers is likely to be less beneficial than projected under the CGE model, with the CETA potentially leading to declines in output and exports for Canada’s textiles and apparel industry. At the same time, if the CETA adopts RoO that are unrestrictive enough to stimulate gains for Canada, it is possible that such an outcome would be detrimental to the EU as it would likely allow third countries such as the U.S. to benefit from the Agreement between the two sides.

EU

Estimates suggest that the CETA could result in positive gains for the EU’s textiles, apparel and leather sectors with tariff liberalisation, in particular, resulting in increases in output, exports and the balance of trade in these products over the long-term. The modelling results project that the most beneficial outcome will arise under a less ambitious agreement, with the rules of origin ultimately agreed to and the resolution of NTBs and IPR enforcement issues in Canada expected to further influence the outcome for the EU.

With respect to tariff liberalisation, the CGE model’s results suggest that the EU would benefit from the removal of tariffs in Canada, which as noted in the baseline are relatively high and likely to act as a deterrent to the EU’s trade of textiles, clothing and leather products with Canada. Specifically, the model projects that textiles, apparel and leather would all be expected to experience increases in output (Tables 81-86 Annex 6). Increases in overall exports across all three sub-sectors would similarly be expected over the long-term, with bilateral exports of apparel increasing by over \$400 million over the long-term and exports of textiles and leather increasing by \$235 million and \$208 million, respectively. These increases in exports would be expected to improve the EU’s balance of trade of these products

⁵¹⁰ Isabel Garcia Catalan, M.

with Canada by as much as \$750 million over the long-term, helping to improve its global trade balance in textiles, apparel and leather by as much as \$550 million.

As noted in Box 18, the impact of tariff liberalisation under the CETA will be influenced by the rules of origin adopted. Less restrictive RoO may place slight downward pressure on the projected gains for the EU while allowing third countries such as the United States greater access to the EU's market for textiles and apparel. However, where the CETA adopts rules that reflect EU preferences, it is likely that potential gains for Canada would be reduced, perhaps leading to greater gains for the EU industry.

The CETA could enhance the gains projected to arise under tariff liberalisation if it is able to address a number of non-tariff barriers that have been identified as trade restricting by EU manufacturers. Specifically, the CETA could generate increased exports to Canada by ensuring that barriers to free circulation within Canada (e.g. in different labelling requirements at the provincial level) are eliminated. Further, the CETA's chapter on IPR may also generate gains for the EU if it provides for greater enforcement of anti-counterfeiting measures and border seizures.

For both Canada and the EU, outward FDI in the textiles sector is limited, and the sector represents a marginal amount of the EU's investment in Canada and vice versa. Further, with restrictions on investment in the sector limited in both the EU and Canada, it is not envisaged that investment liberalisation would significantly alter the impacts already reported.

Overall, the CETA is expected to benefit the EU's manufacturers of textiles, clothing and leather products, with the removal of tariffs and resolution of NTBs likely to produce the greatest gains. Within the EU, the largest beneficiary is likely to be Italy (most notably in leather products, textile yarn and fabric, clothing, hand bags and travel goods and footwear) with lesser gains accruing to Germany (clothing, footwear and textile yarn and fabric) and France (leather products, handbags and travel goods, clothing and footwear). While small in terms of overall value, relative gains may also be significant for new Member States such as Bulgaria and Romania in the area of apparel.

INDICATOR: Employment

BASELINE

Employment in Canada's textile and clothing industry has witnessed significant declines in recent years, with the number employed in the textiles, apparel and footwear sector falling 45.4% since 2004 alone (Table 47).⁵¹¹

Table 47: Employment in Canada's textiles industry, 2004 & 2008

Sector	2008 Employment	Change since 2004
Textiles	24,300	-45.6%
Apparel	44,400	-46.5%
Footwear	2,700	-28.9%
Total	71,400	-45.4%

Source: Industry Canada

The EU textile industry employed 2.04 million in 2009, with the majority employed in the production of

⁵¹¹ Industry Canada

clothing and apparel.⁵¹² As in Canada, the EU's textile and clothing sector has experienced decreases in employment in recent years as increased exposure to competition from low cost providers has placed increasing pressure on EU manufacturers to adjust. As a result, the EU industry has shifted its focus towards production of more high value products, innovation and design and increasingly shifted production to such areas as the Euro-Mediterranean Zone. These trends are also similar across the EU's footwear and leather industries with both exhibiting losses in employment in recent years.

ANALYSIS

Canada

The overall impact on employment from the CETA will depend on the level of liberalisation as well as the rules of origin agreed to. The most positive impact would likely arise under full removal of tariffs and rules of origin that allowed a significant amount of exports from Canada to qualify for preferential tariffs. Hereto, CGE model results suggest that the full removal of all tariffs would likely have a small positive impact on employment in the textiles and apparel sector, with limited declines in employment for those engaged in the production of leather products. Conversely, scenarios that model less ambitious liberalisation of tariffs project minor declines in employment across all three sectors over the long-term. Across all scenarios, the overall impact on employment in Canada is observed to be limited (Table 88 Annex 6).

Restrictive rules of origin would likely stifle these small increases in employment for the sector or exacerbate projected declines in the demand for labour across the industry as whole. These declines in employment would most directly affect the industries in Quebec and Ontario as they are the leading producers of textiles, apparel and leather products in Canada.

EU

Overall, it would appear that the CETA is likely to positively impact employment in the EU's textiles, apparel and leather sectors, with the magnitude of potential gains dependent on the level of tariff reductions, the removal of NTBs and the rules of origin agreed to. Specifically, the CGE model estimates that the removal of tariffs in Canada would stimulate gains in employment within the EU by as much as 0.1% in the textiles sector, 0.14% in apparel and 0.19% in leather manufacturing. Across all three industries, the greatest gains are observed in Scenario A.

These gains would be particularly concentrated in the EU's SMEs (less than 50 employees) as they are the driving force of activity and employment in the sector, accounting for more than 90% of employment and 60% of value added.⁵¹³ As the industry's largest producers are Italy, France, the UK, Germany and Spain – which together account for approximately 75% of production – it is likely that job increases will be concentrated in these Member States. Gains in the apparels sector, however, may provide greater relative benefits to southern and new Member States, particularly as this sector is more labour intensive. In terms of leather production, moreover, gains are again likely to benefit SMEs (around 20 employees) and in particular areas that have limited industrial diversity, most notably in the southern Member States of Italy, Spain and Portugal.⁵¹⁴

⁵¹² Euratex (2009)

⁵¹³ DG Enterprise

⁵¹⁴ Ibid.

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

The CETA is not expected to lead to significant degrees of displacement in the textiles, apparel and leather manufacturing sectors and may in fact lead to job creation in these sectors. The outcome is largely contingent on the CETA fully removing tariffs in the EU while adopting rules of origin that are not overly restrictive to Canadian exports. Under such a scenario, it is possible that the CETA will generate a limited amount of jobs that could benefit lower skilled workers, particularly for migrants and women. If the CETA adopts restrictive rules of origin, it is possible that there may be minor amounts of displacement in these sectors, negatively impacting these social groups. Overall, however, the impact is expected to be minor.

EU

The economic modelling results suggest that employment within the EU's textiles, apparel and leather manufacturing sectors will increase as a result of the CETA. Gains in employment would likely be greatest in the apparel and textiles sectors, with smaller nominal increases expected in the leather manufacturing sector.

Table 48: Employment in the EU's textile, clothing and leather manufacturing sectors

Sector	Employment
Textiles	862,000
Apparel	1,175,000
Leather	50,800

Source: Eurostat

Overall, the CETA is expected to have a positive impact, though overall it is limited. The workforce in apparel and leather products is generally lower skilled than the industrial EU average and as such, gains for the industry could provide greater employment opportunities for lower skilled individuals who are typically more greatly impacted by prolonged periods of unemployment. To this end, expansion of the industry's workforce could have a positive impact on poverty.

Women make up a larger share of the apparel and leather sectors' workforces, implying that increased employment could have positive gender effects. Further, with expansion of the industry into Eastern Europe, it is likely that women in these areas would disproportionately gain through the increased opportunities for employment.

With respect to leather, employment in the sector often occurs in regions that have limited industrial diversity. To this end, increases in employment could benefit these regions by increasing opportunities and wages, while ensuring that communities that thrive on a specific type of production can continue to ensure an adequate livelihood.

INDICATOR: Quality & decency of work**BASELINE & ANALYSIS*****Canada***

The high rates of job losses in the textiles, apparel and leather manufacturing sectors in recent years are likely to engender feelings of job insecurity among those who have not lost their jobs. To the degree that the CETA adopts restrictive rules of origin, inducing labour to shift out of the sector, these perceptions of insecurity are likely to worsen, lowering job satisfaction and overall enjoyment of life. On the other hand, where tariff liberalisation is combined with less restrictive rules of origin, it is unlikely such an outcome will arise.

Unionisation rates in textiles, apparel and leather products are lower than the national average and have exhibited significant decreases in recent years. Collective bargaining and the rights of association could, however, be strengthened by the CETA's ability to reaffirm the ILO's core labour standards (CLS) and under provisions that require Canada to ratify the ILO's *Right to Organise and Collective Bargaining Convention, 1949* (C.98). For detailed discussion on the social ramifications of the CETA as it pertains to core labour standards and the ILO's Decent Work Agenda see Box 14 in the mining and metal manufacturing sector.

EU

According to Eurofound, the textiles, apparel and leather sector performs worse than the EU average in a number of work quality indicators, including⁵¹⁵:

- exposure to ambient and ergonomic risks;
- control over the work process;
- intensity of work; and
- satisfaction with working conditions

With increased employment in these sectors, it is possible that workers will be more greatly subjected to these negative aspects, lowering the overall quality level of work. Workers could see their labour standards improved somewhat over the long-term, however, through the inclusion of a chapter on trade and labour that makes commitments to better implementation of the ILO's Core Labour Standards and Decent Work Agenda (See Box 14).

ENVIRONMENTAL ASSESSMENT***Canada***

Given the minor projected changes in output that is expected to arise in the Canadian textiles industry as a result of the CETA, it is not expected that there will be a significant environmental impact.

⁵¹⁵ Eurofound (2008).

EU

Pressure placed on the EU textiles, clothing and leather industries to comply with environmental regulations has intensified in recent years.⁵¹⁶ The primary issues revolve around reducing waste water levels, as well as combating the amount of chemicals contained in this water. In this regard, the leather industry, concentrated mostly in southern Europe, is the most hazardous. In addition to the liquid effluents produced in the clothing and textiles industry, the production of leather goods creates solid wastes which often contain chromium residue. As well, leather 'dust' can be carcinogenic and causes allergies, both of which represent a threat to the local population. Combined, the industries face a major challenge regarding its compliance with environmental legislation, not least due to a lack of trained individuals able to integrate these policies into the day-to-day running of the businesses

The CGE model indicates for the EU that a CETA will have only moderate impact on output in the EU textiles, apparel and leather industries, leading to no changes in GHG emissions.

Within this sector most companies operate at relatively small scale, thus are not obliged to submit pollutant data to the E-PRTR. Therefore very little data on the environmental impact of the industry is available, making a quantitative assessment difficult. Nonetheless, it is likely that the negative environmental effects of these industries – chemical waste and effluents, inefficient water usage – increase moderately, although with improved regulatory enforcement, these problems may be mitigated.

5.2. USA, MEXICO & OTHER THIRD COUNTRIES

USA

Overall, the impact of the CETA on the industrial products sector in the United States is expected to be limited, with the magnitude of the impact dependent on the level of liberalisation. The primary impact is likely to be derived from the erosion of preferences with Canada vis-à-vis the EU and the accompanying trade diversion that is stimulated by increased integration between the two signatories of the Agreement.

The elimination of tariffs between Canada and the EU could have the most direct impact on the textiles and transportation equipment sectors in the United States, given the high degree of integration observed in these industries in the U.S. and Canada. CGE estimates suggest that in the **auto industry**, full liberalisation could potentially lower output and exports in the United States, as Canada substitutes trade with the U.S. with trade with the EU. However, such an outcome is likely to be contingent on the CETA providing low rules of origin so as to allow Canadian manufacturers to qualify as 'originating' under the Agreement. Where the CETA adopts more stringent RoO, it is likely that the negative impact on the U.S. would be far less pronounced. Conversely, tariff liberalisation could stimulate increased output and exports of **other transport equipment** in the U.S. providing benefits to manufacturers of such equipment in the United States.

With respect to **textiles and apparel**, the impact on the U.S. is likely to again be influenced by the rules of origin agreed to under the CETA. Given the significant degree of integration stimulated by NAFTA, it is

⁵¹⁶ Eurofound (2004).

possible that a CETA that adopts less stringent rules of origin could foster declines in output and exports within the industry in the United States. Hereto, Canada's trade with the U.S. would be diverted to the EU, worsening the US trade balance with Canada in these products.

Other sectors are likely see limited changes in output and exports, though the overall impact is expected to be minimal.

The social impact within the industrial products sector is generally expected to be minor. Overall gains, though small, in manufacturing would likely lead to the creation of jobs in this sector which would likely be seen as beneficial in many of the US' declining manufacturing bases. Further, these sectors would likely provide a disproportionate amount of lower skilled jobs, benefitting those with lower skill sets and educational attainment.

In terms of the environment, the outcome of the CETA would likely be negative as production in the U.S. would shift away from sectors such as the services and towards those that are generally marked by production processes that generate more of an environmental toll, including mining and metal manufacturing and transportation equipment. However, given the marginal increases in output predicted by the CGE model, environmental impacts should be modest. In terms of GHG emissions, the results of the E3MG model show a neutral impact on the aggregate in the United States.

MEXICO

Overall, the CETA is expected to have a negligible economic impact on Mexico's industrial products sector. As with the United States, the primary impact is likely to be derived from the erosion of preferences with Canada vis-à-vis the EU but also of preferences enjoyed as a result of an FTA Mexico has with the EU. Changes at the sub-sectoral level are generally estimated to be limited, with the most prominent changes likely to again be observed in the automotive and textiles/apparel sectors.

Specifically, CGE estimates suggest that full liberalisation could potentially lower output and exports in Mexico's **auto industry**, largely as Canada diverts trade away from its NAFTA partner and toward the EU. However, such an outcome is likely to be highly contingent on the CETA providing low rules of origin so as to allow Canadian manufacturers to qualify as 'originating' under the Agreement. Where the CETA adopts more stringent RoO, it is likely that the negative impact on Mexico would be far less pronounced.

With respect to **textiles and apparel**, the impact on Mexico is again likely to be influenced by the rules of origin agreed to under the CETA. Given the significant degree of integration stimulated by NAFTA, it is possible that a CETA that adopts less stringent rules of origin could foster declines in output and exports within the industry in Mexico.

Other sectors would likely see limited changes in output and exports, though the breadth of the impact is expected to be minimal overall.

In general, the limited economic impact of the CETA on Mexico will also likely engender a limited social and environmental impact.

OTHER THIRD COUNTRIES

In most of the industrial sectors, the expected impacts from the CETA on Third Countries are not likely to be significant. This is due to the current high concentration of industrial activity within the EU and of existing trade patterns between the EU and other large economies such as China, India, the USA and the Russian Federation. The predicted shift in Canada with interests moving away from the extractive sectors and instead moving more towards developing profitable upstream industries, combined with a higher output from the EU, would open space for higher levels of imports of raw materials from Third Countries. Given the likeliness of higher input demands from the EU and an eventual expansion of FDI from the EU and Canada towards resource-rich LDCs, the impact might be more noticeable in the specific subsectors of the LDCs' extractive industries.

According to the preliminary CGE model results, the CETA will affect the EU and Canada differently in each sector, which, in turn, will produce varying effects on Third Countries. Table 49 summarises these effects and identifies the more affected Third Countries.

The positive economic impact on Third Countries may be accompanied by positive social effects in terms of employment and income. In addition, if labour standards and domestic social policies are adequately formulated and implemented, a reduction in poverty and other vulnerabilities could also be expected. LDCs might also benefit from stronger regulation that could be introduced under CETA in order to harmonise environmental regulation between the EU and Canada.⁵¹⁷

⁵¹⁷ An example of this could be the Bill C-300 proposed in the House of Commons of Canada to promote corporate accountability for the activities of mining, oil or gas in developing countries. (Second Session, Fortieth Parliament, 57-58 Elizabeth II, 2009) (<http://www.parl.gc.ca>).

Table 49. CETA expected effects on Third Countries (based on Scenario D – Full trade liberalisation and ambitious services liberalisation)

	Sector	EU	Canada	Effects on Third countries according to the CGE model	Third Countries most likely affected (EU's providers at 90%)	Observations
Forest	Wood – logging	Insignificant	Positive and moderate	Expected decrease in South American countries which the EU has trade agreements with. Potential increase in countries such as Uruguay, Paraguay, Brazil, Chile. Likely direct effect on demand of wood from Russia and the USA	China, Russian Federation, USA, Latvia, Brazil, Switzerland, Indonesia, Estonia, Malaysia, Norway, Cameroon, Ukraine, Gabon, Lithuania, Cote d'Ivoire, Bosnia and Herzegovina, Thailand, Belarus	This could change with agreements on investments
	Paper	Insignificant	Negative and fairly insignificant		Pulp of wood: Brazil, USA, Chile, Norway, Uruguay, South Africa	
Mineral fuels and oils	Coal	Insignificant change	Insignificant change	Expected slight increase in USA, none in Mexico.		
	Petrol. and petrol. products	Insignificant change	Insignificant change	No expected effects other than a minor increase due to a decrease in Canadian oil exports.	Russian Federation, Norway, Libya, Algeria, Kazakhstan, Azerbaijan, Nigeria, Saudi Arabia, USA, Iraq, Iran, Angola, Switzerland, Australia, Venezuela, Egypt, Qatar, Syria	Liberalisation of investments may increase Canadian production of sand oil, which may reduce imports from Third countries
Mineral metals and non metals	Metal ores, gems	Insignificant	Insignificant	Potential increase might come from other sectors demand of raw minerals.	Brazil, South Africa, Peru, Chile, USA, Australia, Ukraine, Argentina, Mauritania, Russian Federation	Overall positive effect on the USA and Mexico
	Ferrous metals (iron and steel)	Insignificant decrease of steel	Insignificant	Increased competition from BRIC countries for raw materials	Russian Federation, Ukraine, China, South Africa, Korea, USA, India, Turkey, Switzerland, Norway, Brazil, Japan, Serbia and Montenegro, Chinese Taipei, Macedonia, Kazakhstan, Mexico, Venezuela	
Auto and other trans.	Auto.	Increase	Decrease		Japan, Turkey, USA, China, Korea, Mexico, India, Chinese Taipei, Brazil, South Africa	
	Other	Decrease	Decrease	Increase in Mexico and USA	idem	

equip.	trans. equip.					
Textile, apparel and leather	Textile	Moderate increase	Insignificant	Potential significant increase in LDCs	China, India, Turkey, Pakistan, Korea, Mexico, Japan, Switzerland, USA, Chinese Taipei, Indonesia, Thailand, Egypt, Israel, Brazil, Tunisia	
	Apparel	Moderate increase	Moderate increase	Potential significant increase in LDCs	China, Turkey, Bangladesh, India, Morocco, Tunisia, Hong Kong, Indonesia, Viet Nam, Sri Lanka, Pakistan, Thailand, Macedonia, Ukraine, Switzerland, Cambodia	
	Leather	Moderate increase	Moderate decrease	Potential moderate decrease in USA leather production	China, Viet Nam, India, Indonesia, Tunisia, Brazil, Thailand, Bosnia and Herzegovina, Morocco	

Environmental impacts

In terms of environmental impact, the preliminary modelling shows that CETA may lead to insignificant changes in the Canadian and EU production of minerals, and a fairly insignificant decrease of coal exports. This last effect could be compensated for by increases in third countries, mostly in the ACP and MERCOSUR, thus shifting environmental impacts from Canada to these regions. However, given that most of the CETA effects refer to insignificant changes in the GDP of USA, Mexico, and China, and an overall decrease of GDP in most of the rest of third countries, the environmental impact of this reduction cannot be fully assessed due to a lack of quantitative environmental data on Third Countries by the specific sectors that will be affected.

Metals and minerals

INDICATOR: Natural resources stocks – Mineral usage, pollution

BASELINE

Under the current trade regime, the EU imports metal and mineral based commodities from Canada, but also from a large number of other trade partners. Table 50 lists the metal based commodities imported by the EU-27 to more than 2% from Canada, and the main other sources of imports.

Table 50. Main sources of metal and mineral product import to the EU-27, 2007, in Mio. US\$⁵¹⁸:

26 : ORES, SLAG AND ASH		28 : INORGANIC CHEMICALS; ORGANIC OR INORGANIC COMPOUNDS OF PRECIOUS METALS, OF...		71 : NATURAL OR CULTURED PEARLS, PRECIOUS OR SEMI-PRECIOUS STONES, PRECIOUS...	
<i>MERCOSUR</i>	6,384	Canada	4,150	<i>ACP</i>	11,451
Brazil	5,603	Russian Federation	3,242	South Africa	8,592
<i>ACP</i>	3,350	United States	2,969	Switzerland	7,367
United States	2,953	<i>ACP</i>	1,584	United States	5,067
<i>OPEC</i>	2,835	China	1,513	Russian Fed.	3,584
Chile	2,631	Norway	723	<i>SAARC</i>	3,213
<i>ASEAN</i>	2,575	<i>MERCOSUR</i>	483	China	3,011
Indonesia	2,553	Jamaica	478	India	2,907
Australia	2,429	Niger	477	Israel	2,816
Peru	2,086	Brazil	465	Canada	2,696
Canada	2,033	Chile	457	<i>OPEC</i>	2,491

⁵¹⁸ OECD

75 : NICKEL AND ARTICLES THEREOF		76 : ALUMINUM AND ARTICLES THEREOF	
Russian Fed.	2,213	Norway	5,931
Canada	1,858	Russian Fed.	4,335
Australia	1,237	ACP	2,683
United States	1,200	MERCOSUR	1,806
Norway	442	Switzerland	1,772
New Caledonia	291	Brazil	1,750
MERCOSUR	239	Mozambique	1,616
Brazil	238	China	1,547
ACP	166	United States	1,304
South Africa	144	OPEC	1,271
Switzerland	70	Canada	1,225

78 : LEAD AND ARTICLES THEREOF		81 : OTHER BASE METALS; CERMETS; ARTICLES THEREOF	
Australia	414	United States	1,706
Morocco	120	China	1,371
Peru	76	Russian Fed.	479
Poland	70	Japan	443
Kazakhstan	61	ACP	343
Russian Fed.	52	Congo, Dem.Rep.	158
OPEC	48	Canada	140
Israel	48	Switzerland	137
Canada	29	Kazakhstan	136
Switzerland	29	Zambia	111
China	29	Australia	82

ANALYSIS

The results from the CGE model and the additional considerations outlined above suggest insignificant change in Canada and the EU outputs, and a moderate decline in coal exports from Canada. Nonetheless, the EU will continue to consume large amounts of metals, minerals and mining products. Under this scenario the demand from the EU manufacturing industries will require importing a larger percentage of its commodities of these metals from Third Countries, potentially causing environmental impacts in these countries. However, this expansion is likely to induce the increase of wages for skilled labour. It might also have some effect on government revenue.

Specifically, the imports of inorganic chemicals and ores from countries other than Canada are expected to increase, most notably from Brazil, the USA, Chile, and the Russian Federation. Assuming that these countries aim to meet the increased demand from the EU by increasing their production, the CETA will contribute to accelerated depletion of non-metal mineral resources in these countries.

Regarding nickel, aluminium and lead products, the EU will substitute decreasing Canadian production of these materials with imports from third countries, notably from the Russian Federation, Australia,

Norway, the USA, and China.⁵¹⁹ Therefore, in these countries the CETA will contribute to accelerated depletion of metal mineral resources in addition to water and air pollution due to the highly polluting production processes for these materials.

Modelling results also predict limited increase in output of most of the rest of industrial sectors. This could lead to potential positive social impact by increasing employment opportunities. Its impact on the environment is not predictable at aggregated level

⁵¹⁹ OECD

6. SERVICES SECTOR ASSESSMENTS⁵²⁰

Summary

*Liberalisation in the services sector is likely to have a positive **economic impact** in the EU and Canada and has the potential to produce the greatest gains on both sides with a CETA that provides ambitious liberalisation in trade and investment in the services industries.*

*The CETA is likely to lead to increases in output and exports of **maritime transport services** for both the EU and Canada. Increased merchandise trade resulting from the CETA will directly increase the demand for maritime transport services, increasing output and exports. Provisions in the CETA that would enhance the positive gains in these indicators would include liberalisation of feeder services and repositioning in Canada which would lower costs, increase competitiveness and efficiency and also spur greater levels of FDI in Canada's maritime transport sector.*

While the CETA could contribute to the development of Canada's underdeveloped short-sea shipping industry, it is less likely that the CETA would lead to wider liberalisation of cabotage in general. Additional related benefits include the upgrading of Canada's maritime fleet through the potential removal of prohibitive tariffs on imported new vessels as well as increased investment in Canada's ports and greater attractiveness as ports-of-call vis-à-vis U.S. ports along the Atlantic, St. Lawrence and Great Lakes. In the EU, large shipping firms are likely to benefit directly through increased access to Canada as well as through improved global competitiveness.

*The CETA has the potential to significantly impact the Canadian **telecom** sector, primarily through its ability to liberalise Canada's foreign ownership restrictions. If the CETA results in the removal of these restrictions, it is likely that the economic impact in Canada will be pronounced, with sizeable increases in inward FDI, output and exports occurring over the long-term. Additional benefits would occur through improved competitiveness in the industry, which would serve to enhance technological acquisition of*

⁵²⁰ **Introductory notes:** This section contains an analysis of the economic, social and environmental impacts expected from the CETA on the services industry in the EU and Canada as well as in third countries. The scoping analysis has flagged 4 sub-sectors within the services industry which will be individually assessed for the EU and Canada: transportation services, telecommunications, financial services and business services. These four sub-sectoral analyses for Canada and the EU are followed by a broader assessment for other third countries such as Mexico and the United States which addresses only those areas within their services industries that are likely to be impacted by the CETA.

The economic assessment is derived largely from a CGE model that estimates the impact of the CETA on output, exports, balance of trade and employment. Four liberalisation scenarios were modelled in the final simulations, with each modelling full removal of tariffs on all industrial products and cuts in service trade costs as noted in Annex 1. The difference between these four scenarios is in i) tariff liberalisation applied to sensitive agricultural products; and ii) the assumed liberalisation of the services sector, with Scenarios B and D employing a more ambitious liberalisation in services (taking as its basis the cuts used in the 2008 Joint Study) and Scenarios A and C a less ambitious liberalisation in services (taking the cuts in Scenario B/D multiplied by a factor of 0.6).

It is important to note that results (located in Annex 6) should be interpreted as reflecting the impact of the CETA itself on these indicators and does not necessarily imply overall changes in the country's output or exports, which could be further affected by exogenous factors. All estimated impacts are to be understood as occurring over the long-term (e.g. in 10+ years) after final implementation of an Agreement. As data limitations made it impossible to incorporate investment effects into the CGE model, the results take into account the impact of trade liberalisation only and do account for the impact from investment liberalisation, which is instead assessed qualitatively.

More information on the CGE model, its assumptions and the scenarios employed can be found in Annex 1.

Canadian telecom companies and help to stimulate their expansion into foreign markets. Canadian consumers would likely benefit substantially from reduced prices, improved service and wider selection. EU telecom companies would also benefit by increased access to the Canadian market, spurring increased investment through establishment and acquisitions. While such an outcome may not impact output and cross-border trade within the EU, it would benefit EU exports via mode 3. Additional benefits could be achieved by the CETA's granting of non-discriminatory access to infrastructure and networks, though this is likely to have less of an impact than the removal of ownership restrictions.

The CETA is unlikely to have a pronounced economic impact on output, trade (as it pertains to cross-border trade and sales through foreign affiliates) and investment in the **financial services** sector of either Canada or the EU. Restrictions are already generally low in both jurisdictions, with the main barriers to trade and investment generally viewed as prudential. Specifically, the 'widely-held' rule is generally credited with fostering the soundness of the Canadian financial system and is also non-discriminatory by applying equally to Canadian and foreign firms. Where the CETA is likely to impact the financial services sector is through its ability to legally bind the existing levels of liberalisation, ensuring their future continuation and providing a positive signal to investors on both sides of the Atlantic. Further, the CETA could improve transparency by requiring Canadian Provinces to list their limitations to financial services. Such an outcome, while unlikely to engender significantly different levels of production, trade and investment, would nevertheless be positive, if limited, in its overall impact.

The CETA is expected to have a positive economic impact on non-financial **business services** within both Canada and the EU, with greater gains likely to accrue under an agreement that provides higher degrees of liberalisation. However, given the absence of restrictions for most sub-sectors within the business services sector, the overall impact from the CETA may be limited, and instead serve to make the existing level of liberalisation legally binding. Nevertheless, liberalisation could yield benefits in certain subsectors where specific barriers are present, while improvements in the temporary movement of labour could serve to benefit trade and investment across the entire sector. Liberalisation of both at-the-border and behind-the-border restrictions on temporary movement of professionals would likely serve to increase the level of cross-border trade as well as the investment and trade occurring via foreign affiliates, providing greater benefits than those estimated in the CGE model. In order to realise the greatest gains, it will be important for the CETA to foster mutual recognition agreements (MRAs) allowing professionals to have their qualifications/certificates recognised in both Canada and the EU. This, however, is complicated by the fact that the authority to sign MRAs resides with professional organisations at the national/provincial level. The CETA could, however, help to facilitate MRAs by developing a framework for their negotiation, which could help facilitate temporary movement of professionals between the two sides.

The **social impact** arising from the CETA's effect on the services sector is likely to be limited. While it is questionable that the CETA will require all EU Member States to ratify the ILO's Maritime Labour Convention (MLC), it could nevertheless have a positive impact on **quality and decency of work** by putting in place a mechanism for cooperation and dialogue on labour issues as well as promotion of the ILO's MLC in third countries. The CETA could also commit to greater collaboration on safety and security issues associated with maritime transport services.

There are concerns in Canada that the liberalisation of foreign ownership restrictions in telecom could indirectly compromise Canadian **cultural objectives** given the increasing vertical integration of telecom companies that is blurring the line between carrier and content provider. It is unclear whether carriage can be effectively separated from content, though to the degree that domestic policy can be effectively structured so as to maintain Canadian content requirements, it is envisaged that any adverse effect on culture can be mitigated.

The CETA's **environmental impacts** arising from liberalisation in the services sector are likely to be minor in the EU and Canada. The greatest impact is likely to arise in the transportation services as significant growth in maritime transport across the Atlantic is expected. This could lead to increased pressures on watercourses as a result of increased traffic and infrastructure demand as well as increased GHG emissions. At the same time, any adverse impact could be partly offset if EU investment in Canada supports a shift from road to maritime transportation, particularly through the development of Canada's short-sea shipping industry.

To the degree that expansion in the services sector attracts resources away from more environmentally harmful sectors (such as in the manufacturing and extractive industries), the environmental impact from the CETA could be mitigated over the long-term.

6.1. EU & CANADA

As is typical in developed economies, the services sector has become the predominant source of economic activity in both Canada and the EU. Services account for nearly 60% of Canada's total value-added and over 70% of its employment, and for approximately 65% and 63% of value-added and employment, respectively, in the EU.⁵²¹ With both economies more heavily oriented towards services, there is significant potential for a CETA between the EU and Canada to generate its greatest gains as a result of liberalisation within the sector.⁵²²

This potential is further influenced by the fact that the existing applied tariffs on goods in EU-Canada bilateral trade are, on average, low.⁵²³ Services, on the other hand, are not levied with tariffs due to their high degree of intangibility, and are instead subject to a number of non-tariff barriers (NTBs). Non-tariff barriers to trade and investment in services can take a number of forms such as foreign equity restrictions and commercial presence requirements but are largely based – especially between OECD countries such as Canada and many EU Member States – on the degree to which sectoral regulations differ between two jurisdictions.⁵²⁴ While NTBs are prevalent in the bilateral trade of goods (e.g. SPS issues in agriculture), they are particularly pronounced in trade and investment within the services sector; most notably due to the sector's greater contribution to GDP in both economies as well as the fact that all restrictions are in the form of NTBs.

However, the fact that restrictions to trade in services are solely in the form of NTBs makes analysis of the impact of liberalisation through the CETA inherently more complicated than in the goods sector. This is largely a result of the difficulty in both identifying these barriers and quantifying them, with a widely agreed to methodology for doing so still in its early stages.

⁵²¹ WTO Statistical Database

⁵²² See specifically the 2008 Joint Study as well as The Conference Board of Canada's 2010 study 'Canada's "Missing" Trade With the European Union' which have reached similar conclusions as to the CETA's potential impact.

⁵²³ According to the 2008 Joint Study, Canadian goods exported to the EU faced an average applied tariff rate of only 2.2% in 2007, whereas EU exports to Canada faced a rate of only 3.5%.

⁵²⁴ Nordas, H.K. and H. Kox (2009).

Further complicating an assessment of services trade and investment and the impact from liberalisation is the fact that trade in services can generally be conceptualised as occurring (independently or simultaneously) across four modes, which as defined by the WTO consist of⁵²⁵:

- **Mode 1 – Cross border supply:** services from one country flowing to another country;
- **Mode 2 – Consumption abroad:** where a service consumer moves into another country to obtain a service;
- **Mode 3 – Commercial presence:** where a service supplier establishes a presence in another country to provide a service; and
- **Mode 4 – Presence of natural persons:** where persons of a country enter another country to supply a service.

The existence of these different modes implies that when measuring the potential impact of liberalisation one must have an understanding of not only the barriers to trade, but also how these barriers manifest themselves across each of the four modes through which services can be delivered. OECD countries (like Canada and many EU Member States) typically have low explicit barriers to services trade, with the majority of the factors inhibiting market access stemming from different approaches to regulation.⁵²⁶ Differences in regulations between Canada and the EU raise compliance costs, impacting trade both with respect to overall trade flows but also by determining which of these 4 modes serve as the dominant method of trading the service.

Liberalisation of the services sector, therefore, cannot be captured in the same way as liberalisation of trade in goods – i.e. primarily through analysis of cross-border trade. While cross-border trade in services (mode 1) is significant – and has been bolstered through advancements in ICT that have lowered communication costs and enhanced the ability of service providers to serve customers in distant locales – for many subsectors within the services industry, the majority of trade occurs not across borders but rather by establishing a commercial presence in a foreign market (mode 3). This is particularly the case in terms of EU-Canada bilateral trade in services, as commercial presence tends to be more dominant when two countries share similar regulations, business environments and a common language.⁵²⁷ To this end, a 2010 study by *The Conference Board of Canada* finds that sales by foreign affiliates serve a far larger role in bilateral trade than do cross-border exports and that this is particularly the case for the services sector.⁵²⁸

This conceptualisation of trade in services as including other modes of delivery besides just cross-border trade highlights several key points. First, trade in services is generally underrepresented in trade statistics. Second, with foreign affiliate trade in services (FATS) playing such a predominant role in not only bilateral trade in services, but also total bilateral trade, the issue of establishment (i.e. Mode 3) becomes a focal point of any assessment on liberalisation in the services sector.

⁵²⁵ http://www.wto.org/english/tratop_e/serv_e/gatsqa_e.htm#4

⁵²⁶ Nordas, H.K. and H. Kox (2009).

⁵²⁷ Ibid.

⁵²⁸ Goldfarb, D. & L. Theriault (2010).

In fact, under the authors' methodology, it is found that when including sales from EU affiliates located in Canada, trade in services from the EU to Canada are nearly identical to EU goods trade with Canada in 2008.

It is therefore, almost impossible to conduct an assessment of a CETA's impact on the services sector without examining potential barriers to establishment by foreign firms. And, as establishing a local presence in a foreign market is most commonly accomplished through FDI (with mergers and acquisitions constituting the primary form of establishment), an assessment of the CETA's impact on the services sector must also take into account the role of potential liberalisation in investment within the sector (See Box 19 for problems in measuring FATS and FDI).⁵²⁹

Box 19: FDI versus FATS⁵³⁰

While foreign direct investment and foreign affiliate trade statistics are closely related there is an important difference in the manner which they are statistically measured. Within the EU, for example, Eurostat has clearly defined rules for classifying when and to whom to accumulate statistics on investment and foreign affiliate trade. One such rule is the 50%-10% rule, which counts outward FATS only when the company established abroad is majority EU owned. This is in contrast to FDI statistics which count outward FDI as occurring when an EU company controls 10% or more of voting power. Another distinction is in the ultimate controlling institution (UCI) and immediate counterparty country, where FATS are assigned to the UCI (or parent company) while FDI may be misrepresented by being assigned to its most immediate destination even though it may be destined for a third country.⁵³¹

These classifications certainly lead to discrepancies in the statistics, with FATS likely to be underrepresented and FDI not necessarily reflecting the actual level of investment that may take place bilaterally between two trading partners.

Canadian FDI in the EU has grown substantially over the past several decades and has been a primary driver of foreign affiliate sales in the EU. Of the total stocks of Canadian FDI located in the EU in 2008, 80% (\$121 billion) was held in the services sector, further supporting the claim that mode 3 trade in services plays an important role in bilateral trade of services. While services play a less predominant role in EU FDI in Canada (39.6% of \$164 billion invested by the EU in Canada in 2008), the sector has experienced annual growth in investment of approximately 10% since 2000, which is nearly twice the rate of growth in EU investment in Canada's goods sector.⁵³²

An additional restriction on bilateral trade in services relates to the temporary movement of business persons between jurisdictions (mode 4).⁵³³ These restrictions generally come in the form of difficulties with regards to the recognition of professional qualifications (e.g. licences or certifications); difficulties in receiving work visas; and citizenship requirements that restrict the ability of a professional to deliver a service in a jurisdiction in which they are not a citizen/resident. In a bilateral context, mode 4 is likely to play a more prominent role in EU-Canada trade of services than it would with other trade partners. This

⁵²⁹ Ghemar et al. (2005).

⁵³⁰ See: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Balance_of_payments_-_FATS

⁵³¹ For example, investments that are sent from Canada to the Cayman Islands and then to the EU would be classified as being investment from the latter.

⁵³² Goldfarb, D. & L. Theriault (2010).

⁵³³ See specifically: Goldfarb and Theriault (2010), Ghemer et al (2005) and the 2008 Joint Study among others.

is supported by data from the 2006 Canadian census which shows that Europeans make up approximately 21% of all temporary workers in Canada.⁵³⁴

Measuring mode 4 is, however, again complicated by a lack of data, and by the fact that it is often complementary to other modes (most notably 1 and 3). So, while modes 1 and 3 may account for more than 80% of global trade in services, mode 4 is often a key facilitating factor to trade in services that is measured primarily through cross-border trade or a sale by a foreign affiliate.⁵³⁵ Further, as mode 4 commitments tend to entail a greater degree of sensitivity than modes 1 and 3, its liberalisation is generally crafted along different parameters.⁵³⁶

In summary, the economic assessment of the CETA's impact on the services sector is complicated by:

- the 4 modes through which trade in services can occur;
- the lack of data on trade in services – particularly through modes 3 and 4 – and the possibility of several mode occurring simultaneously in certain delivery of services; and
- the fact that restrictions to trade in services are entirely made up of NTBs and the limited data on these restrictions leading to inherent subjectivity in quantifying their cost and impact on trade.

It is important to recognise these limitations when interpreting the results of economic modelling, and to note that the results estimated by the CGE model are likely to be understated by failing to account for the sizeable role that services have in bilateral trade and investment.

6.1.1. Transportation Services

ECONOMIC ASSESSMENT⁵³⁷

INDICATOR: Output, trade & investment

BASELINE

Transportation services are crucial to the global economy. They facilitate the trade of goods and movement of people while ensuring that countries are able to receive a stable supply of food, energy

⁵³⁴ Thomas, D. (2010).

⁵³⁵ Roy, M., et al (2006).

⁵³⁶ Ibid.

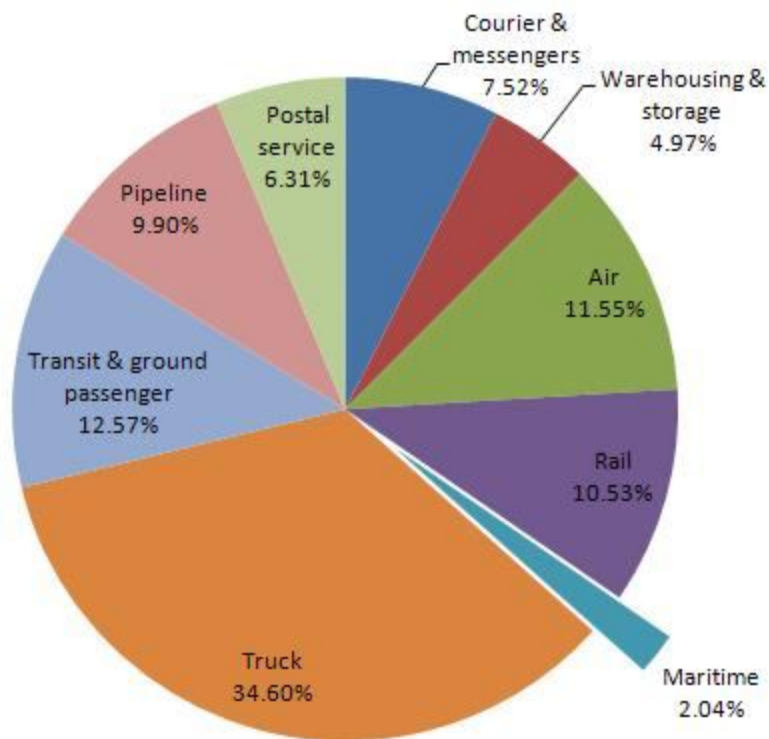
⁵³⁷ CGE results for the transportation services sector are reported according to the GTAP database sectoral aggregation which divides the industry across maritime transportation services (*water*), air transportation services, and all other transportation services sectors. The latter of these primarily includes land transportation such as road and rail, but also pipeline transport and travel agencies.

The impact of the CETA on Canada and the EU's air transportation services is likely to be minimal, as the recently agreed to *Canada-EU Air Transport Agreement* has addressed measures to improve bilateral trade in this area (See Box 20). As such, the primary impact of the CETA on transportation services is expected to be largely in maritime services, and the focus of the following assessment will largely be placed here.

and other key commodities. Changes in technology⁵³⁸ and increased liberalisation have allowed transportation services to function more effectively and efficiently while improving service and ultimately pushing down prices for consumers worldwide.

Within the EU, transportation services⁵³⁹ generated turnover of \$1.66 trillion in 2007, contributing approximately \$685 billion in gross valued added (4.6% of the EU total). Of this, maritime transportation accounted for \$144.3 billion in turnover.⁵⁴⁰ Similarly, transportation services accounted for 4.5% of Canada's GDP in 2009.⁵⁴¹ Herein, truck transportation is the largest sector, followed by transit and ground passenger transportation, air transportation and rail transportation. Maritime transport, as shown in Figure 5, accounts for only a minor percentage of output in the transportation services sector in Canada.

Figure 5: Output of transportation services in Canada by subsector (2009)



Source: Statistics Canada

While the above statistics show that maritime transport services provide only a marginal direct contribution to GDP in both Canada and the EU, this data does not reflect the essential role the sector has as a facilitator of trade. Approximately 90% of the world's freight is delivered by sea and, in many

⁵³⁸ As an example, containerisation is one of the most important technological advancements in the history of maritime transport services, with standardisation of intermodal containers drastically improving efficiency in shipping and lowering transport costs.

⁵³⁹ Includes storage, warehousing and other auxiliary activities

⁵⁴⁰ EC (2010b)

⁵⁴¹ Statistics Canada

instances, maritime transport serves as the only means of effectively delivering goods to foreign markets. Maritime transport is particularly important in the EU, with approximately 40% of its internal trade occurring via short sea shipping and 90% of its external freight delivered through maritime services.⁵⁴² The EU, as a whole, serves as a global leader in maritime transport services with three of the world's five largest container lines based in the EU.⁵⁴³ While only about 20% of the world's fleet flies an EU flag, EU ownership is over 30%, with Greece and Germany serving as two of the leading shipping countries worldwide.⁵⁴⁴ The EU's maritime industry displays a sophisticated level of technology and specialisation, boasting some of the world's most technologically advanced off-shore service companies, and the largest roll-on/roll-off (Ro-Ro) and merchant fleets.⁵⁴⁵

Canada, in contrast, does not own a significant portion of the global shipping industry, maintaining only approximately 1% of the world's fleet.⁵⁴⁶ Nevertheless, Canada does place similar importance on the shipping industry as a facilitator and promoter of trade. Canada boasts a significant amount of coastline as well as important commercial inland waterways in the Great Lakes/St. Lawrence system that stretches from the Atlantic to the central United States. While maritime transport accounts for only one-fifth of Canada's trade with the U.S. (due to the extensive land border between the two), it accounts for approximately 95% of merchandise exports from Canada to other countries, making it particularly important in terms of bilateral trade with the EU.⁵⁴⁷

In trade of maritime transport services, modes 1 and 3⁵⁴⁸ serve as the most relevant means by which international trade in maritime services occurs, with the former generally entailing liner shipping and bulk/tramp and other international shipping. For both Canada and the EU, international trade in transport services constitutes the second largest traded service (after travel services) occurring via mode 1. For Canada, transport services accounted for approximately 20% of the value of all cross-border trade in services (mode 1) in 2007 (\$29.5 billion), with maritime transport accounting for 38.1% of this amount.⁵⁴⁹ Canada, however, operates a significant trade deficit in mode 1 trade of transportation services with imports of \$18.5 billion in 2007, compared to exports of \$11.1 billion.⁵⁵⁰ This is similarly the case for its trade in maritime transport services, with total imports reaching \$7.8 billion in 2007 compared to exports of \$3.5 billion. In the EU, transportation services account for approximately one quarter of all mode 1 trade in services.⁵⁵¹ Exporting \$168.65 billion in transportation services in 2007, the EU maintained a trade surplus of \$27.95 billion in the sector.⁵⁵² As with Canada, the largest externally traded transportation service in the EU is maritime transport, which accounted for over half of the value (73% by volume) of the EU's total external trade in transportation services in 2008.⁵⁵³

With total bilateral trade of \$7.62 billion in 2007, transportation services form the single largest traded service (via mode 1) between the EU and Canada, accounting for approximately 31% of total bilateral cross-border trade in services. Unsurprisingly then, the EU is Canada's second most important partner in mode 1 trade of transportation services (behind the US), accounting for a quarter of Canada's total

⁵⁴² European Commission (DG TREN). http://ec.europa.eu/transport/maritime/index_en.htm

⁵⁴³ AP-Moller-Maersk (Denmark), CMA CGM (France) and Hapag-Lloyd (Germany)

⁵⁴⁴ Optimar (2010).

⁵⁴⁵ Group of Senior Shipping Professionals (2008).

⁵⁴⁶ Optimar (2010).

⁵⁴⁷ ACPA. <http://www.acpa-ports.net/>

⁵⁴⁸ See opening discussion under the Services Sector Assessments for a description of the 4 modes of trade in services as well as an outline of the nuances in measuring them.

⁵⁴⁹ UN Service Trade database

⁵⁵⁰ Ibid.

⁵⁵¹ Eurostat

⁵⁵² Ibid.

⁵⁵³ EC (2010b)

mode 1 imports of transport services and about 27.5% of its total mode 1 exports.⁵⁵⁴ Separated by the Atlantic, trade in maritime transport services plays an even larger role in bilateral cross-border trade in services. With the EU accounting for 27% of Canada's total cross-border trade in maritime services (42% of Canada's exports and 20% of its imports), the EU represents Canada's largest partner for mode 1 trade in maritime transport services.⁵⁵⁵ Overall, the EU maintained a slight trade surplus in 2007 with exports of maritime transport services to Canada totalling \$1.57 billion compared to imports of \$1.46 billion, which combined represented 12.3% of total trade in services (mode 1) between the two sides.

For Canada and the EU, mode 3 trade in transportation services generally entails the establishment of registered companies for the purpose of operating a fleet under the national flag of either Canada or an EU Member State, and other forms of establishment for provision of international maritime transport services. These 'other forms' can be broad but in many instances may take the form of an affiliate office that specialises in marketing (e.g. in securing sales for its services from customers located abroad). In both instances, the issue is difficult to separate from foreign investment and complicated further by the lack of detailed data on foreign establishments in the maritime transport sector in both the EU and Canada.

Outward investment in maritime transport services is greater than inward investment for both Canada and the EU. This is generally unsurprising given the movement over the past several decades to register fleets in open registry countries (e.g. Panama and Liberia) in order to capitalise from less restrictive regulations and cheaper labour markets. For example, maritime transport services accounted for approximately 36.3% (€12.9 billion) of the EU's FDI stocks in transport services abroad in 2005 and exceeded inward FDI stocks by over €5.5 billion.⁵⁵⁶ Canada, however, serves as an almost non-entity in the EU's foreign investment in maritime transport services, accounting for less than 0.2% of all stocks the EU had invested abroad in maritime transport as of 2005.⁵⁵⁷ Canada, meanwhile, has directed limited funds to the EU's transport sector with only €27 million in FDI stocks in the EU's maritime sector in 2005. Overall, the transportation services sector has been a marginal recipient of Canada's outward and inward FDI with the sector holding only 3.7% of all Canadian stocks residing abroad in 2009 (C\$22.05 billion) and 1.6% (C\$8.9 billion) of all inward FDI stocks.⁵⁵⁸

Box 20: Canada-EU Air Transport Agreement

As noted in the introduction, the impact of the CETA on air transport services is likely to be minimal due to the *Agreement on Air Transport between Canada and the European Community and its Member States* (the Agreement) which was reached in December 2009. For both Canada and the EU, the Agreement marks one of the most ambitious air agreements reached to date and establishes an Open Aviation Area between the two sides.⁵⁵⁹ The Agreement replaces bilateral agreements between Canada and individual EU Member States and is particularly noteworthy as 8 Member States previously had no such agreement with Canada (Cyprus, Estonia, Latvia, Lithuania, Luxembourg, Malta, Slovakia and Slovenia).

⁵⁵⁴ UN Service Trade database

⁵⁵⁵ Ibid.

⁵⁵⁶ Eurostat (2008).

⁵⁵⁷ Eurostat (2008).

⁵⁵⁸ Statistics Canada. While this is a fairly limited amount for Canada, it should be noted that the sector saw its total inward investment increase by over 123% from 2008 to 2009.

⁵⁵⁹ DG Transport. http://ec.europa.eu/transport/air/international_aviation/country_index/canada_en.htm

The Agreement is comprehensive and covers a number of areas including traffic rights and investment, safety and security, competition policy, consumer interests, environment and air traffic management. In terms of traffic rights and investment, specifically, the Agreement provides for a significant degree of liberalisation between the two sides, including⁵⁶⁰:

- unrestricted direct air service between Canada and EU Member states without limitations on price and the number of flights;
- flexible pricing arrangements;
- improved flexibility for cargo; and
- gradual liberalisation of foreign ownership rules that will allow EU nationals (Canadian nationals) to establish operations in Canada (the EU) while allowing investment in domestic airlines.

For both sides, the Agreement will allow for greater penetration into each others' respective market while fostering competition and the development of new services. Further, according to a study commissioned by the EC, the Agreement has the potential to bring economic benefits totalling a minimum a €72 million and the creation of 1,000 direct jobs in the first year alone.⁵⁶¹

Given the Agreement's scope and significant degree of liberalisation, it is envisaged that the CETA would be limited in its ability to liberalise the sector and impact the 3 pillars of sustainability discussed in this report. As such, and as mentioned above, this sector will forego detailed discussion on air transport services and the subsequent impact that a CETA would have on these services in Canada, the EU and other third countries.⁵⁶²

ANALYSIS

The CETA has the potential to impact maritime transportation services in Canada and the EU in a number of ways. Most directly, transport services, particularly maritime transport, are inextricably tied to trade. So, to the degree that the CETA increases merchandise trade between Canada and the EU, it is likely that transportation services will directly benefit from increased traffic and demand.

Given its global nature, the maritime transport industries in the EU and Canada would likely be best served by approaching liberalisation in a multilateral context rather than through bilateral preferential agreements such as the CETA. However, binding commitments on maritime services in the WTO have been largely unsuccessful (Box 21), providing opportunity for the CETA to address specific issues bilaterally that could ultimately benefit the maritime transport industries of both sides beyond just increased trade.

Preferential agreements in maritime transport can generally include three types of preferences: (i) cargo sharing agreements (CSAs); (ii) commercial presence; and (iii) access to ports and related services for foreign vessels.⁵⁶³

⁵⁶⁰ DG Transport: http://ec.europa.eu/transport/air/international_aviation/country_index/canada_en.htm; Transport Canada. <http://www.tc.gc.ca/eng/mediaroom/releases-nat-2008-08-h237e-2737.htm>

⁵⁶¹ <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1963&format=HTML&language=en>

⁵⁶² While estimates derived from the CGE analysis on air transportation services can be observed in the Annex, it is strongly recommended that the reader interpret these loosely.

⁵⁶³ Bertho, F. (2010).

Box 21: WTO negotiations on maritime transport services

As noted, WTO negotiations have failed to result in a binding multilateral agreement on maritime transport services. Under WTO negotiations, commitments on maritime transport services have been structured around three main pillars of access: (i) international ocean transport (international transport less cabotage, for which a number of countries have limited enthusiasm to include in negotiations), (ii) maritime auxiliary services (e.g. cargo handling services, storage and warehousing, customs clearance services, container station and depot services, maritime agency services, and maritime freight forwarding services) and (iii) access to and use of ports. In 2005, WTO members collectively recommended the maritime model schedule (MMS) calling for the ‘elimination of cargo reservations, of restrictions on foreign equity participation and on the right to establish a commercial presence both for international freight transport and for maritime auxiliary services’ as well as for ‘additional commitments on access to/use of port services and multimodal transport services as well as for the elimination of MFN exemptions’.⁵⁶⁴ The MMS remains the basis for making commitments on maritime transport services under multilateral negotiations.

The first of these, CSAs, are a type of cargo reservation and constitute one of the most common forms of protectionism in maritime transport.⁵⁶⁵ CSAs have, however, largely disappeared from the international landscape and are not present in terms of bilateral trade between Canada and the EU. Further, given the protectionist nature of CSAs and their negative impact on consumers, it would appear highly unlikely that the CETA would include such measures. Instead, the CETA would most likely serve to guard against the future outbreak of possible protectionist measures such as CSAs between the EU/Canada and a third country.

In terms of the second, most major ship-owning countries – with the exception of open registry companies – attach conditions to ownership and management before a ship can be accepted on their register. These conditions usually relate to minimum requirements on equity participation by nationals, and national requirements in management, among others. While there is potential for the CETA to extend national treatment to the EU and Canada in terms of establishment, it is not clear that the Agreement would significantly alter the status quo of establishment already in place in each. Canada, specifically, requires that a foreign company must open an office in its territory if it wishes to operate an international line to or from Canada. This requirement is in place, at least partially, to grant Canada jurisdiction over a company for safety and security reasons (e.g. in cases of shipwreck) and not likely a measure designed to grant preferences to domestic companies.⁵⁶⁶

With respect to port and auxiliary services, market access restrictions are most commonly present in terms of restrictions on providers of port services (e.g. cargo handling, stevedoring, freight forwarding, storage and warehousing, and customs clearance services) and the restriction on foreign ownership of

⁵⁶⁴ WTO. http://www.wto.org/english/tratop_e/serv_e/transport_e/transport_maritime_e.htm

⁵⁶⁵ Cargo reservation schemes require that part of the cargo carried in trade with other states must be transported only by flagships or ships interpreted as national. Cargo sharing with trading partners is formed under the auspices of bilateral or multi-lateral agreement. In essence, CSAs are protectionist measures and therefore welfare reducing, by ultimately raising prices for consumers.

⁵⁶⁶ Bertho, F. (2010).

ports. The CETA is likely to ensure national treatment in terms of access to and use of port services (e.g. pilotage, towing and tug assistance, etc.), though it unclear whether it will liberalise port ownership. Port ownership regulations can vary not just between Canada and the EU but also between Member States, with many governments wishing to maintain varying degrees of control/ownership over ports due to security concerns.⁵⁶⁷

Further to these three types of liberalisation, the EU has been active in pushing for liberalisation in maritime transport services on two issues that go beyond those based on the MMS as outlined in Box 21. These include: (i) 'repositioning of equipment (mainly empty containers)'; and (ii) 'opening of "feeder" services for international cargo (i.e. operation of ships between hubs and local ports within a country)'.⁵⁶⁸ Were these to be included in the CETA, it is likely that their inclusion would have a positive impact on the maritime transport services sector in both countries, but primarily for providers from the EU.

In terms of 'reposition of equipment', if EU carriers were allowed to reposition empty containers within Canada by their own means, costs could conceivably be reduced, improving the efficiency with which providers delivered their service. This assertion is based on assessments that cite that the costs of repositioning as fairly significant, particularly given the degree of competitiveness within the industry.⁵⁶⁹ Such costs are usually derived from the fact that once containers are delivered to their final customer, they become scattered across different locations, requiring that they must be returned to the carrier or a container depot for reloading, which can be a costly procedure to organise externally.⁵⁷⁰

With respect to 'feeder' services between hubs and local ports within a country, such a commitment is, in essence, a type of cabotage that is directed towards achieving cost reductions. In international trade, the feeder system is intricately involved in the evolution of the more efficient hub and spoke system, which in maritime transport, takes the form of long shipments from main ports (hubs) followed by the distribution of cargo via smaller vessels called feeders.⁵⁷¹ Higher capacity utilisation ratios allow vessels to achieve economies of scale, with the higher the ratio, the lower the unit cost. However, the large sizes such economies of scale engender (as would be the case in trans-Atlantic shipping), limit the number of port of calls of a vessel due to the draught and cargo handling capacity limitations at most ports.⁵⁷² Likewise, a vessel would desire to limit the number of ports of call in order to reduce such costs as handling costs, port dues and port dwell time. Feeder services address both issues by allowing cargo to be shipped by feeder vessels from a few hub ports to local ports across a territory. Such a system allows large vessels to carry larger amounts of cargo (i.e. a higher utilisation rate) and hence realise economies of scale, while it also allows for costs to be saved in storage and handling costs by – when run effectively – reducing the overall time containers need to be stored in container yards on terminals.⁵⁷³ Further, the ability for large international carriers to be more directly involved in the entire transport chain implies that these carriers would more easily be able to trace cargo and control quality, limiting the likelihood that the process of logistics would experience problems. These aspects further combine to ultimately lower cost.

⁵⁶⁷ Ports in Canada are government owned and managed with terminals, in some cases, leased to third parties (including foreign operators). Whereas the UK has completely privatised its port system, other major economies in the EU maintain some level of government ownership/control. France, Italy and Germany, for example, maintain ownership of some (if not all) ports choosing to allow private operators to run them through a leasing arrangement.

⁵⁶⁸ EC (2004b).

⁵⁶⁹ Hastings (1997) claims that these costs may reach 8% of the overall costs entailed in a shipment.

⁵⁷⁰ Brooks, M.R. (2009).

⁵⁷¹ Bertho, F. (2010). '

⁵⁷² Zhang, H.B. (2005)

⁵⁷³ Ibid.

Canada

In and of itself, the CETA's likelihood of increasing merchandise trade implies that the Agreement is likely to positively impact output and trade in maritime services in Canada. This assertion is supported by the CGE modelling results which project that **output** will increase by 1.89% to 3.52%, with greater increases occurring under a CETA that provides greater liberalisation of goods and for the sector (Tables 89-96 Annex 6). While such an increase represents a significant percentage change, it should be remembered that the maritime transport services' contribution to total output in the transport services is minor. Nevertheless, liberalisation would be expected to positively and significantly impact output with similar results expected for trade in maritime transport services. To this end, the CGE model projects that Canada's total **exports** of maritime transport services (mode 1) could increase by as much as 5.6%, helping to improve Canada's balance of cross-border trade in these services by as much as \$170 million.

The CETA could, however, lead to an outcome that either surpasses or falls short of the estimates projected by the CGE model depending on the provisions of the CETA and the degree of liberalisation reached. Of particular relevance is the Agreement's ability to include the two measures pertaining to repositioning and feeder services as advocated by the EU. Inclusion of these factors would stand to significantly increase the competitiveness of Canada's short-sea shipping industry, while improving the overall efficiency of maritime transport services in Canada. Not only would this lead to a reduction of costs, benefitting consumers, but it would also very likely lead to an influx of **investment** from the EU impacting output and exports. To this end, allowing EU shipping liners access to Canada's feeder services would likely lead EU shipping companies to make notable investments which over the long-term would likely serve to increase output and trade in maritime transport services beyond those estimates generated under the CGE model.

Overall, the removal of investment restrictions and the upgrading of Canada's short-sea shipping through improved feeder services would serve to allow both EU and Canadian firms greater cost saving opportunities through the fostering of triangulation. Liberalisation in Canada is, however, likely to meet opposition, since allowing EU shipping companies to provide feeder services may be identified as liberalisation of cabotage, which has generally been excluded from liberalisation around the world due to beliefs that doing so benefits employment and ensures the continued existence of the domestic maritime industry.⁵⁷⁴

Additionally, the Canadian maritime transport services sector would likely benefit from the removal of the high duty imposed on new vessels (25%). The Canadian Shipowners' Association notes that Canada's merchant fleet is in need of renewal, but that the excessively high duty discourages them from effectively doing so.⁵⁷⁵ They further note that the ships Canadians must purchase are those that aren't produced domestically and could, in large part, be satisfied by EU producers (e.g. lakers and self-unloaders). This punitive tariff also acts as a deterrent to Canada's short-sea shipping market by further increasing the costs of complying with requirements to convert a vessel in order to meet marine safety requirements and contributing the aging problem endemic of the Canadian-flag fleet.⁵⁷⁶

⁵⁷⁴ However, the OECD has recently questioned claims that restricting foreign competition preserves employment and the capacity of national maritime industries, particularly in light of the success experience by the EU, making it possible that such claims are unfounded. See: OECD (2001b)

⁵⁷⁵ www.shipowners.ca/index.php?page=fleet-renewal

⁵⁷⁶ Brooks, M.R. (2009).

While the CETA may lead to liberalisation of feeder services in Canada, it would appear unlikely that this liberalisation would be extended to include cabotage in general and provide unrestricted access to Canada's domestic short sea shipping markets. The 1992 *Coasting Trade Act* reserves domestic maritime traffic in Canada for national-flag ships, restricting foreign access to the domestic market. As a means to stimulate the Canadian shipping industry, foreign-owned international ship management companies are effectively excluded from participation in short-sea shipping though they can reside in Canada.⁵⁷⁷ Canada would likely benefit from greater foreign access to the short sea shipping sector, particularly as its volume of short sea shipping does not match the potential for a country of such an extensive waterway system.⁵⁷⁸

A final benefit relevant to the CETA's potential impact on maritime transport services could arise through the increased cargo which passes through Canada's primary ports. Canada's ports generally compete with a number of those in the United States over status as being the preferred port of call. With preferential access for EU goods, the CETA could increase the competitiveness of a number of Canadian ports along the Atlantic, St. Lawrence and Great Lakes.⁵⁷⁹ This in turn could result in further expansion of Canada's ports, leading to capital investments in infrastructure and employment.

EU

As in Canada, the CETA could positively impact the EU's maritime transportation sector, with the size of the impact dependent on the liberalisation achieved. The likelihood of increased merchandise trade will directly benefit the EU, leading to increased output and cross-border trade in the sector. CGE results confirm this, estimating that the EU would witness a 0.04% to 0.07% increase in output over the long-term. These increases in output would be expected to coincide with increased exports (mode 1), with CGE model results suggesting overall exports of maritime transport services would increase by 0.07% to 0.12% over the long-term and to Canada by as much as 15.6% (Tables 89-94 Annex 6).

There are, however, a number of additional factors which if included in the CETA could potentially lead to greater gains for the EU over the long-term. As noted above, liberalisation of feeder services and repositioning under the CETA could stand to benefit the EU industry. Their inclusion would enhance the ability for Europe's largest international carriers to further reduce costs helping to improve efficiency as well as their ability to succeed in an increasingly competitive global market that has become increasingly cost sensitive. EU shipping companies would also be able to increase the scope of operations in the Canadian market by increasing the number of services they are able to provide. Liberalisation of feeder services, in particular, would likely stimulate an increase in exports via mode 3 while also serving to drive an increase in EU investment in Canada.

INDICATOR: Employment

BASELINE

In 2009, the maritime transport industry employed approximately 29,000 people in Canada. Of these approximately 13,000 were in support activities for maritime transport (employment related to port and harbour operations; marine cargo handling; navigational services to shipping; marine salvage services; ship piloting services and other navigational services for shipping), 13,200 in maritime transport (deep

⁵⁷⁷ Ibid.

⁵⁷⁸ Ibid.

⁵⁷⁹ Association of Canadian Port Authorities. <http://www.acpa-ports.net/>

sea, coastal and Great Lakes water transport and inland transport), and 2,300 in scenic sightseeing for maritime transport.⁵⁸⁰

The EU employs approximately 610,000 in maritime transport services with around 184,000 in maritime transport and the remainder involved in onshore auxiliary services in such areas as cargo handling and logistics.⁵⁸¹ The Member States with the greatest employment in maritime transport services are Germany, Italy, Greece and Sweden, but in terms of relative importance, Denmark, Malta, Cyprus, Finland, Sweden and Greece have the greatest reliance on the industry as a source of employment.

ANALYSIS

Canada

Employment in Canada's maritime transport services sector is expected to be positively impacted over the long-term by the CETA. Results from the CGE model show increases ranging from 1.75% to 3.2% over the long-term depending on the level of liberalisation (Table 96 Annex 6). Additionally, increases in inward FDI resulting from liberalisation of feeder services and expansion of ports could increase the overall gains in employment for the sector.

EU

The EU is similarly expected to experience increases in the demand for labour in its maritime transport services sector. These gains are likely to be less pronounced than in Canada with CGE estimates projecting increases in the demand for labour of approximately 0.02% to 0.04% over the long-term (Table 95 Annex 6).

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

Results from the economic modelling suggest that the CETA will likely lead to significant increases in employment in Canada's maritime transportation services. Expansion of the industry implies that workers in Canada's maritime transport industry would not be subjected to displacement, with new jobs likely to be created, particularly in Canada's Atlantic Provinces and along the St. Lawrence and Great Lakes. At the same time, increased employment would likely coincide with decreased demand for labour in the land transportation sector, particularly if the CETA diverts trade from the United States to the EU. Given that land transport is a much more important source of employment in Canada, even very small percentage declines as predicted by the CGE model, would likely serve to cancel out the larger percentage gains in maritime transport, limiting the associated benefits from expansion in the sector.

⁵⁸⁰ Transport Canada (2009).

⁵⁸¹ Optimar (2010).

Table 51: Employment in Canada's transportation services sectors

Sector	Employment
Maritime	29,000
Air	68,036
Other transport	404,000

Source: Statistics Canada; Transport Canada

If displaced by the CETA, workers in the land transportation services sector could potentially transfer into maritime or air transportation services as well as the sectors expected to expand over the long-term as shown in Table 52. As shown in the right-hand column, movement into most of these sectors would, on average, provide higher salaries than presently enjoyed. Although this implies greater economic well-being, it also important to consider the expected ease with which such a transfer could be made.

Table 52: Sectors in Canada expected to increase employment, by degree and liberalisation scenario and wage compared to the average for other transportation services

Sector	Scenario C	Scenario D	Salary Compared to average wage in other transport
Mining	+		>
Textiles	+		<
Apparel	+		<
Non-ferrous metal manuf.	+		>
Automotive manuf.	+	+	>
Other Transport manuf.	+	+	>
Construction	+	+	>
Trade	+	+	<
Maritime transport	+	++	=
Air transport	+	+	>
Communication services	+	+	>
Recreation services	+	+	<

+ denotes marginal gain, ++ denotes significant gain, <=,> denotes less than, equivalent or greater than

Generally, individuals employed in other transportation services have lower levels of educational attainment than the national average. As such, individuals employed in driving a truck or handling cargo, may not easily secure higher salaried employment in the above sectors, which may require a higher degree of specialisation and job specific training. While this would not be the case for construction, trade, mining or maritime transportation, it would likely be so for other areas. As such, changes in wages after displacement would likely remain comparable if the worker did not seek to upgrade her skills through additional training.

With respect to maritime transportation specifically, it is also important to note that movement into this profession could require relocating as the majority of jobs are located at ports along major bodies of water (e.g. the Great Lakes, Saint Lawrence or Atlantic/Pacific Oceans).

EU

According to the economic assessment, the EU is projected to see minor increases in employment within the maritime transport services sector. Given the expansion of employment, it is not expected that the CETA will engender any degree of displacement for those employed in the EU's maritime transport industry.

Table 53: Employment in the EU's transportation services sectors

Sector	Employment
Maritime	184,000
Air	409,100
Other transport	8,619,600

Source: Eurostat

INDICATOR: Quality & decency of work

BASELINE & ANALYSIS

Canada & EU

Given its global nature, the promotion of labour standards for the maritime transport sector is generally approached through international fora such as the ILO. In 2006, the ILO adopted the Maritime Labour Convention (MLC) which ensures freedom of association and collective bargaining and calls for an end to child labour and discrimination (See Box 22). While Canada has ratified this convention, only 2 EU Member States had done so as of 1 January 2011 (though more are in the process of ratification and EU Member States remain subject to those rules and regulations which they previously ratified but which are not consolidated under a single convention). While it is questionable that the CETA will call for mandatory ratification, it could include a mechanism for greater and regular cooperation and dialogue on maritime labour issues, including commitments to maintaining and improving working conditions in the maritime sector along the framework of the ILO, with emphasis on cooperation in promoting these standards in third countries so as to ensure an appropriate social floor is in place globally for seafarers. This cooperation could further consist of commitment to strengthening the minimum qualifications applied globally and in international improvement to training of seafarers.

Box 22: The ILO's Maritime Labour Convention, 2006

Given the global nature of the maritime transport sector, international standards are needed to ensure that ships will not register in countries with poor enforcement of standards in order to improve competitiveness. This is particularly relevant given the movement over the past several decades to register fleets in open registry countries (e.g. Panama and Liberia) in order to capitalise from less restrictive regulations and cheaper labour markets.

In response to these challenges and concerns, the ILO adopted the *Maritime Labour Convention* (MLC) in 2006 in an attempt to ensure that all seafarers would not be subjected to unacceptable working conditions. The MLC consolidates over 68 international labour standards that have been adopted to deal with maritime working conditions over the past 80 years.⁵⁸² The Convention sets out the rights to decent work for all seafarers and takes an important step towards levelling the playing field so as to ensure that shipping companies will not seek to improve competition by eroding labour standards for their employees.⁵⁸³

Still in its early stages, the MLC has not yet been ratified by the number of countries necessary to achieve the entry-into-force formula (only 12 countries have thus far ratified the recently devised MLC). Canada has, however, already ratified the MLC and has been active in assisting other countries with ratification through high-level tripartite missions.⁵⁸⁴ While the EU-27 has been a strong advocate of the MLC and remains committed to fostering its ratification among members, only 2 of the 27 Member States (Spain and Bulgaria) had ratified the MLC as 1 January 2011.⁵⁸⁵ However, EU MS are still subject to the legal effects of the ILO instruments which the MLC is seeking to replace.

In terms of the CETA, it is questionable that the Agreement will have a pronounced impact on ratification of the Convention in the EU. Nevertheless, both sides could still commit to ensuring that labour standards in the ILO maritime labour convention are in place while expressing their firm commitment to jointly cooperating in promoting these standards in third countries.

INDICATOR: Health & safety

BASELINE & ANALYSIS

Canada & EU

Maritime transport services are subject to some of the highest incidences of work related injuries in Canada and the EU, while port security remains an important issue of national security for all countries.⁵⁸⁶ The CETA could include provisions that foster greater collaboration on security measures

⁵⁸² ILO. <http://www.ilo.org/global/standards/maritime-labour-convention/lang--en/index.htm>

⁵⁸³ ILO. http://www.ilo.org/global/standards/maritime-labour-convention/fag/lang--en/index.htm#P47_9051

It should be noted that the MLC can be ratified without a country having ratified all fundamental ILO conventions, which while designed in part to ensure that open registry companies can more easily ratify the agreement, has allowed Canada to play a more active role in advocating its ratification in third countries.

⁵⁸⁴ ILO. (2010).

⁵⁸⁵ Italy and Luxembourg appear close to ratification. Europa. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32007D0431:EN:NOT>

⁵⁸⁶ International Labour Organization

relevant to the maritime industry, with commitment and cooperation on better implementation of measures included in the International Maritime Organization (IMO) and International Ship and Port Facility Security Code.⁵⁸⁷ Such cooperation could, over the long-term, lead to a reduction of shipping accidents and the subsequent risks associated with them (injuries, exposure to hazardous materials).

ENVIRONMENTAL ASSESSMENT

INDICATOR: Water usage and quality / Contamination of water from chemicals and wastes

BASELINE & ANALYSIS

Water transportation affects water quality and ecosystems in three major ways: through dredging and habitat modification, discharges of toxic contaminants in watercourses, and the introduction of invasive species. Increases in water transportation impact all three of these indicators.

Canada

As water traffic increases – as is predicted under the economic assessment – demands for port infrastructure expansion are also likely to multiply. Such infrastructure projects can impact water and coastal ecosystems. Dredging can alter water flow patterns and release contaminated sediments. Both of these impacts can have detrimental effects on vulnerable or endangered species. In the first case, dredging can reduce minimal water flows or seasonal flooding that sustains marshes and other important habitat for fish and other species' reproduction. In the second case, contaminated sediments can bio-accumulate and impact species dozens of kilometres from the source of these sediments. Impacts can also be felt on humans, especially on the St-Lawrence River that is the primary source of water for over half the population of the province of Quebec. The St-Lawrence seaway has very high levels of water transportation traffic. In 2009, 30.8 million cargo tonnes were transported: 27% of which was grain, 61% was bulk goods, and 9% was coal. This cargo was transported by 3,631 vessel transits in 2009.⁵⁸⁸

Demand for dredging is likely to increase under the CETA as average tonnage increases and water levels fall as a result of climate change. Every time the water level drops 1 cm, vessels must transport 6 less containers. Dredging in the past has made it possible for the St-Lawrence shipping lane to keep a minimum depth of 11.3 meters. If water levels drop, more dredging could be necessary.⁵⁸⁹ This is likely to become a problem in the coming years as higher tonnage ships enter the market. This will also push demand for enhanced port infrastructure.

Voluntary or accidental discharges of contaminants (oil, waste or other chemical products) occur every year on commercial navigation routes. According to the Canadian Commissioner of the Environment and Sustainable Development, 'a total of about 4,160 pollution incidents involving spills of oil, chemicals, or other pollutants into Canadian waters were reported to the Canadian Coast Guard. About 2,000 of these incidents involved vessels ranging from pleasure craft and fishing boats to barges, cargo vessels, and tankers'.⁵⁹⁰ On the St-Lawrence River only, over 150 such spills are inventoried every year. In addition, an unknown number go unreported. Most of these accidents are minor but nevertheless significant at

⁵⁸⁷ European Commission and Government of Canada (2008).

⁵⁸⁸ The Saint-Lawrence Seaway Traffic Report 2009. The St. Lawrence Seaway Management Corporation.

⁵⁸⁹ Transport Québec.

⁵⁹⁰ Report of the Commissioner of the Environment and Sustainable Development to the House of Commons (2010)

the point of impact. For example, it only takes 1 litre of gasoline to make 1 million litres of water unsafe for consumption.⁵⁹¹

Another point of environmental concern is the spread of exotic species, in particular from ballast water from water transportation. The increased growth in the water transportation sector predicted under CETA increases the likelihood of introducing highly invasive species, such as the zebra mussel, originally from the Caspian Sea. The zebra mussel population has exploded, taking advantage of the lack of predators, reaching densities of 3,000,000 per m² in some cases.⁵⁹² About one third of the 140 invasive species in the Great Lakes came through ballast water.

EU

In recent years, European maritime transport administrations and the European shipping industry have made significant efforts to improve the environmental record of maritime transport. The EU regulatory framework has been strengthened and cooperation with Member States has been increased to tackle issues including the prevention of accidents and incidents, atmospheric emissions, ballast water treatment and ship recycling.⁵⁹³ For example, the number of oil spills at sea in the last 30 years has decreased significantly to approximately one-third of the occurrences and volume of oil spilled.⁵⁹⁴

Given that the only noticeable effect of a CETA on transport activities in the EU is a limited increase in trans-Atlantic water transport, most of the environmental impact is expected to be related to the maritime industry. In standard operations this subsector causes hardly any significant water usage or contamination. The major water related risks associated with the industry are accidents, leading to contamination of the sea, coastal areas and/or ports.

Indicator: Air pollution / GHG emissions

Canada

BASELINE

Transportation is of course an important contributor to GHG emissions. In fact transportation accounted for 26% of GHG emissions, and used 31% of all energy consumed in Canada in 2004.⁵⁹⁵ Air transportation has the highest energy intensity, followed by transit and ground passenger transportation. Rail transportation is the least energy intensive. Transportation represents 28% of emissions growth since 1990, increasing by 45 megatonnes of CO₂e from 1990 to 2004.⁵⁹⁶ Aviation emitted 8,500 kilotonnes of CO₂eq, road transportation emitted 135,000 kilotonnes of CO₂eq, railways emitted 7000 kilotonnes of CO₂eq, and domestic marine emitted 5800 kilotonnes of CO₂eq in 2008.⁵⁹⁷ Marine vessel shipping emits between 4.5 and 12 g of CO₂e per tonnes-km, rail transportation emits 18 g CO₂e/tonnes-km, and truck

⁵⁹¹ Statistics Canada (2006).

⁵⁹² Statistics Canada (2006).

⁵⁹³ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009DC0008:EN:HTML:NOT>

⁵⁹⁴ EU Energy and Transport in Figures Statistical Pocket book 2010, p.222

http://ec.europa.eu/transport/publications/statistics/doc/pocketbook2010_contractor.pdf

⁵⁹⁵ Statistics Canada (2006).

⁵⁹⁶ Ibid.

⁵⁹⁷ Environment Canada (2010b)

transportation emits 114 g CO₂e/tonnes-km.⁵⁹⁸ In stark contrast, aviation emits 1,025 g CO₂e/tonnes-km.⁵⁹⁹

Air pollution is another concern. In 2004, three quarters of carbon monoxide emitted came from transportation, over one half of nitrogen oxides, and over a quarter of volatile organic compounds (VOCs). These contribute to smog, acid rain, and have health impacts. However, these emissions have decreased through the use of technologies like catalytic converters and fuel efficiency standards. NO_x emissions decreased 19% from 1990 to 2004, CO and VOC each decreased 37% over the same period. Most of the emissions come from road transportation, and within that, most from heavy-duty vehicles (for instance 25% of transportation NO_x).⁶⁰⁰

ANALYSIS

The CETA's impacts on GHG emissions in the transportations sector are likely to be marginal for rail transportation but significant for the road, air and marine transport sectors. According to the E3MG results, road transport should see its emissions grow by 0.60% to 0.68% (between 135,810 and 135,918 kt of CO₂e emitted), air transport by 0.92% to 1.45% (between 8578 kt and 8623 kt of CO₂e emitted), and by 0.71% to 1.12% for other transport services, including maritime transportation (between 12890 and 12943 kt of CO₂ emitted). Given that road transportation represents the largest share of transport-related emissions in Canada, the rise in emissions caused by CETA can be considered significant. Increased EU investment in the Canadian transportation sector could further increase GHG emissions. However, if EU investment leads to the introduction of new fuel efficient technologies it could contribute to offsetting this increase, or even reducing emissions. Emissions reduction measures such as a shift to natural gas for freight transportation or new energy efficiency standards could also offset this growth in emissions. Air and maritime transportation represent only 10% of transport-related emissions. Therefore the growth in these sectors will not have a major impact on overall transport-related emissions in Canada. Should CETA lead to investments in short-sea shipping infrastructure, it could support a shift from road to maritime transportation and lead to a reduction in GHG emissions.

EU

BASELINE

Transport and logistics services cause a variety of environmental impacts (e.g. depletion of land, depletion of fuel resources), but by far the most significant impact are the greenhouse gas (GHG) emissions that are produced as a by-product:⁶⁰¹

Table 54: GHG emissions, 2007, EU-27

Year	Mio. t CO ₂ equivalent					% of total EU GHG emissions				
	Total	All transport	Air transport	Road transport	Water transport	Total	All transport	Air transport	Road transport	Water transport
1990	5740	956	83	715	131	100	16.7	1.4	12.5	2.3
2000	5301	1165	136	858	151	100	22.0	2.6	16.2	2.8
2007	5360	1297	161	920	198	100	24.2	3.0	17.2	3.7

⁵⁹⁸ <http://www.cn.ca/en/greenhouse-gas-calculator-emission-factors.htm>

⁵⁹⁹ Transport Canada (2008).

⁶⁰⁰ Statistics Canada (2006).

⁶⁰¹ Ibid.

The main producer countries of transport related GHG within the EU are Germany, the UK, France, Spain and Italy:⁶⁰²

Table 55: GHG from Transport, 2007

	GHG from Transport, Mio. t CO2 equivalent, 2007
EU27	1297.6
EU25	1275.1
DE	188.9
UK	174.9
FR	163.6
ES	149.9
IT	147.5
NL	98.4
BE	61.8
PL	40.9
EL	36.8
SE	30.6

ANALYSIS

As outlined above, a CETA would be expected to lead to marginal increases in transport activity and consequently in GHG emissions. The EU countries most likely to be affected are transit countries like Germany, Austria and France, and also countries with significant port facilities like the Netherlands, France, Spain and Italy.

The limited impact on water transport and other transport will cause correspondingly additional GHG emissions, which equates to additional GHG emissions of 140,000 t and 180,000 t CO2 equivalent, respectively.

Regarding air transport, as outlined above the recently agreed to Canada-EU Air Transport Agreement has already put in place measures to improve bilateral trade in this area, therefore the marginal impact of the CETA on air transportation services and subsequent environmental impacts are likely to be negligible.

The E3MG modelling also predicts no impact on GHG emissions from this sector.

⁶⁰² Ibid.

6.1.2. Telecom Services

ECONOMIC ASSESSMENT

INDICATOR: Output, trade & investment

BASELINE

The telecom industry and its services play a key social and economic role. Advances in the industry through technological development and regulatory reform over the past several decades have driven down communication costs, providing consumers with greater access to a wider array of services while also helping to increase productivity. In recent years, advances in telecommunications – led by the expansion of the internet and digitisation – have increasingly blurred the line between the traditional areas of telecom and broadcasting with service providers in each industry competing over a similar package of services such as voice, internet and video services.⁶⁰³

In the **EU**, value-added generated by the telecom industry reached \$237 billion in 2005 with the sector having benefited substantially from regulatory reform that has liberalised the sector across Member States. As a subsequent result of the improved competitive environment these reforms have fostered, the EU has enjoyed lower prices and better service while providing consumers with greater choice and coverage. Although the majority of the sector's value-added is concentrated in four Member States – the UK, Germany, France and Italy – the sector is relatively less concentrated than other industries in the EU.⁶⁰⁴ Part of the reason behind this lies in the fact that, despite regulatory reforms, the internal market has remained fragmented due to non-uniform application of the EU framework by national regulators.⁶⁰⁵ Nevertheless, the recently established European Telecoms Body should help to rectify this problem with the EU taking strides towards ensuring that the industry meets its goal of fostering an 'information society' that will improve the quality of its citizens' lives and allow them to thrive in a changing global environment.

The **Canadian telecom industry** accounts for over \$40 billion in revenues and 3.3% of the country's GDP.⁶⁰⁶ In contrast to the EU, however, the Canadian telecom sector is viewed as less competitive than other OECD countries. Both the Telecom Policy Review Panel (TPRP) and the Competition Policy Review Panel have both issued support for increased competition in the Canadian telecom sector, claiming that the current market structure limits the full potential of the domestic industry, while disadvantaging consumers.⁶⁰⁷

One of the primary means of improving competitiveness in the Canadian telecom sector would be to liberalise the foreign ownership restrictions currently in place. Canada remains one of the few OECD countries to have foreign ownership restrictions in the telecom sector, with the OECD itself stating that Canada's telecom sector is the most restrictive among members.⁶⁰⁸ This restrictiveness stems from the

⁶⁰³ Competition Policy Review Panel (2008).

⁶⁰⁴ Eurostat

⁶⁰⁵ http://ec.europa.eu/information_society/policy/ecommm/tomorrow/index_en.htm

⁶⁰⁶ Industry Canada (2010).

⁶⁰⁷ Competition Policy Review Panel (2008).

⁶⁰⁸ Industry Canada (2010).

Telecommunications Act, which promotes domestic ownership of the industry through a 46.7% threshold on foreign equity in domestic telecom companies (20% cap on foreign ownership of the voting share of operating companies and 33.3% among holding companies) while mandating that four-fifths of the board of directors must be Canadian nationals⁶⁰⁹

These restrictions not only imply limited levels of FDI in Canada's telecom sector but, in limiting ownership, also restrict the level of mode 3 trade⁶¹⁰ that foreign telecom companies can make within Canada.⁶¹¹ By establishing a local presence or acquiring a majority stake in a local incumbent, mode 3 serves as the primary mode through which telecom services are traded internationally. Without sufficient data to disentangle FDI from mode 3 trade, it can only be surmised from the existing data on FDI in Canada that trade is negatively impacted by the restrictions on foreign ownership. For example, of the EU's total stocks of outward FDI in the telecom sector in 2005, 3% (€74.7 billion) was located in the telecom sector.⁶¹² Of this, however, Canada received only 0.3% with the sector serving as the recipient of 0.2% of all EU stocks in Canada (€250 million).⁶¹³ Comparatively, this level of investment is far lower than that observed for EU investment in the US, where telecom held 3.2% of all EU stocks invested in the US in 2005.⁶¹⁴

Cross-border trade in telecom services (via mode 1), moreover, plays a relatively minor role in both the EU and Canada's international trade in services, compounding the negative impact that limitations on foreign ownership appear to have in terms of trade in telecom services. In 2007, for example, Canada's exports and imports of telecom services occurring via mode 1 totalled just \$1.35 billion and \$1.04 billion, respectively, representing only 1.6% of total mode 1 cross-border trade in services.⁶¹⁵ Similarly, trade in telecom services by the EU accounted for only 2% of mode 1 trade in services in 2007 (compared to 5.4% of all outward EU FDI in the services).⁶¹⁶ In total, these statistics support the importance mode 3 has for trade in telecom services, and as such reflect the trade inhibiting effects that limits on foreign ownership in Canada are likely to have on bilateral trade.

ANALYSIS

Canada

Canada could experience a number of gains from commitments under the CETA that provide for greater ownership in the domestic telecom sector to EU investors. Canadian telecom companies would likely benefit by having greater access to capital at a reduced cost. Further, increased direct investment from EU telecom companies would likely lead to improved acquisition of technology and managerial expertise. Further, greater exposure to competition would likely force domestic firms to upgrade their operations, which would in turn make them more competitive internationally over the long-term. Finally, consumers would be expected to benefit from this increased competition, resulting in improved service and quality, greater choice in services and lower overall costs. Taken together, these benefits to the domestic telecom sector and its end users could significantly and positively impact Canada.

⁶⁰⁹ Competition Policy Review Panel (2008).

⁶¹⁰ See opening discussion under the Services Sector Assessments for a description of the 4 modes of trade in services as well as an outline of the nuances in measuring them.

⁶¹¹ This would particularly be the case with respect to trade from the EU as Eurostat only counts sales from affiliates as EU exports when the companies are majority EU owned.

⁶¹² Eurostat (2008).

⁶¹³ Ibid.

⁶¹⁴ Ibid.

⁶¹⁵ UN Services Trade Database

⁶¹⁶ WTO Statistics Database. <http://stat.wto.org/ServiceProfile/WSDBServicePFView.aspx?Language=E&Country=E27,CA>

The degree of these impacts is, however, largely dependent on whether the CETA leads to liberalisation in foreign ownership within the telecom sector and, if so, to what degree. To this end, all indications are that Canada intends to liberalise foreign ownership, though it is unclear whether the CETA will be directly attributable. As noted, for example, both the TPRP and the Competition Policy Review Panel have both issued their support for using greater foreign ownership as a means of bolstering competition in the Canadian telecom sector.⁶¹⁷ Further, in February 2010 the Harper government pledged to liberalise foreign investment in the sector while consultations with Industry Minister Tony Clement were launched the following June. While the Harper government has since delayed plans to do so until some undisclosed point in 2011 or 2012, it nevertheless appears that the opening of the sector to greater competition is a goal of the current government. One issue influencing the timing of liberalisation may be uncertainties over how to design the next auction of wireless frequencies for mobile phone companies (not scheduled to take place until late 2012), specifically with regards to how spectrum will be allocated and who will be able to compete for it. Given these hold ups, it is unclear whether the CETA will make any concrete allowances for increased EU ownership in the industry; and it is further possible that removal of foreign ownership restrictions will occur even in the absence of a CETA. In short, if the CETA is responsible for the removal of ownership restrictions – either directly or indirectly – it will likely have a significant impact on the telecom sector.

With respect to the formal modelling, although CGE estimates do not generally take into account the impact from increased investment⁶¹⁸, the results nevertheless indicate that the CETA will lead to significant increases in output and exports within Canada's telecom sector. Specifically, the CGE model predicts that output could increase by upwards of 0.7% over the long-term with total exports (mode 1) potentially increasing by as much as 9.4% and the balance of trade by nearly \$200 million (Tables 97-102 Annex 6).⁶¹⁹

Given that the impact on trade would likely be driven predominantly by mode 3 trade in telecom services, it is expected that the impact on Canada would be more pronounced than estimated under the CGE model. Further, it is likely that removal of ownership restrictions would lead to an influx of investment in the sector likely having a pronounced impact on sectoral output and exports, resulting in greater estimates than presently projected by the CGE model.

EU

A CETA that liberalised ownership restrictions in Canada's telecom sector would almost certainly benefit the EU by removing a major barrier to market access. Establishing a local presence is particularly important in terms of EU trade with Canada as their separation by the Atlantic increases the preference of establishing a commercial presence in order to deliver services to the Canadian market. As such, the restrictions on EU ownership in Canada's telecom sector significantly limit the involvement of EU telecom companies in the Canadian market and largely relegate them to participation through satellite services and reselling, for which Canada does not maintain foreign ownership restrictions.

It is therefore expected that removal of foreign ownership restrictions would serve to lead to both increases in output, exports and investment by the EU telecom sector. As noted above, however, it is

⁶¹⁷ Competition Policy Review Panel (2008).

⁶¹⁸ The assumed cut in service trade costs used for the sector may proxy for investment liberalisation to some degree, though it is not expected to fully account for this.

⁶¹⁹ Again note that the GTAP database aggregates telecom services with postal services, complicating the interpretation of the results.

unclear to what degree the CETA will directly or indirectly contribute to liberalisation of these ownership restrictions in Canada.

CGE estimates largely do not reflect this assertion, however, with estimates projecting almost no change in output and overall exports as a result of the CETA. However, it is important to note that CGE estimates do not account for increased investment and the relative increase in mode 3 trade in services likely to be fostered by liberalisation. Notably, the removal of restrictions on ownership would likely lead to sizeable increases in investment in Canada, particularly as it pertains to acquisitions and establishment, in turn leading to greater levels of foreign affiliate sales (mode 3 trade in services).

An additional area where the CETA would likely lead to benefits for EU firms would be in ensuring non-discriminatory use of and access to telecom transport networks. The current limitations on foreign ownership have 'perpetuated a regime in which foreign-owned competitors are forced to rely on incumbents for facilities, a regime that is characterized by continual regulatory disputes over terms and conditions of access'.⁶²⁰ To the degree that the CETA ensured non-discriminatory access, EU telecom companies would likely benefit, though likely not to the degree that they would under investment liberalisation.

INDICATOR: Employment

BASELINE

Total EU employment in the telecom services sector reached 1.2 million in 2005. Employment by Member State varies, being a far more important source of jobs in Bulgaria where it accounts for 2% of the non-financial service jobs. Overall, however, the majority of people employed in telecom services are in the UK, Germany and France with these three countries accounting for half of total EU employment in telecom services.⁶²¹

As of July 2010, Canada employed 106,400 in the telecom sector which marked a decrease of 10,300 from the same period a year earlier. At the provincial level, the leader in employment in the telecom sector is Ontario with 47.1% of total Canadian employment in 2009. As in Europe, the sector has a low degree of concentration with it finding its greatest relative importance in Manitoba where it employs 1.3% of the workforce.⁶²²

ANALYSIS

Canada

Employment in Canada's telecom sector is likely to be positively impacted by the CETA, with the size of the impact determined by whether the Agreement leads to the removal of foreign ownership restrictions. CGE estimates project increases in the sectoral demand for labour ranging from around 0.13% to 0.33%. However, the removal of ownership restrictions would likely lead to more pronounced increases in the demand for labour, as a likely influx of FDI into Canada could stimulate more pronounced increases in output and exports over the long-term.

⁶²⁰ McFetridge, D.G. (2008).

⁶²¹ Eurostat

⁶²² Statistics Canada (2010).

EU

The impact on employment in the EU's telecom sector is likely to be limited. Although the EU stands to gain from the CETA, the potential impact is likely to arise from the removal of ownership restrictions in Canada. To this end, the CETA would likely stimulate greater investment in Canada's telecom sector and trade via mode 3, limiting the direct impact on employment within the EU itself.

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

With potential for gains in employment within the telecom sector, the CETA's social impact is likely to be positive. Growth in employment within the sector would likely serve as an important source of job creation, allowing for workers displaced in alternative sectors to shift into a position that is generally well paying compared to the national average. As the industry within Canada exhibits limited degrees of concentration, these gains would be more evenly dispersed throughout the country.

EU

With no expected change in employment, it is not expected that the CETA will have an impact on worker displacement in the EU's telecom sector.

INDICATOR: Quality & decency of work

BASELINE & ANALYSIS

Canada

Survey data suggests that the telecom sector is subject to higher rates of job related stress and dissatisfaction with balancing work with other activities.⁶²³ With employment growth projected for the industry, it is possible that the national average for these indicators could increase, negatively impacting quality and decency of work. Collective bargaining and the rights of association could, however, be strengthened by the CETA's ability to reaffirm the ILO's core labour standards and under provisions that require Canada to ratify the ILO's *Right to Organise and Collective Bargaining Convention, 1949* (C.98). For detailed discussion on the social ramifications of the CETA as it pertains to Core Labour Standards and the ILO's Decent Work Agenda see Box 14 in the social assessment on mining and metal manufacturing.

EU

The CETA could contribute to the further improvement of labour standards in the EU with the inclusion of a chapter on trade and labour that makes commitments to better implementation of the ILO's Core Labour Standards and Decent Work Agenda (See Box 14).

⁶²³ Lowe, G. (2007).

INDICATOR: Health, education & culture**BASELINE & ANALYSIS****Canada**

Canada's telecommunications industry generally provides better work related health benefits than the national average, while having lower instances of work related injuries. As such, increased employment within the industry is likely to positively impact health.⁶²⁴

In terms of education, the higher skills demanded in the telecom services sector – particularly as it pertains to higher paying jobs – would likely have a positive impact on the Canadian workforce's educational attainment by providing greater incentive to acquire the necessary entry requirements.

With respect to culture, there are concerns from stakeholders in Canada that liberalisation of foreign ownership restrictions could adversely affect Canadian culture (See Box 23).

Box 23: Does liberalisation of telecom mean liberalisation of Canada's cultural industries?

Complicating the issue of liberalising foreign ownership restrictions in Canada's telecom sector is the increasing overlap between telecom and broadcasting, particularly in terms of distribution networks.⁶²⁵ Due to shifts in technology, it is now commonplace for companies traditionally relegated to one of these spheres to cross over into the other and offer competing services (e.g. a cable company offering internet services). With Canada heavily guarding the content industry, concerns over liberalisation of telecom may be based on the notion that in so doing, they would essentially also be liberalising the content industry. Based on this current overlap between telecom and broadcasting, does removing restrictions on foreign ownership in telecom also imply that Canada's cultural industries will become necessarily open to increased foreign investment, undermining cultural objectives in place within Canada?

The answer is unclear. On the one hand, it appears that the EU has no expressed desire to seek liberalisation within Canada's content/cultural industries, making it entirely plausible that any liberalisation of the telecom industry could attempt to ensure that liberalisation of carriage can be effectively structured as separate from content. The possibility of creating such a divide has received support by the Canadian House of Commons Standing Committee on Industry, Science and Technology, which in 2003 concluded that telecom could be liberalised without endangering cultural policy objectives that aim to ensure that cultural industries support and distribute Canadian content.⁶²⁶

On the other hand, doubts have been raised among stakeholders in Canada that a separate structuring of content and carriage could effectively occur given the increasing vertical integration within the industry. Specifically, consultations with the Canadian Media Production Association (CMPA) has expressed concern that liberalising foreign ownership restrictions in light of industrial developments would 'inevitably lead to comparable liberalisation of FDI rules for broadcasting and broadcasting

⁶²⁴ Statistics Canada, Workplace and Employee Survey 2003

⁶²⁵ Competition Policy Review Panel (2008).

⁶²⁶ McFetridge, D.G. (2008).

distribution – irrespective of the fact that the EU professes that it is currently not seeking liberalisation of FDI rules as they apply to Canada’s cultural industries’⁶²⁷

To the degree that domestic policy can be designed to effectively separate content from carriage, it is likely that Canada’s cultural policy objectives can continue to be met. There would, in this regard, appear to be room for policy space to ensure the continued enforcement of cultural objectives, particularly given that the EU appears to have little expressed desire to liberalise Canada’s content industry. Additionally, the CETA’s impact on Canadian cultural objectives is further unclear given (i) the CETA may itself not be able to achieve liberalisation of Canada’s foreign ownership restrictions in telecom; and (ii) the Harper government appears poised to liberalise foreign ownership restrictions by 2012 regardless.

EU

Given the limited impact on employment and job displacement in the sector, it is not envisaged that there will be a significant impact on health, education or culture in the EU.

ENVIRONMENTAL ASSESSMENT

Canada

No significant effects predicted.

EU

The EU telecom sector uses insignificant amounts of material inputs and outputs, causing only minor environmental impacts. The CGE model predicts an only insignificant increase in output for the EU telecoms sector. It is therefore expected that the CETA will not produce a significant environmental impact.

⁶²⁷ Bolen, N. (2011).

6.1.3. Financial services

ECONOMIC ASSESSMENT

INDICATOR: Output, trade (modes 1 & 3) & FDI

BASELINE

Financial services are a pillar of any market economy, serving as a fundamental source of growth, investment, savings and economic stability. The EU and Canada in particular, as two developed economies, have mature financial systems that are populated by globally competitive firms offering a wide array of services. In recent years, financial services in both Canada and the EU have become increasingly integrated, with large financial groups being formed that provide a number of different types of services. This is particularly evident in the EU, where competition facilitated under the Economic and Monetary Union (EMU) has allowed the EU to develop 13 of the world's 20 largest financial groups. While this integration of services has somewhat blurred the line between the different types of services and their providers, the discussion herein will, where relevant, make distinctions along two broad categories of financial services: (i) banking and other non-insurance financial services; and (ii) insurance and insurance-related services.

Within these two groups, non-insurance financial services, led by banking, constitute the largest contributor to output, trade and investment for both the EU and Canada. In the EU, financial services are largely concentrated in the original EU-15 members with these countries in 2007 holding 97.8% of all commercial banking assets and 84.7% of all banks in the EU.⁶²⁸ Similarly, Canada's financial services industry is dominated by Quebec and, in particular, Ontario while three-quarters of all national assets have become concentrated within the country's six largest banks.⁶²⁹

This pronounced concentration of assets in the financial services sector – particularly in banking – has placed increased pressure on financial institutions to expand into international markets in order to generate growth. In Canada, the incentive for internationalisation has been further reinforced by limits on acquisitions of large banks and life insurance companies under Canada's 'widely held' rule. Under this rule, Canada's large banks (equity over C\$8 billion) and demutualised life insurance companies (equity over C\$5 billion) are restricted from having more than 20% of voting shares or 30% of non-voting shares controlled by a single legal person.⁶³⁰ While these ownership restrictions protect the domestic financial services sector from foreign takeover through acquisition, they also serve to limit the ability of financial groups to grow domestically. The implications of the latter are that it limits the creation of major Canadian financial groups which can rival those found in the US, Europe and Japan, while placing greater pressure on Canada's larger banks and life insurance companies to seek out opportunities in foreign markets.⁶³¹

⁶²⁸ Kaisergruber, D. & K. Volger-Ludwig (2009).

⁶²⁹ These include: Royal Bank of Canada, Toronto-Dominion Bank, Bank of Nova Scotia, Bank of Montreal, Canadian Imperial Bank of Commerce and the National Bank of Canada. See: Department of Finance Canada (2005).

⁶³⁰ This is in contrast to medium banks and life insurers which can be closely held and are subject only to a 35% public float, and small banks and life insurers which have no restrictions

⁶³¹ Mandel-Campbell, A. (2008).

At the same time, it should be noted that the widely held rule is based largely on prudential grounds, with the procedure being a means of limiting self-dealing while contributing to transparency and improved corporate governance. The Canadian financial system is widely regarded as being one of the world's soundest. The Bank of International Settlements, for example, ranks Canada as having 'the strongest banks in the world', while the World Economic Forum (WEF) has ranked Canada's financial system as the world's soundest for the past three years.

This combination of stability and limited systemic risk has helped Canada maintain a highly regarded financial system. Under its 2010 *Financial Development Index*, which ranks national financial systems across a number of indicators and services, the WEF recently ranked Canada as high as 6th worldwide.⁶³² As the below table suggests, this ranking places Canada's financial services sector on equalling footing with the most competitive Member States in the EU-15 and well ahead of those in the New Member States.

Table 56: World Economic Forum 2010 Financial Development Index, Canada and EU Member States⁶³³

Country	WEF Ranking (2010)	Country	WEF Ranking (2010)
UK	2	Ireland	18
Canada	6	Austria	19
Netherlands	7	Finland	20
Belgium	10	Italy	25
France	11	Czech Republic	33
Sweden	12	Poland	35
Germany	13	Slovak Republic	36
Spain	14	Romania	44
Denmark	16	Hungary	45

Source: World Economic Forum (2010)

In terms of **trade**, official statistics from Eurostat show that the EU's exports of financial services totalled \$80.7 billion in 2009 (\$60.1 billion for financial intermediation services and \$20.6 billion for insurance services), making it one of the EU's leading sectors for services exports.⁶³⁴ This is significantly larger than exports from Canada, which totalled nearly \$7 billion in 2007 (\$3.22 billion in non-insurance and \$3.76 billion in insurance services) and represented 10.8% of total services exports.⁶³⁵

Although these numbers appear low when compared to trade in goods, it is almost certainly the case that these statistics (for both the EU and Canada) are largely reflective of cross-border trade in financial services (mode 1) and, therefore, do not sufficiently account for the major role played by sales through affiliates (mode 3).⁶³⁶ As the latter is a far more significant means of exporting financial services for both Canada and the EU – particularly across the Atlantic – it is therefore exceedingly difficult to analyse

⁶³² WEF (2010).

⁶³³ Only lists those MS for which rankings are provided

⁶³⁴ Eurostat: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-10-037/EN/KS-SF-10-037-EN.PDF

⁶³⁵ UN Services Trade Database

⁶³⁶ See opening discussion under the Services Sector Assessments for a description of the 4 modes of trade in services as well as an outline of the nuances in measuring them.

trade in financial services as separate from foreign **investment**, which serves as the main means of establishing a commercial presence abroad in the financial services sector (primarily through mergers and acquisitions).⁶³⁷

The role of foreign affiliates in bilateral trade in financial services is likely to be particularly strong given that the financial services sector serves as the largest source and recipient of outward and inward FDI for both Canada in the EU. **Outward investment**, in particular, plays similar importance for both sides accounting for 43.1% of all EU FDI stocks outside the EU in 2005 and 37.4% of all Canadian outward stocks in 2007.⁶³⁸ This investment is reflective of the preponderance of the sector to deliver its services through local presence rather than through cross-border trade. As such, it is likely that the export figures listed above (reflective of mode 1) significantly under-represent the trade that both Canada and the EU are engaged in within the financial services sector.

With respect to **inward investment**, the financial services sector plays a relatively far more important role for the EU where it accounted for 42% of all inward stocks (extra-EU) in 2005 compared to only 13.5% for Canada in 2007.⁶³⁹ While the reasons for this disparity are no doubt multifaceted, Canada's significant endowment of natural resources (particularly in oil and gas extraction and mining) and investor protections – which are in stark contrast to many other countries with similar endowments – has resulted in major inflows of FDI, particularly in recent years, lowering the overall role the financial services sector plays. Further, as mentioned, overt limitations on the amount of equity in Canada's largest providers of financial services, have almost certainly limited the amount of direct investment via acquisitions that would perhaps otherwise occur.

In terms of **bilateral investment**, financial services make up a significant share of Canada's investment in the EU (and vice versa). Total stocks of FDI in EU financial services represented 41.5% of all Canadian investment in the EU as of 2007, with the EU being the recipient of 26% of Canada's worldwide outward investment in the sector. Similarly, Canada's financial services sector was the recipient of 23.2% of all EU FDI stocks in the country as of 2009, accounting for 34.8% of total direct foreign investment in the sector and placing the EU behind only the U.S. in terms of foreign investment in Canada's financial services sector.⁶⁴⁰

Comparing figures on inward investment to those for cross-border imports of financial services (mode 1), it is observed that the EU has played only a moderate role in cross-border trade in financial services in Canada, accounting for 28.5% of its imports of non-insurance financial services in 2007 (\$1.16 billion) and 8% of insurance services imports (\$486 million).⁶⁴¹ As this equates to a total of 16.2% of Canada's overall imports of financial services, it could be surmised that the much larger role of FDI further reinforces the idea that trade through establishment of a local presence (mode 3) is playing a greater role in bilateral trade in financial services. This is likely to be particularly true in the case of insurance services as the EU's import market share (8%) is significantly lower than its share of the global market (40%) and since the industry is less restricted by investment barriers.⁶⁴² Although there are no equity caps in insurance, multiple regulatory requirements are imposed by provinces acting as a trade barrier with market conduct rules imposed at provincial level. These assertions are likely to similarly hold true for Canada's exports to the EU. For example, in 2007 it is already noted that the EU held 26% of

⁶³⁷ DFAIT: <http://www.international.gc.ca/trade-agreements-accords-commerciaux/services/canada-ts.aspx?lang=en>; Goldfarb, D. and L. Theriault (2010).

⁶³⁸ Eurostat (2008).; DFAIT (2008).

⁶³⁹ Ibid.

⁶⁴⁰ Statistics Canada; OECD.stat

⁶⁴¹ UN Services Trade Database

⁶⁴² CEA (2010).

Canada's outward FDI stocks in the financial services sector. In that same year, however, the EU received only 16.8% of Canada's total cross-border exports in financial services.

ANALYSIS

Given a limited degree of restrictions in place within the financial sector, it is not expected that the CETA will have a pronounced impact on trade, investment or output in either Canada or the EU over the long-term. The major financial service providers in the EU, like Canada, are members of the OECD and, as with the majority of OECD countries, both tend to have open markets for banking and other financial services while providing national treatment to financial information and advisory services (FIAS).⁶⁴³

Overt restrictions on mode 3 do exist in Canada with the aforementioned widely held rule, which limits establishment. These, however, are non-discriminatory and apply equally to both domestic and foreign investors. Additionally, under the *Investment Canada Act* (ICA), Canada implements an automatic screening process for any investments over C\$299 million for WTO members.⁶⁴⁴ Under this review, foreign investments are required to display that the investment will provide a 'net benefit' for Canada. While this threshold and burden to prove a net benefit may act to restrict investments through acquisitions, it is unlikely that the CETA would provide lower thresholds for Member States, particularly in the financial services which can be subjected to prudential measures. However, if the CETA were to extend national treatment to EU investors, it is possible that the agreement could stimulate limited increases in EU FDI in Canada's financial services sector the long-term through the removal of screening procedures. Nevertheless, amendments were made to the ICA in 2009 that will increase these thresholds to C\$600 million for all WTO members over the short-term, and eventually C\$1 billion over the mid-term, limiting any impact that a CETA is likely to have in this regard.

In addition to the equity restrictions, Canada maintains requirements that a majority of the board of directors must be Canadian citizens.

In the EU, explicit restrictions on modes 1 to 3 are generally not present. In terms of investment in the financial sector, the OECD FDI restrictiveness index is generally lower for a number of EU countries than it is for Canada, generally implying greater ease to establish local presence either through establishment of an affiliate or through acquisition. However, a *Conference Board of Canada* paper highlights a number of flaws in this index and claims that barriers within the EU do exist, but that they are more opaque in nature (e.g. political interference) though nevertheless are as or more restrictive than barriers found in Canada.⁶⁴⁵ Specific examples of limiting investment and attempts at acquisitions include 'the lack of market discipline exercised by German's state-owned regional savings banks' as well as 'the threat implied by the Bank of Italy's right to veto mergers'.⁶⁴⁶ To the extent that these statements reflect actual barriers faced by Canadian service providers wishing to invest in the EU financial services sector, particularly in certain Member States, it is potentially the case that the CETA could enhance investment through the creation of investor-state provisions that provide national treatment. This would be contingent, however, on the creation of such a provision as well as the inclusion of it being enforced in the financial services sector (See Chapter on Investment for more discussion on this issue).

In general, the CETA is likely to make the existing levels of liberalisation more legally binding, thereby limiting the extent to which any increase in liberalisation takes place, but at the same time ensuring that

⁶⁴³ OECD (2001a).

⁶⁴⁴ Expected to CAD\$312m for year 2011 according to Industry Canada. http://www.ic.gc.ca/eic/site/ica-lic.nsf/eng/h_1k00050.html

⁶⁴⁵ Mandel-Campbell, A. (2008).

⁶⁴⁶ Ibid.

liberalisation will be maintained at least at the current levels into the future. National treatment will likely be enshrined for cross-border trade in financial services and establishment and it is also likely that the CETA will legally require that regulations pertaining to the financial services sector are transparent and mandate that access is provided to national payment and clearing systems. Under such an outcome, it is again noted that there is likely to be limited further liberalisation than that already in place given the openness of the two sides' financial service sectors and the limited discriminatory measures against foreign access. Long-term increases in investment may be fostered somewhat given assurances provided to investors under measures being bound by the legal provisions of the Agreement

CGE modelling results generally confirm this assessment projecting limited changes in output, exports and the balance of trade in either Canada or the EU (Tables 105-110 Annex 6). As it is not expected that a significant degree of liberalisation will occur beyond the cut in service trade costs modelled, it is further estimated that the long-term impact of the CETA on output, trade and investment in the financial services sector will be limited.

INDICATOR: Labour mobility (temporary presence for business purposes)

BASELINE & ANALYSIS

In the context of the present assessment, labour mobility takes on key importance, particularly as the temporary movement of labour constitutes one of the modes through which services are traded (mode 4). As noted in the introduction to the services section, approximately one in five of the temporary workers located in Canada are from the EU, with the majority of these being professionals and technicians. While the EU does not maintain similar statistics, it is not overly presumptive to believe that many of the Canadians who reside temporarily in the EU are employed in similar capacities.

Stakeholders in both Canada and the EU have, however, identified barriers to temporary entry as one of the most prominent barriers restricting business activities between the two sides.⁶⁴⁷ These barriers take the form of at-the-border restrictions, such as difficulties in obtaining entry/work permits, spousal visas and labour market tests, and behind the border restrictions, which include a lack of mutual recognition of professional qualifications and licences. Therefore, with relatively limited barriers to cross-border trade in the financial services sector, restrictions on the temporary presence of natural persons who enter either Canada or the EU for business purposes constitute one of the most prevalent barriers which could be addressed by the CETA.

It is herein important to note that the CETA's provisions on labour mobility are likely to reserved for temporary entry/presence and herein only for a limited segment of the workforce (e.g. professionals such as senior managers or skilled technicians). In terms of financial services these would deal primarily with individuals responsible for establishing a presence, making sales of financial services, intra-corporate transferees who possess a specific degree of specialisation (e.g. senior managers and specialists) and those who have reached a contract with a Canadian-based establishment and must deliver the service within Canada. While detailed data on such movement of labourers within the financial services sector does not exist, it is likely that the overall impact of easing movement of these workers would be minor in the context of present bilateral economic relations.

It is difficult to provide ex ante quantification of the impact that could be derived through removal/reduction in the restrictions to temporary entry. In the financial services sector, improvements in the at-the-border restrictions (e.g. through streamlining or elimination of visas for temporary workers

⁶⁴⁷ European Commission and Government of Canada (2008).

or easing intra-company transfers between the two Parties) would likely have a positive impact on investment and exports by enhancing the ability for Canadians to provide services in the EU and locate investment/sales opportunities (and vice versa), though the overall contribution to this is likely to be limited in terms of overall trade and investment.

Mutual recognition agreements (MRAs) for specific professions within the financial services sector could likely produce gains for specific types of service providers such as securities dealers who would likely benefit from mutual recognition of stock exchange standards.⁶⁴⁸ However, MRAs are not negotiated at the national level in Canada and are instead under provincial jurisdiction; and most often under the competence of professional bodies.⁶⁴⁹ It is therefore, not clear whether the CETA will be able to directly result in the formation of MRAs for professionals engaged in financial services.

INDICATOR: Employment

BASELINE

Approximately 682,600 people in Canada are employed in the financial and insurance services sector. Ontario and Quebec serve as the predominant sources of employment in the industry providing 66.8% of total financial services jobs. In terms of relative importance, however, Manitoba has the highest concentration of jobs in the sector with 6.3% of total employment in the province located in financial services. This is followed by Ontario (5.4%), Saskatchewan (4.9%), Nova Scotia (4.6%) and Quebec (4.6%).⁶⁵⁰

In the EU, the financial services sector employed approximately 5.3 million people in 2007, with 65% employed in banking, 20% in the insurance industry and 15% as intermediaries (agents and brokers).⁶⁵¹ The majority of employment is concentrated in only a handful of Members with the UK and Germany alone accounting for approximately 43% of employment. Together, the UK, Germany, France, Italy, Spain, the Netherlands and Poland account for over 80% of all financial services positions in the EU.⁶⁵²

In terms of relative importance, however, the financial services sector is by far the greatest source of employment in Luxembourg, where it accounts for nearly 12% of all jobs. Other countries relatively more reliant on the sector include Ireland (4.9%), the UK (4.8%) and Malta (4.7%). Generally, with the exception of Spain, Portugal, Finland and Sweden, the sector accounts for over 3.3% of employment in each of the EU-15 countries.⁶⁵³

ANALYSIS

Canada

Given the limited expected impact on output and trade, employment in Canada's financial services sector is unlikely to be significantly affected by the CETA over the long-term. CGE model results project a very minor decrease in employment, with demand for workers in the insurance industry projected to decrease by as much as -0.17% over the long-term (Table 112 Annex 6). This is a relatively negligible

⁶⁴⁸ Ibid.

⁶⁴⁹ Ibid.

⁶⁵⁰ Statistics Canada (2010).

⁶⁵¹ Kaisergruber, D. & K. Volger-Ludwig (2009).

⁶⁵² Ibid.

⁶⁵³ Ibid.

change in employment, which does not take into account the potential positive impact of the CETA's potential provisions on temporary movement of labour and portfolio flows.

EU

It is not expected that the CETA will significantly impact employment in the EU's financial services sector. This is supported by CGE results, which project very limited changes in both insurance services (0% to 0.03%) and other financial services (-0.01% to 0.01%) over the long-term.

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

As shown in Table 57, the financial services sector is a significant source of employment in Canada, providing jobs for 4.6% of the country's workforce. While it is estimated that the financial services sector will see declines in employment, it is not expected to lead to any pronounced degree of displacement. This assessment is largely derived from presently low expected declines which are approximately -0.01% for financial intermediation and -0.17% for insurance services.

Table 57: Employment in Canada's financial services sector, 2009

Sector	Employment
Financial intermediation	464,048
Insurance	195,470

Source: Statistics Canada

EU

Employment in the EU's financial services sector is not expected to change as a result of the CETA, limiting the likelihood that the Agreement leads to any noticeable instance of displacement.

INDICATOR: Quality & decency of work

BASELINE & ANALYSIS

Canada & EU

With limited worker displacement and generally good prospects for transferring into expanding industries, it is not envisaged that quality and decency of work will be significantly impacted in either Canada or the EU.

INDICATOR: Health, education & culture

BASELINE & ANALYSIS

Canada & EU

It is not envisaged that health, education or culture will be significantly impacted in either Canada or the EU.

ENVIRONMENTAL ASSESSMENT

Canada & EU

Financial services have few direct environmental impacts other than those related to office supplies and energy use. They can have indirect impacts on the environment through the financing they make available to other industries, which then in turn impacts the environment (e.g. preferential financing of oil sands contributes to environmental issues).

Given that financial services represent the most important share of foreign direct investment in Canada, they could also have impacts through investment practices. However, unless the CETA would radically alter current practices in the financial industry, or related regulatory frameworks, something that cannot be demonstrated through the lens of the SIA, it is unlikely that CETA will have direct effects on the environment in these sectors.

Similarly, with limited changes in output in the EU projected, it is therefore expected that the CETA will not produce a significant environmental impact.

Indicator: GHG emissions

BASELINE & ANALYSIS

Canada

One area where financial services can have a direct impact is on GHG emissions. According to the economic modelling scenarios conducted for this assessment, the CETA could lead to a shift of resources in Canada from the natural resources to the services sector. This would result in lower environmental impacts overall. However, this could increase GHG emissions in the financial sector if energy consumption increases. Unfortunately, the E3MG estimates do not provide disaggregated results for these specific sub-sectors of the services sector.

Commercial and institutional emissions were 34,900 kt of CO₂e in 2008, up from 25,700 kt of CO₂e in 1990. As the Canadian economy restructures, more jobs are being created under the services industry. This reduces the country's overall GHG emissions, as there is a structural shift from carbon intensive primary industry, to less carbon intensive service industries. Heating and cooling of buildings, electricity use for lights, electronics and appliances are the primary culprits of energy use.

However, between 1990 and 2008, direct emissions from fuel use in the services sector (not electricity consumed) increased 47%, or by 19Mt, though this mostly occurred between 1990 and 2003. The cause of this rise in emissions can be attributed to the increase in office floor space (up about 34% from 1990

to 2007) and the growth in office equipment. Energy intensity hit its highest point in 2003, and had been diminishing to a level slightly lower than what it was in 1990. However, if electricity were factored in, emissions would increase as electricity use has gone up 27% from 1990 and 2007, mostly because of electronic equipment and space cooling. Since 2004, direct emissions have stayed fairly stable because of programs to encourage reductions in energy use and warmer winters requiring less heating.⁶⁵⁴

EU

In 2008 the only GHG emissions reported by the financial services, insurance and auxiliary subsectors to the EU were 171 t of methane.⁶⁵⁵

Due to low resource utilisation in the sector and only marginal impact of a CETA no environmental impact is expected. The E3MG modelling also predicts no impact on GHG emissions from this sector.

6.1.4. Business Services

ECONOMIC ASSESSMENT⁶⁵⁶

INDICATOR: Output, trade, investment & labour mobility (temporary presence for business purposes)

BASELINE

Business services are comprised of a wide range of heterogeneous sub-sectors that can vary in the specifics by which they are traded, produced and in the market access barriers they are most prominently exposed to. Regardless of these differences, business services tend to share the trait of being high value-added services that can improve the productivity of the customers they serve. Firms can improve their competitiveness, for example, by choosing to outsource business services that they use only sparingly – and hence economise on the ability to forego employing these experts full-time – while at the same time enjoying access to a wide range of expertise that cannot be matched in-house.⁶⁵⁷ As such, business services can be particularly crucial for SMEs, which cannot afford to maintain internal competence in areas such as law, market research or accounting.

For both Canada and the EU, business services make up one of the most dynamic sectors, serving as one of the key sources of employment, trade and output. In Canada, **output** from the business services

⁶⁵⁴ Environment Canada (2010b)

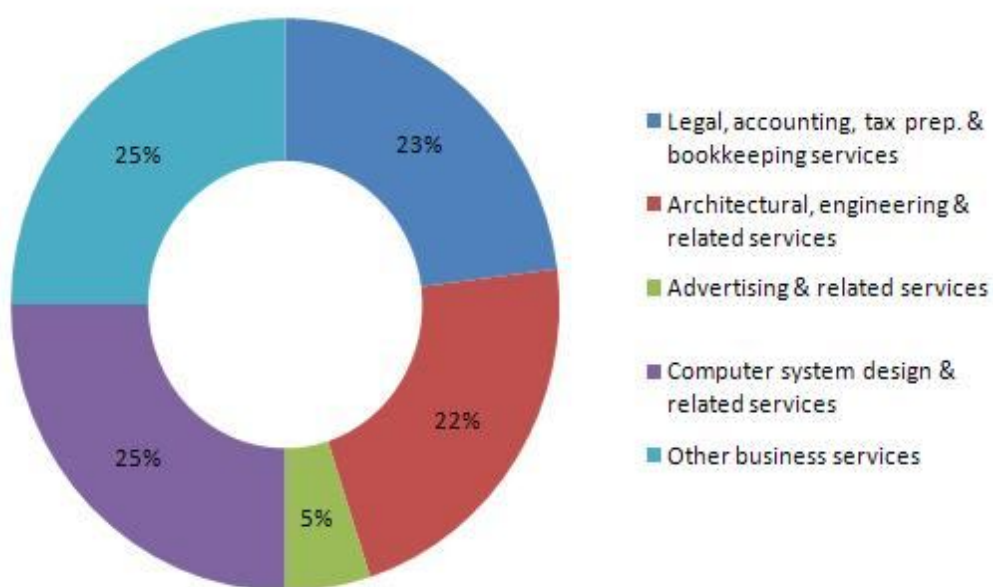
⁶⁵⁵ European Pollutant Release and Transfer Register

⁶⁵⁶ For the purposes of the analysis, business services are defined to include all non-financial services where human capital is the major input. This follows the NACE K72 and K74.1-K74.5 classifications and includes: computer and related activities; legal, accounting, bookkeeping and auditing activities, tax consultancy, holdings; architectural and engineering activities and related technical consultancy; technical testing and analysis; advertising; and labour recruitment and provision of personnel. Results from the CGE model for the business services sector are, however, reported according to the GTAP database grouping which combines these services along with real estate and renting activities into one aggregated group. As such, modelling results should be understood as representing the impact on all of these services.

⁶⁵⁷ Leshner, M and H. Nordas (2006).

sector has increased 44.5% since 1999 with its GDP reaching \$51.5 billion (5.1% of GDP) in 2009.⁶⁵⁸ Among the subsectors within business services, output is generally evenly dispersed between legal and accounting services, architectural and engineering services, computer and IT services and other business services, with each accounting for 22-25% of total sectoral output (Figure 6).

Figure 6: Output of business services in Canada by subsector, 2009



Source: Statistics Canada

The EU's business services generated approximately \$2,214 billion in gross turnover in 2006.⁶⁵⁹ Within this, legal, accounting, auditing and business management services was the largest sector accounting for 29.8% of turnover, followed by computer and related activities (21%), architecture and engineering (15.3%) and advertising (8.2%).⁶⁶⁰ The UK serves as the sector's leading Member State, providing over a quarter of the total value added in the EU, with Germany, France, Spain, Italy and the Netherlands serving as other major contributors of EU value added.

Trade in business services can offer a number of benefits, including lower costs through increased competition as well as providing smaller economies with greater access to different types of services.⁶⁶¹ While modes 1 (cross-border trade) and 3 (establishment)⁶⁶² – as with other services sectors – contribute significantly to trade in business services, mode 4 (temporary movement of labour) plays a far greater role than in other services. Mode 4 trade in business services can be difficult to disentangle from modes 1 and 3, however, making a separate analysis of it difficult (see Box 25). Further compounding this problem is the fact that data on mode 4 is widely unavailable and difficult to quantify.

⁶⁵⁸ Statistics Canada. These include the combined contributions of professional, scientific and technical services and information and cultural industries

⁶⁵⁹ Eurostat

⁶⁶⁰ Eurostat, Structural Business Statistics.

⁶⁶¹ Leshner, M and H. Nordas (2006).

⁶⁶² See opening discussion under the Services Sector Assessments for a description of the 4 modes of trade in services as well as an outline of the nuances in measuring them.

Box 25: Mode 4 trade in business services and its relation to Modes 1 and 3

While it is widely acknowledged that temporary movement of labour plays a significant role in the trade of business services, attempts to quantify the importance it plays in international trade have been largely unsuccessful. Data on temporary movement of labour is widely absent from national accounts and, in instances where such data is collected, it is lacking in the level of detail and disaggregation necessary for making statistical inferences. Further compounding the issue of measuring temporary movement of labour and its impact on trade in business services is the fact that it is often complementary to modes 1 and 3 and often bundled together with them in the final delivery of the service.

For example, consider the following:

- an architect designing a blueprint in her office in Milan travels to Vancouver to survey the site for which her plans are intended;
- an independent consultant based in Ottawa needs to reside in Brussels for three months to work on a specific project commissioned by the EU;
- a manager of a small engineering firm based in Edmonton travels to Frankfurt to meet with potential clients in order to secure business for her firm's services;
- a lawyer based at an international law firm's headquarters in London is temporarily transferred to its office in Toronto to provide advice to local clients.
- a Senior Partner of a Montreal-based accounting firm travels to Paris to seek out opportunities for establishing a branch office.

All of the above examples include the temporary movement of labour from the home territory to a foreign territory for the purposes of delivering a service (mode 4). At the same time, the occurrence of mode 4 is being combined either with mode 1 or mode 3, illustrating the difficulties present in properly quantifying the isolated role mode 4 has on international trade in services. For this reason, as well as the absence of data, it is extremely difficult to properly quantify the impact mode 4 liberalisation would have on trade.

Mode 1 trade plays an important role for all subsectors of the business services. This is particularly true given that providers of business services are generally small in size, increasing the cost of establishing a local presence in foreign markets. Further, advances in technology – particularly with regards to telecom – have provided greater scope for business services to be delivered via cross-border trade. For example, engineers and architects can more easily transmit blueprints and designs electronically, while IT programmers can more easily provide contracted services to customers in distant locales.

Canada is competitive in a number of business services. Its engineering industry is strong in resource-based, energy-related infrastructure projects, while its usage of both common law and civil law (Quebec) make its legal professionals well positioned to provide expertise in a multi-juridical context.⁶⁶³ In 2007, Canada's total cross-border exports of business services (delivered via mode 1) reached \$25.44 billion,

⁶⁶³ Government of Canada (1999).

producing a trade surplus of just under \$6 billion.⁶⁶⁴ Canada's leading export subsectors were in business and management consulting and public relations (\$7.88 billion) and computer and information services (\$7.06 billion), with the latter producing the highest trade surplus of any subsector in the business services (\$2.09 billion). Other leading export sectors include architectural and engineering services (exports of \$6.27 billion in 2007) and R&D services (\$4.22 billion), with both producing a trade surplus in 2007.⁶⁶⁵

For the EU, total mode 1 trade in business services reached \$472.5 billion in 2007.⁶⁶⁶ Among the subsectors of business services, the largest traded services are computer and information services (\$135.47 billion); legal, accounting, management, consultant & public relations services (\$115.49 billion); R&D services (\$83.59 billion); architectural, engineering and other technical services (\$75.73 billion); and advertising and market research (\$74.66 billion).⁶⁶⁷ Within these subsectors, the EU maintained a sizeable surplus in mode 1 trade of computer & information services (\$44.36 billion), architectural, engineering and other technical services (\$16.29 billion) and legal, accounting, management, consultant and public relations services (\$5.59 billion), resulting in an overall trade surplus of \$51.48 billion in 2007.

In bilateral trade in these subsectors, Canada maintained a surplus in mode 1 trade within all except architectural, engineering and other technical services, in which the EU had a surplus of \$170 million in 2007.⁶⁶⁸ Overall, EU-Canada bilateral mode 1 trade in business services accrued to \$3.8 billion in 2007, accounting for 14.9% of Canada's total mode 1 trade in business services and resulting in a trade surplus of \$729 million for Canada. In terms of relative importance, the EU serves as a significant destination for Canadian mode 1 exports of R&D services (26.9% of total mode 1 exports in this subsector), business and management consulting and public relations (14.8%) and computer and information services (12.3%). Similarly, the EU is a major supplier of Canadian mode 1 service imports, with a significant import share in R&D services (24.2%), computer and information services (14.2%), business and management consulting and public relations (13.6%) and architectural, engineering and other technical services (11.3%).⁶⁶⁹

While cross-border trade represents an important mode through which business services are delivered internationally, establishment (**mode 3**) may, in many cases, be the primary method of trade and has been increasing in importance in recent years. The establishment of foreign affiliates not only provides a channel through which to deliver services to the end user located in a foreign market, but also a means of identifying and increasing sales in that market. This is particularly true in the subsector of accounting services, which is dominated internationally by larger firms. Most notably, the 'Big 4' (Deloitte Touche Tohmatsu, PwC, Ernst & Young and KPMG) operate in approximately 150 countries worldwide and in some markets maintain three-fourths of all revenue generated in the national industry.⁶⁷⁰ These firms have become heavily reliant on markets outside their home countries, with approximately 65% of their revenues generated internationally.⁶⁷¹

The subsector of legal services provides another example of the importance of establishment for the international trade in business services. While the sector is overwhelmingly populated by small firms or individual practitioners, the recent wave of globalisation has led to increased internationalisation and

⁶⁶⁴ UN Services Trade database ; it is important to note that herein, these trade statistics may also be accounting for mode 4 delivery of services for reasons highlighted in Box 25.

⁶⁶⁵ UN Services Trade database

⁶⁶⁶ Eurostat (2009).

⁶⁶⁷ Ibid.

⁶⁶⁸ UN Services Trade database

⁶⁶⁹ Ibid.

⁶⁷⁰ Cattaneo, O. & P. Walkenhurst (2010a).

⁶⁷¹ Cattaneo, O. & P. Walkenhurst (2010b).

consolidation of law firms, who have followed their clients into international markets. Clients have exhibited greater demand for a law firm that can provide integrated services and expertise on a number of legal and regulatory systems.⁶⁷² The industry's increasing consolidation – particularly among the common law countries of the USA and UK – have further increased this wave of mode 3 trade in legal services, by helping create larger law firms that can offer a wider range of legal services to meet customer needs, while also having the means of more easily expanding into foreign markets.⁶⁷³

Nevertheless, most international law firms are fairly small in nature with the world's largest – Baker & McKenzie – employing only 3,900 lawyers worldwide (2006) and the world's top 10 law firms representing only 4% of output and 1% of employment.⁶⁷⁴ While this highlights the continued importance alternative modes⁶⁷⁵ are likely to have in trade of legal services, it also suggests that firms will be more negatively impacted by restrictions that raise the cost of establishing a local presence in a foreign market. This is particularly likely given the lack of dominant large firms as well as the general preference of multi-national companies located abroad to contract legal services from firms who have offices in their home country.⁶⁷⁶

Data on **FDI** in the business services supports the importance mode 3 has in trade of business services for both Canada and the EU.⁶⁷⁷ For the EU, 22.5% of all stocks of inward FDI in 2005 were directed towards business services, while 11.7% of its total outward stocks were in the business services sector.⁶⁷⁸ Given its much larger market, the EU plays a much greater role in Canada's outward investment (5.4% of all stocks in EU's business services sector) than Canada does in EU outward investment in business services (2.1% of the EU's total outward investment in business services). With the majority of this investment being made in order to deliver services internationally, it is therefore clear that mode 3 plays an important role in the international and bilateral trade of business services for both Canada and the EU.

As noted, the ability to deliver services via a temporary presence (**mode 4**) serves an important role in the international trade of business services and complements trade through modes 1 and 3. This is likely to be particularly true within the EU-Canada bilateral relationship, where nearly 22% of temporary workers in Canada are from Europe.⁶⁷⁹ However, given the sensitivities surrounding the international movement of workers, restrictions on mode 4 delivery of services tend to be some of the most prevalent barriers to trade in services among OECD countries. These restrictions most commonly take the form of residency/nationality requirements for service providers as well as visa restrictions and issues with licensing and qualification requirements.

Residency requirements limit the ease with which foreign service providers can temporarily operate within a jurisdiction while also inhibiting the ability of a company to engage in intra-office transfers

⁶⁷² Geloso Grosso, M. (2004).

⁶⁷³ Ibid.

⁶⁷⁴ Cattaneo, O. & P. Walkenhurst (2010b).

⁶⁷⁵ Modes 1 and 4 in particular play an important role in international trade of legal services. The internet, for example, has allowed law firms to more easily provide services across borders, with trade primarily consisting of transmission of legal documents by email or by offering legal advice/consulting through telecom services. In the context of international trade in goods, mode 1 can be particularly important for a company that requires legal advice on a trade related issue specific to a foreign market in which the contracted service provided is located.

⁶⁷⁶ Cattaneo, O. & P. Walkenhurst (2010b).

⁶⁷⁷ The majority of FDI which flows into a country's business services sector is largely for purposes of establishing affiliate offices and delivering services to the domestic market

⁶⁷⁸ Eurostat (2008).

⁶⁷⁹ Thomas, D. (2008).

Although the exact employment these European nationals are engaged in is not known, it is expected that a significant percentage of them are professionals engaged in skilled/technical capacity with many likely employed in the business services.

between countries. These restrictions can not only limit bilateral trade in services but can also limit a country's FDI as mode 3 can lose significance when a company lacks the ability to transfer professionals from their home country.⁶⁸⁰ Difficulties in recognising foreign credentials serves as one of the primary 'behind the border' issues relevant to the business services sector.⁶⁸¹ This is particularly true given the fact that many of the subsectors within business services belong to the group of 'accredited' professional services (e.g. engineering, architecture, law, accountancy). Within these services, it is typically the case that a country will require that an individual obtain a license before being able to practice the profession within its territory. While public policy objects serve as one of the primary reasons behind this requirement, the hesitance or inability to recognise qualifications and licences for professionals accredited in a different jurisdiction hinders the unrestricted movement of professionals between jurisdictions, and hence limits trade in business services.

This is likely to be particularly true in the Canada-EU context, where similar standards tend to be used in terms of professional experience, education and overall competence. However, the high standards to which some professions may be held, tends to lead to these services being heavily regulated. This is particularly the case in the legal and accountancy services, which are often strictly regulated, and less so with engineering and architecture. One way of overcoming the restrictions on trade in business services as a result of differences in qualifications and licensing – while keeping in place public policy objectives – is a mutual recognition agreement (MRA), which can facilitate recognition of professional qualifications between the EU and Canada.

In summary, trade in business services tend to be restricted in a number of ways relevant to modes 1, 3 and 4. In an EU-Canada context, these restrictions are most likely to prominently feature in the temporary movement of business persons. While restrictions specific to cross-border trade or establishment are also likely to be present, it should be noted that restrictions on mode 4 will also likely restrict the bilateral trade in services that possess properties relevant to mode 1 and/or mode 3.

ANALYSIS

The business services sector – particularly in a bilateral context – raises fewer sensitivities than those found in other services sectors (e.g. financial, telecom, maritime transport services), with the most prominent market access issues between the EU and Canada related to the temporary movement of business professionals. Given the less sensitive nature – temporary movement of labour notwithstanding – it would appear that the CETA could contain wide ranging commitments for business services. This could potentially include national and MFN treatment on cross-border supply and investment, while ensuring that neither side is able to impose limitations on business service suppliers via such circumstances as foreign equity restrictions, quotas, economic needs tests, the number of employees or services that can be provided, the type of legal entity the foreign company is allowed to take or nationality requirements for senior management.

For a number of sub-sectors within the business services, the impact of such provisions may, however, be minimal given the already low level of restrictiveness. For these industries, the impact of the CETA may, therefore, largely consist of making the existing level of liberalisation legally binding. Nevertheless, there are sub-sectors within the business services that tend to be more restricted, providing potential for a CETA to provide improvements in market access by removing restrictions on cross-border trade and/or establishment issues. This is likely to be particularly true within legal and accounting services,

⁶⁸⁰ Roy et al (2006).

⁶⁸¹ European Commission and Government of Canada (2008).

which are the most restricted sub-sectors within the business services sector.⁶⁸² Further, cross-border trade (mode 1) could be further improved under the CETA by provisions ensuring that firms cannot be forced to incorporate locally in order to provide services within a jurisdiction. This could likely be of particular benefit to SMEs that lack the size or resources to establish a local presence in either Canada or the EU.

One area where the CETA could provide benefits to business service providers on both sides would be in the removal of restrictions on the temporary movement of labour between the Canada and the EU. While movement of labour tends to be a sensitive issue in trade agreements, the CETA would be expected to deal with temporary presence, and herein only for a specific sub-sector of professions. Specifically, the CETA likely has the greatest potential to make improvements in the temporary bilateral movement of key personnel, graduate trainees, business services sellers and contractual service suppliers. With reference to key personnel, the CETA could potentially facilitate the temporary movement of senior professionals – either for setting up an establishment or as an intra-corporate transferee – or specialists, while also allowing contracted service suppliers to temporarily reside in Canada or the EU without needing to have an establishment in the territory. By providing significant improvements in the temporary bilateral movement of professionals between the EU and Canada, the CETA would likely foster improvements in bilateral trade in business services (mode 1) as well as increased investment (and hence greater trade via mode 3).

Results from the CGE model suggest that the CETA is likely to positively impact output and trade for both Canada and the EU's business services, with the greatest benefits arising under an Agreement that provided the greatest level of liberalisation, with output expected to increase by as much as 0.03% in the EU and 0.27% in Canada over the long-term (Tables 113-118 Annex 6). This increase in output is largely a result of increased opportunities for cross-border trade in services between Canada and the EU with overall exports (mode 1) estimated to increase by as much as 3.3% and 0.26%, respectively, leading to improvements in the overall balance of trade of \$267 million for Canada and \$587 million for the EU.

These figures are, however, likely an underrepresentation of the potential gains that could occur under a high degree of liberalisation for the sector. While improvements to the temporary movement of professionals between the two sides is at least partially accounted for in the CGE estimates, they would only be able to account for the mode 1 effects of such liberalisation. As the estimates on exports do not take into account mode 3 trade occurring through foreign affiliates, and since increased movement of professionals will likely foster greater investment and establishment, it should be expected that the CETA would have a more pronounced impact on trade and output than estimated by the CGE model. While, as noted, it is difficult to quantify the impact of the removal of restrictions on temporary movement of labour, the business services sector would likely be the most greatly impacted.

Canada

Canada could specifically benefit in a number of ways in addition to those noted above. The EU serves as a key market for architectural and engineering services, making the increased liberalisation arising from the CETA potentially beneficial to Canadian providers of these services.⁶⁸³ Hereto, the CETA could enhance market access for Canadian architectural and engineering services through the inclusion of provisions that ensure the removal of citizenship requirements and restrictions related to establishment of commercial entities and foreign investment as well as improved commitments for the temporary

⁶⁸² Ibid.

⁶⁸³ Ibid.

entry of architects and engineers.⁶⁸⁴ Specifically, Canada has flagged the Member States of Greece, Italy and Portugal as being particularly prohibitive, providing for potentially increased exports (mode 1 and 3) and FDI into these countries as result of the CETA.⁶⁸⁵

Further, Canada has identified barriers in the EU which are prohibitive to Canada's trade and investment in R&D and legal services, and has specifically noted market access barriers in accounting services present in Austria, Belgium and France.⁶⁸⁶ Stakeholders in Canada have also raised concern over the requirements and time necessary to secure work permits.⁶⁸⁷ To the degree that the CETA deals with these issues, it could enhance Canada's cross-border exports to these Member States while also increasing Canada's investment and sales through foreign affiliates.

EU

In addition to those points noted above, the EU could potentially realise benefits through the elimination of establishment requirements at the provincial level, which could produce increases in cross-border trade of some business services. EU providers of business services would also likely benefit from recognition of EU qualifications and the removal of citizenship requirements for accreditation present in some professions. This appears to be particularly true in the field of architecture and engineering where EU professional certifications are not recognised.⁶⁸⁸

The CETA's ability to concretely establish mutual recognition of qualifications/certificates is, however, dependent on it resulting in a bilateral MRA, which becomes complicated due to the fact that such an agreement is decided upon by the relevant professional organisation in Canada and not by the federal government. Hereto, the government can only 'encourage and support the negotiation of MRAs between professional bodies through the development of appropriate frameworks and provisions contained in its international trade agreements'.⁶⁸⁹ Nevertheless, to the degree that the CETA results in such a framework, it is possible that greater bilateral recognition of qualifications can be realised over the long-term; in turn fostering the temporary movement of professionals between Canada and the EU and leading to greater cross-border trade in business services. At the same time, the ability to reach such an agreement and foster movement of professionals will be complicated by the fact that Canada itself suffers from issues pertaining to inter-provincial barriers to labour mobility. As such, any effective MRA would require that certifications/qualifications be recognised by all provinces and territories and that service providers not be required to obtain approval from separate approving bodies located at the provincial level.

The CETA may also improve the flow of temporary labour from the EU to Canada by improving upon the current framework present in Canada's Temporary Foreign Worker Program (TFWP). With the TFWP requiring a company to demonstrate a 'needs test' showing that they are unable to satisfactorily fill the position from within the Canadian labour market and that the entry of the worker will not be

⁶⁸⁴ Ibid.

⁶⁸⁵ DFAIT. Trade Barrier Fiche: Engineering and Integrated Engineering Services. <http://w01.international.gc.ca/CIMAR-RCAMI/fiche-detail.aspx?id=1418&lang=eng>; Trade Barrier Fiche: Architectural Services. <http://w01.international.gc.ca/CIMAR-RCAMI/fiche-detail.aspx?id=1402&lang=eng>

⁶⁸⁶ DFAIT. Trade Barrier Fiche: Legal Services. <http://w01.international.gc.ca/CIMAR-RCAMI/fiche-detail.aspx?id=1321&lang=eng>; Trade Barrier Fiche: Research and Development Services <http://w01.international.gc.ca/CIMAR-RCAMI/fiche-detail.aspx?id=1321&lang=eng>; DFAIT. Trade Barrier Fiche: Accounting, Auditing, and Bookkeeping Services. <http://w01.international.gc.ca/CIMAR-RCAMI/fiche-detail.aspx?id=1401&lang=eng>

⁶⁸⁷ European Commission and Government of Canada (2008).

⁶⁸⁸ Ibid.

⁶⁸⁹ Ibid.

detrimental to the Canadian labour market, such a provision limits intra-corporate transfers and ultimately the ability for professionals to move between labour markets.⁶⁹⁰ Further, to the degree that cooperation under the CETA can facilitate the removal of delays in obtaining work permits, temporary movement of labour may be facilitated, adding to the potential benefits outlined herein.

INDICATOR: Employment

BASELINE

In 2006, 22.2 million people in the EU were employed in business services.⁶⁹¹ With respect to concentration, the Netherlands, Luxembourg and the UK are particularly reliant on the sector with a significant portion of their workforce employed in business services. Employment in Canada's business services was 740,200 at the end of 2009.⁶⁹² Within Canada, the largest source of employment for business services is Ontario, with 41.6% of Canada's employment in the sector, followed by Quebec, Alberta and British Columbia (Table 58). In terms of concentration, business services provided the largest source of employment in Alberta with 6.2% of the workforce engaged in the sector. This was followed by Ontario, British Columbia and Quebec. Generally speaking, however, Canada has a far lower regional concentration in the sector than observed in the EU.

Table 58: Employment in business services in Canada, by province and importance (2009)

Province	Employment (in thousands)	Share of total workforce (%)
Newfoundland and Labrador	6.6	3.4
Prince Edward Island	1.8	2.8
Nova Scotia	13.8	3.5
New Brunswick	10.0	3.2
Quebec	165.8	4.9
Ontario	308.0	5.5
Manitoba	16.6	2.9
Saskatchewan	12.3	2.8
Alberta	106.5	6.2
British Columbia	100.4	5.3
Yukon	0.6	2.9

Source: Statistics Canada

ANALYSIS

Canada

As a result of the CETA, Canada's business services sector is not expected to experience significant changes in the demand for labour. CGE estimates project that, despite increases in output and exports, the CETA will place very minor downward pressure on the demand for labour over the long-term. The estimated change is negligible, and is explained by greater substitution of capital for labour given the former becoming cheaper relative to latter. At the same time, the inability of the model to properly

⁶⁹⁰ Ibid.

⁶⁹¹ Eurostat, Structural Business Statistics.

⁶⁹² Statistics Canada (2010).

account for increased investment and trade via mode 3 (foreign affiliates), suggests that the CETA could very well lead to limited increases in employment in the sector in Canada, particularly to the degree that the EU increases its sales via foreign affiliates.

EU

The overall impact of the CETA on employment in the EU's business services is likely to be negligible over the long-term. CGE estimates project that employment will not change as a result of the Agreement, though it possible that very minor increases may arise from increased investment by Canada and greater sales via foreign affiliates. Nevertheless, no significant impact is expected.

SOCIAL ASSESSMENT

INDICATOR: Worker displacement

BASELINE & ANALYSIS

Canada

The economic modelling projects very minor decreases in employment within Canada's business services sector. Nevertheless, as one of the most important sources of employment in Canada, even minor declines in employment could result in a relatively larger number of displaced. Still, CGE estimates project very minor declines in employment (-0.06% to 0%) with potential increases in investment that are not captured by the model expected to place upward pressure on the demand for labour. As such, it is not expected that the CETA will have a pronounced impact on displacement.

EU

Although the preliminary CGE model projects limited increases in output within the EU's non-financial business services sector, it estimates that employment will not be impacted. Given that increased Canadian FDI may place very minor upward pressure on the demand for labour, it is not expected that the CETA will lead to displacement in the EU's business services sector.

INDICATOR: Quality & decency of work

BASELINE & ANALYSIS

Canada & EU

Generally, working conditions in business services are good with the majority of employees provided with safe and comfortable surroundings. These professions, however, are typically above the national average in unpaid overtime and job induced stress. To this end, employees in these occupations on average report dissatisfaction with their work-life balance. Nevertheless, with limited expected change in employment in Canada or the EU's business services, these indicators should not be affected by the CETA.

INDICATOR: Health, education & culture**BASELINE & ANALYSIS*****Canada & EU***

It is not envisaged that the CETA's impact on business services will have a significant impact on health, education or culture in the EU or Canada.

ENVIRONMENTAL ASSESSMENT***Canada & EU***

The business services sector has few direct environmental impacts other than those related to office supplies and energy use. However, through their influence on customers and suppliers, they have important upstream and downstream effects on sectors of the economy that may have a direct environmental footprint. For example, architecture or engineering services influence downstream construction, transportation and building energy use, as well as upstream supply of materials. They therefore have influence on the upstream supply chain and downstream customer behaviour.

Unless the CETA would radically alter current practices in these industries, or related regulatory frameworks, something that cannot be demonstrated through the lens of the SIA, it is unlikely that CETA will have direct effects on the environment in these sectors.

INDICATOR: GHG emissions**BASELINE & ANALYSIS*****Canada***

One area where business services can have a direct impact is on GHG emissions. According to the economic modelling scenarios conducted for this assessment, the CETA could lead to a shift of resources in Canada from the natural resources to the services sector. This would result in lower environmental impacts overall. However, this could increase GHG emissions in the business services sector if energy consumption increases within the sector. Unfortunately, the E3MG estimates do not provide disaggregated results for these specific sub-sectors of the services sector.

Commercial and institutional emissions were 34,900 kt of CO₂e in 2008, up from 25,700 kt of CO₂e in 1990. As the Canadian economy restructures, more jobs are being created under the services industry. This reduces the country's overall GHG emissions, as there is a structural shift from carbon intensive primary industry, to less carbon intensive service industries. Heating and cooling of buildings, electricity use for lights, electronics and appliances are the primary culprits of energy use.

However, between 1990 and 2008, direct emissions from fuel use in the services sector (not electricity consumed) increased 47%, or by 19Mt, though this mostly occurred between 1990 and 2003. The cause of this rise in emissions can be attributed to the increase in office floor space (up about 34% from 1990 to 2007) and the growth in office equipment. Energy intensity hit its highest point in 2003, and had been diminishing to a level slightly lower than what it was in 1990. However, if electricity were factored in, emissions would increase as electricity use has gone up 27% from 1990 and 2007, mostly because of

electronic equipment and space cooling. Since 2004, direct emissions have stayed fairly stable because of programs to encourage reductions in energy use and warmer winters requiring less heating.⁶⁹³

EU

In 2008 the various subsectors⁶⁹⁴ reported GHG emissions of 692,000 t CO₂ to the E-PRTR.

Due to low resource utilisation in the sector and only marginal impact of a CETA no environmental impact is expected. The minor increase caused by the CETA would equate to insignificant additional CO₂ emissions. The E3MG modelling also predicts no impact on GHG emissions from this sector.

6.2. USA, MEXICO & OTHER THIRD COUNTRIES

USA

Liberalisation of the services sector under the CETA, and the expected gains it would produce for Canada and the EU, would likely have a negative but limited **economic impact** for the United States. U.S. exports and output of telecom, insurance and other business services are estimated to be the most negatively impacted by the CGE model, with the U.S. expected to lose some market share in Canada and the U.S. as a result. Erosion of preferences would likely be the primary factor behind this impact. Not only would competition from the EU in the Canadian market increase, but potential improved efficiency in Canadian companies would likely further threaten American market share while also serving to make Canadian firms more suited to compete in the US market over the long-term.

The negative economic impact would also likely extend to the **social** sphere, with decreases in US output and exports expected to have a negative impact on employment. Decreases in employment would likely have a negative social impact as those displaced may have difficulties finding alternative employment that provided comparable benefits (e.g. in wages). Nevertheless, the overall social impact would be expected to be limited.

Environmentally, the specific impact on the services would likely be positive due to reduced output. However, if this production would instead shift towards manufacturing, the overall impact would likely be negative.

A notable area of interest is **telecom**. As noted in the assessment on Canada and the EU, the primary market access restriction in Canada is the foreign ownership restrictions in place. It is unclear to what extent the CETA will lead to a removal of these restrictions, but to the degree that it does, it is possible that these preferences will be extended to the United States given provisions under NAFTA. If this were to occur, the impact on the U.S. would likely be significant as the removal of investment barriers would likely spur increased investment in the Canadian telecom sector, increasing mode 3 exports. More discussion on this can be found in the chapter on investment.

⁶⁹³ Environment Canada (2010)

⁶⁹⁴ NACE: 69 Legal and accounting activities; 70 Activities of head offices, management consultancy activities; 71 Architectural and engineering activities, technical testing;; 73 Advertising and market research; 74 Other professional, scientific and technical activities; 77 Rental and leasing; 78 Employment activities; 82 Office administrative, office support and other business support

MEXICO

Estimates suggest that Mexico's services sector would be negatively impacted over the long-term by the CETA between Canada and the EU. Mexico would likely suffer from the erosion of preferences both with Canada and the EU, leading to limited declines in output and exports of insurance and other business services, in particular. However, this impact is expected to be minor.

OTHER THIRD COUNTRIES

The EU and Canada are almost 100% net exporters of services to **LDCs**,⁶⁹⁵ making it unlikely that the CETA will have an economic, social or environmental impact on these countries.⁶⁹⁶ Trade in services takes place mainly with the US, followed by the EFTA countries (Iceland, Norway, Switzerland, and Liechtenstein)⁶⁹⁷ and changes might be expected in these countries. Services, excluding transportation and travel, dominate.

In addition, limitations on foreign investment in facilities based telecommunication enterprises in Canada as well as limits on competition in the Northern Territories; commercial presence market access limitations in Finland, France, Poland and Slovenia, and national treatment limitations for cross-border services in Cyprus and Malta may not change under CETA.⁶⁹⁸

While the total of internationally purchased services in the non-manufacturing sector initially appears to be insignificant, it has been found that purchased services from low-wage countries have a statistically significant (but small) negative impact on employment. For the manufacturing sector, while purchased services from low-wage countries is not significant, the outsourcing of intermediate materials to low-wage countries appears to have a relatively small negative impact on the demand for labour. The effect might be more pronounced for intermediate materials from **China** and the **East Asian countries** than for those from Central and East European countries.⁶⁹⁹ In the instance that investment liberalisation is included in the CETA, potential increased EU FDI into Canada in the telecommunications sector may boost the demand for labour from countries such as **India**. In the ambitious scenario of services liberalisation, changes in the world prices of electricity, air transport, communication, financial services, insurance, and business services, can lead to minor welfare losses in **China, EUPTA, LDCs, ACPexLDC and ROW countries**.

Significant environmental impacts on third countries, directly related to services liberalisation, are not expected. However, the moderate increase of land transportation services in the EU could increase its demand for fuels from third countries, which would negatively affect the environment in these countries (see the assessment of this subsector in section 3.2.2.2).

⁶⁹⁵ Mattoo et al (2008)

⁶⁹⁶ Due to data limitations, direct estimates of impact indicators are not available for all sectors (trade, other finance, insurance and consumer services). For these sectors, estimates for the aggregate services sector were then used.

⁶⁹⁷ Eurostat. Statistics in Focus (59) 2009, August 3.

⁶⁹⁸ European Commission and the Government of Canada 2008

⁶⁹⁹ Falk and Wolfmayr (2008).

7. CROSS-CUTTING ISSUES

7.1 PUBLIC PROCUREMENT⁷⁰⁰

Summary:

The logic behind liberalising public procurement (also known as government procurement [GP]) rules in trade agreements is to improve the transparency, efficiency, and effectiveness of the procurement process, as well as to increase market access into GP markets. This is expected to ensure accountability in GP, combat corruption (particularly when involving countries with corruption problems), as well as provide governments the best value goods and services for their money. It is likely that the majority of sensitive GP provisions in CETA, and thus the focus of this assessment, deal particularly with GP market access issues.

Economic assessment: *The main effect of GP provisions in CETA would be to encourage competitiveness in the bidding process. At the most macro scale, Canada may experience some minor benefits in terms of GDP increases partially from GP provisions under CETA, although the extent of these gains is uncertain, and would be linked with the benefits from other directly relevant CETA provisions. The EU is not expected to see significant gains given the already highly competitive nature of its GP market.*

GP provisions in CETA would limit Canada's flexibility in making economic policy, and to a lesser extent limit the EU's flexibility in economic policymaking. In assessing CETA's impact on regulatory flexibility it is prudent to compare Canada's and the EU's 1994 GPA commitments with potential CETA commitments. Through such analysis it is clear that CETA will remove the wide discretion that the Canadian government was afforded in its 1994 GPA commitments to favour certain domestic companies in its tendering process in terms of entities, sectors/services and goods, and exceptions. CETA would also reduce the discretion of the EU in favouring its own companies in the GP process, although given the comparative openness of the EU GP market at present, the magnitude of this additional opening under CETA would not be as great as that experienced by Canada.

GP provisions in CETA could create a loss of some policy space in Canada in particular, although this needs to be contextualised in terms of thresholds, as it is unlikely that CETA will apply to Canadian contracts worth less than the lowest current GPA thresholds of SDR 130,000 (approximately \$202,420 in current USD), which means the significant amount of GP contracts falling under this threshold would not be legally subject to CETA GP provisions. Generally, CETA will likely impact policy space for governments of different provinces and territories in Canada more significantly than the federal government, and areas with comparatively more contracts above thresholds would experience more significant impacts on policy space. (The resulting effects on market share, employment, cost and quality of public services, quality and decency of work, and the environment are discussed below.)

⁷⁰⁰ **Introductory notes:** This section, unlike the other cross-cutting sections, provides a baseline and analysis per each indicator due to the specificity of the background information required per each indicator. It also considers the US alongside the assessment of the EU and Canada given the relevance of NAFTA, the GPA, and the AGP to CETA. It is worth noting that while this assessment attempts to present as much relevant data as possible, comprehensive data on GP is difficult to compile, particularly as it relates to contracts subject to trade agreements.

Overall, EU companies would likely see some increase in market share as a result of GP provisions in CETA, and Canadian companies are likely to see some, although a comparatively less, increase in market share. WTO data suggests that domestic companies in GPA Parties like Canada and the EU control the overwhelming percentage of market share in their home GP markets and empirical evidence suggests any significant competition from foreign companies is through foreign subsidiaries. Thus, CETA will likely not lead to any notable shifts in domestic to “direct” cross-border trade; however, EU firms may gain market share through “indirect” cross-border trade (through a foreign subsidiary). They may take advantage of the potential allowances in CETA to gain market share in the Canadian utilities and other sectors, as well as in sub-central GP above CETA thresholds. The extent of these gains importantly depends on a number of factors of competitiveness and not just market access afforded in CETA, as a wide range of foreign subsidiaries are already competitive in the Canadian GP market. Also, as a result of CETA, in the mid- to longer-term EU companies may become more competitive in Canadian GP contracts both above and below thresholds. Canadian companies may increase their market share of EU GP contracts as a result of CETA, although this would be made difficult given the EU’s GP environment is more open and thus more accustomed to competition than the GP market in Canada.

The effect of GP provisions in CETA on employment in Canada is mixed. CETA is unlikely to result in any significant loss of domestic employment to companies operating in the GP market that have not established a foreign presence in Canada and are not employing people living in Canada. The precise impact of CETA on employment in specific localities within Canadian borders is unclear, although there is some indication of potentially negative impacts even if minor. Prohibition of offsets could have some negative impacts on employment in the short-term at least, but a comprehensive analysis would be needed to gauge the full impacts therein.

If set-asides for Aboriginal and minority businesses are prohibited, it would have some negative effects on employment (and culture), at least in the near term, on those currently benefiting from such preferences. And this would create a negative social impact in addition to the economic impact. However, such concerns over Aboriginal businesses may be unnecessary as consultations with the EC suggest they intend to respect “set-asides with a social dimension.”

Social assessment: Evidence from a number of studies suggests that the competition caused by GP provisions, like those in CETA, will likely result in increases in welfare. And these increases may translate into lower cost public goods and services. However, the extent of these welfare gains will also depend on changes in competition and investment rules, among other provisions in CETA.

CETA would encourage more firms to participate in the GP process, allowing wider choice for governments in the companies contracted to deliver goods and services, which should reinforce the trend that companies that provide quality services win contracts; however, beyond this theoretical statement there is not enough available evidence to suggest this will have a significant positive or negative impact on the end quality of goods and services tendered in the EU and Canada, including water delivery and management, and health and education services.

Moreover, quality in GP would likely be maintained in that it seems any agreeable CETA would include key provisions for quality standard in GP agreements. These provisions include discretion to use “most advantageous offer” in terms of price and quality; denial of contracts if there are no suitable offers/the option not to award a contract if not in the “public interest”; the ability to institute or enforce measures to protect several fundamental societal interests; and the ability to use selective or limited tenders. Also, the democratic process and well developed institutions in the EU and Canada provide a solid foundation to ensure quality in procured goods and services and that the aforementioned provisions are properly enforced. Additionally, even if CETA included mechanisms for challenging GP bids and projects via investor-state cases, which does not clearly exist in NAFTA, or bid challenges, which are normally allowed

in GP agreements, there is no conclusive evidence to suggest these would have a net positive or negative effect on the quality of government-procured goods or services in Canada or the EU.

CETA would likely have less of an impact on quality and decency of work in the GP sector than some stakeholders have predicted, although there are still issues of concern and related questions that cannot be answered without further details of CETA. Empirical evidence suggests that production costs, wages inclusive, do not correlate to winning of GP projects. Companies in the EU are required by domestic laws to meet core requirements in terms of treatment of workers. Companies in Canada must likewise comply with domestic Canadian laws on treatment of workers. While there are still discrepancies in the quality and decency of work environments within localities in the EU and Canada, there does not appear to be sufficient evidence to suggest these will be significantly exacerbated by GP provisions in CETA. However, without further details of the Agreement it is not clear how CETA would affect current initiatives towards “fair wages” and other “social considerations” as it is not obvious that these policies would be an “unnecessary obstacle” to trade. If CETA disallows these initiatives it would have a negative impact on quality and decency of work in certain areas, although consultations with the EC suggest the commitment of Canada and the EU to maintain these policies would likely mean they are unaffected by CETA.

Environmental assessment: *A GP Chapter in CETA would likely have mixed environmental impacts, although the full extent of these impacts is unclear without further details of the Agreement. Generally, given the high level of support in the EU and Canada for environmental considerations in GP, also known as “green procurement” policies, such policies could very well still remain in place under CETA. To be clear, the EU and Canada have made some exceptions in the GPA to allow for environmental considerations in GP, and NAFTA more generally stipulates it should not prevent parties from implementing measures to protect animal or plant life or health. If CETA removes flexibility in green procurement enjoyed under agreements like NAFTA and the GPA it would reduce environmental policy space in Canada and the EU, creating certain negative impacts; however, consultations with the EC suggest the commitment of Canada and the EU to maintain these policies would likely mean they are unaffected by CETA. Still, this does not fully address specific concerns over CETA’s disallowance of offsets.*

7.1.1. EU, Canada, and USA

ECONOMIC ASSESSMENT

INDICATOR: Institutional and regulatory environment

BASELINE

The WTO Government Procurement Agreement (GPA), NAFTA, 2010 US-Canada Agreement on Government Procurement (AGP), and domestic legislation and regulations currently govern the GP framework between the EU, Canada and US. For simplicity, major components of GP agreements are broken down as follows:

1. **General commitments and procedural provisions** (framework rules) – which may include provisions on national treatment; transparency; standards; type of tendering* (open, selective, single/limited) and tendering procedures (invitations to tender, selection procedures, tendering documentation, procedure for submission of tenders, timing, award procedures etc.); technical

co-operation; negotiations; bid challenge procedures; consultations and dispute settlement; and special and differential treatment

2. **Monetary thresholds**– obligations only apply to contracts at or above the agreed thresholds
3. **Entities listed (negative or positive list)** – specific entities or a range of entities through which procurement opportunities may (positive list) or may not (negative list) be sought
4. **Goods and services** – goods and services not subject to exceptions (non-construction and construction services are usually listed separately)
5. **Exceptions/exclusions/derogations** (safeguards) – any range of exceptions to commitments. For example, exclusions of certain types of entities, scope of goods and services, offsets, set-asides, among others. Exceptions may be organised according to a specific area or generally apply to GP commitments in their entirety.

*The following are generally the 3 different types of procurement mechanisms: *Open tendering* – tendering where any entity that meets the basic requirements of the tender is allowed to bid. In terms of goods in particular, this tendering is said to be most suitable for standard items bought in large numbers. *Selective tendering* – tendering to a list of qualified suppliers, the number of which is set by purchasing entities/contracting authorities. It is generally used for more complex contracts. Rules are established for how to get onto a list of qualified suppliers. As an example, under NAFTA selective tendering is allowed if it is in-line with the efficient operation of the GP system and it allows opportunity for participation from both domestic suppliers (e.g. those in Canada) and suppliers from the other countries party to the agreement (e.g. the US and Mexico). *Single/limited tendering* – tendering to one specific Party. This type of tendering is normally used for an item where there is only one supplier or under certain rather restricted circumstances. As an example, under NAFTA, limited procurement can only be used in certain circumstances where there is evidence of collusion among suppliers, justifications in the interest of protecting intellectual property rights, or an imbalance of competition for technical reasons.

1994 GPA

The GPA is a plurilateral WTO agreement, meaning that not all WTO members are obliged to become parties or observers to the agreement. Only those that are Parties to the GPA are obliged to follow it and the specific commitments they negotiated therein.⁷⁰¹ The GPA was established in 1994, and as such this agreement is often referred to hereafter as the “1994 GPA.” It first came into effect for a number of members, including the US, Canada and the EU-15 on January 1996, whereas the additional members of the EU-25 and EU-27 acceded on May 2004 and January 2007, respectively. The GPA functions as an international mechanism for regulation of the procurement activities of its Parties. The GPA contains a version of the major components of GP agreements as outlined above.

The specific market access commitments of Parties to the GPA are contained in Appendix I to the GPA (there are 4 appendices), which contains 5 annexes, each of which contain a notes section establishing exclusions for the specific commitments and a General Notes section setting exclusions for the coverage afforded in all those annexes/the GPA collectively. The 5 GPA annexes are: Annex 1: Federal entities, Annex 2: Sub-central government entities, Annex 3: Federal enterprises/all other entities allowed to procure under the GPA, Annex 4: Services (committed to for entities listed in Annexes 1-3), and Annex 5: Construction services (to be committed for entities listed in Annexes 1-3).

⁷⁰¹ Members to the GPA can be found at: http://www.wto.org/english/tratop_e/gproc_e/memobs_e.htm#parties

Canada

Canada committed a broad range of its central entities, i.e. department and agencies, to the 1994 GPA. However, while Canada wrote Annex 2 and 3 commitments, these annexes are not currently binding under the 1994 GPA as the negotiations required to make them binding were not successful.⁷⁰² Thus, Canada is not bound by any of its specific 1994 GPA commitments on sub-central entities or entities in Annex 3 under the 1994 GPA. Canada did not cover municipal governments in its 1994 GPA commitments.

Additionally, the exceptions in Canada's 1994 GPA commitments exclude federal or sub-central Crown corporations (state-owned enterprises); certain goods and construction and non-construction services, including utilities;⁷⁰³ and provide for a number of other important exceptions. Some of Canada's GPA exclusions relate to the issue of reciprocity, where it has excluded certain commitments, to the US and EU for example, on the basis that the EU and US have excluded certain commitments to Canada. See Table 59 below for an overview of Canada's key GPA exclusions and commitments.

EU

Within the 1994 GPA, the EU commits a range of goods and services across a broad range of departments, ministries and agencies, including for each MS. In fact, the EC's GPA commitments are the "most comprehensive" out of all GPA members in terms of procuring entities and procurement areas, covering procurement opportunities at the central and sub-central levels as well as procurement from these entities in utilities, among other goods and services.⁷⁰⁴ However, while the EU affords these commitments to other GPA members, it does not on the basis of reciprocity extend certain access to certain other countries, including blocking Canadian access to a number of areas of EU GP.

Like the US and Canada, the EU has a number of exemptions in its 1994 GPA commitments. A notable amount of these specifically pertain to the aforementioned reciprocity issue: for example, exclusions of service suppliers in terms of water, electricity airports, ports, urban transportation⁷⁰⁵ for the US and Canada, among other countries, until such countries provide "comparable and effective" access for EU undertakings in such areas. Some exclusions in the EU's 1994 GPA are external to the issue of reciprocity. See Table 59 below for an overview of key exclusions and commitments.

US

The US, like the EU and Canada, commits a range of goods and services across a broad range of government entities in its GPA commitments. On the state level, the US makes GPA commitments for 37

⁷⁰² Note 6 under the General Notes section in Canada's offer stipulates: "*The offer by Canada, with respect to goods and services (including construction) in Annexes 2 and 3, is subject to negotiation of mutually acceptable commitments (including thresholds) with other Parties, with initial commitments to be specified on or before 15 April 1994 and specific commitments to be confirmed within eighteen months after the conclusion of the new Government Procurement Agreement.*" (emphasis added). Mutually acceptable commitments were not negotiated with other Parties between April 1994 and October 1995.

⁷⁰³ Canada's 1994 GPA, Annex 4 (services) (4)

⁷⁰⁴ EC (2009). Report from the Commission: COM(2009)592 final. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009DC0592:EN:NOT>

⁷⁰⁵ See General Notes 1 a-e of the EU's 1994 GPA schedule

states.⁷⁰⁶ The US provides a number of exclusions in its commitments, which include among others Buy American provisions on federally-funded mass transit and highway projects, as well as federal and state set-asides on behalf of small and minority businesses. Of note, it explicitly excludes Canada from those goods and services, including construction services, in Lists A and B in its Annex 3.⁷⁰⁷

Basic comparison of Canadian, EU and US commitments in 1994 GPA

There are key differences between the commitments of the EU, Canada and US. As established, the EU is said to have made the most ambitious GPA offers in terms of procuring entities and types of procurement opportunities. All GPA Parties except Canada offer some GP access to their utilities, although the extent of this coverage differs. Additionally, these three GPA parties have committed to somewhat different contract thresholds.

A brief (non-exhaustive) comparison of the scope of Canada's and the EU's GPA market access commitments can be found in Table 59 below. Additionally, a comparison of the GPA contract thresholds among the EU, US and Canada can be found in Table 60 below.

Table 59: Key goods, construction services and other services excluded in EU and/or Canada GPA commitments

General GP area	EU and Canada both exclude	Canada (only)	EU (only)
Goods, services and construction services below the thresholds set out in the GPA	X		
Generally -- Goods, services and construction services purchased by sub-federal entities		X	0
Goods, services and construction services purchased by Canada's Crown Corporations (federal or provincial)		X	0‡
Goods of a military nature	X		
Goods, services and construction relate to international aid and joint projects	X		
Shipbuilding and ship repair		X	0
Urban rail and transportation	X		
(Certain+) *Transportation services		X	0*
Dredging		X	0
Some communications equipment		X	0*
Information technology equipment		X	0
Research and development	X		
(Certain+) *Utilities services		X	0*
(Certain+) **Education, health and social services		0**	X***
Printing, advertising and public opinion research services		X	0
Agricultural products for agricultural support programmes and human feeding	X		

⁷⁰⁶ These 37 states are: Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, New York, Nebraska, New Hampshire, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming.

⁷⁰⁷ See US 1994 GPA General Notes 1 and 5, respectively

programmes ++			
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Source: Box 2.3, pg 77, 2008 Joint Study; Canada and EU 1994 GPA annexes

Key:

X = country excluded this area in their GPA commitments (but see * and ** notes)

0 = although the country/area has included commitments on this or related areas for other GPA members, it explicitly excludes them due to lack of reciprocity from the other country/area (but see * and ** notes)

‡ As a result of Canada's lack of reciprocity in this area the EU has excluded goods, services and construction services in the utilities to Canada

+denotation added to Box 2.3 from the Joint Study

++category added to Box 2.3 from the Joint Study

*This denotation follows the analysis in the 2008 Joint Study; however, one may argue about the extent of its accuracy. At a minimum, it should be applied with the qualification that the EU 1994 GPA, General Notes, note 6. excludes "contracts awarded by entities in Annex 1 and 2 in connection with activities in the field of drinking water, energy, transport or telecommunications"; and note 7. "This Agreement shall not apply to contracts awarded by entities in Annex 3 for the purchase of water and for the supply of energy or of fuels for the production of energy."

** This denotation follows the analysis in the 2008 Joint Study; however, one may argue about the full extent of its accuracy. At a minimum, it should be considered with the qualification that Canada does apply certain related exceptions, for example in Canada's 1994 GPA, note 5, Annex 2 notes, provides specifically for exclusions for goods or services transferred to social services

***This denotation follows the analysis in the 2008 Joint Study; however, for context it should at least be also noted that Annex I of the EU's GPA commitments allows GPA member procurement from a number of higher education institutions and ministries of culture and education in the EU.

Table 60: Threshold comparison between EU, Canada and US for Annex 1, 2 and 3 of Appendix I of the GPA (Numbers in terms of Special Drawing Rights)

WTO Party	Annex 1			Annex 2			Annex 3		
	Goods	Services except construction services	Construction services	Goods	Services except construction services	Construction services	Goods	Services except construction services	Construction services
Canada	130,000	130,000	5,000,000	355,000	355,000	5,000,000	355,000	355,000	5,000,000
European Communities/ EU	130,000	130,000	5,000,000	200,000	200,000	5,000,000	400,000	400,000	5,000,000
US	130,000	130,000	5,000,000	355,000	355,000	5,000,000	250,000 (USD) or 400,000	250,000 (USD) or 400,000	5,000,000

Source: WTO data

Revised Canadian, EU and US GP proposals in the WTO

The US, EU and Canada have continued to make proposed revisions under the GPA framework, although GPA negotiations are not part of the Doha Round. In general, these revisions aim to update the GPA

given modernisation of IT and procurement methods, extend coverage of the agreement, eliminate remaining discriminatory measures, as well as consider the addition of other signatories. Some of these revisions, for example the October 2006 revised offer from the US and the November 2007 revised offer from Canada, have become particularly important in 2010 as they are specifically referenced in the AGP agreement to be discussed hereafter. The EC offered a revised GPA offer in 2005, including on utilities, although given the reluctance of some GPA Parties to reciprocate, it then offered a newly revised offer in February 2008 considering the feasibility of reciprocation. The new submission has been said to offer about 85% of all above threshold procurement of the EU.⁷⁰⁸ The EC also continues to promote an agreement on government procurement under the GATS, another WTO agreement which although excluding GP does establish a WTO negotiating mandate on services procurement.

NAFTA

Chapter 10 of NAFTA sets forth rules on GP between Canada, the US and Mexico. It is similar to the GPA in framework, containing a section of general commitments and procedural provisions, and establishing a scope of commitments covering GP in goods, non-construction services and construction services with exceptions. NAFTA Chapter 10 only applies to federal government agencies and “government entities.” It does not require state, provincial or local buyers to provide equal treatment to offerors from outside their jurisdictions (even if for projects using federal funds); however it “encourages” such treatment.⁷⁰⁹ NAFTA also only included commitments on 53 US central government entities, whereas 79 were listed in Annex I in the US 1994 GPA.⁷¹⁰

In this regard, written 1994 GPA commitments of Canada and the US are in certain senses more stringent than those GP commitments in NAFTA, although as mentioned only sections of the countries’ GPA commitments are actually binding due to reciprocity issues. In addition to the aforementioned exclusion of state, provincial or local buyers within NAFTA, the agreement also includes exclusions of specific goods and services that are provided for in the GPA. For example, NAFTA excludes “health and social services” in Canada,⁷¹¹ which are not excluded in Canada’s initial 1994 GPA commitments although are ultimately made non-binding due to reciprocity issues.

Notably, NAFTA includes requirements for extending certain core provisions to agreements with other countries that NAFTA members may sign. There are provisions for extending national treatment and MFN treatment in investment via Article 1102 1103 and in services via Article 1202 and 1203, respectively, to NAFTA parties engaging in subsequent international agreements. It is notable that NAFTA’s Article 1102, 1103 and 1106 (on performance requirements) do not apply to government procurement.⁷¹²

⁷⁰⁸ EC (2009). Report from the Commission: COM(2009)592

⁷⁰⁹ Government of Canada. Government Procurement Opportunities and NAFTA.

<http://www.canadainternational.gc.ca/sell2usgov-vendreauougouvusa/opportunities-opportunitites/opportunities-debouches.aspx?lang=eng>

⁷¹⁰ Woolcock, S. (May 2008). “Public Procurement and the Economic Partnership Agreements: assessing the potential impact on ACP procurement policies.” Commonwealth Secretariat; London School of Economics.

⁷¹¹ Note G., Section B exclusions for Canada, Chapter 10 of NAFTA

⁷¹² Re Article 1102, 1103 (and 1107) as stipulated by Article 1108 (Reservations and Exceptions), sub-article 7(a) of NAFTA. Re Article 1106, as stipulated by Article 1108, sub-article 8 (and for example, confirmed by DFIAT. “NAFTA – Chapter 11 – Investment: Municipalities and NAFTA Chapter 11.” <http://www.international.gc.ca/trade-agreements-accords-commerciaux/disp-diff/Mun-FAQs.aspx?lang=en>)

Box 26: NAFTA contract thresholds

According to Article 1001.1(c) of NAFTA, contract thresholds are, subject to other provisions of NAFTA including those in Article 1001.2c, as follows:

1. for federal government entities, US\$50,000 for contracts for goods, services or any combination thereof, and US\$6.5 million for contracts for construction services,
2. for government enterprises, US\$250,000 for contracts for goods, services or any combination thereof, and US\$8.0 million for contracts for construction services,
3. or state and provincial government entities, the applicable threshold, as set out in Annex 1001.1a-3 in accordance with Article 1024.

US-Canada Agreement on Government Procurement (AGP)

The AGP, which went into effect on 16 February 2010, was specifically negotiated in response to the US Recovery Act, the US stimulus bill passed in February 2009 in response to the financial crisis. The Canadian government asked for exemption from Buy American provisions in the Recovery Act and in return offered access to Canadian provincial and municipal government procurement. The AGP was subsequently established, and which for simplicity may be organised into 3 main functional parts: (1) permanent changes under the GPA; 2) temporary allowances until Sept. 30, 2011; and (3) commitment to scope for further access to procurement markets.

The AGP commits the US and Canada to increased GP market access. It should be noted that although the AGP makes changes in commitments between Canada and the US under the GPA, it does not change the mutually agreed upon, or lack of mutually agreed upon (due to reciprocity issues), coverage afforded by either country to other Parties under the GPA. The thresholds for procurement in the AGP are consistent with those in the GPA.

Under the first functional component of the AGP the US extends its 1994 GPA commitments at the state level to Canada, further revising its “revised October 2006” GPA offer. Canada is committed to subjecting those sub-central entities it listed in Annex 2 (of Appendix I) of its 1994 GPA to its “revised 2007 GPA” offer.

The second component of the AGP provides temporary commitments, i.e. until 30 September 2011. It exempts Canadian companies from the US Recovery Act’s Buy American requirements for seven programs,⁷¹³ notably allowing construction projects to use Canadian iron, steel and manufactured goods. Certain estimates show that this exemption allowed Canadian suppliers to compete for a maximum of

⁷¹³ See List C of Annex 3, Appendix I, of the US GPA (see schedule dated 19 March 2010): 1. U.S. Department of Agriculture, Rural Utilities Services, Water and Waste Disposal Programs; 2. U.S. Department of Agriculture, Rural Housing Service, Community Facilities Program; 3. U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Energy Efficiency and Conservation Block Grants; 4. U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, State Energy Program; 5. U. S. Department of Housing and Urban Development, Office of Community Planning and Planning and Development, Community Development Block Grants Recovery (CDBG-R); 6. U. S. Department of Housing and Urban Development, Office of Public and Indian Housing, Public Housing Capital Fund; 7. U.S. Environmental Protection Agency, Clean Water and Drinking Water State Revolving Funds, for projects funded by reallocated ARRA funds where the contracts are signed after February 17, 2010

\$US4-5 billion of procurement projects.⁷¹⁴ In return, Canada granted the US access to a range of goods and services, mainly from government ministries. It granted access to certain municipal and Crown corporations' construction projects, collectively estimated by certain sources to be worth more than \$CAD 25/\$US24.7 billion. However, Canada did not grant the US access to a range of other procurement entities, programs and sectors present in Canada's GPA commitments.⁷¹⁵

The third component of the AGP sets forth a mechanism for expanding upon the AGP. The mechanism allows for both extension of the temporary provisions of the agreement, and a wider expansion of GP market access commitments at large.

Domestic legislation

Canada

Laws govern GP at both the federal level and among and within Canadian provinces and territories. The level of cooperation among all provinces/territories in particular is often criticised as limited, although some examples of key agreements for inter-provincial trade include the Agreement on Internal Trade (AIT), the British Columbia-Alberta Trade, Investment, and Labour Mobility Agreement (TILMA), and the recent Trade and Cooperation Agreement between Ontario and Québec (TCA). Individual territories and provinces and their localities have regulations governing the many aspects of their GP processes. Laws regulating competition, including the Competition Act and Investment Canada Act, are also relevant to GP regulation in Canada to the degree that competition policy informs and conditions GP rules and seeks to prevent uncompetitive practices in significant GP sectors/areas.

EU

EU treaties and policy set forth fundamental GP requirements. Article 12 of the EU Treaty prohibits discrimination on grounds of nationality, which applies to GP. The Lisbon Treaty, in force on 1 December 2009, provides a number of GP reforms, including support for increasingly sustainable procurement. EU competition policy is relevant to GP to the degree that it informs and conditions GP rules and prevents uncompetitive practices in significant GP sectors/areas.

Individual MS have their own regulations for GP that transpose the EU Directives. Recent EU-wide policy initiatives have pushed Social Considerations on Public Procurement (SCPP) to foster fair wages among other benefits, and have been adopted in different forms by various MS. Individual MS and localities have regulations governing the many other aspects of their GP processes.

In terms of specific GP directives, the EU has experienced a wave of reform throughout the last few decades. The most recent wave of GP reform was initiated in 1996 through a Green Paper. The EC submitted a proposal in May 2000 and the European Council and European Parliament reached an agreement on the reform package, passing a number of GP reforms in 2004. The reforms consists of two new core directives: One on the public sector via Directive 2004/18/EC procedures for the award of public works, supply and service contracts; and the second on the utilities sector via Directive 2004/17/EC on procurement procedures of entities in the water, energy, transport and postal services sectors. MS were required to implement the regulations by 31 January 2006. These directives create certain changes to technical specifications; allow for the possibility of incorporating social and environmental considerations, particularly via listing of specific environmental considerations in

⁷¹⁴ Sinclair, S. (April 2010). "Negotiating from Weakness: Canada-EU trade treaty threatens Canadian purchasing policies and public services." Canadian Centre for Policy Alternatives. pg 9.

⁷¹⁵ Ibid

procurement; exclude those engaged in criminal activities from GP; indicate criteria for contract awards and weighting of such criteria; provide for competitive dialogue procedures; clearly allow for framework agreements; develop rules on central purchasing entities; and attempt to streamline and improve electronic accessibility of procurement information and make purchasing systems more dynamic.⁷¹⁶

US

Like Canada and the EU, the US has laws regulating GP at the national, and sub-national (including state and local) levels. Key federal laws regulating GP include the Federal Acquisition Regulation (FAR), and, for authorisation and appropriating of GP, the Federal Acquisition Reform Act (FARA) and Federal Acquisition Streamlining Act (FASA). The Trade Agreements Act of 1979 (TAA) and a related executive order allows the US to provide treatment of GPA countries as bound by the GPA. Federal procurement in the US below the WTO GPA's thresholds are with few exceptions governed by the Buy American Act of 1933 and related executive orders and implementing regulations. In US federal-level GP, country of origin is not determined by the 'substantial transformation test,' but rather by domestic manufacturing and content requirements. Some state and local governments have enacted similar requirements. Most states have anti-trust laws (the US version of what other nations call competition laws) as does the federal government, which are relevant to GP to the degree that they inform and condition GP rules and prevent uncompetitive practices in significant GP sectors/areas. Individual states and localities also have a system of other regulations governing the many aspects of their GP processes.

ANALYSIS

Canada

CETA will have significant impacts on the regulatory and institutional environment for GP in Canada. Outside of this general point, and with the exception of the discussion on the potential electronic system requirement in CETA and an introduction of thresholds in CETA, the institutional and regulatory changes CETA may produce are discussed in terms of more specific indicators hereto.

Some stakeholders note that there may be a requirement in CETA for Canada to create a "single electronic point of access for procurements by all Canadian jurisdictions and entities,"⁷¹⁷ and argue that this would be a costly burden on institutions. If such a requirement is included in the final CETA indeed it would cost time and money in the near term, which would likely be of particular burden to municipal governments. However, creation of such a system would also benefit both Canadian and foreign enterprises by providing easy access to information. The system would not necessarily be started from scratch as Canada does already have comprehensive online GP sources.⁷¹⁸ Any new or upgraded electronic system may actually save Canada significant costs in the long term, as evidenced by EC

⁷¹⁶ Beuter, Rita. (2005) "European Public Procurement Reform: Main Innovations in the Public Sector Directive."

⁷¹⁷ Sinclair (April 2010), pg 12.

⁷¹⁸ MARCAN is a government-funded website for procurement opportunities established under the AIT: <http://www.marcan.net/english/index2.htm>. (In terms of other services, MERX is a for-profit [but also with some free services, e.g. for accessing federal procurement opportunities] Canadian website that provides comprehensive tendering information. It includes federal and provincial tenders in Canada as well as federal, state and local tenders in the US. MERX includes GP opportunities from Alberta, Manitoba, New Brunswick, Newfoundland, Nova Scotia, the territory of Nunavut, Ontario, Prince Edward Island, and Saskatchewan. Most provincial and federal government agencies and departments are required to post tenders over CDN\$25,000.)

estimates that an electronic procurement system in the EU will contribute to yearly expenditure savings of EUR 19 billion by 2010.⁷¹⁹

Regarding thresholds, CETA's impact on Canada's regulatory environment for GP contracts depends on the degree to which thresholds are lowered from GPA commitments and the extent to which CETA commitments on entities, goods and services and prohibitions/limitations on exceptions go beyond Canada's GPA commitments. Certain thresholds are needed to ensure companies are capable of carrying out contracts.

Analysis of the thresholds in GPA commitments (found in Table 60) suggests a number of trends. The EU currently protects certain smaller GP contracts awarded by all entities covered by Annex 3 relatively more than Canada does for equivalent contracts; specifically, the EU has 11% (by 45,000 SDR) higher thresholds than Canada for goods and services outside construction services for all entities covered in Annex 3. Canada protects certain smaller GP contracts awarded by sub-federal enterprises significantly more than the EU does for equivalent contracts; specifically, Canada has 44% (by 155,000 SDR) higher thresholds than the EU for goods and services except construction services for sub-central entities (Annex 2). For other areas, both sides afford the same level of protection/liberalisation; specifically, all Annex 1 thresholds are the same for the EU and Canada, and their thresholds are the same for construction services, at SDR 5 million, across all 3 annexes (i.e. Annex 1, 2 and 3).

As mentioned throughout this analysis, 90% of Canadian (federal) Government contracts are worth less than \$100,000.⁷²⁰ This statistic appears to only apply to Canadian federal government contracts, and study team research to date has not found statistics that clearly distinguish what percentage of Canadian sub-central level GP contracts are worth less than \$100,000.

According to consultations with the Contracting Authority, it is reasonable to use certain GPA thresholds as a general proxy for CETA thresholds.⁷²¹ CETA may not lower thresholds below the lowest GPA threshold (found in Annex 1 of the GPA) of SDR 130,000 (approximately \$202,420 in current USD). However, and as discussed below, this does not preclude the possibility that CETA may lower certain individual thresholds within each of the 3 main GP annexes to below GPA levels.

Without further details of what is being committed it is unclear what percentage of GP contracts will be subject to CETA thresholds.⁷²² Without improved statistics and details on CETA it is not possible at the current stage of the study to calculate the percentage of Canadian federal or sub-central level contracts subject to CETA, but it should be noted that sub-central level contracts appear to account for well over half of the GP market in Canada.⁷²³

⁷¹⁹ EC (2005). "Cutting public procurement costs in the EU." *Single Market News*, No. 38.

⁷²⁰ Indian and Northern Affairs Canada (2010). "Doing Business with the Federal Government."

⁷²¹ Consultations with Contracting Authority at the project Steering Committee Meeting in November 2010

⁷²² Using one method of calculation, it appears around 14% of Canada's federal contracting is subject to thresholds under the GPA. Source: Author's calculations using WTO statistics mentioned in the "market share" indicator hereto: The federal government of Canada buys approximately \$14 billion worth of goods and services each year. Canada's federal contracts in 2007 for entities listed in Annex 1 of the GPA and above GPA thresholds (SDR130,000 for goods, SDR130,000 for services except construction, and SDR 5,000,000 for construction services) were listed to constitute \$CAN 1.9 billion. \$CAN 362.74 million of these contracts were subject to limited tendering, making \$CAN 1.54 billion of above GPA thresholds contracts subject to non-limited tendering. This suggests 14% of federal government contracts were subject GPA thresholds, although approximately 2.6% were limited tendering and thus less competition.

⁷²³ The Canadian federal government buys approximately \$14 billion of goods and services a year. Statistics suggest the value of GP contracts for sub-federal Canadian entities for 2007 is \$CAN 17.2 billion, although this number excludes a wide range of

It may be useful to consider potential deviations in individual CETA thresholds from similar thresholds in Canada's GPA annexes, while being mindful of the likelihood that the lowest CETA threshold may not be lower than the lowest threshold in Canada's GPA commitments. The below Table 61 provides a *hypothetical example* of CETA's GP thresholds and compares such thresholds to Canada's 1994 GPA thresholds. Given that other indicators in this report mention thresholds, for example in terms of policy space, costs of goods and services, market share, GDP, employment and quality of goods and services, the analysis in this section will only provide a general framework for future assessment of the impacts of changing thresholds in terms of potential regulatory changes. (Note: an assessment on the regulatory and institutional impacts of the specific thresholds *actually agreed upon* in CETA would be required to make a more accurate assessment herein).

Table 61: Hypothetical/sample CETA thresholds for Canada vs. Canada's 1994 GPA thresholds (in Special Drawing Rights [SDR])

WTO Party	Annex I			Annex 2			Annex 3		
	Goods	Services except construction services	Construction services	Goods	Services except construction services	Construction services	Goods	Services except construction services	Construction services
HYPOTHETICAL/SAMPLE CETA thresholds	130,000	200,000	5,000,000	200,000	200,000	5,000,000	200,000	200,000	5,000,000
Canada's 1994 GPA commitment thresholds	130,000	130,000	5,000,000	355,000	355,000	5,000,000	355,000	355,000	5,000,000

Source: Canada's GPA commitments and hypothetical example created by author

A number of sample trends can be discerned from the above hypothetical example. For example, in the above hypothetical CETA the EU has requested that Canada actually increase its threshold for "services except construction services" for federal entities in Annex I by 35% (SDR70,000). Such a reduction in threshold amount might be present in the actual CETA if the type and number of entities requested in CETA are expanded beyond those currently included in Canada's GPA Annex 1 – reflecting an effort to allow Canada to better protect contracts of these newly added entities than would otherwise be possible if the according GPA threshold were used.⁷²⁴ On the other hand, Canada's GPA Annex 2 and

different entities. Numbers are not readily accessible for the amount of sub-federal procurement that would be subject to 1994 GPA thresholds.

⁷²⁴ Still, there could certainly be situations where reduction of thresholds in Annex 1 would not necessarily be justified simply as a result of moving of entities between Annex 3 and/or 2 and Annex 1. For example, moving an entity like the National Capital Commission of Canada from Canada's GPA Annex 3 to Annex 1 of the abovementioned sample CETA would in fact have no

Annex 3 thresholds for goods and “services except construction services” are approximately 44% (SDR155,000) higher than the thresholds of Annex 2 and 3 in the above hypothetical example CETA, thus implementing such thresholds under this hypothetical version of CETA would mean lesser protection of contracts in these categories. The thresholds for “construction services” are the same in Canada’s GPA and the above hypothetical CETA across all 3 annexes.

EU and US

Institutional and regulatory changes that may take place in CETA and their impacts on the EU and the US are considered in terms of other more specific indicators below. The relatively most important impacts for the EU are found under the “Market share,” “Decency and quality of work,” and “Environmental policy space” indicators. The relatively most important impacts for the US are found under the “(Economic) policy space” indicator.

INDICATOR: Impact on economic policy space (and spill-over effects to other types of policy space)

BASELINE

Canada

In Canada, flexibility in policy space with regards to GP liberalisation to date has been contingent on internal agreements and, in terms of foreign relations, in terms of NAFTA and the GPA and recently in terms of the AGP with the US. Canadian public procurement has included policies for fair wages in GP, has instituted Green Procurement and otherwise used GP as a tool of local development. It should be noted these areas not only relate to economic policy space, but also directly to social and environmental policy space.

EU

EU economic policy space does not appear to be restricted in an overly negative way by GP provisions it has made in its 1994 GPA commitments, FTAs or economic agreements,⁷²⁵ or domestic policy initiatives, which have been quite ambitious. In line with the Global Europe 2020 strategy, EU FTAs, like CETA, have also included provisions liberalising public procurement. The EU made the most ambitious 1994 GPA proposal out of any GP Party, which was made even more ambitious in its 2008 revised offer which included further access to EU utilities among other areas. EU public procurement has recently included liberal policies of Social Considerations in Public Procurement and Green Procurement. It should be noted these areas not only relate to economic policy space, but also directly to social and environmental policy space.

US

There is little evidence to suggest that the US is currently experiencing significantly restricted economic policy space in the area of GP agreements with Canada. In fact, the US has proven its ability to expand past agreements with Canada on government procurement, for example through the 2010 AGP.

significant regulatory effects to the extent that most of the National Capital Commission’s contracts appear to be in the construction services market, which has a SDR 5,000,000 threshold in both the 1994 GPA and sample CETA.

⁷²⁵ It should be noted that this statement does not take a position on if EU GP provisions in other FTAs/trade agreements have restricted the policy space of other signatories to the agreement

ANALYSIS

Canada

The current Canadian government and numerous Canadian businesses are pushing for further liberalisation of Canada's GP market of the type that will likely be proposed in CETA. For example, a series of 2008 surveys for DFIAT found 72% of Canadian executives polled were not opposed to opening up Canada's GP markets at all levels (federal, provincial and municipal) to foreign companies in exchange for similar access abroad, and 49% indicated clear support.⁷²⁶ Additionally, the government in recent years has been openly encouraging development of public-private partnerships and liberalisation initiatives.

On the other hand, it is clear from a number of stakeholder consultations that there is also opposition to the opening of Canada's GP market as potentially instituted in CETA. Stakeholders have expressed concerns over specific potential commitments CETA may make in terms of entities, sectors, and scope of goods and services. Herein, one could make the distinction between the level of economic policy space that the government decision-makers desire and the level desired by certain stakeholders, as well as the impacts they predict from these various levels of economic policy space.

In assessing how stakeholders' concerns might affect Canadian economic policy space, as well as the sometimes directly linked impacts on social and environmental policy space, it is prudent to consider the potential inclusion of new commitments on entities in CETA together with the potential expansion of sectors and goods in services in CETA, and compare these components with Canada's 1994 GPA commitments. This will provide a more holistic understanding of the degree of any proposed changes beyond a pre-existing *international* framework to which both the EU and Canada are party (the GPA), albeit one not fully in force due to reciprocity issues. Box 27 provides this assessment.

Box 27: Key Canadian stakeholder concerns on CETA compared with Canada's 1994 GPA commitments

Provisions alleged to reduce policy space and according comparative analysis

General commitments and procedural provisions

Certain Canadian stakeholders have criticised a number of provisions that may be in CETA as providing an undue competitive advantage to the EU via creating an overly rigid institutional and regulatory framework. One area of concern has been a GP national treatment provision in the CETA. Some stakeholders have noted that the CETA may include compulsory tendering, which includes reporting requirements and mandatory time limits before closing tenders.

These provisions in and of themselves are not new restrictions to Canadian federal-level regulatory flexibility, as analysis suggests they are included in currently binding commitments in the EU's and Canada's GPA commitments. National treatment provisions are an integral part of the 1994 GPA (see Article III). All of the other aforementioned elements are standard in agreements like NAFTA and the 1994 GPA. However, to the degree that these CETA provisions are combined with obligations on federal-level entities not previously subject to binding commitments in the GPA, they do reduce the regulatory

⁷²⁶ Phoenix Strategic Prospectives, Inc. (2008). "Final Report: Business Survey on Government Procurement Market Access Priorities." Report for DFIAT.

flexibility once held at the federal level under the GPA.

It also should be noted that these provisions are applied currently only under binding provisions of Canada's GPA with the EU, and so do not apply to the Canadian sub-central level, to municipalities or to sectors and areas excluded in the GPA through lack of reciprocity. As such, making such commitments binding under CETA and adding more commitments at the sub-central level will limit regulatory flexibility at the sub-central level.

The mechanism for bid challenging, because it creates a risk for litigation for public authorities (bid challenges go through the Canadian International Trade Tribunal (CITT)), is further singled out as being a particularly negative aspect of a potential CETA, in part contributing to loss of policy space. Stakeholders fear it will slow the procurement process as private companies appeal the loss of tenders to other bidders. Some sources have implied that the GP provisions in the CETA could lead to the increased risk of litigation and thus force Canadian municipalities to provide monetary compensation to certain firms.⁷²⁷

The bid challenge mechanism is standard in GP agreements. It is standard in NAFTA and the 1994 GPA, although it should again be noted that these elements are applied currently only under binding

⁷²⁷ Shrybman, S. (May 2010). "Municipal Procurement Implications of the Proposed Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union." Legal Opinion for Centre for Civic Governance, Vancouver.

⁷²⁸ Sinclair (April 2010), pg 12

⁷³⁰ Ibid, pg 13

⁷³¹ Ibid, pg 13

⁷³² Ibid, pg 13

⁷³³ 1994 GPA. Article XVI (offsets), sub-article 1, pg 23, footnote 7

⁷³⁴ Among others see Sinclair (April 2010), pgs 7, 11 and 16

⁷³⁵ Despite this listing, the EU's 3-point strategy for GP liberalisation does not explicitly list Canada as a target in terms of liberalisation small businesses exceptions (the US is listed). This is inferably due to the fact that Canada does not have a general system of exceptions for small businesses or for specific types of small businesses (outside Aboriginal-owned businesses) on par with the US.

⁷³⁶ Note 1: The GPA prohibits offsets in one sub-article (Article XVI, sub-article 1), but allows for offsets for *developing countries* under certain circumstances in the following sub-article (Article XVI, sub-article 2). Specifically, the latter sub-article allows offsets for *developing countries* in light of general policy considerations if they are used only for qualification to participate in the procurement process and not as criteria for awarding contracts, and if such conditions are objective and non-discriminatory (See Article XVI:2 of the GPA). Canada, however, is not a developing country and such these allowances do not clearly apply; still, it is clear from its written commitments that Canada negotiated to include offsets in its GPA schedule.

Note 2: It is worthwhile to note that if Canada's 1994 GPA as originally written were fully binding then offsets for the sub-central level would legally be notably more restricted than they are at present, e.g. confined to the specific circumstances mentioned in the paragraph on Annex 2 exclusions.

⁷³⁷ See Annex 1001.2b General Notes, Schedule of Mexico, 6(a) and (b). "Turnkey" projects herein could be considered a type of offset. Also see Trade Compliance Center. "What is Chapter 10 of the NAFTA and what does it do?"

http://tcc.export.gov/Trade_Agreements/Exporters_Guides/List_All_Guides/NAFTA_chapter10_guide.asp

⁷³⁸ Note 1: As noted in Table 40, Canada and the EU have excluded goods of a military nature from their 1994 GPA commitments. Note 2: Also, Article XXIII of the GPA (Exceptions to the Agreement) provides an exception that may be used by countries to justify using offsets specifically in defence-related procurement. Sub-article 1 states: "*Nothing in this Agreement shall be construed to prevent any Party from taking any action or not disclosing any information which it considers necessary for the protection of its essential security interests relating to the procurement of arms, ammunition or war materials, or to procurement indispensable for national security or for national defence purposes.*" Note 3: For examples of countries employing defence offsets see U.S. Department of Commerce (2007). "Impact of Offsets in Defence Trade: An Annual Report to Congress." <http://www.bis.doc.gov/defenseindustrialbaseprograms/osies/offsets/final-12th-offset-report-2007.pdf>

⁷³⁹ See Annex 1001.2b, General Notes, Schedule of Canada, sub-article 1(d)

⁷⁴⁰ See Annex 1001.2b, General Notes, Schedule of Canada, sub-article 1(f)

⁷⁴¹ Consultations with Contracting Authority at Steering Committee Meeting in November 2010

⁷⁴² Indian and Northern Affairs Canada (2010)

provisions of Canada's GPA with the EU, and so do not apply to the Canadian sub-central level. To the degree that the mechanism is increasingly utilised under CETA it will cost time and resources of reviewing authorities. Although local/municipal governments currently have generally open and transparent tendering in which EU companies can already participate, the bid challenges under CETA may increasingly burden these levels of government given they require commitments that go well beyond the currently binding provisions of Canada's 1994 GPA. Still, based upon an initial review, it appears difficult to establish that the majority of bid challenges under CETA would have substantial and direct negative impacts in terms of costs to government and quality of government-procured goods and services. (See the "Quality of goods and services" indicator for more on bid challenges.)

Entities

CETA will likely add significant commitments for entities not currently included in Canada's GPA commitments, many of which stakeholders believe will create overstretched regulatory and institutional commitments. Some areas of concern mentioned by stakeholders are as follows:

- Commitments on all central government and all other central public entities. The Canadian Wheat Board is an example of an entity that stakeholders fear may be bound in CETA.⁷²⁸
- Commitments on all sub-central government entities, including those at the regional, local or municipal level, as well as "all other entities in all Canadian Provinces and Territories whose procurement policies are substantially controlled by, dependent on, or influenced by central, regional or local government and which are engaged in non-commercial or non-industrial activities."⁷²⁹ Inclusion of Nunavut, which was excluded from the AGP, as well as all municipalities with populations over 50,000 people.⁷³⁰
- Commitments on "all entities" and "any corporation or entity owned or controlled by one or more of" such entities in the municipalities, municipal organisations, school boards and publicly funded academic, health and social services (MASH) sector.⁷³¹
- Commitments on all provincial Crown corporations involved in the electricity sector.
- Commitments on all entities involved (in terms of contracts, or commercial or industrial activities and whose procurement policies are controlled by government) in exploring and operating in a geographical area for the purpose of extracting oil gas, coal or other solid fuels.
- Commitments for the same entities in the abovementioned point involved in the production, transport or distribution of drinking water, or supply of drinking water to such networks.⁷³²

These potential CETA provisions go substantially beyond Canada's 1994 GPA commitments, as can clearly be determined through a comparative analysis using the text of Canada's 1994 GPA. Moreover, if CETA included these provisions it would provide substantially new access not only beyond Canada's currently binding commitments, but also would go beyond the written commitments in the 1994 GPA that are not currently binding due to reciprocity issues. The impact of such commitments on regulatory flexibility is of course limiting; however, the full economic, social and environmental effects of such commitments in terms of actually reducing economic policy space as defined in this SIA are best assessed in combination with other provisions of CETA. These are analysed in the below section on exceptions and scope of CETA, and as outlined throughout analysis on other relevant indicators.

Exceptions/exclusions for sectors and scope of goods and services in GPA vs. potential CETA

Stakeholders' have expressed a number of concerns over reduced policy space resulting from CETA's potential prohibition of exceptions and expansion of the scope of goods and services Canada is currently allowed in its GP market (although it appears many stakeholders have typically not directly linked these to the GPA, they have acknowledged the obligations exist somewhere in the legal realm). First, concerns have been expressed that CETA will remove exceptions and/or make new commitments for sectors like urban and rail transportation equipment, roads, and ports; telecom; waste, water, electricity and other utilities; and other essential services. Second, concerns have been expressed over the impact of removing general exceptions, like those to contribute to "economic development" via an absolute prohibition of "offsets" ("offsets" are defined in the 1994 GPA as "*measures used to encourage local development or improve the balance-of-payments accounts by means of domestic content, licensing of technology, investment requirements, counter-trade or similar requirements*").⁷³³ Collectively, these concerns translate into a general worry from stakeholders that the government will be unable to use GP-linked initiatives to foster fair wages, create employment, and foster local innovation (for example, in green technology), among other benefits relating to public welfare.⁷³⁴

In addressing these specific concerns, as with the previous analyses, it is important to understand the extent of exclusions and limitations on the scope of GP commitments set out in Canada's GPA. One can then make an assessment as to how far the CETA provisions in according areas would go beyond a key international agreement on GP. In certain cases, NAFTA will also be used as a reference.

As found in the General Notes section, Canada's GPA commitments notably exclude, among other areas, (e) agricultural products made in furtherance of agricultural support programs or human feeding programs, (d) set-asides for small and minority businesses,⁷³⁵ and (b) urban rail and urban transportation equipment. As found in the notes to Annex 4 (services), Canada's GPA commitments exclude, among other areas, public utilities, R&D, certain services from the provincial police forces, and certain telecommunication services.

As found in the notes to Annex 2 (sub-central entities), Canada's GPA commitments exclude a host of areas. For example, they exclude programs promoting the development of distressed areas; procurement that is "*intended to contribute to economic development within the provinces or territories of Manitoba, Newfoundland and Labrador, New Brunswick, Prince Edward Island, Nova Scotia, Yukon or Northwest Territories*"; any measure adopted or maintained with respect to Aboriginal peoples (in so far as it does not affect existing aboriginal or treaty rights of any of the Aboriginal peoples of Canada under section 35 of the Constitution Act, 1982); and procurement of goods, services of construction purchases for or transferred to school boards or their financial equivalents, publicly-funded academic institutions, social services or hospitals for all provinces in Canada except Ontario and Quebec. Note 7 of the exclusions also states that "*Nothing in this Agreement shall be constructed to prevent any provincial or territorial entity from applying restrictions that promote general environmental quality in that province or territory, as long as such restrictions are not disguised as barriers to international trade.*" Annex 2 itself states it does not apply to preferences on a number of highway projects. A number of other exclusions are made.

In response to the first main concern of stakeholders, prohibition of exceptions/adding commitments in sectors including utilities (including water and electricity, among others), urban and rail transportation equipment (which the EU also excludes in its 1994 GPA commitments), and certain transportation services, among others, would go well beyond Canada's currently binding GPA commitments and even beyond the written commitments in the 1994 GPA that are not currently binding due to reciprocity issues. This can clearly be determined by a comparative analysis using the text of Canada's 1994 GPA.

In response to the second main concerns of stakeholders, an absolute prohibition of offsets indeed goes

beyond Canada's currently binding GPA commitments and even beyond the written commitments in the 1994 GPA on sub-central level procurement that are not currently binding due to reciprocity issues.⁷³⁶ Indeed this would disallow a broad area of regulatory discretion over GP contracts subject to CETA.

To make another comparison, NAFTA generally prohibits offsets for procurement covered in Chapter 10. This said, NAFTA does allow certain exceptions to the offset restriction, for example for local content in turnkey construction projects in Mexico.⁷³⁷ For context, it should also be recalled that NAFTA does not apply to sub-central entities whereas Canada's GPA does in written form although, again, not in binding form due to reciprocity issues.

However, it should be noted that a number of factors would mitigate even an absolute prohibition of offsets in CETA. As mentioned again below, CETA would not restrict the usage of offsets in GP contracts below CETA thresholds. Also, as in the GPA and NAFTA, there will inferably be a variety of industries/areas of procurement excluded in CETA GP commitments, and thus CETA would not prohibit usage of offsets in these areas. Additionally, one may question if language in CETA would explicitly prohibit offsets for all defence procurement, as of recently both EU MS and Canada still maintain offsets in this area which is also traditionally a significant source of offsets.⁷³⁸ Further analysis on CETA provisions regarding offsets can be found in the "Employment" and "Innovation" indicators hereto.

Additional issues

While not as related to concerns over economic policy space as social policy space, stakeholders suggest Canadian policy space may be restricted as a result of GP provisions in CETA to the degree that it jeopardises the quality of procured goods and services. However, as outlined in later analysis, there is evidence to allay much of these specific concerns. Still, this is not to say that the government may still attempt to increase the amount of services provided by government directly or alter procedures for procuring them. Although raised as a concern by stakeholders, and as discussed in more detail in the Investment section and later in this section, while the government may encounter some difficulty in making private services public due to investor-state challenges, even if investor-state provisions are included in CETA they may not be entirely relevant to GP.

In addition to the expressed stakeholder concerns, it appears that CETA would change a number of other provisions in Canada's GPA commitments that may limit regulatory flexibility, and in turn somewhat limit policy space. It may exclude the set-asides for small businesses and minority peoples allowed in Canada's GPA (and NAFTA⁷³⁹). It may exclude the provisions on agricultural products made in furtherance of agricultural support programs or human feeding (which the EU also excludes in its 1994 GPA commitments, and which is also excluded in Canada's NAFTA commitments⁷⁴⁰), and the clause allowing "*restrictions that promote general environmental quality in that province or territory [within Canada]*" under certain circumstances.

Are there any provisions in CETA that may in fact mitigate these reductions in regulatory flexibility?

It is important to note that not all of the alleged reductions in policy space should be considered as constituting a reduction in policy space as defined in this SIA, although they all do constitute a reduction in regulatory flexibility. Care must be taken in distinguishing the two effects.

Also, very importantly, the aforementioned losses of regulatory flexibility, and fewer confirmed instances of actual economic policy space loss, from CETA would technically only apply to those

contracts above threshold floors agreed upon in CETA. As mentioned in the “Institutional and regulatory environment” indicator, consultations with the Contracting Authority indicate that thresholds in CETA may generally follow those in the GPA.⁷⁴¹ Thus, CETA may be unlikely to institute thresholds for contracts worth lower than the lowest GPA threshold for Annex I entities of SDR 130,000 (approximately \$202,420 in current USD). And this floor would likely apply to federal (Annex 1), sub-federal (Annex 2), or other entities (Annex 3) listed in CETA. This significantly decreases the abovementioned losses of policy space, and the losses to policy space are lessened even more when considering the fact that 90% of Canadian (federal) Government contracts are worth less than \$100,000.⁷⁴²

This is not to say that by gaining a foothold in the market for larger contracts opened up under CETA firms would not become growingly competitive in areas unopened by CETA, but Canadian governments would retain the current level of policy space in those areas. Without improved statistics and details of CETA it is not possible to calculate how much GP would be subject to CETA thresholds, and thus subject to some policy space loss.

Additionally, one way CETA will likely at least somewhat mitigate the impacts on policy space mentioned will be to maintain a wide variety of requirements mentioned in the “Quality of goods and services” indicator later in the analysis.

Conclusion

In summary, CETA’s GP commitments discussed by stakeholders would indeed significantly limit regulatory flexibility in Canada. The conclusion regarding the limitations in regulatory flexibility is drawn from an analysis that Canada’s GPA commitments exclude federal-level entities; are not binding for sub-central entities; and allow for a large amount of exceptions for sectors and goods and services, including certain offsets, set-asides, and other provisions – and these commitments may be reversed in CETA.

However, and very importantly, by no means do all the reductions in regulatory flexibility discussed, which are often cited by some as constituting a reduction in “policy space,” constitute a reduction in policy space – economic, social or environmental – as defined as a sustainability indicator in this SIA. This said, in certain situations GP provisions could create losses in economic policy space. Herein, however, the assessment provided thus far does not fully explain the related economic, social and environmental impacts of such reductions on policy space. Rather, the conclusions are drawn from the in-depth analysis on such impacts that are presented not in this indicator but in other indicators hereto (i.e. see the “employment” indicator in this section, and the different indicators in the social and environmental assessments below).

Additionally, confirmed cases of losses in economic policy space in and of themselves must be contextualised in terms of thresholds, with larger rather than smaller scale projects being affected. Generally, CETA will likely impact policy space for governments of different provinces and territories in Canada more significantly than the national level government. And therein, the impact on specific jurisdictions would depend largely upon the number of projects per sub-central level above thresholds agreed upon in the CETA, with areas with comparatively more contracts above thresholds experiencing more significant impacts on policy space. Certain provinces/territories have been more apt to open up their GP markets in the past than others.

Could CETA affect Canadian policy space in any other ways?

It is worth noting that regulatory flexibility, and potentially some form of policy space, of the Canadian government as a whole may in the long term be limited indirectly as a result of CETA because of pressure to build a more ambitious GP agreement with the US. The US and Canada will likely preserve the AGP rather than abandon it.⁷⁴³ Further, the US and Canada may decide to extend the timing of the temporary provisions in the AGP. Article 8 allows the temporary provisions of the AGP (Part B), which are set to expire by September 2011, to be extended simply by “mutual written consent.” Additionally, Article 9 (1) of the AGP, which applies to the entire AGP, requires Canada and the US to enter into discussions to explore expansion of the AGP on a reciprocal basis within 12 months of entering into force of the AGP – thus the parties are bound to meet by February 16, 2011 for these discussions. Further, according to Article 9(2) *“on any matter related to government procurement, the other Party shall promptly engage in such consultations, which shall commence no later than 10 days after the request has been made.”*

Even if Canada and the US do not expand the provisions of the AGP, they may at least agree to extend its provisions. Although NAFTA contained provisions allowing further negotiation of procurement rules after its enactment but further liberalisation did not take place,⁷⁴⁴ recent evidence shows signs that NAFTA Chapter 10 may be further negotiated.⁷⁴⁵ Also, temporary provisions in the AGP may be extended, and would be easier than expanding the AGP. Further, the AGP and subsequent permanent changes to both the US’ and Canada’s 1994 GPA is a clear example of continued liberalisation in GP that has operated outside specific NAFTA commitments in response to domestic US legislation and a changing economic climate. As such, it would seem reasonable to predict that the extension of otherwise temporary provisions or even the expansion of the AGP may be further fuelled by CETA and certain subsequent legislation on GP coming out of the US or Canada.

EU

GP provisions are not a new component of EU FTAs, although it should be noted that many previous EU FTAs have dealt with developing countries and have aimed at bringing transparency to their procurement practices with a relatively longer-term view to eventually increase market access. The CETA by contrast focuses on immediate reciprocal market access for a potential near-term GP competitor.

The EU would have to make commitments in CETA beyond its 1994 GPA commitments. The EU’s 1994 GPA exclusions on procurement of utilities like “water” and “electricity”, as well as “urban transport” and airports and ports by Canada (and the US) are based on reciprocal blockage by Canada (and the US),

⁷⁴³ Although Article 14 of the AGP allows either Party to the agreement to terminate the Agreement (in its entirety) by written notification, the reasoning for terminating the agreement early are arguably much less clear than those for expanding the agreement.

⁷⁴⁴ See Article 1024: Further Negotiations. Where the Parties should have commenced further negotiations no later than December 31, 1998. Sub-federal entities were to be consulted, and other steps to be taken.

⁷⁴⁵ See USTR (2010). “US-Canada Joint Statement on Government Procurement.” <http://www.ustr.gov/about-us/press-office/press-releases/2010/february/us-canada-joint-statement-government-procurement>; and analysis at: Todgham Cherniak, C. (2010). “Canada and United States Tentative Agreement on Buy American Should be Reason for “Cautious Optimism.” [http://tradelawyersblog.com/blog/archive/2010/february/article/canada-and-united-states-tentative-agreement-on-buy-north-american-should-be-reason-for-cautious/?tx_ttnews\[day\]=05&cHash=53955a6f44](http://tradelawyersblog.com/blog/archive/2010/february/article/canada-and-united-states-tentative-agreement-on-buy-north-american-should-be-reason-for-cautious/?tx_ttnews[day]=05&cHash=53955a6f44)

although the EU also institutes general exclusions for all GPA members regardless of the level of reciprocity for a number of at least generally related areas. Specifically, note 6 in the General Notes of the EU's GPA commitments excludes "6. *Contracts awarded by entities in Annexes 1 and 2 in connection with activities in the fields of drinking water, energy, transport or telecommunications, are not included.*" Note 7 of the General Notes states "*This Agreement shall not apply to contracts awarded by entities in Annex 3 for the purchase of water and for the supply of energy or of fuels for the production of energy.*"

Further, in 2007, utilities covered by the EU's GPA Annex 3 commitments amounted to EUR 52 billion, although EUR 27 billion of utilities subject to GP were not covered in such GPA commitments.⁷⁴⁶ As such, the EU's binding GPA commitments covered 65% of a EUR 80 billion EU GP market in utilities in 2007.⁷⁴⁷ The CETA will likely remove some of these exceptions, particularly to Canadian companies' access to utilities procurement in the EU.

As a result of this potential opening of the EU GP market in CETA, EU policy space may be restricted in a negative direction if EU stakeholders feel it jeopardises the quality of procured goods and services, and limits the ability of government to regulate industries. However, consultations to date suggest the former concern is limited in the EU, and less of a concern than it appears to be in Canada. Regarding the latter concern, it is unclear how the CETA may limit policy initiatives in the EU like Social Considerations in Public Procurement. These initiatives have been utilised by a number of institutions to foster fair wages among other benefits. The CETA could cause some regulatory chill limiting the flexibility of EU institutions to meet related policy targets, given potential obligations in CETA and/or threat of litigation through CETA mechanisms. These issues are further discussed in other indicators hereafter.

US

The US is unlikely to experience significant limitations in policy space as a result of CETA, although it may indirectly cause some reduced regulatory flexibility in the US. Specifically, the US may undergo a push to further liberalise GP policy with Canada which may carry with it the cost of at least some reciprocal limitation in US regulatory flexibility, which may translate into some reductions in economic policy space although the extent of these impacts are currently unclear. There is no 'cut off' date for finalising discussions on the AGP once they have been commenced, i.e. there is no *de jure* expiration of such discussions or on the binding nature of the AGP in its entirety, and discussions on expanding market access could continue throughout 2011 or beyond until an agreement is reached or the process is abandoned or postponed. Given the EU's goal to sign the CETA by the end of 2011, while certainly possible, it seems unlikely that the EU would be able to negotiate an agreement that would provide market access beyond the new level of reciprocal access likely to be negotiated by the US and Canada during the same time or not too long thereafter. Even if particular provisions were to provide the EU greater market access than the US, the US may, even without necessarily receiving a draft of the provisions, invoke Article 9(2) of the AGP at any time to immediately discuss 'related' or any number of procurement issues with Canada. If the AGP is any indication, the approach would be to provide comparatively less access to the US GP market than sought in the Canadian market. All of this of course would be an indirect result of CETA and hinges very much on the desires of the US.

⁷⁴⁶ Annex – Purchases, EU 2007 GPA statistics notification to WTO

⁷⁴⁷ Calculations using data from Annex – Purchases, EU 2007 GPA statistics notification to WTO

INDICATOR: Market share**BASELINE*****Canada***

A range of companies are funded by the Canadian GP market. The federal government of Canada buys approximately \$14 billion worth of goods and services each year.⁷⁴⁸ Rough estimates, as outlined hereafter, suggest Canada's sub-central GP is well over \$CAN 17 billion. Public Works and Government Services Canada (PWGSC) is the largest purchasing entity in the Canadian federal government, with an average of 60,000 contracts totalling \$10 billion per year.⁷⁴⁹ WTO statistics show the worth of Canada's federal contracts in 2007 for entities listed in Annex I of the GPA and above GPA thresholds to be \$CAN 1.9 billion.⁷⁵⁰ \$CAN 362.74 million of these contracts were subject to limited tendering, making \$CAN 1.54 billion of Canadian contracts bound by the GPA subject to non-limited tendering.⁷⁵¹

The value of GP contracts for sub-federal Canadian entities for 2007 was \$CAN 17.2 billion, although this number excludes a wide range of different entities, including Crown Corporations and those engaged in MASH procurement.⁷⁵² As such, the procurement market is inferably notably larger. Numbers are not easily accessible for the amount of sub-federal procurement that would be subject to Canada's 1994 Annex 2 GPA thresholds (recall that sub-federal level procurement in Canada's Annex 2 commitments is not binding and so information on such contracts is not reported to the WTO as it is for Annex 1).⁷⁵³

Similarly, statistics are not available on the value of contracts above the Annex 3 thresholds in Canada's GPA for entities within that Annex 3 given such commitments are not currently binding.

EU

Sources suggest the EU procurement market, including central, sub-central and utilities entities, is worth more than EUR 1.5 trillion per year.⁷⁵⁴ According to WTO data, in 2007 the EU's GPA commitments alone covered contracts collectively valued over EUR 293.48 billion. MS contribute significantly to GP opportunities, and significant GP opportunities also come from the European Commission and Council of the European Union, among governing other bodies. In 2007, procurement contracts for EU-27 MS entities bound to the 1994 GPA totalled EUR 293.48 billion overall – EUR 31 billion in Annex 1, EUR 150 billion in Annex 2, and EUR 51.3 billion in Annex 3.⁷⁵⁵ In terms of individual MS, Spain and the United

⁷⁴⁸ CBO. Government Procurement Guide, Canada. http://www.cbo-eco.ca/en/info-guide/government_procurement_info-guide_1121180832226.cfm

⁷⁴⁹ Mwanzia, K. (2008). "Niagra's Green Procurement." St. Catharines-Thorold Chamber of Commerce.

⁷⁵⁰ WTO (2007). Canada's 2007 statistics notification under Article XIX:5 of WTO GPA.

http://www.wto.org/english/tratop_e/gproc_e/gpstat_e.htm. pg 2

⁷⁵¹ Author's calculations from Ibid, pg 23

⁷⁵² Author's calculations using MARCAN

⁷⁵³ MARCAN does include certain data on contracts below thresholds established in the Sept. 1994 Agreement on Internal Trade (<http://www.ic.gc.ca/eic/site/ait-aci.nsf/eng/il00006.html>) (which are significantly lower the 1994 GPA thresholds)

⁷⁵⁴ Beuter, Rita (2005) Pg 1

⁷⁵⁵ WTO (2007). EU's statistics notification under Article XIX: 5 of WTO GPA.

<http://docsonline.wto.org/imrd/directdoc.asp?DDFDocuments/t/PLURI/GPA/94A4.doc>

Kingdom have the highest ratio of openly advertised public procurement to GDP, whereas Luxembourg and Germany have the lowest.⁷⁵⁶

US

The US, like the EU, has a particularly large GP market in which it spends over \$US 1 trillion each year.⁷⁵⁷ The US federal government itself spends over \$400 billion on procurement each year.⁷⁵⁸ In 2007, the US reported the following for GP contracts under Article XIX:5 of the GPA: award of 5,193 contracts in goods and services contracts above GPA thresholds, which were worth \$US 34.38 billion; and award of 5 contracts in construction services above GPA thresholds, which were worth a value of \$US 2.1 billion. In the same year the US reported the following under derogations (exclusions) in the GPA: award of 6,432 contracts for goods and services above GPA thresholds, which were worth \$US146 billion; and award of 183 contracts above the GPA thresholds, which were worth \$8.78 billion. Additionally, in 2007 the US reported \$US 539.07 billion in total procurement for the 37 states listed in Annex 2 of its GPA commitments, although the data does not clearly indicate this amount is for contracts above the GPA thresholds. The amount also excludes procurement contracts issued in 13 states, which would add substantially to the total level of state procurement. Lastly, in 2007 the US reported \$US 13.8 billion was procured by entities listed under its Annex 3 GPA commitments, although only for some of these entities does it distinguish if the amounts are for contracts above or below the GPA thresholds.⁷⁵⁹

ANALYSIS

Canada

Economic evidence suggests that the main result of GP reform/liberalisation is increased competition in the domestic GP market. Sources suggest that the main effect of liberalising GP rules in developed economies is an increase in competition within home procurement markets rather than increased cross-border trade.⁷⁶⁰ Evenett and Hoekman (2004) provide empirical evidence showing that the impact of reducing discriminatory and non-transparent GP rules is increased competition leading to increased

⁷⁵⁶ Eurostat. Government Finance Statistics.

http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Government_finances_statistics#Further_Eurostat_information

⁷⁵⁷ Calculations based on U.S. House Committee on Oversight and Government Reform, 110th Congress (2007). "More Dollars, Less Sense: Worsening Contracting Trends Under the Bush Administration."

<http://oversight.house.gov/features/moredollars/moredollars.pdf>. suggesting procurement spending of over \$400 billion by federal procurement, as well as estimates in WTO Trade Policy Review Body (2008)., *Report by the Secretariat: Trade Policy Review: United States*, 68. WT/TPR/S/200 that sub-federal bodies procured \$616 billion in fiscal year 2007 and \$585 billion in fiscal year 2006.

⁷⁵⁸ U.S. House Committee on Oversight and Government Reform, 110th Congress (2007). Other sources break down this number, suggesting the US buys over \$200 billion of goods and services a year and allots an additional \$240 billion to grantees who buy goods and services. See: Jane Early, LLC. "Green Procurement in Trade Policy". Report for Government of Canada.

http://www.cec.org/Storage/50/4219_green-procurement-in-trade%20Policy_en.pdf

⁷⁵⁹ Author's calculations using data at: WTO (2007). US' statistics notification under Article XIX: 5 of WTO GPA.

<http://docsonline.wto.org/imrd/directdoc.asp?DDFDdocuments/t/PLURI/GPA/94A1.doc>

⁷⁶⁰ See Woolcock, S. (May 2008) and Woolcock, S. (April 2008). "Government procurement provisions in CARIFORUM EPA and lessons for other ACP states." London School of Economics.

welfare in certain cases, rather than clearly increasing market access (for example, from firms abroad).⁷⁶¹

Several EC publications suggest that EC directives and other reforms have led to a significant increase in “indirect” cross-border trade in GP goods and services, although it should at least be noted that these studies focus on cross-border within the EU as opposed to trade with countries outside the EU. “Indirect” herein refers to foreign subsidiaries operating in the country for which GP is being offered. “Direct” refers to companies bidding in a foreign country from their home country rather than through a subsidiary established in that country.

Herein, it is notable that “direct” and “indirect” cross-border competition refers to two quite distinct sources of competition. In a 2004 EU study, data suggests 67% of EU bids were submitted by domestic firms in their home countries whereas only 3% of firms conducted direct cross-border procurement, i.e. bidding for a project in a different country without having a subsidiary in that country. However, 30% of firms carried out procurement through foreign subsidiaries. The study found that domestic firms and foreign subsidiaries have similar rates of success when bidding for contracts in the country where they are located (30% and 35%, respectively).⁷⁶²

These findings from the EC and other sources provide strong evidence of EU GP market competition concentrated within the EU becoming increasingly competitive over the last decade; moreover, these findings taken together with WTO statistics suggest that internal regulations and policy directly contributed to this phenomenon. Without a separate analysis it is unclear if or how much the GPA contributed indirectly to this phenomenon. Overall, WTO statistics suggest that the EU awarded approximately EUR 12 billion in contracts to GPA members in 2007. This would mean that around 4.1% of all contracts in 2007 covered under the EU’s GPA commitments (EUR 293.48 billion) were awarded by the EU to other GPA members in 2007.⁷⁶³ The figure indicates that the EU awards the vast majority of its contracts to non-GPA countries, even over a decade after the GPA entered into force (in 1996).

As such, it appears safe to assume that liberalising GP rules domestically, whether or not this is directly or indirectly a product of an international agreement, saves costs and significantly increases competition in home procurement markets. Also, the GP liberalisation does not necessarily lead to increased direct trade with companies operating overseas, although it indeed might encourage ‘indirect’ cross-border trade within a country like Canada or area like the EU. All of this is also contingent, of course, on the actual type, breadth, implementation and enforcement of the domestic reforms that are made.

Canada, when compared to other GPA members and considering the size of its economy and population, has a decent foothold in the EU GP market. According to WTO statistics, out of 13 Parties to the GPA, Canada won the 4th highest number of EU contracts in 2007. It was the 3rd largest winner in terms of value of contracts, after the US and Switzerland. It beat out Japan who despite having exponentially more contracts/lots than Canada in terms of number was awarded collectively less in terms of value, although on a per capita basis Switzerland is the leader in the EU cross-border GP market among GPA parties in terms of value of contracts awarded.⁷⁶⁴

⁷⁶¹ Evenett, S. and B. Hoekman (2004). “Government Procurement, Market Access, Transparency and Multilateral Trade Rules.” *World Bank Policy Research Paper* 3195, January 2004. The study, however, sets forth a number of nuanced situations. The study does not find a clear correlation between transparency in GP and market access.

⁷⁶² EC (2004). “A report on the functioning of public procurement markets in the EU: Benefits from the application of the EU directives and challenges for the future.” 3 February 2004.

⁷⁶³ This figure inferably does not take into account the time needed for tendering, which may mean a contract was not awarded in the year in which it was tendered and would skew the figure more or less depending on the monetary value of such contract.

⁷⁶⁴ Author’s calculation from data in WTO (2007), EU notification under Article XIX:5 of WTO GPA

However, in order for Canada to utilise CETA to increase its market share of EU GP contracts, it would have to become more competitive for contracts with a number of countries' companies, likely including the US. This is because certain EU firms will inevitably maintain an advantage in the EU GP market and given the US clearly maintains an exponentially larger share of the EU procurement market subject to the GPA than Canada. Specifically, WTO data suggests that in 2007 the EU awarded 105 contracts/lots to Canadian firms, worth approximately EUR 866 million overall; however, the EU awarded the US – who like Canada is also only granted limited GP market access under the GP in the EU due to reciprocity issues – 11,691 contracts/lots, worth approximately EUR 8.68 billion overall.⁷⁶⁵ Still, for the very reason that Canada is already awarded a fairly low amount of EU contracts at present, it is likely that a liberalisation of the GP market via CETA will result in some increase in contracts awarded to Canada. Additionally, to the degree that the AGP, or the expansion or extension of the AGP, makes Canadian firms more competitive against US firms this may allow Canadian firms to gain some market share in EU GP contracts previously held by US entities, albeit likely a very minimal share in the short term.

Canada could also benefit from becoming more competitive with Switzerland and Japan in the GP market. This is reflected in that the same 2007 WTO data for the US suggests the EU awarded 1,333 contracts to Switzerland, worth approximately EUR 1 billion; and 1,247 contracts to Japan, worth approximately EUR 844 million (see Table 62).

Table 62: Top 4 recipients of cross-border GP contracts awarded by the EU (2007)

Country	Number of GP contracts/lots	Contract value (mil EUR)	Population (mil)	Avg. contract value/capita (mil EUR)
US	11,691	8,680	303,824,640	0.0000286
Switzerland	1,333	1,000	7,581,520	0.0001319
Canada	105	866	33,212,696	0.0000261
Japan	1,247	844	127,288,416	0.0000066

Source: EU 2007 GPA Statistics notification to WTO, CIA World Factbook

In the same vein, while GP competition may increase between EU and Canadian firms and this would not necessarily lead to any notable shifts in domestic to strictly 'overseas' trade, EU firms may gain market share by displacing Canadian firms, particularly if they operate through a competitive subsidiary in Canada. To the degree that CETA prohibits offsets, among other exceptions; opens up entire sectors (like, among others, the utilities); and opens up to entities which were excluded in the binding GPA, these areas would be forced to become more competitive under CETA.⁷⁶⁶ To add to this effect, certain stakeholders note that CETA may disallow splitting of contracts to stay under monetary thresholds or short time-frames,⁷⁶⁷ which if allowed may give an advantage to suppliers in a closer geographic proximity to the tender. The ensuing speed and level of competition among Canadian firms, and between Canadian and EU firms would depend upon the competitiveness of such firms in the newly opened environment. It would also depend on the thresholds in CETA. (See analysis on the EU below for some additional insights herein).

⁷⁶⁵ Author's calculations from data in Ibid

⁷⁶⁶ This considers that while in practice certain areas not bound under the GPA have experienced competition, and simply asserts that removal of de jure protection under Canada's binding GPA commitments would increase competition to some degree.

⁷⁶⁷ Sinclair (April 2010)

It is notable that a series of surveys conducted for DFIAT in 2007 suggest that Canadian businesses want access to at least certain GP markets in the EU, are willing to provide reciprocal access in return, and expect to see increased revenues under such an arrangement. The surveys focused on the GP markets in China, India, Russia, Brazil, Japan as well as the UK, France and Germany. 76% of respondents were interested in the GP markets in the UK, France and Germany. 72% of executives polled were not opposed to opening up Canada's government procurement markets at all levels (federal, provincial and municipal) to foreign companies in exchange for similar access abroad, and 49% indicated clear support. Moreover, 63% of executives said they expected a net increase in their company revenues if such arrangements would be made.⁷⁶⁸

It is important to note that many contracts would be excluded from CETA as they would not fall under CETA thresholds and/or they would be subject to certain exclusions which may very well be included in the agreement. These factors are mentioned under the "Economic policy space" indicator hereto. These factors both limit the potential of Canadian companies' market share increases in the EU GP market while also protecting against such gains from EU companies in Canada.

It is also important to note herein that not all EU-Canada tendering under CETA would be opening tendering. This allowance both somewhat limits the potential of Canadian companies' market share increases in the EU GP market while also somewhat protecting against such gains from EU companies in Canada. Specifically, while it is noted in the 2008 Joint Study that "open tendering" is "the norm" in the GPA,⁷⁶⁹ it is important to note that the GPA and other EU FTAs clearly allow for selective and single/limited tendering. And limited and selective tendering will inevitably be allowed in CETA.

Additionally, there are a number of other allowances likely to be included in the CETA, given they are in other GP agreements and EU FTAs, that provide certain buffers to competition and thus restrict the potential for significant market share gains in the Canadian and EU GP market. CETA will almost certainly allow procurement decisions to be based on considerations of both 'lowest offer' in terms of price and/or 'the most advantageous' offer. A 'most advantageous offer' option allows purchasing entities certain leeway to choose suppliers that offer better overall packages even if the price may not be the lowest. CETA will very likely also allow purchasing entities not to award a contract to any bidders in light of certain justifiable circumstances. A number of exceptions present in NAFTA and the GPA that would also likely be allowed in CETA on justifiable measures for protection of human health among other elements would serve as at least a limited buffer to completely open competition. Further potential buffers are mentioned in the "Quality of goods and services" indicator.

Lastly, by way of comparison, given the EU's GP market is currently among the most liberalised in the world and Canada's GP market is relatively more protected, it is the opinion of this study that CETA would provide opportunities for comparatively greater net market share gains by EU companies in Canada than Canadian companies in the EU. In other words, allowing Canadian suppliers increased access to the EU – in terms of equal access through implementation of GPA provisions that are currently non-binding, or even going beyond those GPA provisions in CETA – will likely not encourage significant further competition in the EU GP market because of the high degree of competition already prevailing in the EU. The extensive reform and liberalisation of EU GP to date is mentioned in the baseline of the "Institutional and regulatory environment" indicator hereto. These impacts should be contextualised, however, with the aforementioned fact that there are many EU subsidiaries already operating competitively in the Canadian GP market, and that it is likely some Canadian firms would make certain gains in the EU GP market under CETA.

⁷⁶⁸ Phoenix Strategic Prospectives, Inc. (2008)

⁷⁶⁹ 2008 Joint Study, pg 75

In conclusion, it is unlikely that Canadians will significantly increase their market share in the EU GP market and may lose some of their own GP market share to EU subsidiaries in Canada as a result of CETA. It is the opinion of this study that any net gains Canada would make in the EU GP market would likely be comparatively less. Still, Canada may increase the number of GP contracts it wins from the EU, particularly if they become more competitive with US suppliers, and also suppliers from other nations like Switzerland and Japan, and depending on the size of the contracts this could provide potentially noteworthy benefits for the Canadian companies winning such contracts.

EU

Data is not easily accessible for how many GP contracts in terms of number and value Canada has awarded the EU. It would be reasonable to assume that Canada awards the US more contracts than it awards the EU. Still, the EU already has a good number of competitive subsidiaries operating in the Canadian GP market. As discussed in the above section, CETA would very likely provide some advantages to EU firms, particularly if operating a subsidiary in Canada, to compete directly with Canadian firms.

The EC has noted that EU companies are world leaders in transport equipment, public works and utilities. The EU could very well increase market share in these areas to the degree they are opened up in CETA.

CETA would also likely allow the EU to compete better with US firms on Canadian contracts, and perhaps opportunities for EU firms to compete on contracts not afforded to US firms. As such, this would allow the EU to potentially gain market share by displacing both Canadian and US firms.

Despite these opportunities, there will be some factors limiting the potential for market share gains. For example, the allowance of limited and open tendering under CETA will both somewhat limit the potential of EU companies' market share increases in the Canadian GP market while also somewhat protecting against such gains from Canadian companies in the EU. And GP exclusions/derogations in CETA will have the same effect.

Additionally, threshold limitations will limit the benefits provided by CETA to smaller EU companies. In the years since NAFTA was implemented, US companies, particularly SMEs, have done very well and have been awarded GP contracts in a wide range of product and service areas in Canada; and most of these contracts have been below US\$100,000, and many are in high-tech sectors. Further, many of the winners have been US SMEs new to the Canadian market whose specific technology and expertise were what the Canadian Government was seeking.⁷⁷⁰ As mentioned, CETA may unlikely develop thresholds below the lowest GPA threshold of SDR 130,000 (approximately \$202,420 in current USD), and thus would provide limited direct benefit to EU SMEs over US SMEs in competing for Canadian contracts operating on contracts below this threshold. This is compounded by the fact that 90% of Canadian (federal) Government contracts are worth less than \$100,000.⁷⁷¹

Then again, while threshold requirements in CETA will restrict the benefits of CETA to EU companies, EU firms could still gain a new foothold in the sub-central level GP market for higher value GP contracts and in the mid- to longer-term these companies could use this foothold to compete more on lower value contracts. Depending on their resources, both larger EU enterprises as well as SMEs could increase market share through this approach.

⁷⁷⁰ US Commercial Service in Canada. "US companies in the Canadian government procurement market."

⁷⁷¹ Indian and Northern Affairs Canada (2010)

In conclusion, CETA will likely provide some opportunities for EU firms to increase market share in the Canadian GP market. Still, the most significant factor determining the competitiveness of EU companies in Canada's GP market in the future will not be CETA provisions but how their capacity to place competitive bids measures up against equivalent US and Canadian companies.

US

As per the impacts on the US, data is not easily accessible for how many contracts in terms of number and value Canada has awarded the US. Still it would be reasonable to assume that Canada awards a significant amount of the GP contracts won by foreign firms to the US, a pattern that has been bolstered by the recent AGP.

As mentioned above, CETA could lead to some decrease in US market share in Canadian GP if displaced by EU firms. In such a situation, US firms would likely either have to increase their competitiveness with EU firms in relevant areas or extend or expand the AGP in order to maintain market share.

INDICATOR: Cost of goods and services

BASELINE

EU, Canada and US

Goods and services funded through GP range widely in costs, but as discussed those contracts subject to GP agreements must exceed set monetary thresholds (see Table 20 for current GPA thresholds for Canada, the EU and US). As mentioned under the GDP indicator, GP contracts collectively make up a significant amount of government expenditure.

ANALYSIS

Canada

Reciprocal GP market access granted in CETA may increase competitiveness among firms operating in Canada, which may result in government savings. Evenett and Hoekman (2004) suggest that the impact of reducing discriminatory and non-transparent GP rules is increased competition that tends to improve welfare.⁷⁷² Further, Deltas and Evenett (1997) and Evenett (2003) explain that discriminatory GP practices specifically in terms of 'price preferences' tend to limit welfare gains as any gains are limited by the increased average prices paid by public entities for GP projects. These price preferences increase average GP prices paid by public entities, and to the extent that the government uses the "wrong rate of price preference" (i.e. deviates from optimal policy, which is particularly difficult to accurately predict given it must fully account for the expectation different bidders have about the price of each other's offer prices) this further eliminates any small welfare gains from discriminatory GP practices.⁷⁷³

⁷⁷² Evenett, S. and B Hoekman (2004). The study, however, sets forth a number of nuanced situations. For example, if government demand is higher than supply GP discrimination would lead to welfare losses in the short run; long term economic impacts of discriminatory GP practices depend on the barriers to entry and exit, although under free entry prices are determined by minimum average cost rather than existence of discrimination, and output is determined by government demand. As a note, the study does not find a clear correlation between transparency in GP and market access.

⁷⁷³ Evenett, S. (2003). "Is there a case for new multilateral rules on transparency in government procurement." *Chapter III of The Singapore Issues and The World Trading System: The Road to Cancun and Beyond*. Simon Evenett and the Swiss State Secretariat of Economic Affairs. Pg 26; and

Additionally, a 2009 EC publication found that “local and cross-border competition” in the GP market has allowed contracting authorities to save 5-8% from what they had originally earmarked for projects.⁷⁷⁴ These findings suggest provisions of CETA that open up the Canadian GP market may reduce the costs of goods and services paid by the government.

These reductions in costs should be contextualised in terms of the potential administrative costs of opening up the GP market under CETA. Opening up the GP market will increase the number of bids governments have to process. As such, administrative costs of governments processing the bid proposals may rise in the short term. This may burden smaller municipalities more than larger ones. However, it may be possible in the mid- to long-term for institutions to improve their tendering processing systems, for example through developing and/or improving upon electronic tendering systems, which would limit the increases in such administrative costs.

The reductions in costs should also be contextualised in terms of the potential costs from bid challenges resulting from opening up the GP market under CETA. As mentioned in other indicators hereto CETA may increase the number of bid challenges, which have monetary costs in certain situations and may burden municipalities more than larger levels of government.⁷⁷⁵ However, available evidence collected by the study team to date does not suggest that bid challenges in Canada cost the government a significant amount of money as a percentage of government expenditure, and this may not change even if CETA contributed to increased bid challenges in Canada. Additionally, while the precise size of costs related to bid challenges is difficult to gauge given lack of readily accessible data, they could arguably be largely offset in the long-term by increased welfare gains from increased competition. This said, further research is warranted in this area.

Canadian government savings from opening up the Canadian GP market may directly translate into lower cost public goods and services from particular projects from which they were reaped and/or may result in increased money that the government chooses to spend in other areas. However, the actual tangible benefit to society from the reduction of the costs of government-procured goods and services is very much determined by what the Canadian government does with the savings. To the extent that CETA changes the investment and competition environment within Canada through other provisions not directly related to GP, this would also potentially influence prices of government procured goods and services.

It is important to note within all of this that the welfare discussed refers to overall welfare resulting from GP provisions written in CETA. Stakeholders have cited examples of where privatisation has resulted in poor coverage of public services and/or increased cost of such services.⁷⁷⁶ This analysis does not dispute all these examples; however, privatisation will not be a legal stipulation of GP provisions under CETA.⁷⁷⁷ Certain forms of privatisation of services that are not as competitive currently as they

Deltas, G. and S. Evenett (1997). “Quantitative Estimates of the Effects of Preference Policies,” in B. Hoekman and P.C. Mavroidis (eds.), *Law and Policy in Public Purchasing*. Ann Arbor: University of Michigan Press.

⁷⁷⁴ EC (2008). “Internal Market Scoreboard: Members States still on target but need to focus on correct application of rules.” Europa Press release, 16 July 2008.

<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1149&format=HTML&aged=0&language=EN&guiLanguage=en>

As a note, another EC report, from 2004, suggests that the nationality of firms within the EU GP market did not have any significant affect on the price paid for GP contracts (Source: EC (2004) “A report on the functioning of public procurement markets in the EU: Benefits from the application of the EU directives and challenges for the future.” As such, it is not clear that lower priced bids for public goods and services will be offered by a company from a particular country as a result of the CETA.

⁷⁷⁵ Shrybman, S. (May 2010)

⁷⁷⁶ For example, see: The Council of Canadians, CUPE-SCFP (2010). “Public Water for Sale: How Canada Will Privatize Our Public Water Systems.” December 2010. pg 21

⁷⁷⁷ Consultations with Contracting Authority at project Steering Committee Meeting in November 2010

would be under CETA, however, could indirectly result in the long-term. More on this issue is discussed in the “Quality of goods and services” indicator below.

EU

As mentioned under the GDP indicator below, while CETA may increase competition in the EU it may in fact not lead to significant savings for the EU. Nonetheless, the savings that do occur may directly translate into lower cost public goods and services from particular projects from which they were reaped and/or may result in increased money that the government chooses to spend in other areas.

US

No significant impact on costs of goods and services procured by the US government is predicted, although potential cost reductions in the longer term may be possible if Canadian firms become more competitive under CETA and then compete more on price in the US market.

INDICATOR: GDP

BASELINE

Canada

Sources estimate that Canada’s total GP market is worth 11.5% of its GDP in terms of total expenditure (TE) less compensation of employees.⁷⁷⁸ In terms of TE less compensation, sources estimate central level GP in Canada constitutes 1.7% of its GDP and local level GP is worth 8.8% of its GDP.⁷⁷⁹ Federal contracts falling under Canada’s binding GPA commitments totalled approximately 0.2% of nominal GDP in 2007, of which non-limited tendering contracts totalled roughly 0.1% of GDP.⁷⁸⁰ Given Canada’s sub-federal GPA commitments are not binding, WTO statistics are not available for the amount of its sub-federal GP subject to GPA thresholds.

EU

As a whole, including governments of EU countries as well as main EU institutions involved in procurement, GP in the EU composes about 16% of GDP,⁷⁸¹ although other estimates suggest it is as low as 9.2% of GDP.⁷⁸² Depending on the MS, GP as a percentage of national GDP varies widely.

US

Sources suggest US GP has accounted for 19.5% of GDP annually, two-thirds of which is from state and local purchasing (12.6% of GDP), and one-third of which is federal (7% of GDP).⁷⁸³ As with the EU, this percentage of GP to GDP may vary depending on the source.

⁷⁷⁸ The value of Canadian GP in terms of TE is estimated at 25.83% of Canadian GDP. In terms of TE less compensation and defence related expenditures: 10.40% of GDP for all contracts, and 0.62% of GDP for central level GP. Sources: Audet, D (2002). “Government Procurement: A Synthesis Report.” *OECD Journal on Budgeting*, 2(3). OECD Publishing, Paris. OECD Report on Government Procurement available at <http://www.oecd.org/dataoecd/34/14/1845927.pdf>

⁷⁷⁹ Ibid

⁷⁸⁰ Author’s calculations using WTO GPA notification data in market share indicator and CIA Factbook figures of \$1.089trillion, adjusted is \$CAN 1.17 in 2007 (i.e. \$CAN 1,177,110,990,000)

⁷⁸¹ Beuter, Rita (2005), pg 1

⁷⁸² Audet (2002)/OECD statistics

⁷⁸³ Ibid

ANALYSIS

Canada

A 2009 EC publication found that “local and cross-border competition” in the GP market has allowed contracting authorities to save 5-8% from what they had originally earmarked for projects, and estimated that these savings could mean increases in GDP of between 0.08-0.12% if continued over the next decade. As discussed in other indicators hereto, it is likely that most if not all of these savings came from improved facilitation and competition within the EU GP market as a result of reforms and liberalisation.

As such, Canada’s commitments to GP provisions within CETA may ultimately also save money that can be quantified as a percentage of GDP, although the magnitude of such gains is uncertain and could be between relatively minor or insignificant. A variety of factors would need to be assessed to more precisely estimate the impact of CETA’s GP provisions on Canadian GDP, and while a useful proxy indicator in some senses the aforementioned 2009 EC publication may not be the best metric for such a prediction even when adjusting for differences in the value of the GP market in the EU vs. Canada.⁷⁸⁴ Given Canada’s market for inter-provincial competition faces a certain level of restrictiveness at present, GP liberalisation combined with other provisions of the CETA, for example on investment, labour mobility, and free circulation of goods would likely result in increases in Canadian GDP. On the other hand, given CETA excludes GP contracts below thresholds, which is a significant amount of contracts (in number at least) this limits the impact of CETA in contributing to GDP gains. And in-line with the analysis in the “Costs of goods and services” indicator, the aforementioned increases in GDP may be at least marginally offset by increased administrative costs in the short-term and bid challenges; although on the other hand these costs may not be significant enough to substantially impact such gains. A range of other factors would also have to be considered. Unfortunately, a more in-depth analysis herein is beyond the scope of this SIA.

EU

To the degree that EU firms increase their market share in the Canadian GP market this may contribute to some minor or negligible gains in EU GDP. Given the openness of the EU GP market currently, it is unlikely that allowing Canadian firms increased competition in the EU GP market would significantly increase overall GP competition in the EU. And given the formerly mentioned studies on welfare gains from GP liberalisation appear to be predominately based upon savings to government gained from increased competition within the home market, the contribution of GP provisions in CETA to GDP growth in the EU will likely be minor at most.

US

US GDP will likely not be significantly affected by GP provisions in CETA. If US firms lose their GP market share in Canada to the EU this would negatively impact these companies and this could be compounded with other components of CETA, for example in terms of tariff reductions and other market access provisions, providing benefits to EU over US enterprises. However, losses of US GDP due directly to GP

⁷⁸⁴ Given available statistics suggesting Canada’s GP market makes up less of its total GDP than the EU GP market makes up of EU GDP, one might estimate that GP reforms in CETA in and of themselves would likely contribute to less than 0.12% gains in Canadian GDP over the next decade; however, this would not fully consider a number of important other variables, some of which are listed in the text above.

provisions in CETA will likely be negligible or non-existent (and potential negligible losses of GNP would become a non-issue altogether if the US extended or expanded an agreement like the AGP).

INDICATOR: Employment

BASELINE

Canada, EU, US

Considering the figures mentioned above regarding the significance of GP as a percentage of government expenditure and percentage of GDP, it is clear that GP is also an important source of employment in Canada, the EU and US. Further data on GP and related employment was not readily available.

ANALYSIS

Canada

Impact on foreign vs. domestic companies

In determining the effects CETA may have on employment in the Canadian GP market, it is first important to consider what type of competition such provisions would actually foster. It is clear that, and as stakeholders suggest, if GP money is spent to pay for products or services not produced in one's home country and by workers not living in one's home country, this detracts from the local economy and negatively impacts domestic workers (even though the people in the procuring country still maintain the utility of being able to use the procured project). However, as established in the discussion on market share, CETA would likely increase domestic competition in Canada rather than necessarily leading to awarding of contracts to companies only stationed abroad.

As previously mentioned, there is evidence that foreign subsidiaries rather than foreign parent companies are most competitive in cross-border GP transactions, which in turn has implications for what type of workers would be hired by EU companies potentially increasingly winning Canadian GP contracts. Although foreign subsidiaries may hire expatriates from offices abroad, they also, and in some cases very significantly, hire locals who have an expertise in terms of knowledge of local language, culture, laws and regulations, business practices, and possess contacts among other skills, knowledge and experience. A 2008 report for DFIAT provides further context herein, showing that Canadian firms found the most significant barrier to the GP market in the UK, France and Germany to be a lack of communication channels and contacts.⁷⁸⁵

Canadian subsidiaries in foreign countries also have strategies to hire locals.⁷⁸⁶ And in-line with the above analysis this would indicate that if Canadian companies were to increase their GP market share in the EU to any degree it would not necessarily lead to an equivalent increase in employment for Canadian workers.

⁷⁸⁵ Phoenix Strategic Prospectives, Inc. (January 2008)

⁷⁸⁶ Minton-Eversole. (2008). "US, Canadian firms look past borders: hiring nationals hard, but worth it, survey says." *HR Magazine*. April 2008.

Further to the above analysis, CETA's prohibition of exemptions otherwise in the GPA would not directly lead to a decrease in employment of permanent residents/citizens of Canada, and if so this may at least in part be a product of an already ongoing trend. Pre-existing hiring practices are already promoting hiring of non-citizens/non-permanent residents in Canada in sectors that might be further opened up in the CETA. In other words, depending on the industry and sector, a Canadian company dealing in the Canadian GP market may indeed already be hiring those with only temporary residence or those who are not yet fully Canadian citizens.⁷⁸⁷

Despite these trends, the degree to which foreign subsidiaries in particular currently hire locals may be changed, although not necessarily significantly, with labour mobility arrangements in CETA. To the degree that foreign subsidiaries are only hiring local labour due to government restrictions limiting labour mobility, provisions in CETA liberalising these restrictions may discourage hiring of permanent residents/citizens in place of temporary expatriates. Any changes in hiring practices would be focused in professional business services, as this is the only sector likely to be covered in labour mobility provisions in CETA (see the cross-cutting section on Labour Mobility for further information).

General impact on companies within the internal market

To the degree that the local market becomes more competitive it may create some unemployment or at least temporary unemployment among workers living domestically, particularly in less competitive companies at least in the short term. In-line with the theme that CETA will likely encourage domestic competition in the GP market, which would be magnified by any reduction in thresholds under CETA, CETA would create an environment of increased competition among Canadian companies, and between Canadian and foreign companies operating through subsidiaries. And this may create some unemployment among workers living domestically in less competitive companies in the short term; however, in the medium- to long-term, workers would at least theoretically make their ways to the most productive companies.⁷⁸⁸

In some ways, some SMEs may not be as directly affected by these changes. SMEs win a significant portion of GP contracts. For example, the PWGSC is responsible for a significant portion of Canadian GP (85% of the total value spent) and since 2006-2007, on average, the PWGSC has awarded more than 43% of the total value of contracts transacted with businesses located in Canada to SMEs.⁷⁸⁹ Overall, the vast majority, in fact 90%, of Canadian (federal) Government contracts are worth less than \$100,000.⁷⁹⁰ This is a sizeable market especially for SMEs. However, as mentioned, it is unlikely that CETA thresholds and thus its other GP provisions would extend to contracts of \$100,000 or lower and therefore SMEs which rely on these smaller contracts would not be directly affected by CETA.

At the same time, as mentioned under the "market share" indicator, some EU SMEs could still gain a new foothold in the GP market for higher value GP contracts, particularly at the sub-central level, and in the mid- to longer-term compete more on lower value contracts. Still, Canadian governments would retain policy space in tendering choices for lower value contracts. This may indicate that in certain cases

⁷⁸⁷ Valiani, S. (2006). "The increasing use of migrant labour in Canada." Canadian Labour Congress. <http://www.canadianlabour.ca/sites/default/files/pdfs/migrantLPresJune06.pdf>

⁷⁸⁸ This is not to say, however, that increased efficiency in the GP market would not lead to long term decreased government expenditures in certain sectors potentially creating long term unemployment therein. But this would be a product of domestic policymaking rather than a direct effect of CETA.

⁷⁸⁹ Canada's House of Commons Committee. "Government Response to the Seventh Report of the Standing Committee on Government Operations and Estimates."

<http://www2.parl.gc.ca/HousePublications/Publication.aspx?DocId=4144312&Language=E&Mode=1&Parl=40&Ses=2>

⁷⁹⁰ Indian and Northern Affairs Canada (2010)

some employment may move from smaller companies to larger companies. As a note, survey data suggests MNCs have better strategies than SMEs to address some of the aforementioned problems encountered in foreign GP markets,⁷⁹¹ one of which includes hiring locals to at least some degree.

Impact on companies by sector, and in terms of offsets and set-asides

Generally, given the level of competitiveness of EU firms in transportation equipment, public works and utilities industries, they could gain in market share in Canada and thus shift employment within Canada in these industries. This could simply lead to shifts in employment for Canadian workers into the more competitive Canadian firms, more competitive EU firms, and/or result in some unemployment. However, how these trends would in fact play out and the significance therein is unclear and would require exhaustive analysis of current policies and levels of competitiveness that is beyond this scope of this SIA.

The impact of CETA's prohibition of offsets in relevant GP contracts warrants special attention. To recall, offsets allow for local content, technology licensing investment requirements, and counter-trade or similar requirements in an effort to contribute to "economic development." There are three general types of offsets: "indirect" offsets which need not be related to base procurement, "semi-direct" offsets, and "direct" offsets" which must be directly related to the base procurement. Some countries, for example several EU MS, often call offsets "Industrial Participation." Stakeholders have cited examples where a prohibition on GP offsets in CETA may have a negative influence on employment in Canada.⁷⁹² And as listed in Box 27 in the "Impact on economic policy space" indicator, Canada has included allowances for a number of offsets in its GPA schedule which could create employment. At first glance, prohibition of GP offsets in CETA would seem to intuitively have negative impacts on employment in Canada's GP market.

However, while it seems intuitive to suggest that a prohibition of offsets in CETA would create unemployment in Canada, or would at least limit a mechanism to create employment in Canada, this conclusion deserves at least some qualification. First, it is important to recognise an inability to use offsets is not the same as the inability to use GP contracts to contribute to local economic development. It simply prohibits the use of local content, technology licensing, investment requirements and counter-trade or similar requirements to do so. This allows significant leeway for GP contracts to contribute to local employment. Second, one must consider what programs that use offsets would actually be above CETA thresholds. The prohibition of offsets under CETA would only apply to those contracts above CETA thresholds (as discussed, the lowest of which may perhaps be around \$200,000) and subject to the other GP commitments (on entities, goods and services, etc.) in CETA. This would allow a significant portion of GP contracts to still use offsets. Then again, and importantly, it is likely that larger contracts that would be above CETA thresholds are those that are most effective in promoting local employment. Third, as in the GPA and NAFTA, there will likely be a variety of industries/areas of procurement excluded in CETA GP commitments, and thus CETA in itself would not prohibit usage of offsets in these areas. Additionally, one may question if language in CETA would explicitly prohibit offsets for all defence procurement, as of recently both EU MS and Canada still maintain offsets in this area which is also traditionally a significant source of offsets.

Several other points deserve analysis. Fourth, one must consider how the costs saved from the increased competitiveness from GP provisions in CETA, as mentioned in the "Costs of goods and services" and "GDP" indicators hereto, would be reinvested in Canada. These could be used to create

⁷⁹¹ EC/CiLT (2006). "Effects on the European Economy of Shortages of Foreign Language Skills in Enterprise." http://ec.europa.eu/education/languages/pdf/doc421_en.pdf

⁷⁹² For example, a recent tender for wind energy by Hydro Quebec required contractors to create jobs and economic spinoffs in the Gaspé region and other areas in Quebec. For other examples see Sinclair (April 2010), pgs 7 and 11.

employment. Fifth, selective and limited tendering procedures may make the prohibition of offsets less of an issue, by allowing the government preferential decision making on who bids for contracts. Sixth, one would have to consider how offsets are working currently, and if in fact different policies would better use government efforts to stimulate employment.⁷⁹³ Seventh, and perhaps controversially, it would have to be considered if the offsets otherwise used in absence of CETA would effectively build up a strong industry in the long-term in terms of global competitiveness, or in fact would merely insulate an industry in the short-term while in the long-term when (and if) the policies are removed this could result in the collapse of such industry. And it would need to be considered if this could actually create more negative impacts on employment than if the industry was subject to competition from the start.

In summary, while prohibition of offsets could have some negative impacts on employment in Canada, the full significance of these impacts is unclear without an in-depth analysis. And this additional analysis is outside the scope of this SIA.

It would be difficult to argue that removing exemptions for specific group of society, i.e. Canadian GPA set-aside provisions for Aboriginal and minority businesses, would benefit these businesses in terms of employment in the near-term. Currently, contracts are awarded to this group on a preferential basis and elimination of such preferences would at least in the near-term subject them to increased competition, which may result in at least some unemployment. In addition to the economic impact, this would create a negative social impact. This said, most contracts won by Aboriginal businesses may in fact be below CETA thresholds, and thus CETA would not impact such contracts or employment resulting from such contracts.⁷⁹⁴ Still, it is likely that at least some contracts otherwise subject to set-asides would be impacted by CETA.⁷⁹⁵ It is important to note herein that Aboriginal set-asides may in fact not be altered in CETA as the EC has stated that set-asides with a social dimension, for example, for aboriginal business, are to be respected.⁷⁹⁶ An exhaustive analysis of how such group-specific GP preferences are currently contributing to employment in ways other programs are and could not would be required to make a fuller assessment herein.⁷⁹⁷

More on the details of the Aboriginal set-aside programs in particular in Canada are discussed in Box 28 below.

⁷⁹³ There appears to be relatively limited amount of research and analysis in this area, at least in terms of GP for non-defence/civil purposes. One study that uses transaction cost theory to provide a policy matrix for use of offsets is Taylor, T.K (2003) (See: Taylor, T.K. (2003). "The proper use of offsets in international procurement." *Journal of Public Procurement*, 3 (3): 338-356. PrAcademics Press. Pg 1-19.) A number of studies do look at performance requirements for investment in the market at large, and many of the findings therein are likely applicable to offsets in the GP market. For one overview of these studies see: UNCTAD (2003). *Foreign Direct Investment and Performance Requirements: New Evidence from Selected Countries*. United Nations, New York and Geneva. http://www.unctad.org/en/docs/iteiia20037_en.pdf.

⁷⁹⁴ Consultations with EC officials in November 2010. Note: Consultation attempts to date with Aboriginal industry associations have not produced statistics.

⁷⁹⁵ A review of government data suggests that Aboriginal businesses have won a number of important contracts valued above certain GPA thresholds and a significant portion of these particular contracts were won due to set-asides allowed in the GPA. (See Indian and Northern Affairs Canada (2003). "Procurement Strategy for Aboriginal Business: Performance Report for 2001.")

⁷⁹⁶ Consultations with experts from DG Enterprise and Industry, April 2011

⁷⁹⁷ For example, even though it may be a policy intention or even stipulation that certain contracts are 'set-aside' for these groups to bid upon, for a variety of reasons the contracts may not in the end be awarded to these groups.

Box 28: Set-asides for Aboriginal businesses in Canada

PSAB Program

The Canadian federal government does not have set-aside provisions for small businesses at large;⁷⁹⁸ however, it does have a Procurement Strategy for Aboriginal Business (PSAB). The term "Aboriginal" herein refers to a Status or Non-Status Indian, Métis or Inuit when used for contracts under the PSAB. There are set requirements for what constitutes an Aboriginal-owned business.⁷⁹⁹

The PSAB helps Aboriginal firms do more contracting with the Government of Canada through mandatory and voluntary set-asides. Specifically, under the PSAB, *mandatory set-asides* apply in situations where "All procurements over \$5,000 for which Aboriginal populations are the primary recipients are to be restricted exclusively to qualified Aboriginal suppliers where operational requirements, best value, prudence, probity and sound contracting management can be assured. There is no upper limit. Procurements under \$5,000 may be set aside but it is not mandatory. Procurements over \$2 million will continue to be subject to the procurement review process."⁸⁰⁰ In addition to the mandatory set-asides, agencies like the PWGSC may institute *voluntary set-asides* for Aboriginal businesses. These voluntary set-asides do not appear to be limited to contracts above certain thresholds.⁸⁰¹

Comprehensive Land Claims Agreements

In addition to the PSAB set-asides, Canada currently allows right of first refusal (set-asides) for the portions of GP involving delivery of goods and/or services and/or construction to settlements in Comprehensive Land Claims Agreements (CLCAs). CLCAs are legally binding treaties built on Aboriginal rights and titles to lands traditionally used and occupied by an Aboriginal group. At present, there are 23 CLCAs.⁸⁰²

⁷⁹⁸ Government of Canada. Procurement in the US.: <http://www.canadainternational.gc.ca/sell2usgov-vendreaugouvusa/procurement-marches/faq.aspx?lang=eng>

⁷⁹⁹ "To qualify for set-asides, a business - which can be a sole proprietorship, limited company, co-operative, partnership or a not-for-profit organization - must meet the following criteria. At least 51 percent of the firm must be owned and controlled by Aboriginal people; If it has six or more full-time staff, at least a third of the employees must be Aboriginal people; If the bidder is a joint venture or consortium, at least 51 percent of the joint venture or consortium must be owned and controlled by an Aboriginal business or businesses as defined above. It also has to have at least a third of the employees be Aboriginal people if there is more than 6 employees working for the joint venture or consortium.

When an Aboriginal supplier or joint venture intends to sub-contract part of the requirement, the Aboriginal component in the work must be maintained." See PSAB. Module 1: Procurement Strategy for Aboriginal Business. Indian and Northern Affairs Canada. <http://www.ainc-inac.gc.ca/ecd/ab/psa/bts/wbg/md1/index-eng.asp>. Note: The Canadian Aboriginal and Minority Supplier Council (CAMSC) was established in 2004 to provide certification along these lines.

⁸⁰⁰ Indian and Northern Affairs Canada (2009). "Procurement Strategy for Aboriginal Business." 07 August 2009.

⁸⁰¹ See Article 9.40.1 "Decision to Set Aside a Procurement under PSAB," sub-article c, of the PWGSC Supply Manual. Chapter 9. available at URL: <http://www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre09-chapter09-eng.html#s9-1>

⁸⁰² Ibid, 9.35.5

⁸⁰³ Ibid, 9.35.20

⁸⁰⁴ Ibid, 9.35.65

Procurement exceptions for contracts subject to CLCAs are broad. Specifically, Article 9.35.20 of the PWGSC's Supply Manual states that a CLCA generally applies to any portion of a procurement in Canada regardless of dollar value that involves delivery of goods and/or services (both construction and non-construction services) to locations covered by CLCAs.⁸⁰³ CLCA contracting may also be subject to set-asides under the PSAB, although in certain situations a distinction must be drawn between a "CLCA beneficiary firm" and "aboriginal business" under the PSAB.⁸⁰⁴

Conclusion and long-term impact on employment

In summary, GP provisions in CETA will likely lead to some shifts in employment, which may mean employment gains for some working for Canada and EU firms, and losses for others. The full scale of these impacts are uncertain.

EU

GP provisions in CETA may create some positive employment impacts for EU citizens, although these impacts will likely be relatively limited. While, as discussed in the section on Canada, some EU companies will likely see some benefits from GP provisions in CETA, the extent to which these benefits are particularly realised in terms of employment of EU citizens largely depends on the amount of EU staff that EU companies operating in Canada hire.

As the EU has much fewer exceptions in the 1994 GPA for its own GP market, and given it is overall more open and thus competitive than Canada's GP market, the potentially negative effects on employment in this area mentioned for Canada would not clearly apply to the EU. However, to be sure, certain MS policies used to reduce unemployment would need to be investigated individually, using the framework for determining the legally binding nature of such policies under CETA as generally alluded to under the "...economic policy space" indicator (Meets CETA thresholds? Applies to entities committed in CETA? Not covered under exceptions in CETA?). Some policies to be investigated in this regard include, among others, Industrial Participation (offset) policies in places like Belgium, and more specifically policies of several municipal governments in Belgium and the Netherlands requiring contractors to recruit the chronically unemployed.⁸⁰⁵

US

It is envisaged that as CETA increases competition within the Canadian market for Canadian GP projects, this would potentially lead to some decrease in employment among US companies currently operating or hoping to operate in the Canadian GP market. However, these impacts may not be significant and the negative impacts herein would be mitigated to the degree that the AGP in its current or expanded form would further level the US-Canada GP market playing field.

⁸⁰⁵ Such policies are mentioned in UNOPS (2009). *2008 Annual Statistical Report on United Nations Procurement: Sustainable Procurement Supplement*.

SOCIAL ASSESSMENT

INDICATOR: Social policy space

Canada, EU, US and Mexico

BASELINE & ANALYSIS

As mentioned in the policy space indicator in the economic section, the implications GP provisions in CETA might have on reducing policy space are best addressed through the other indicators hereto. GP provision in CETA may reduce social policy space in Canada that may have negative impacts on employment (as mentioned in the economic assessment). It may also reduce Canadian social policy space in ways that will result in some negative results on indicators of innovation, quality and decency of work, and cultural preservation. It may reduce EU policy space in a way that will result in some negative results on the indicator of quality and decency of work. Negligible impacts would be expected in the US and Mexico. More details on potential reductions in policy space can be found in the policy space indicator in the economic section, and a further discussion on the aforementioned social impacts can be found in the specific indicators in the social assessment below.

INDICATOR: Quality of goods and services

BASELINE

Canada, the EU, and US all provide high quality government-procured goods and services. This is due to the fact that they have well developed economies and regulatory and institutional systems, including their GP systems.

It is important to note that government-funded goods and services can be provided by a number of different entities, including private enterprises, government enterprises/state-owned companies, and public-private partnerships (also called “P3s”). It should also be recognised that government funds allotted in government budgets solely for government agencies to act as the end provider of goods and services are not a form of government spending potentially subject to the CETA, i.e. it is not public procurement. It is sufficient to say that the body of literature is full of differing opinions as to how and if goods and services funded by the government should be delivered under these mechanisms. Arguments have been well reasoned on both sides for the positives and negatives of using certain goods and services delivery mechanisms over others.

The below baseline briefly discusses access currently allowed in the GP markets of Canada, the EU and US for particularly sensitive goods and services. It looks at certain goods, utilities and other services outside health and education, and separately at health and education services. This will provide background from which to base an assessment on how liberalisation under CETA may influence the quality of such particularly sensitive government-procured goods and services.

Goods, utilities and other services excluding those for health and education

Canada, EU, and US

As mentioned in the “institutional and regulatory environment” indicator, the EU has a relatively more open GP market than Canada. The US provides many opportunities for GP, although in its GPA schedule it also has not committed to as open as a system as the EU. By way of example, the EU has opened portions of utilities and sub-central level GP to international trade for years, whereas Canada in particular remains more closed in these areas. The treatment of certain water-related services, a particularly sensitive area to some stakeholders, under NAFTA is somewhat ambiguous;⁸⁰⁶ and municipal procurement in water services has not been included in any trade agreement to date.⁸⁰⁷

Health

Canada

Canada provides some limited access to its health services market in trade agreements. NAFTA provides exclusions for national treatment and MFN status in GP of “health and social services.”⁸⁰⁸ The 2008 Joint Study suggests Canada’s 1994 GPA initially provided access to its health services in the GP arena, although these commitments are non-binding due to lack of reciprocity.⁸⁰⁹ Even within the aforementioned commitments, however, it should be mentioned that a note in Canada’s Annex 2 (sub-central entities) states that Canada’s commitments do not apply to “*Emergency Health Services in Nova Scotia with respect to ambulance-related procurement, including telecommunications for Emergency Health Care purposes.*” R&D is excluded in Canada’s GP commitments in NAFTA and its 1994 GPA.

EU

The 2008 Joint Study notes that the EU closed its “Education, health and social services”⁸¹⁰ GP market in the GPA, and as a result Canada does not grant reciprocal access in these services. R&D is excluded in the EU’s 1994 GPA commitments.⁸¹¹

US

Unlike Canada, the US does not have exclusions for “health and social services” in its NAFTA GP commitments. R&D is excluded in US’ GP commitments in NAFTA.

Education

Canada

NAFTA provides exclusions for MFN and national treatment of “health and social services” on GP contracts.⁸¹² The 2008 Joint Study suggests Canada’s 1994 GPA initially provided access to its education services in the GP arena, although these commitments are non-binding due to reciprocity issues.⁸¹³ Even within the aforementioned initial commitments, however, it should be noted that Canada in their GPA

⁸⁰⁶ Gleick, Peter H. et al. (2002). “The New Economy of Water: The Risks and Benefits of Globalization and Privatization of Fresh Water.” Pacific Institute. February 2002.

http://www.pacinst.org/reports/new_economy_of_water/new_economy_of_water.pdf

⁸⁰⁷ The Council of Canadians, CUPE-SCFP (2010), pg 3

⁸⁰⁸ NAFTA “Chapter 10 (government procurement), Section B - Excluded Coverage Schedule of Canada Services Exclusions by Major Service Category – G. *Health and Social Services*”

⁸⁰⁹ 2008 Joint Study, Box 2.3, pg 77

⁸¹⁰ Ibid

⁸¹¹ Ibid

⁸¹² NAFTA, Chapter 10 (GP), Section B - Excluded Coverage Schedule of Canada Services Exclusions by Major Service Category – G. *Health and Social Services*

⁸¹³ 2008 Joint Study, Box 2.3, pg 77

Annex 2 (sub-Central government entities) makes the following note “6. *Except for Ontario and Quebec, this Agreement does not apply to the procurement of goods, services or construction purchased for the benefit of, or which is to be transferred to the authority of, school boards or their financial equivalents, publicly-funded academic institutions, social services entities or hospitals.*”

EU

The 2008 Joint Study notes that the EU closed its “Education, health and social services”⁸¹⁴ GP market in the GPA, and as a result Canada does not grant reciprocal access in these services.

US

Unlike Canada, the US does not make exclusions for “health and social services” in its NAFTA GP commitments.

ANALYSIS

Canada and EU

An in-depth analysis on the benefits of delivery of goods and services through the different mechanisms mentioned in the baseline and how these mechanisms would be individually affected by CETA is far beyond the scope of this analysis and would not focus on GP issues alone. However, a basic analysis on GP provisions in CETA should provide some useful insights on how CETA may impact the quality of government-procured goods and services in Canada and the EU.

Theoretically, CETA would encourage more firms to participate in the GP process, allowing wider choice for government in which companies are contracted to deliver goods and services, which should reinforce the trend that companies that provide quality goods and services win contracts. However, this finding is, again, theoretical and deserves further analysis. And further analysis is made difficult given Canada and the EU already provide high quality government-procured goods and services, and this is due to the fact that they have well developed economies and regulatory and institutional systems, including their GP systems. Nonetheless, some analysis can be made.

As mentioned, generally, firms currently providing public services in Canada and the EU either provide high enough quality services to meet demand or are replaced by other firms or government programs. This is not to say that in some cases, as certain stakeholders’ have pointed out, this is not done without difficulty.⁸¹⁵ In fact, stakeholders suggest it can result in two main forms of legally sanctioned backlash: bid challenges and/or investor-state challenges. Box 29 below outlines these mechanisms.

Box 29: Mechanisms in CETA related to contesting GP bids and projects

Bid challenges

As discussed in the “Policy space” indicator hereto, bid challenges are standard to GP agreements. Stakeholders fear that bid challenging creates a risk for litigation for public authorities, and thus monetary compensation to firms. They also note that bid challenges allow for an unsuccessful bidder to stall the GP process for several months by making claims.⁸¹⁶ Taken together, some suggest these

⁸¹⁴ Ibid

⁸¹⁵ See examples in: Sinclair, S. (April 2010)

⁸¹⁶ Shrybman, S. (May 2010)

allowances will have a negative impact on the government's ability to function in the best interest of the public.

While, as with any number of agreements on GP, CETA will allow for bid challenges, the extent and significance of these bid challenges warrants further consideration. Direct costs of bid challenges include costs to the government to maintain the bid challenge system, costs to the complainant in bringing the case, and the compensation paid by the government if they lose a bid challenge. While detailed statistics do not appear to be easily available on these costs,⁸¹⁷ a number of points should be made to contextualise the potential costs, monetarily and otherwise, of bid challenges under CETA. To the degree that CETA does not dramatically change the Canadian International Trade Tribunal Procurement Inquiry Regulations, these points should be relevant.

First, and very importantly, parties are encouraged to discuss concerns tantamount to a bid challenge with contracting authorities before resorting to legal proceedings. This is a useful mechanism to limit costs and impacts from bid challenges on the quality of government-procured goods and services from formal litigation.

Second, it is critical to note that parties in trade agreements cannot challenge their loss of any bid, but can only challenge bids that are above thresholds agreed to in relevant trade agreements. This understanding has even been explicitly confirmed in Canada given the January 2010 CITT decision on *A-1 Cleaners vs. Department of National Defence* (File No. PR-2009-068).⁸¹⁸

Third, while there were 154 cases brought to the CITT from fiscal year 2009-2010, it is critical to note that these were not resultant from allowances from one trade agreement. Bid challenges currently heard by CITT may come from NAFTA, the AIT, the AGP, the Canada-Chile Free Trade Agreement (CCFTA) or the Canada-Peru Free Trade Agreement (CPFTA).⁸¹⁹ Even taken as a whole, there is not a readily available metric to suggest these cases act as a significant burden on government's ability to act in the

⁸¹⁷ Although some costs are clear. Specifically, under Canadian law, the government is obliged to reimburse costs of hearing a complaint along a pre-determined all-inclusive flat rate (including expenses, representation services, and disbursements). The awarded costs depend on the level of complexity of a case, with the rate for a level one case at \$1,000, level 2 at \$2,400, and level 3 at \$4,100. See: CIIT. *Canadian International Trade Tribunal Guideline for Fixing Costs in Procurement Complaint Proceedings*.

⁸¹⁸ CITT -1 *Cleaners vs. Department of National Defence* (File No. PR-2009-068). January 2010 decision. http://www.citt.gc.ca/procure/determin/pr2j068_e.asp

⁸¹⁹ Note: The Canada-Costa Rica Free Trade Agreement, Canada- Israel Free Trade Agreement, and the Canada-EFTA Free Trade Agreement do not contain government procurement chapters.

⁸²⁰ Close, P. M. (2003). "An Unintended Consequence: The Canadian Domestic Spin-off of Government Procurement Trade Agreements." *Canadian Foreign Policy*, 10 (3): 117-140. Note: more recent statistics were not readily available.

⁸²¹ Canadian International Trade Tribunal (2010). *Annual Report for the Fiscal Year Ending March 31, 2010*. 'Chapter IV'. URL: http://www.citt.gc.ca/publicat/ar2k_e.asp

⁸²² Close, P. M. (2003). Note: more recent statistics were not readily available.

⁸²³ Ibid

⁸²⁴ Bid Challenge Lawyer Online at <http://www.bidchallengelawyer.com/>

⁸²⁵ Note: According to Canadian International Trade Tribunal -- Practice Notice, *Complaints by Potential Suppliers – TT Inquiries*, bid challenges generally should be decided within 90 days, and while under certain circumstances the deadline for issuing a ruling and recommendations may exceed 90 days, under no circumstances can it exceed 135 days.

⁸²⁶ Sinclair (April 2010)

⁸²⁷ See NAFTA Decision: *ADF Group, Inc. v. United States of America*. Case No. ARB (AF) 00/1. Ruling issued to parties on 9 January 2003. For one analysis see: Epting, R. (2005). "An analysis of 'Buy America' Provisions in ADF Group Inc. vs. United States under Chapter 11 of the NAFTA." IELP Law Clerk. August 25, 2005.

http://legacy.lclark.edu/org/ielp/objects/adf_buy_america.pdf

best interest of the public.

Fourth, sources indicate that after NAFTA entered into force domestic suppliers rather than foreign suppliers brought most of the cases to the CITT.⁸²⁰ While of course this does not alter the fact that bid challenges add to the administrative burden on government, it does at least undermine an argument that the bid challenge mechanism (for example, under Canada's biggest trade agreement to date) has resulted in mostly foreign companies challenging Canada's bid tendering process/awards.

Fifth, while the costs to the state of actually hearing bid challenges in Canada are unclear without further fact finding, there is indication that bid challenges have not affected a particularly significant portion of overall GP contracts. Specifically, 154 cases brought in fiscal year 2009-2010 involving 147 different contracts represented only about 0.8 percent of the total number of contracts issued by PWGSC in 2009-2010.⁸²¹

Sixth, there is at least some evidence that the value of GP contracts subject to bid challenges is relatively minor/limited when compared with the size of the Canadian GP market. For example, in 2001, the CITT reviewed around 77 complaints, which involved less than 5% of the total value of Canadian government contracts awarded that year.⁸²²

Seventh, there are fewer bid challenges that end favourably for complainants than there are cases that are filed. For example, of the 154 cases in fiscal year 2009-2010, 61 of these inquiries were not initiated (given the following justifications: "lack of jurisdiction/not a potential supplier," "late filing," or "not a designated contract/no reasonable indication of a breach/premature") and 7 were abandoned while filing and withdrawn.⁸²³

Eighth, even successful bid challenges do not necessarily result in monetary damages or decisions that could in any way affect the quality of government procured goods and services. Based on the circumstances, the CITT may award successful complainants (1) bid preparation costs, (2) bid challenge costs, (3) damages, and/or (4) money for lost opportunity. Also, the CITT may (1) enact a "stop award" order to maintain the status quo, (2) recommend the contract be awarded to the appropriate party, (3) require the Canadian Government to clarify technical or evaluation criteria, etc.⁸²⁴

Ninth, and importantly, based upon a review of the literature, there does not appear to be conclusive evidence linking the majority of bid challenges with *net* positive or negative impacts on public services in the EU, Canada or US. This includes, of course, the impacts bid challenges have in terms of delaying tenders.⁸²⁵

In summary, one cannot with certainty find that the bid challenge mechanism in CETA would have significant negative impacts on government ability to function in the best interest of the public. This assessment is based upon the lack of evidence showing bid challenges directly have had a net positive or negative effect on the quality of government procured goods or services in Canada or the EU. It also considers the utility in being able to use a bid challenge as a tool to ensure fairness and transparency in the bid awarding procedure. As such, it would seem much more reasonable to suggest that bid challenges in the EU, Canada and US have produced some negative (for example, in paid out damages by the government and the administrative burden to participate in the challenge – which would likely impact smaller governments, i.e. municipalities more so than other levels of government) and positive impacts (for example, by ensuring fairness and transparency in the bid award system) and this trend would continue under CETA.

Investor-state challenges

As discussed in the Investment section, investor-state provisions, which allow investors to challenge the state if they believe the state has taken an action that discriminates against certain allowances for investment legally afforded to the investors, are standard to investment agreements. Stakeholders have voiced concern over investor-state challenges as they relate to the GP market. Some appear to infer that GP provisions in CETA could increasingly facilitate investor-state challenges if the government attempts to nationalise a service formerly delivered for profit, thus making it harder to reverse failed privatisations.⁸²⁶

The aforementioned concern may be largely moot when considering likely limitations on the usage of investor-state provisions. If CETA were to include investor-state provisions modelled off of the structure of NAFTA there is precedent to suggest that in many if not all circumstances the provisions in fact would not be allowed to apply to GP. Specifically, in the *ADF Group Inc. vs. United States* case filed on July 19, 2000, which was the only investor-state case in the decade after implementation of NAFTA that directly involved GP, the NAFTA tribunal found the Canadian company's claim over Buy American provisions constituted government procurement and therefore fell under Chapter 10 of NAFTA not Chapter 11. Article 1108's exemption of government procurement, among other issues, played into this decision.⁸²⁷ Unless the relationship between the GP chapter and the Investment Chapter in CETA was substantially different from that in NAFTA, it would appear such limitations on application of investor-state provisions to GP would exist under CETA.

Nonetheless, for the sake of context, it is worthwhile to consider the impacts investor-state claims against Canada under NAFTA have actually had on government and public services, regardless if they relate to GP. Given available evidence, albeit which as mentioned in the Investment section is limited, Chapter 11 cases do not appear to have significantly undermined government ability to deliver health/safety, education, and other key public services or environmental protection; however, investor-state arbitration does pose a risk to reducing policy space. It seems unlikely that investor-state arbitration would cause a significant reduction in the quality of public services even if applicable to GP in CETA, although they could pose some less significant indirect risk therein.

In summary, there is strong precedent to limit fears that investor-state provisions linked to GP provisions in CETA which are modelled off NAFTA will necessarily lead to a significant negative impact on the quality of government-procured goods and services. However, this does not mean that investor-state cases will absolutely not impact public services somewhat negatively in certain circumstances. As such, while available evidence suggests such impacts will likely not be significantly negative, inclusion of investor-state allowances in CETA deserves close consideration as it would pose some risk to social and environmental sustainability in particular. These and other related issues are discussed further under the "health" and "education" boxes below and under the "policy space" indicators in the economic, social and environmental assessments in the Investment section.

If CETA does remove previously held exclusions for specific industries like telecom, urban and rail transportation equipment, and utilities (e.g. distribution and purification of drinking water, water/sewage treatment), there is not sufficient evidence to suggest this would *per se* substantially affect the quality of such services. This is not, however, to take a stance in the debate on what goods and services should be fully public vs. private or quasi-public or to detract from the important concept that government is an indispensable figure in delivery of certain public services.

It is worth noting that some stakeholders are particularly concerned about CETA's effect on some of the aforementioned industries. Specifically, certain Canadian stakeholders have expressed significant

concern over water delivery and water management.⁸²⁸ Concern among EU stakeholders herein appears to be less given areas otherwise sensitive to Canadian stakeholders, like portions of utilities, have already been open to international trade for years.

Box 30: CETA's potential impact on government-procured Healthcare services

Note: Also see the analysis following this box for further discussion on relevant issues impacting government-procured services including healthcare

Canada

Healthcare is a longstanding sensitive issue in trade agreements for Canadians. Stakeholders have expressed concern that provisions in CETA specifically will open up the Canadian healthcare services at all levels, including the municipal level, to foreign competition particularly from MNCs. They also suggest if CETA were to include provisions allowing investors to sue the state, as provided in NAFTA, this would hurt healthcare. Although not all these concerns are in fact limited to the GP market in particular, they will be generally assessed.

Firstly, CETA would almost certainly not preclude enactment of fundamental measures to protect public health in GP, as they are a fundamental part of NAFTA and other trade agreements, including the GPA. Such provisions are mentioned under different indicators hereto.

Secondly, investor-state provisions in CETA will likely not apply to government-procured health services in the way certain stakeholders have envisaged. As discussed in the above box on investor-state provisions, if CETA were to include investor-state provisions modelled off of the structure of NAFTA there is precedent to suggest that in many circumstances at least they in fact would not be allowed to apply to GP.

Nonetheless, for the sake of context, it is worthwhile to consider the impacts investor-state claims against Canada under NAFTA have had on healthcare services, regardless if they relate to GP. Evidence from NAFTA, albeit which as discussed in the Investment section is limited, does not suggest similar investor-state provisions in CETA would particularly significantly affect public health. No successful private investment case was brought against Canada in the non-GP market for healthcare since NAFTA was enacted.⁸²⁹ There have been a number of environmental cases brought under Chapter 11, which some could argue could affect public health, may create regulatory chill, and may cost government money, but they do not appear to have significantly hurt health and safety. If provisions from NAFTA were borrowed in CETA, they might provide some basic protection for companies operating healthcare services against being sued.⁸³⁰ As such, it seems unlikely that investor-state arbitration would cause a

⁸²⁸ For example, see The Council of Canadians, CUPE-SCFP (2010).

⁸²⁹ Review of cases as listed in: Sinclair, S. (October 2010). "NAFTA Chapter 11 Investor-State Disputes." Canadian Centre for Policy Alternatives.

Notes: One case, *Signa SA vs. Government of Canada* was brought in 1996 but was not successful. The most recent case on healthcare, *Centurion Health Corporation v. Government of Canada*, was dismissed on procedural grounds.

⁸³⁰ NAFTA Chapter 11, Article 1101, sub-article 4. "Nothing in this Chapter shall be construed to prevent a Party from providing a service or performing a function such as law enforcement, correctional services, income security or insurance, social security or insurance, social welfare, public education, public training, health, and child care, in a manner that is not inconsistent with this Chapter."(emphasis added)

significant reduction in the quality of public services *even if* applicable to GP in CETA, although they could pose some less significant indirect risk therein. However, this does not mean that investor-state cases will absolutely not impact public services like healthcare in certain circumstances *if* the sector in Canada is further opened (although this study views this as unlikely) under CETA. As such, inclusion of investor-state allowances in CETA deserves close consideration (see the social assessment in the Investment section for further details herein).

(For more analysis on these are other related issues see the “policy space...” indicator in the social assessment in the Investment section.)

Third, it is difficult to gauge what would happen even if CETA explicitly opened up the GP market for healthcare in Canada. The healthcare market in Canada has not been open under key binding international GP agreements. The October 2010 decision *in Bayshore Health Ltd.* shows that the Canadian government did not open healthcare GP under the GPA, Chapter 10 of NAFTA or even the AIT.⁸³¹ (As a note, even though not open to the EU due to reciprocal access issues, Canada initially committed to a comparatively more open “Education, health and social services” sector within its GPA compared to the EU.)

If CETA did break from this trend and explicitly opened up the health sector in Canada, it is difficult to determine if CETA would result in significant GP market share losses in the overall Canadian healthcare sector to EU companies operating in Canada through subsidiaries or otherwise (see “Market share” indicator and below section on the EU for more on the competitiveness of EU firms). Among other issues, the percentage of healthcare contracts meeting CETA thresholds would have to be considered. On a very macro level, and in the long term, competition as a result of CETA may result in reduction of prices of certain medical services, although this is not necessarily the case as it depends on a number of factors. A more detailed analysis which is beyond the scope of this SIA would be required to assess competitiveness in specific areas within the entire healthcare industry, services and otherwise, and which of them if any would be specifically affected under CETA GP provisions.

It should lastly be considered that CETA could change how Canadian officials procure health services in Canada. After implementation of CETA, in order to ameliorate stakeholders concerns about privatising services like healthcare, Canadian officials may at least consider further utilising selective tendering (and perhaps single/limited tendering) provisions.

EU

If CETA opened the EU sector for health and social services, there is mixed evidence as to the potential impact on market share of EU companies operating in such sector. This assessment would follow the analysis under the “Market share” indicator. Without further details of CETA the level of access the EU is even offering in certain sectors is unclear. CETA may provide some advantage to EU firms, particularly if operating a subsidiary, to compete directly with Canadian firms.

At the same time, it is worth noting that the EU closed its “Education, health and social services” sectors within its 1994 GPA. As such, depending on their level of competitiveness, EU companies currently operating in these sectors are likely to experience increased competition.

As in the Canadian case, it seems unlikely that investor-state arbitration would cause a significant reduction in the quality of public health services even if applicable to GP in CETA, although they could

⁸³¹ Canada International Trade Tribunal. *Bayshore Health Ltd. Procurement: Decisions and Reasons*. File No. PR-2010-06, issued October 13, 2010. URL : ftp://ftp.citt-tcce.gc.ca/doc/english/procurement/determinations/pr2k065_e.pdf

pose some less significant indirect risk therein. However, this does not mean that investor-state cases will absolutely not impact public services like healthcare in certain circumstances *if* the sector in the EU is further opened under CETA (which is unclear at present) when compared to the EU's GPA commitments. As such, inclusion of investor-state allowances in CETA deserves close consideration (see the social assessment in the Investment section for further details herein).

On a very macro level, and only in the long term, competition as a result of CETA may result in reduction of prices of certain medical services, although this is not necessarily the case and prices may potentially rise. Among other issues, the percentage of healthcare contracts meeting CETA thresholds would have to be considered. A specific assessment herein depends on a number of factors and is beyond the scope of this analysis.

Box 31: CETA's potential impact on government-procured education services

Note: *Also see the analysis following this box for further discussion on relevant issues impacting government-procured services including education*

Canada

The impacts described for Canada in the education sector would roughly be the same as those described for the healthcare sector in the previous box.

EU

The impacts described for Canada in the education sector would roughly be the same as those described for the healthcare sector in the previous box. To the degree that this opening might make the Canadian educational system more competitive in the long term, and particularly if combined with relevant labour mobility provisions, EU students, particularly those seeking to enrol in college (as opposed to lower-levels of education, in which labour mobility is limited by a number of factors) may benefit.

By way of further support for the above findings, it would seem that no agreeable CETA would remove contracting authorities' ability to award contracts based upon a number of key provisions to ensure the quality of goods and services. Prevalence of such provisions would allow Canadian officials to award many contracts to contractors that provide both the best price and quality. These provisions, fundamental in modern GP agreements, include allowance of contract granting for the "most advantageous offer," denial of contracts if there are no suitable offers, and the option not to award a contract if not in the "public interest."

Also, no agreeable CETA would outright preclude a Party from instituting or enforcing measures to protect several fundamental societal interests. It would seem necessary to provide the NAFTA and GPA exception that the agreement should not preclude a Party from instituting or enforcing certain justifiable measures that are necessary to protect public morals, order or safety; human, animal or plant life or health; intellectual property; or those relating to goods or services of persons with disabilities,

philanthropic institutions or prison labour. Herein, requiring such measures are “justifiable” means that the aforementioned exceptions can only be invoked to defend measures in specific circumstances.⁸³² Canada and the EU would be obliged to follow international agreements on health and safety to which they are signatories, for example the WTO agreements on TBT and SPS.⁸³³ The EC-Canada Mutual Recognition Agreement (MRA) on product conformity assessments and the EU-Canada Veterinary Agreement to protect public and animal health would still be in place.

Moreover, Canada and the EU as a whole have well developed system for procurement selection which includes laws, regulations and guidelines that must be met to ensure the safety and welfare of both people working in companies awarded the contracts as well as for ultimate delivery of the goods and services. As an example, established technical specifications require characteristics of a product or service in terms of quality, safety, labelling, environmental performance, and so on, and are a fundamental part of all GP tenders which would also inevitably be in the CETA. Parties to CETA would be bound by current domestic laws on health and safety.

Governments would retain the ability to use selective and limited tenders in the CETA. This mechanism is one method of allowing high-quality and trusted providers to get easy access to GP opportunities.

Governments would not be restricted from awarding contracts to any one type of entity just because such contracts are subject to CETA competition. And while CETA may remove the previously provided protection of certain entities, sectors and types of contracts within the tendering process, it does not necessarily *per se* preclude awarding contracts to any specific type of legal entity.

In addition, there would be no *de jure* requirement in CETA explicitly requiring privatisation.⁸³⁴ Nonetheless, the issue of privatisation warrants further analysis (see box below). Herein, it is important to note that one can make distinctions in the different forms of what is often referred to under the blanket term “privatisation.” There is ‘full’ privatisation (government transfers full ownership of a service provider to the private sector) vs. ‘partial’ privatisation (public ownership over a service provider is maintained, but some of the operational responsibilities are transferred to the private sector), as well as ‘further’ privatisation (assets and/or operational responsibilities of an otherwise fully or partially nationalised service provider are transferred to the private sector via full or partial privatisation) vs. ‘new’ privatisation (a currently fully nationalised service provider is partially or fully privatised). One could describe privatisations using combinations of the aforementioned terms, for example ‘further-

⁸³² Justification herein requires that such measures meet a necessity test and are the least restrictive measures possible.

⁸³³ Note 1: Generally (not just in relation to the GP Chapter), NAFTA may not be the most appropriate proxy on application of SPS and TBT measures under CETA. NAFTA’s SPS requirements, which were drafted at the same time as WTO SPS measures, are less restrictive than those in GATT in that NAFTA Article 710 stipulates that NAFTA Chapter 7B on SPS measures apply instead of those in GATT Article XX(b) (Hufbauer, C.G. and J.J. Schott. (2005). *NAFTA Revisited: Achievement and Challenges*. Institute for International Economics. Washington, DC., pg 156). NAFTA TBT regulations are more extensive than WTO TBT regulations (Irish, M. (2009). “Regulatory Convergence, Security and Global Administrative Law in Canada-United States Trade.” *Journal of International Economic Law*. 12(2)).

Note 2: It is worth at least noting that there have been debates although unrelated to GP about where certain disputes regarding if measures for the protection of “human, animal or plant health” as stipulated both in NAFTA and in GATT XX(b) should fall under the purview of NAFTA dispute settlement or the WTO DSM. NAFTA’s Article 2005(4) requires that in certain types of disputes defending parties can request, and complainants are to oblige, to use NAFTA mechanisms as the sole venue of dispute settlement. As recently as 2010, despite the related 1991 WTO ruling, the US requested consideration of the Tuna-Dolphin case under NAFTA (See *American Shipper Florida Connection*. “US seeks NAFTA panel for Mexico dispute.” 27 September 2010.). (Herein, GATT XX(b) should also be contextualised in terms of its applicability in the WTO; for example, the WTO dispute settlement panels in the 1991 Tuna-Dolphin case and 1998 Shrimp-Turtle case did not find environmental protection legislation as a legitimate basis for imposing trade restrictions.)

⁸³⁴ Consultations with Contracting Authority at Steering Committee Meeting in November 2010

partial' privatisations. Note: one could generally define forms of nationalisation (the opposite of privatisation) using the same definitions herein applied in reverse.⁸³⁵

Box 32: Will a GP Chapter in CETA Encourage Privatisation?

If certain privatisation takes place after CETA, even at the closest level of a causal relationship possible, it would be a long-term and indirect result of increased competition in certain services that are not as competitive currently as they would be under CETA. The details of this scenario and its potential impact are discussed below.

Generally, any privatisation pressures subsequent to CETA's enactment (which would be indirect) might develop in the long-term through a few means. While EU firms would only gain access in above threshold contracts and/or government-procured services and goods in Canada explicitly allowed by CETA, they could still use this foothold in these areas to expand in the mid- to longer-term to below threshold contracts and related (not explicitly liberalised) goods and services (this possibility is also mentioned in the "Market access" indicator). Also, as suggested by stakeholders concerned about privatisation of water services in particular, *"there is good chance a procurement dispute panel [bid challenge panel] would decide that on market determinations alone, a private firm should have won out over the public option after going through this procurement process."*⁸³⁶ Non-GP provisions in CETA in terms of services and investment (see "Investment" section) may also compound this trend.

However, and again, there would be no legal requirement in CETA explicitly requiring privatisation, and in this sense such action would be a conscious decision of government outside CETA *per se*. Also, the tendency of certain type(s) of privatisation over others herein would need to be considered in assessing the tangible impact of a privatisation; for example, given the current details of CETA it seems unlikely that the agreement could even lead to a 'new' (full or partial) privatisation as defined above, and rather more likely could lead to 'further' privatisation, if any privatisation. This would likely further mitigate the impact of a privatisation if it were to indeed happen.

Still, while indirect and in the long-term, the possibilities of privatisations, however indirect, are real, are very important, and most certainly warrant close and further consideration. Privatisation of water services in particular has been noted to have both dangers and benefits depending on the circumstances.⁸³⁷ Further analysis on this point is beyond the scope of this SIA, although the issue is also mentioned in the "Investment" section.

More generally, Canada and the governing bodies of the EU and EU MS have political leaders that represent vocal populations with access to information and that are actively involved in the democratic process, which strongly helps ensure quality in procured goods and services.

⁸³⁵ The terms in single quotations herein are created by the author and are not necessarily indicative of common terminology used to describe forms of privatisation

⁸³⁶ The Council of Canadians, CUPE-SCFP (2010), Pg 19.

⁸³⁷ Among others see: Gleick, Peter H. et al. (2002).

Lastly, and a point already alluded to, CETA will likely not significantly impact the quality of government-procured goods and services in Canada and the EU given they all already provide high quality government-procured goods and services. This is due to the fact that they have well developed economies and regulatory and institutional systems, including their GP systems.

In summary, there does not appear to be strong evidence to suggest CETA will have a significant positive or negative impact on goods and services delivered in Canada or the EU. In combination with the aforementioned safeguards of the GP process, and given Canada and the EU already provide high quality government-procured goods and services, the main difference in the quality of goods and services offered by companies under CETA would likely not significantly change from the present. Instead, factors of determining competitiveness within such markets currently, including management structures, labour and technological productivity and the related metric of value added, among others, would likely determine the quality of goods and services.

Still, for a more nuanced perspective, there may be some lesser than significant negative or positive impacts of CETA on GP in Canada and the EU. There will be challenges to bids and projects under CETA that will cost certain amounts of time and money, although these likely will not be as significant as some observers have suggested. There may be some intrinsic value in contracting to certain companies, or strata of employees covered under current GPA exceptions that would be undermined by CETA (more on this is discussed in the cultural indicator section below). Lastly, as certain government-procured goods and services are subject to new competition under CETA there may be some net positive benefit (but likely less than significant, and beyond this metric difficult to quantify) to the quality of certain goods and services that are newly opened up under CETA.

US

CETA is unlikely to have any significant direct impacts on the quality of government-procured goods and services in the US. However, it may have some lesser and relatively indirect positive impacts on the quality of services enjoyed by Americans.

The impact of CETA on the quality of US healthcare services, and in terms of who delivers the services would likely not be significant for reasons implied in the healthcare analysis for the EU and Canada, although those US citizens currently seeking medications and medical treatment in Canada may enjoy slightly lower prices, albeit marginally so, due to potentially increased EU-Canada competition. Then again, while unclear at this point, these welfare gains may be somewhat offset by IPR provisions in CETA.

The impacts described for the US in the education sector would roughly be the same as those described for the healthcare sector. To the degree that an opening of this sector in CETA might make the Canadian educational system more competitive in the long term, American students, particularly those seeking to enrol in college (as opposed to lower-levels of education, in which labour mobility is limited by a number of factors) may benefit.

INDICATOR: Innovation

BASELINE & ANALYSIS

Canada

The precise impact on innovation of prohibiting GP offsets in CETA is debatable. While not restricting Canadians from enjoying innovative products *per se*, it may in some ways limit policies otherwise used by the government to encourage Canadian companies to add to such innovation themselves. The role of GP in spurring innovation is well documented in the body of literature. Many argue over the exact model to best promote innovation, and the balancing of government vs. private sector incentives herein.⁸³⁸ While an exhaustive assessment herein is beyond the scope of this SIA, it is worthwhile to mention two points.

First, one must consider what programs that use offsets would actually be above CETA thresholds. 90% of (federal) Government of Canada contracts are worth less than \$100,000. Also, most of the contracts won by many foreign companies, particularly US companies, in Canada have been below US\$100,000, and many are in high-tech sectors. This would suggest that many contracts given to companies which are innovating in Canada, even those for foreign companies, would not be impacted by the prohibition of offsets in CETA because they would not be above CETA thresholds (the lowest of which, using Annex 1 thresholds of the GPA as a floor, may be around \$200,000). Given a lack of statistics, this does not fully consider sub-central level procurement; however, while perhaps an administrative burden, it would be difficult to argue that sub-central governments could not meet at least some of their innovation policy objectives argued to require offsets by using offsets in a host of contracts valued below \$200,000. Moreover, thresholds for sub-central level contracts in CETA could very well be above \$200,000 (although if and how far above is unclear at this point), allowing even further discretion of offset usage.

Second, to the degree that Canadian governments and stakeholders desire ambitious new GP policies using high value contracts that also include mechanisms like offsets to fuel innovation the proposed CETA would clearly limit such a liberal scope of policy space. This would include limitations on policies like the Ontario Green Energy Act which requires local content (an offset) as a precondition for GP (although it should be noted that the Ontario Green Energy Act does not only focus on GP projects).⁸³⁹ Still, as alluded to under the “Employment” indicator, the impact of a prohibition of offsets on innovation even in this instance would depend on a number of factors. For example, some would argue that while a prohibition of offsets would remove an extra impetus for indigenous innovation in the short-term. And some may argue that contracts above CETA thresholds may be more effective in promoting certain policy objectives of offsets. However, others could argue, perhaps controversially, it could have positive impacts because while domestic companies may not innovate at the same level they would in the presence of offsets, the market would still theoretically supply innovation from either domestic or foreign enterprises, for example EU, US, Japanese, or Chinese firms.

EU

⁸³⁸ For example, see Aschhoff, B. and W. Sofka (2007). “Innovation on Demand—Can Public Procurement Drive Market Success of Innovations?” Center for European Economic Research Discussion Paper. 08-052.

⁸³⁹ In fact, it also includes projects outside GP. This has recently raised questions over the WTO compliance of the Act, whereas TRIMS and SCM violations among others have been cited by certain WTO members. (See DS412 brought on 13 September 2010 by Japan at http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds412_e.htm)

If CETA prohibits offsets in GP it will likely not have a significant negative impact on innovation in the EU. While the EU prominently used GP offsets in the 1980s and 1990s to foster innovation, for example in building the wind industry in Denmark, it has since relied far less on those offsets. A wide usage of GP offsets are now prohibited by the EU's legal obligations under its binding GPA commitments, which are more stringent on offsets than Canada's binding GPA commitments. (Certain EU and Canadian offsets are more generally prohibited outside GP in TRIMS obligations.)

On the other hand, a prohibition of GP offsets in Canada may allow the EU some opportunities to develop innovative products through subsidiaries in the Canadian market. At this point it is unclear, however, how much such a prohibition would lead to increased opportunities, i.e. opportunities that would not exist without CETA.

US

It is unlikely that innovation in the US would be significantly affected by GP provisions in CETA.

INDICATOR: Quality and decency of work: equity, quality of work environment, collective bargaining, wages

BASELINE

Canada, EU, and US

In the absence of detailed and comprehensive data on indicators in the quality of work environments in terms of hours and job satisfaction, equity in wages, unionisation rates, and health and safety within the workplace specifically for workers in the GP market vs. non-GP market, the following baseline is limited.

In terms of 2009 statistics, four EU members had higher average PPP-adjusted wages than Canada, but 23 countries had lower average wages. Additionally, Romania, Latvia, Bulgaria, Poland and Lithuania had average lower wages (measured in GDP/capita) than Mexico, a member of NAFTA.⁸⁴⁰ And all of these countries, Mexico included, are listed by the IMF in 2010 to be "emerging and developing countries."⁸⁴¹ In 2009, Romania, which has the lowest average wage of any EU country, had average wages (\$ 11,500) that were 70.5% less than Canadian wages (\$38,400).

ANALYSIS

Canada and EU

Certain stakeholders have suggested that opening up Canada and the EU's GP market would mean taxpayers' dollars diverted to countries where unionisation rates are low, wages are low and where legal rights are ineffective.⁸⁴² In the absence of specific data, it is difficult to specifically assess how quality and decency of work would specifically change under GP provisions in CETA; however, analysis of the overall trends among and within trading nations with different wages and other characteristics should be a useful proxy for assessment.

⁸⁴⁰ World Bank 2009 statistics

⁸⁴¹ IMF (2010). *World Economic Outlook Report, April 2010*.

⁸⁴² See in particular: EPSU, CUPE, NUPGE, and PSAC (2010). "A Critical Assessment of the Proposed Comprehensive Economic and Trade Agreement between the European Union and Canada." Position Paper, January 2010.

General impacts on international decency and quality of work

Empirical studies suggest that, in general, production costs, wages inclusive, in fact do not correlate to winning of GP projects. Evenett (2003)⁸⁴³ suggests that overall, differences in production costs among firms (even between foreign firms vs. domestic firms, and even if there are only a small number of potential suppliers competing) do not result in welfare gains for contracting authorities. The welfare gains mentioned are inferably savings gleaned from lower bid prices. As such, this suggests that the differences in production costs between foreign and domestic firms are not significant determinants of bid prices and ultimately who will win bids. This could mean that the differences in such costs between companies are not great and/or that even if there are differences these do not generally result in lower priced offers. Either way, this suggests that a reduction of discriminatory provisions in CETA will not *per se* lead to companies with lower wages in the EU winning contracts from Canadian companies with comparatively higher wages or vice versa.

To be sure, while the aforementioned stakeholder concerns would in fact likely apply if signing a GP agreement with a country with characteristics directly related to such concerns, e.g. China, they should not be such a significant issue in a CETA with the EU-27.⁸⁴⁴ A 2004 EC report suggests that the nationality of firms within the EU GP market did not have any significant affect on the price paid for GP contracts.⁸⁴⁵ These findings would imply that there was no clear trend of countries with comparatively lower wages, unionisation rates and/or poor working environments within the EU winning comparatively more GP contracts. As a note, the biggest average wage gap between two EU member states in 2002 was 75.9% (\$50,986 in Luxembourg and \$12,289 in Greece).⁸⁴⁶

Additional evidence specifically suggests Canadian GP contracts would not by any means necessarily go to countries or specific intra-country jurisdictions in the EU with lower wages, or vice versa, but rather would be determined upon other factors of competitiveness. Specifically, evidence from NAFTA suggests that such a trend, even when signing a free trade agreement with a much less developed country and one with significantly lower wages, is in fact not inevitable. As of NAFTA's entry into force on 1 January 1994, Mexico's overall average annual wage was \$4,709, making it 82.3% lower than the US wage of \$26,669 and 75.3% of the \$19,093 average wage earned in Canada during the same time.⁸⁴⁷ This makes the wage gap between Romania (lowest average wages in the EU) and Canada in 2010 roughly 5% less than the gap Canada had with Mexico upon signing NAFTA.⁸⁴⁸

Studies suggest that after NAFTA's enactment Mexican companies did not win a notably increased amount of Canadian GP contracts, despite comparatively much lower wage rates and less effective working and legal rights in Mexico. For example, evidence collected from years post NAFTA's inception indicate the US was awarded new Canadian GP contracts at a higher rate than Mexico. Prior to NAFTA, US companies were awarded 4% of all Canadian GP contracts, and not long after NAFTA was signed this number grew to 7%. Mexico's claims to Canadian GP projects remained static during this same period

⁸⁴³ Evenett, S. (2003).

⁸⁴⁴ As an apparently rather unique exception to Evenett (2003). in recent years there has been increasing weariness in some countries over some Chinese firms' ability to offer substantially lower bids on their GP projects than domestic firms. This is likely due to the incredible economies of scale, and other factors (e.g. government support), not just wage rates, Chinese firms rather uniquely enjoy.

⁸⁴⁵ EC (2004). "A report..."

⁸⁴⁶ Author's calculations using data from nationmaster.com, which uses CIA Factbook and World Development Indicators data. Data from 2002 was used as it appears Ibid (EC (2004)) uses data from 2 years back in places. Note: data is unfortunately not readily available for wages in the GP market specifically.

⁸⁴⁷ Author's calculations from nationmaster.com (using World Development Indicators and CIA Factbook)

⁸⁴⁸ Author's calculations using CIA Factbook 2009 statistics

with approximately 3% of all contracts being awarded to Mexican companies both before and after NAFTA was implemented.⁸⁴⁹

Moreover, even if GP contracts were awarded to EU subsidiaries with comparatively lower wages than Canadian enterprises working on equivalent projects – although there is no strong evidence to suggest this would take place – the regulatory system in Canada would prevent a significant undermining of the local work environment. And the same applies to Canadian firms operating in the EU. (See the intra-country analysis below for further discussion on this point).

General impacts on intra-county decency and quality of work

Further analysis would be needed and is beyond the scope of this assessment to assess how the findings mentioned in the above section would apply among companies within specific Canadian or EU jurisdictions. This is not to say that Canadian or EU companies with comparatively lower wages may in some cases be particularly competitive in the GP market, however, the study team has not found sufficient evidence readily available to correlate the disparity in wages with a competitiveness that will allow such companies with lower wages to win GP contracts.

A global analysis herein would need to consider, among other issues, the impact of prohibiting offsets. There would be a number of uncertainties to address in an analysis on the prohibition of offsets in CETA. In particular, one could argue that if CETA removed Canadian offsets as tools to develop the local market Canadian workers may lose out to other nations with lower decency and quality of work that are utilising their own offsets. For example, like workers in China. As mentioned in the “Employment” and “Innovation” indicators, these impacts could have negative and positive dimensions, and the extent of these impacts is not clear-cut.

However, to consider the more direct impacts of CETA, even if it could be empirically proven that Canadian companies with lower average wages win comparatively more Canadian GP contracts within certain jurisdictions, Canada’s core domestic labour laws and laws on safety and health in the GP market working environment as a whole, and support of ILO standards (albeit it has yet to sign ILO Conv. 94, in particular), would arguably prevent a significant undermining of the work environment in Canada’s GP market. More generally, it is extremely unlikely that any localities’ democratic system, or the governing institutions of Canada, would allow it to significantly reduce its domestic labour standards as a result of CETA. This said, provincial level governments in Canada currently impose certain restrictions on trade union rights, and breaches of labour standards have often been reported by the Canadian Labour Congress to the ILO.

Likewise, all EU countries are required by domestic laws to meet requirements in terms of treatment of workers which would suggest that CETA would not result in GP projects being operated by workers with notably unfair wages and unsavoury working environments. The EU has established a strong commitment to the ILO’s Decent Work Agenda, in part through the Lisbon Strategy to create more and better jobs. Moreover, a number of EU states have ratified ILO Convention No 94, which establishes a standard on labour clauses in public contracts and aims to avoid companies underbidding by cutting labour costs. Additionally, a 2005 ILO study found notably positive trends specifically for new EU member states in bringing comprehensive decent and quality work standards (in terms of working time,

⁸⁴⁹ Wise, C. (1998). “The post-NAFTA political economy: Mexico and the Western Hemisphere.” (Note: this data is limited in that it reflects a period of only a few years, and should not be taken to necessarily say that the US increase in Canadian GP contracts was due to NAFTA).

employment contracts, wages, stress at work, reconciliation of work and family, occupational health and safety, social dialogue and industrial relation), albeit did note there is room to improve.⁸⁵⁰ Additionally, it is extremely unlikely that any EU country's democratic system, or the governing institutions of the EU, would allow it to significantly reduce its domestic labour standards as a result of CETA.

While it must be noted that there is a need for marked improvement in the quality of decency of work in certain jurisdictions in Canada and the EU, still – with perhaps the exception of jurisdictions with comparatively significant amounts of Aboriginal-owned businesses, for example in CLCAs (see the 'Employment' indicator) – there is limited evidence to suggest this would necessarily be significantly exacerbated by GP provisions in CETA. A "race to the bottom" in terms of labour standards is a problem more acute in developing countries.

Impacts on wage-specific policies in GP

Without a more in-depth analysis, it is unclear how CETA may limit initiatives in the EU towards Social Considerations in Public Procurement. These initiatives have been utilised by a number of nations to foster "fair wages" among other benefits, and some evidence suggests that including social clauses in GP contracts results in slightly higher costs paid by contracting authorities.⁸⁵¹ It is not obvious that these policies would be an "unnecessary obstacle" to trade under CETA, but, again, this is unclear at this point without further details of CETA. Also, it is not clear how CETA would impact policies to use "fair trade" specifications, for example those used by several governments in Italy in procuring food for public school cafeterias. If CETA disallows these initiatives it would have a significant negative impact on quality in decency of work in certain areas; although, by way of assurance, consultations with the EC suggest that the strong commitment of the EU to maintain these policies would likely mean they are unaffected by CETA.⁸⁵²

As in the EU, it is not clear how CETA would impact Canadian provisions to encourage "fair wages" in GP as defined specifically by "fair wage" initiatives. Specifically, if CETA disallows these initiatives it would have a significant negative impact on quality and decency of work in certain areas; although, by way of assurance, consultations with the Contracting Authority suggest that the strong commitment of Canada to maintain these policies would likely mean they are unaffected by CETA.⁸⁵³

Other impacts

While CETA may not necessarily result in GP contracts being awarded more consistently to companies with comparatively lower wages, the competition it fosters may increase wages in certain firms while wages in other firms may remain static (in the GP market or in different areas), which creates wage inequality. The extent of this wage inequality is uncertain and may be insignificant.

To the degree that CETA fosters competition that leads to certain larger EU and Canadian firms becoming more competitive in the market at least some employment will likely shift from smaller enterprises to these larger enterprises. This may have some positive consequences on decency and

⁸⁵⁰ Vaughan-Whitehead, D. et al. (2005). "Working and Employment Conditions in New EU Member States: Convergence or Diversity?" ILO. April 2005. URL: http://www.ilo.org/public/libdoc/ilo/2005/105B09_92_engl.pdf

⁸⁵¹ EC (2004). "A report..."

⁸⁵² Consultations with experts from DG Enterprise and Industry, April 2011

⁸⁵³ Ibid

quality of work indicators if the larger firms offer better benefits than smaller companies. The extent of these impacts is uncertain and likely to be insignificant.

As a final note related to quality and decency of work, although also more broadly to the concept of “social justice,” sources suggest that procurement policies can be used to effectively promote gender, racial and ethnic equality as well as provide employment opportunities for disabled persons. For example, the 2001 Ontarians with Disabilities Act has provisions for government agency purchasing of accessible information and communication technology. In past decades, the EU and Canada have instituted laws preventing racial and ethnic discrimination in procurement.⁸⁵⁴ These policies, which are ingrained not only in procurement law but also in the standard operation of the EU and Canadian systems, would not appear to be particularly affected by CETA.

US

In the absence of specific data it is difficult to assess how quality of decency of work would change under GP provisions in the CETA; however, given the strength of the regulatory system in the US it is unlikely that CETA would have a significant effect on equity in terms of wages of the quality of working environments. To the degree that the US loses market share to EU firms this may result in some increase in inequality of wages, although this is likely to be recouped through an extension of the AGP or a future GP agreement.

INDICATOR: cultural preservation – identity, preservation of cultural lands and sites

BASELINE

Canada, EU and US

Goods and services in the GP markets of Canada, the EU and US have cultural significance depending on the type of project and who is implementing the project.

ANALYSIS

Canada

It is envisaged that the cultural concerns that are described within this SIA per each sector in Canada could apply to companies working on GP contracts in such sectors. To the degree that GP contracts are concentrated in a particularly sensitive sector, or the types of contracts deal with particularly culturally sensitive issues, the impact of foreign competition brought about through the CETA would increase. It is beyond the scope of this analysis to suggest if this would have overall positive or negative consequences.

On an additional point, if CETA were to remove set-asides and certain other exclusions for a specific stratum of society, this may result in the loss of cultural identity to the degree that former workplaces/workers protected under such provisions and the projects awarded to such workplaces’ workers formed or reinforced cultural identities. For example, if an EU company – to complete the example, one not hiring a notable amount of Aboriginals within Canada – were contracted to provide services relating to Aboriginal culture in Canada over a company majority-owned and/or employing Aboriginals, even if this were because the EU company offered a better price for the services, this would have a negative impact on cultural identity. While not necessarily jeopardising the preservation status of

⁸⁵⁴ For example, see McCrudden, C (2007). *Buying Social Justice: Equality, Government Procurement, and Legal Change*. Oxford and New York: Oxford University Press.

cultural lands and sites, one may argue that this would also detract somewhat from the purpose of such preservation. As a caveat, this scenario may not be plausible as it would require set-asides for Aboriginal businesses to be removed in CETA, which, as mentioned in the “Employment” indicator, the EC may not even request in negotiations. Even if such set-asides are removed, the possibility of the aforementioned scenario would depend entirely on if such contracts met CETA thresholds, which such contracts in fact may not meet.

More generally, to the degree that CETA fosters competition which leads to certain larger EU and Canadian firms becoming more competitive in the market some employment will likely shift from smaller enterprises to these larger enterprises. This may result in some loss of company culture preserved by smaller companies, but may be a non-issue if company culture in larger firms is preferred by employees. Also, the extent of this trend may be minor.

EU and US

It is unlikely that CETA would have any significant overall effect on cultural identity or preservation of cultural lands and sites in the EU or US.

ENVIRONMENTAL ASSESSMENT

BASELINE

Canada and EU

A wide variety of projects with notable environmental impacts are funded by GP. For example, construction of roads and other infrastructure, which is often the biggest portion of GP expenditures, has wide implications for land usage among many other environment impacts. Given data limitations, it is unfortunately not plausible to compile a detailed statistical breakdown of what types of projects are funded by what governments with a view to gauging the environmental impacts of such projects.

Because government is a major purchaser in the Canada and EU, the implementation of environmental considerations, also called ‘green procurement,’ in its procurement process can have notable environmental effects. These include effects on GHG emissions, air contaminants, waste, hazardous waste and toxic chemicals and energy and water efficiency.⁸⁵⁵

Canada allows for environmental considerations in GP. The government’s Policy on Green Procurement came into effect in April 2006. Under the guidelines for greening services, considerations that need to be taken into account include assessing environmental impacts, as well as general environmental considerations, such as the presence of eco-labels or third party environmental certification like ISO 14001. The mostly widely recognised eco-label in Canada is the Environmental Choice Program.⁸⁵⁶ Approximately three quarters of Canadian government agencies or departments had green purchasing policies as of 2007.⁸⁵⁷ A number of Canadian provinces and localities have included environmental considerations in GP, including the currently debated and controversial Ontario Green Energy Act.

⁸⁵⁵ PWGC. *Policy on Green Procurement*.

⁸⁵⁶ PWGSC Supply Manual. Chapter 9.

⁸⁵⁷ UNOPS (2009)

Recent GP reforms in the EU also allow for environmental considerations in GP. These include technical specifications involving environmental performance. They develop new procurement procedures for entities in many sectors that are particularly environmentally sensitive, include water and energy, among others. In 2004 the EC produced a Handbook on Green Public Procurement to introduce environmental considerations in the different stages of a procurement procedure.⁸⁵⁸ As of 2007, 9 of 26 EU MS adopted sustainable or, specifically, green procurement action plans, five drafted a plan but it had yet to be adopted, and two were in the process of preparing a plan. In seven MS – Austria, Denmark, Finland, Germany, Netherlands, Sweden and the UK – 40-70% of all tenders published on Tenders Electronic Daily incorporated some environmental criteria, although in the other EU MS the number was below 30%.⁸⁵⁹ The Treaty of Lisbon generally encourages environmental sustainability in areas applicable to GP.

The EU and Canada have made some exceptions in international agreements to allow for environmental considerations in GP. For example, Note 7 of Canada’s GPA Annex 2 (sub-central entities) finds that *“Nothing in this Agreement shall be constructed to prevent any provincial or territorial entity from applying restrictions that promote general environmental quality in that province or territory, as long as such restrictions are not disguised as barriers to international trade.”* NAFTA states that it should not prevent any NAFTA party from implementing of measures to protect *“...animal or plant life or health.”* Article XXIII sub-article 2 of the GPA provides similar stipulations.⁸⁶⁰ In the EU’s 1994 GPA commitments, General notes, note 7 states that *“This Agreement shall not apply to contracts awarded by entities in Annex 3: for the purchase of water and for the supply of energy or of fuels for the production of energy”*; however, as noted, in more recently revised GPA offers as well as FTAs with other countries and blocs the EU has notably opened up its sectors, goods and services, including in utilities and other environmental services.

US

As in Canada and the EU, there have been recent policy initiatives in the US to support green procurement.

ANALYSIS

INDICATOR: Policy space, institutional and regulatory environment

Canada

Generally, the same analysis in policy space indicator in Economic section above applies herein, although, the issue of “green” procurement in international trade agreements and how it may be affected in CETA warrants specific consideration.

A study for the government of Canada on how international trade agreements like NAFTA and the GPA would affect green procurement in Canada found the provisions in the agreements constitute “no serious barriers to ‘green’ procurement.” The study found, however, that green standards themselves may be challenged and this trend may increase in the future as eco-labels and green buying programs

⁸⁵⁸ EC (2004). *Handbook on Green Public Procurement*. Brussels

⁸⁵⁹ UNOPS (2009)

⁸⁶⁰ Also, although not specifically applying to GP it is worthwhile to note that the EU and Canada are bound by Article XX(b) of GATT, which provides similar stipulations, and are also bound by Article XX(g) of GATT, which allows justifiable measures *“relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption”* although there is limited jurisprudence on this provision to date.

becoming more common. However, the study finds such challenges would not be restricted to GP transactions *per se*, but could result out of any dispute over market access within the GP market or otherwise. The report suggested that standards relating to controversial products, such as transgenic maize in Canada might be subject to particular scrutiny.⁸⁶¹

To the degree that CETA removes flexibility in green procurement enjoyed under the current trading regime, the CETA would reduce environmental policy space and regulatory flexibility. To the degree that CETA disallows usage of certain initiatives for green procurement – which again is unclear at this point without further details of the agreement – this would undermine the positive aspects of such procurement, i.e. the cost effectiveness of some greener products; direct environment benefit from the government sourcing environmentally-friendly products; government ability to use its market power to influence producers to more quickly move to cleaner technologies; and raising consumer awareness about the environmental implications of certain purchases.⁸⁶²

Further, the logic behind full-out disallowance of environmental clauses in CETA would be unclear as it would not necessarily render any significant financial benefits for contracting authorities. For example, a 2004 EC study found that the introduction of environmental clauses in EU contracts does not increase the prices actually paid for the supplies, services or works.⁸⁶³ This trend is generally confirmed by other sources, which find that some greener products and services cost less in terms of usage, maintenance and disposal despite higher initial investment costs.⁸⁶⁴

If CETA changes provisions in Canada's current international GP agreements to open Canada's GP market further, this does not necessarily imply that the usage of environmental clauses in particular will be phased out under the CETA. It is unclear if CETA will exclude environmental protection provisions like that in Note 7 of Canada's GPA Annex 2.

Generally, given the high level of support for green procurement policies currently, such policies could very well still remain in place under CETA.⁸⁶⁵ This should allay concerns over the broad environmental impact of a GP chapter in CETA, although this does not fully address specific concerns over CETA's disallowance of offsets.

CETA's potential prohibition of offsets warrants analysis in terms of environmental impacts, as this could have mixed effects. While certain offsets are allowed under exceptions in Canada's GPA commitments, it should be recalled that offsets are prohibited in NAFTA with limited exceptions (for example, for Mexico). The extent of removing offsets would need to be assessed in detail along the lines of the considerations mentioned in the "Quality of goods and services" and "Innovation" indicators. It is beyond the scope of this SIA to provide this assessment.

A further assessment herein is beyond the scope of this SIA, although some additional analysis on related issues is made under the indicators below.

EU

No significant environmental effect is expected for the EU outside those similar impacts described under the above section on Canada. The body of literature supports the idea that environmental

⁸⁶¹ Jane Early, LLC., pg iii

⁸⁶² Kjollerstrom, M. (2009). "Public procurement: a tool for promoting more sustainable consumption and production patterns." Sustainable Development Innovation Brief, UNDESA in UNOPS (2009)

⁸⁶³ EC (2004) "A report..."

⁸⁶⁴ Kjollerstrom, M. (2009) in UNOPS (2009)

⁸⁶⁵ Consultations with experts from DG Enterprise and Industry, April 2011

considerations in procurement generally have positive impacts on the environment. Thus, if CETA specifically disallows initiatives on green procurement, it would certainly have a significant negative impact on the environment in the EU. Specifically, this could undermine the positive aspects of such procurement in terms of the cost effectiveness of some greener products; direct environment benefit from the government sourcing environmentally-friendly products; government ability to use its market power to influence producers to more quickly move to cleaner technologies; and raising consumer awareness about the environmental implications of certain purchases.⁸⁶⁶ However, given the high level of support for green procurement policies currently, such policies could very well still remain in place under CETA.⁸⁶⁷

US

No significant environmental effect is expected outside any effects applicable to GP that are mentioned in the environmental impact sections for specific sectors.

INDICATOR: Water usage and pollution

Canada

On paper, the CETA may have certain implications for regulation of water usage and pollution in Canada, although it is unlikely that it would significantly affect the sector. If drinking water and other water-related utilities are included in the CETA, this would step beyond Canada's past international GP commitments. However, the main issue being discussed in CETA is EU access to services dealing with the distribution and purification of water, as well as water treatment (sewage, etc.); and is not so much an issue of the EU seeking to exploit Canada's domestic water supply. Either way, Canadian domestic laws that regulate water usage and water pollution would provide a strong framework against unsustainable practices in government procured water contracts.

EU and US

No significant environmental effect expected.

INDICATOR: Natural resource stocks – Fish usage, biodiversity change, others

In absence of specific data for the GP market, refer to the analysis for according environmental indicators for the sectoral assessments in the SIA.

7.1.2. MEXICO

BASELINE

⁸⁶⁶ Ibid

⁸⁶⁷ Consultations with experts from DG Enterprise and Industry, April 2011

Mexico is party to Chapter 10 of NAFTA on GP. Mexico's schedule sets forth a number of exceptions to GP commitments, i.e. in the area of land transportation; water transportation; air transportation; supporting and auxiliary transport; post and telecom; repair services of other transport equipment on a fee or contract basis; public utilities services, including telecom, transmission, water or energy services; management and operation contracts awarded to federally-funded research and development centres or related to carrying out government sponsored research programs; financial services; and research and development services.⁸⁶⁸

The EU signed an FTA with Mexico in March 2000, which includes an ambitious GP section. Mexico is required to open up procurement from government enterprises in telecoms, energy (gas and petrol), and railways. The EU covers procurement by public authorities and undertakings in drinking water, electricity, urban transport, airports, and maritime or inland ports. The agreement allows for possibly expanding coverage.

Mexico is not a party to the GPA.

ANALYSIS

There is little evidence to suggest that CETA would significantly impact the GP market of Mexico. This is in part given that the EU already has an ambitious GP agreement with Mexico through the EU-Mexico FTA.

However, CETA may indirectly impact Mexico. To the degree that CETA pushes the US to sign a more comprehensive GP agreement, for example extending or expanding the AGP, Mexico would be further pushed out of the US, and potentially, the Canadian GP market. Mexico seems to be undercut by Buy American provisions in recent US legislation. For example, the only explicit exemption for Buy American provisions on iron and steel in the US Recovery Act is given to Canada in the AGP. Although under the AGP's modification of US GPA Annex 3, note 4 allows for other parties to the GPA to reach mutually agreeable solution, inferably meaning similar treatment as afforded to Canada, Mexico is not a party to the GPA. As such, the AGP currently seems to undermine the level of liberalisation afforded to Mexico in NAFTA. To the extent that CETA would encourage extension of the temporary provisions of the AGP or exemption of Canada from future US legislation in a way that discriminates against Mexico, this would undermine Mexico's involvement in the NAFTA GP market, albeit in certain situations it would seemingly have legal recourse.

7.1.3. OTHER THIRD COUNTRIES

The EU currently includes GP in all its bilateral trade agreements. It has currently in force bilateral agreements with Mexico, Chile, CARIFORUM and Switzerland that include GP provisions. EU procurement rules apply to the European Economic Area. To the degree that CETA allows for Canadian firms to become more competitive in the EU, this could theoretically allow Canadian firms to take some the EU GP market share previously divided among third countries; however, as discussed in the above section on Canada, the EU and US, it is unlikely that the Canadian firms would gain a noteworthy share of the EU GP market, in part given the significant degree of competition there already. This in turn would limit the overall economic, social and environmental impacts of GP provisions in the CETA on

⁸⁶⁸ NAFTA, Chapter 10, exclusions in Schedule of Mexico

third countries, as the EU is a much more significant GP market for third countries (again, this category excludes the US and Mexico) than Canada.

Canada's and the EU's commitments to other nations with which they do not have bilateral agreements would remain the same under their current mechanisms, and would not be effected by CETA. Their commitments to other members of the GPA would remain the same.

7.2. INTELLECTUAL PROPERTY RIGHTS (IPR)

Summary: *Canada offers a standard level of IPR protection when assessed at a world-wide level but it is lower than that of the EU on several accounts.⁸⁶⁹ Canada does not accept the patentability of higher life-forms, does not offer patent term extension, does not protect copyrights for 70 years after death, does not protect technological protection measures, does not offer resale rights to artists, does not have statutory provisions on internet service providers liability, has not ratified and implemented WIPO internet treaties nor UPOV 1991, has no sui generis protection for geographical indications on food products, does not offer a 10 years exclusivity for data protection, and the Canada Border Services Agency does not have the legal authority to detain on its own initiative goods suspected of infringement. It is thus assumed that CETA will lead to an upward harmonisation and call primarily for change in Canadian laws.*

Assessing the specific impact of CETA IPR provisions is challenging for three reasons. First, the final provisions of CETA are not yet available. This section is thus based mostly on speculations. Second, both Canada and the EU are currently considering major changes in their IPR system independently from CETA. If implemented before CETA, these initiatives could substantially forestall impacts identified in this report. Third, the economics of IPR are characterised by a high level of scientific uncertainty. Rhetorical claims are far more frequent than empirical evidence due to the high number of variables and methodological difficulties in providing reliable data.

Nevertheless, it is safe to assume that IPR-related provisions in CETA will likely benefit specific sectors, such as the Canadian publishing industry and the innovative pharmaceutical industry. R&D spending and FDI inflows could increase as a result. As a net importer of IPR-related assets, however, Canada has an interest in maintaining some exceptions and limitations. CETA could otherwise have significant adverse impacts on consumers of educational and pharmaceutical products as well as on the balance of payments for royalties and licensing fees. The overall impact will depend on CETA's specific provisions and on Canada's implementing legislation.

Strengthening IPR protection in Canada will very likely have a positive impact on the economy of the European Union, derived mostly from reduced counterfeiting and piracy level in Canada, enhanced export opportunities, and additional revenues from royalties and license fees. Depending on CETA provisions, the creative industry, the pharmaceutical industry and the agro-food industry, or at least companies active in the Canadian market or facing Canadian competition, would benefit from enhanced IPR protection. Only minor impacts are anticipated for each indicator, but the cumulative impact could have a moderate significance and spill-over impacts on third countries could be significant as well.

⁸⁶⁹ European Commission and Government of Canada, *Assessing the Costs and Benefits of a Closer EU-Canada Economic Partnership*: 2008, p. 79-88

7.2.1. CANADA

ECONOMIC ASSESSMENT

INDICATOR: Strength of enforcement mechanisms

BASELINE & ANALYSIS

Counterfeiting and piracy levels in Canada are especially disturbing. Stakeholders almost unanimously acknowledge that enforcement of IPR in Canada must be improved. According to the Canadian Intellectual Property Council, “counterfeiting and piracy cost the Canadian economy \$22 billion annually in lost tax revenue, investment and innovation.”⁸⁷⁰ More specifically, the Canadian Motion Picture Distributors Association calculated the annual GDP loss due to film piracy at \$965 million⁸⁷¹ and the Business Software Alliance estimated that reducing software piracy by 10% in two years could increase GDP by more than \$4 billion⁸⁷².

This gloomy picture should be put in its global context. The OECD’s trade-related index of physical counterfeiting and piracy indicates that Canada has a higher rate (0.057086) than Germany (0.039872) but a lower rate than most EU countries, including France (0.086579), the Netherlands (0.063505), Italy (0.384653), Spain (0.212384) and the United Kingdom (0.127595).⁸⁷³ This relatively good performance is also reflected in a study conducted by the Business Software Alliance estimating that the “software piracy rate” in Canada (29%) is lower than the average of Western Europe (34%) and Central/Eastern Europe (63%).⁸⁷⁴ That being said, these statistics are estimates based on seized infringing physical goods and must be used with great caution.⁸⁷⁵ They could be misleading because enforcement and hence seizures are often seen as the Achilles’ heel of the Canadian IPR system. The Royal Canadian Mounted Police acknowledge that, although it has investigated nearly 1,500 cases of IPR crime between 2005 and 2008, these “numbers are believed to be a fraction of the true IPR crime situation in Canada.”⁸⁷⁶

The Canadian government has repeatedly expressed its determination to address the issue of IPR enforcement. Some stakeholders, however, consider that these intentions have led to few concrete measures. On the copyright front, for example, several bills were tabled in the Canadian Parliament (Bill C-60 in 2005, C-61 in 2008 and Bill C-32 in 2010) but so far none were enacted. Policy options suggested by stakeholders include 1) providing more resources to police authorities and prosecutors for the enforcement of IPR laws; 2) introducing statutory damages for trademark infringement and increasing

⁸⁷⁰ Canadian Intellectual Property Council, *A Time for Change: Toward a New Era for Intellectual Property Rights in Canada*, Ottawa, The Canadian Chamber of Commerce, 2009, p.13.

⁸⁷¹ IPSOS and Oxford Economics (on behalf of the Canadian Motion Picture Distributors Association), *Economic Consequences of Film Piracy in Canada*, 2011, available at www.cmpda.ca

⁸⁷² The Business Software Alliance, *Piracy Impact Study: The Economic Benefit of Reducing Software Piracy*, Washington, BSA, 2010.

⁸⁷³ OECD, *Magnitude of Counterfeiting and Piracy of Tangible Products: An Update*, Paris, OECD, 2009, p. 5. See also OECD, *The Economic Impact of Counterfeiting and Piracy*, Paris, OECD, 2008, p. 70.

⁸⁷⁴ The Business Software Alliance, *Piracy Impact Study: The Economic Benefit of Reducing Software Piracy*, Washington, BSA, 2010.

⁸⁷⁵ Standing Committee on Industry, Science and Technology, *Counterfeiting and Piracy are Theft*, June 2007, p. 7.

⁸⁷⁶ Royal Canadian Mounted Police, *A National Intellectual Property Crime Threat Assessment 2005-2008*, Ottawa, RCMP, 2010, p. 3.

damages and penalties for copyright infringement; 3) adopting criminal prohibitions on the manufacture and distribution of circumvention devices; 4) authorising the Canada Border Services Agency to detain on its own initiative goods suspected of infringement; 5) creating appropriate incentives for ISPs to cooperate with right-holders in curbing online piracy; and 6) providing clear rules on secondary liability for IPR infringements.⁸⁷⁷

All of these measures could significantly strengthen enforcement of IPR law in Canada. Border measures are expected to be especially efficient with respect to physical goods since most counterfeit and pirated goods in Canada are imported.⁸⁷⁸ As noted by the Canadian Anti-Counterfeiting Network, “it is virtually impossible to effectively deal with imported counterfeit and pirated products once they have been disbursed into the marketplace.”⁸⁷⁹ Although most infringing goods in Canada are imported from Asia, additional enforcement measures in Europe resulting from CETA could also help Canada in enforcing its own legislation.⁸⁸⁰

Further, the European pharmaceutical industry believes that the CETA provides opportunity to ‘address Canadian measures that are problematic for innovative pharmaceutical and biopharmaceutical products’.⁸⁸¹ In this regard, they claim that the CETA could specifically help to address ‘unfair, discriminatory judicial processes and weaker patent and regulatory data protection’ that is argued to exist in Canada.⁸⁸²

INDICATOR: GDP/capita (PPP adjusted)

BASELINE & ANALYSIS

IPR-based industries represent a significant share of Canadian GDP. In 2008-2009, Canada’s arts and cultural sector alone contributed \$46 billion, or 3.8% of Canada's GDP.⁸⁸³ Moreover, IPR industries have high annual growth rates. Copyright industries, for example, have a growth rate twice higher than the Canadian economy.

Canada, however, does not fully take advantage of its potential as a knowledge economy. Venture capital and business expenditure on R&D as percentage of GDP are significantly lower than the OECD average.⁸⁸⁴ Many explain this poor performance by the limited IPR protection available in Canada. As opposed to several OECD countries, Canada does not accept the patentability of higher life-forms, does not offer patent term extension, does not protect copyrights for 70 years after death, does not protect technological protection measures, does not offer resale rights to artists, does not have statutory provisions on internet service providers liability, has not ratified and implemented WIPO internet treaties nor UPOV 1991, has no *sui generis* protection for geographical indications on food products,

⁸⁷⁷ Currently, Canada Border Services Agency can detain suspected goods only if a court order has been previously obtained.

⁸⁷⁸ Criminal Intelligence Service Canada, *2005 Annual Report on Organized Crime in Canada*, Ottawa, CISC, 2005;

⁸⁷⁹ Canadian Anti-Counterfeiting Network, letter to Foreign affairs and International Trade Canada, April 30, 2008

⁸⁸⁰ Royal Canadian Mounted Police, *A National Intellectual Property Crime Threat Assessment 2005-2008*, Ottawa, RCMP, 2010, p. 3.

⁸⁸¹ EFPIA (2010)

⁸⁸² Ibid.

⁸⁸³ Canada, *2008-2009 Annual Report of the Cultural Affairs Sector*, Ottawa, Department of Canadian Heritage, 2010. Estimates presented by the industry are significantly higher. According to the Canadian Intellectual Property Council, the creative industry alone represents 7,4% of GDP. Canadian Intellectual Property Council, *A Time for Change: Toward a New Era for Intellectual Property Rights in Canada*, Ottawa, The Canadian Chamber of Commerce, 2009, p. 9

⁸⁸⁴ OECD, *Science and Innovation Country Notes: Canada*, Paris, OECD, 2008.

does not offer a 10 years exclusivity for data protection, and the Canada Border Services Agency does not have the legal authority to detain on its own initiative goods suspected of infringement.

Most stakeholders assume a causal relation between weaker IPR protection and lower R&D investments. They consider that Canada's IPR regime "undermines the country's innovation capacity and economic prosperity."⁸⁸⁵ Among them, Canada's Research-Based Pharmaceutical Companies notes that, historically, amendments strengthening patent protection have been followed by periods of increased R&D investment in the pharmaceutical sector.⁸⁸⁶ It is thus assumed that bringing Canadian IPR protection to European levels would help Canada in catching up to the OECD R&D average. Under this perspective, CETA could potentially have a positive impact on Canada's GDP.

Nevertheless, the impact of strengthening IPR protection on GDP remains subject to controversies.⁸⁸⁷ Some scientific studies contradict the industry's viewpoint and "fail to find evidence of a strong positive response by domestic innovators that could be reasonably ascribed to the effect of stronger IPR."⁸⁸⁸ To clarify, it is undisputable that R&D spending is associated with higher GDP growth and, given current business models, a certain level of IPR protection is essential for investment in innovation and creativity.⁸⁸⁹ Incremental IPR reforms in OECD countries, however, do not seem to increase domestic spending in R&D.⁸⁹⁰

Some are even more pessimistic. A study commissioned by the Canadian Generic Pharmaceutical Association concluded that every additional dollar invested in R&D as a result of CETA would cost an additional 8 dollars to Canadian consumers (though these figures have been contested by Canada's Research-Based Pharmaceutical Companies on the basis that it is faulty to assume that healthcare costs can only be controlled 'by maintaining weak and ineffective IP protection').⁸⁹¹ Other stakeholders

⁸⁸⁵ Canadian Intellectual Property Council, *A Time for Change: Toward a New Era for Intellectual Property Rights in Canada*, Ottawa, The Canadian Chamber of Commerce, 2009, p. 3.

⁸⁸⁶ Rx&D, *Reality Check: Analysis of the CGP's Economic Impact Assessment of Proposed Pharmaceutical IP Provisions*, 2011, available at www.canadapharma.org. See also The Canadian Chamber of Commerce and the Canadian Intellectual Property Council, *Innovation for a Better Tomorrow: Closing Canada's Intellectual Property Gap in the Pharmaceutical Sector*, 2011, available at www.ipcouncil.ca or www.chamber.ca

⁸⁸⁷ Some estimates, for example, ignore the fact that higher prices characterising IP-protected products would reduce the demand for those products. The sale of a counterfeit or pirated product does not equate a loss in sales of the authorised product. Emmanuel Combe and Etienne Pfister, "Le renforcement international des droits de propriété intellectuelle", *Economie internationale*, no 85, 2001, p. 68.

⁸⁸⁸ Lee Branstetter, "Do Stronger Patent Induce More Local Innovation?" in *International Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime*, edited by Keith E. Maskus and Jerome H. Reichman, Cambridge, Cambridge University Press, 2005, p. 309. For example. Elhanan Helpman, "Innovation, Imitation, and Intellectual Property Rights," *Econometrica*, vol. 61, 1993, p. 1247–1280.; Edwin L. C. Lai, "International Intellectual Property Rights Protection and the Rate of Product Innovation," *Journal of Development Economics*, vol. 55, 1998, 133–153. Gene M. Grossman and Edwin L. C. Lai, "International Protection of Intellectual Property," *American Economic Review*, vol. 94, 2005, 1635–1653. Keith Maskus, "Intellectual Property Rights and Economic Development", *Case Western Reserve Journal of International Law*, vol. 32, p. 471-506.

⁸⁸⁹ OECD, *Creating Value from Intellectual Assets*, Paris, OECD, 2007; OECD Trade Policy Working Papers, No.104 – Policy Complements to the Strengthening of IPRS in Developing Countries (2010); TAD/TC/WP(2010)12/FINAL; Lee Branstetter, Fritz Foley and Kamal Saggi, "Has the Shift to Stronger Intellectual Property Rights Promoted Technology Transfer, FDI and Industrial Development." *the WIPO Journal*, vol. 2(1), 2010, p. 93-98.

⁸⁹⁰ S. Kortum and J. Lerner, "What is Behind the Recent Surge in Patenting?", *Research Policy*, vol. 28, p 1-22; Lee Branstetter and M. Sakakibara, *Do Stronger Patents Induce More Innovations? Evidence from the 1988 Japanese Patent Law Reforms?*, NBER Working Paper 7066, 1999; A. Jaffe, "Policy Innovations and the Innovation Process", *Research Policy*, vol. 29, 2000, p. 539-555.

⁸⁹¹ Grootendorst, Paul and Aidan Hollis, *The Canada-European Union Comprehensive Economic & Trade Agreement: An Economic Impact Assessment of Proposed Pharmaceutical Intellectual Property Provision*, Study commissioned by the Canadian Generic Pharmaceutical Association, 2011, available at www.canadiangenerics.ca . For a criticism to this report, see Rx&D,

interviewed for this study consider that excessive IPR could actually harm R&D if their holders can block follow-on research.⁸⁹² They argue that other policies, such as advance market commitments, targeted subsidies, fiscal incentives, or product development partnerships, provide more direct incentive for private R&D investment than enhanced IPR protection.

Whether Canada has reached the optimal balance between minimal and excessive IPR protection is an open question for some, although evidence suggests the need for improvement in at least a number of IPR-related areas. IPR-related provisions of CETA could have, at best, a minor positive impact on Canadian growth. Depending on their specific content, they could even have an adverse impact on the Canadian economy.

INDICATOR: Employment rate by sector/industry

BASELINE & ANALYSIS

IPR-based industries represent a substantial share of the Canadian workforce. More than 633,000 Canadians work in the culture sector and more than 200,000 are engaged in R&D activities.⁸⁹³ Employment growth in these sectors is especially dynamic. Employment in copyright-based industries has grown at 5.3% between 1991 and 2002 and research personnel have grown at over 4% yearly from 1995 to 2004.⁸⁹⁴

The impact of stronger IPR protection on Canadian employment will vary among industrial sectors. The Business Software Alliance calculated that reducing software piracy by 10% in two years could create more than 64,000 new jobs in Canada.⁸⁹⁵ Likewise, according to the Canadian Motion Picture Distributors Association, film piracy costs the equivalent of 12,600 full-time jobs in Canada.⁸⁹⁶ While the methodology supporting these estimates is open to debate, it is realistic to assume that employment in IPR-based industries could benefit from strengthened IPR protection. It is, however, equally realistic to assume that employment could be adversely impacted in other sectors, such as the generic pharmaceutical industry and agri-food industries that employ geographical indications in their branding. The impact of IPR provisions in CETA on overall employment is likely to be minor.

Reality Check: Analysis of the CGP's Economic Impact Assessment of Proposed Pharmaceutical IP Provisions, 2011, available at www.canadapharma.org.

⁸⁹² Tim Wu, "Intellectual Property, Innovation, and Decentralized Decisions", *Virginia Law Review*, vol. 92(1), 2006, p. 123-147.

⁸⁹³ Singh, Vik, "The Impact of the Culture Sector on the Canadian Economy", *Quarterly Bulletin from the Culture Statistics Program*, vol. 15(1), Ottawa, Statistics Canada, 2005, p. 1; Statistics Canada, *Sciences Statistics*, May 2008, p. 5.

⁸⁹⁴ Wall Communications, *The Economic Contribution of Copyright-Based Industries in Canada*, commissioned by Canadian Heritage, Geneva, WIPO, 2004, p. 5; OECD, *Science and Innovation Country Notes: Canada*, Paris, OECD, 2008, p. 3.

⁸⁹⁵ The Business Software Alliance, *Piracy Impact Study: The Economic Benefit of Reducing Software Piracy*, Washington, BSA, 2010.

⁸⁹⁶ IPSOS and Oxford Economics (on behalf of the Canadian Motion Picture Distributors Association), *Economic Consequences of Film Piracy in Canada*, 2011, available at www.cmpda.ca

INDICATOR: Rate/volume of FDI inflows**BASELINE & ANALYSIS**

According to Statistics Canada, “foreign organizations supported R&D in Canada in the amount of \$2.6 billion” in 2008.⁸⁹⁷ Strengthening IPR protection could positively increase this inflow. Reports from non-Canadian industry associations frequently stress that Canada “is fast gaining a reputation as a haven where technologically sophisticated international piracy organizations can operate with virtual impunity.”⁸⁹⁸ According to the Canadian Intellectual Property Council, this regrettable reputation “directly affects the willingness of foreign firms to invest domestically.”⁸⁹⁹ Further, the European pharmaceutical industry stresses that improved IPR protection could act as a clear signal to investors, helping to provide greater predictability and, hence, inflows of EU FDI into Canada.⁹⁰⁰

This causality between IPR protection and FDI inflow is supported by empirical evidence. Surveys of executive managers suggest that investments and technology transfer decisions are strongly sensitive to the perceived strength of IPR protection.⁹⁰¹ These findings are confirmed by most empirical and statistical studies.⁹⁰² There is no consensus, however, on the necessary conditions required. Some consider that the capacity of IPR reforms to attract additional FDI is valid among developed countries where other factors affecting investment are similar.⁹⁰³ Others believe that strengthening IPR can attract FDI only in developing countries where foreign corporations typically prefer to invest directly rather than granting a license to a local manufacturer.⁹⁰⁴

In the age of globalisation, however, it is very likely that transnational corporations in IP intensive sectors disconnect their investment decisions from their marketing strategies.⁹⁰⁵ In other words, they invest where conditions are ideal for investment, not where conditions are ideal for marketing. The availability of skilled resources, for example, is more important than the IPR level to attract FDI into Canada.

⁸⁹⁷ Statistics Canada, “The Ongoing Importance of Gross Domestic Expenditures on Research and Development”, *Innovation Analysis Bulletin*, vol. 11(1), 2009, p. 11

⁸⁹⁸ For example, International Intellectual Property Alliance, *2010 Special 301 Report on Copyright Enforcement and Protection*, p. 9; Pharmaceutical Research and Manufacturers of America, *Special 301 Submission 2010*, p. 70.

⁸⁹⁹ Canadian Intellectual Property Council, *A Time for Change: Toward a New Era for Intellectual Property Rights in Canada*, Ottawa, The Canadian Chamber of Commerce, 2009, p. 10

⁹⁰⁰ EFPI (2010)

⁹⁰¹ Edwin Mansfield, “Intellectual Property Protection, Direct Investment, and Technology Transfer”, *International Finance Corporation*, Discussion Paper No. 27.

⁹⁰² Lee Branstetter, Raymond Fisman and C. Fritz Foley, “Do Stronger Intellectual Property Rights Increases International Technology Transfer? Empirical Evidence from US Firm-Level Panel Data”, *The Quarterly Journal of Economics*, 2006, p. 321-349; Lee J. & E. Mansfield, “Intellectual Property Protection and US Foreign Direct Investment”, *Review of Economics and Statistics*, vol. 78 (2), 1996, p. 181-186; John Hagedoorn, Danielle Cloodt, Hans van Kranenburg, “Intellectual Property Rights and the Governance of International R&D Partnerships”, *Journal of International Business Studies*, vol. 36(2), 2005, p. 175-186.

⁹⁰³ N. Kumar, “Intellectual Property Protection, Market Orientation and Location of Overseas R&D Activity by Multinational Enterprises”, *World Development*, vol. 24, 1996, p. 673-688

⁹⁰⁴ Keith Maskus, “The International Regulation of Intellectual Property”, *Weltwirtschaftliches Archiv*, vol. 134 (2), 1998, p. 186-208.

⁹⁰⁵ Grootendorst, Paul and Aidan Hollis, *The Canada-European Union Comprehensive Economic & Trade Agreement: An Economic Impact Assessment of Proposed Pharmaceutical Intellectual Property Provision*, Study commissioned by the Canadian Generic Pharmaceutical Association. 2011. www.canadiangenerics.ca. For a criticism to this report, see Rx&D, *Reality Check: Analysis of the CGP’s Economic Impact Assessment of Proposed Pharmaceutical IP Provisions*, 2011, available at www.canadapharma.org.

Interestingly, a survey conducted by the International Chamber of Commerce has found that foreign investors are more concerned about enforcement practices than standards provided in legislation.⁹⁰⁶ Therefore, raising IPR standards might not significantly increase FDI inflows, but improving enforcement as a result of the CETA could have a positive impact.

INDICATOR: Rate/volume of FDI outflows

CETA's IPR provisions are not likely to affect Canadian FDI outflows to Europe.

INDICATOR: Economic policy space

BASELINE & ANALYSIS

Policy coherence between IPRs and other economic policy-areas is frequently sought through limitations and exceptions. For example, the fair dealing exception facilitates documentary filmmakers' ability to use copyrighted material. Similarly, the Plant Breeders' Rights Act authorises farmers to save and plant their own seed of protected varieties. The Canadian Internet Policy and Public Interest Clinic argues that these "exceptions and limitations to intellectual property have enormous economic value."⁹⁰⁷

It is unclear to what extent CETA could restrict the Canadian ability to maintain its exceptions and limitations. Trade agreements do not typically list specific IPR exceptions authorised. Most agreements provide only general exceptions with considerable room for interpretation (such as TRIPs art. 13, 17, and 30). In this context, Canada's ability to have a flexible economic policy would depend on CETA's formal objectives and guiding principles (see for example Article 7 and 8 of the TRIPs agreement), and on implementing legislation.

INDICATOR: Trade balance

BASELINE & ANALYSIS

Canada is a net importer of IP-based goods. In 2008, Canada imported \$4.0 billion of cultural goods and exported \$1.7 billion.⁹⁰⁸ According to the Canadian Manufacturers & Exporters, counterfeit goods represent 2% to 3% of Canada's trade.⁹⁰⁹

IPR reforms could have a significant impact on trade. A number of studies suggest that exports from high-income countries to developing countries tend to increase when the latter raise their standards for IPR protection.⁹¹⁰ However, for countries where threat of imitation is weak, strengthening IPR protection

⁹⁰⁶ International Chamber of Commerce, *Global Survey on Counterfeiting & Piracy*, 2007, Paris, ICC, p. 5.

⁹⁰⁷ Canadian Internet Policy and Public Interest Clinic, Letter to Foreign Affairs and International Trade Canada, April 30 2008, p. 7.

⁹⁰⁸ Statistics Canada.

⁹⁰⁹ Canadian Manufacturers & Exporters, *Position Paper – Intellectual Property Rights in Canada and Abroad*, Ottawa, CME-MEC, June 2006.

⁹¹⁰ Keith Maskus, "Normative Concerns in the International Protection of Intellectual Property Rights", *The World Economy*, vol. 13, 1990, p. 387-409; Keith Maskus and D. Eby-Konan, "Trade-Related Intellectual Property Rights: Issues and Exploratory Results", in *Analytical and Negotiating Issues in the Global Trading System*, ed. by Deardoff & Stern, Ann Arbor, University of Michigan Press, 1994.

tends to have minor impact on exportations.⁹¹¹ It is thus likely that European exports to Canada will not be significantly affected, as it currently does not imitate a noteworthy amount of IPR-protected products. Exports of products protected by geographical indications will likely increase, but in some other industries European businesses might prefer to invest directly in Canada.

The Canadian trade balance would not necessarily benefit from IP provisions in CETA. Trade in specific goods, that are currently freely marketed and exported from Canada, could be adversely affected. For example, several Canadian companies brand and export their products with labels that could be considered as European geographical indications. These companies could lose market shares in domestic and foreign markets if they are forced to abandon their commercially significant labels. In sum, both Canadian exports and imports might be slightly and negatively impacted, but only in specific sectors.

INDICATOR: Balance of payments

BASELINE & ANALYSIS

Canada has a negative balance of royalties and license fees paid for the authorised use of IPR. In 2008, receipts were US\$ 3.4 billion while payments were US\$ 8.8 billion.⁹¹²

If Canada raises its level of protection and enforcement, it will likely increase payments made by Canadians to European holders of IPR. If CETA does not require major changes in European IPR regimes, as is anticipated, Canadian holders of IPR in Europe would not increase their receipts from European markets. One of the only cases that could benefit Canadian copyright works is an extended duration of IPR protection resulting from a new reciprocity. Therefore, it is very likely that the CETA will worsen the Canadian deficit in its balance of royalties and license fees.

INDICATOR: Consumer price

BASELINE & ANALYSIS

Despite their social and economical benefits, IPRs are linked to increased consumer prices for certain products. Patents, copyrights, trademarks, geographical indications, plant breeder's rights, and other IPR conferred exclusive rights, restrict competition, and authorise holders to maintain higher prices. Several mechanisms, such as compulsory license schemes or the Patented Medicines Prices Review Board (PMPRB), are intended to maintain prices of IP protected goods at reasonable levels.

Certain CETA provisions could lead to some higher consumer prices in Canada. For example, if artistic works and data protection are protected for longer periods, the effective use of fair dealing exception is limited, protection for geographical indications and industrial designs are enhanced, and term extensions are made available for patents, it is very likely that CETA will create an inflationary pressure on consumer prices for certain IP products.⁹¹³ Mechanisms external to the IP systems could be established to offset this increased pressure.

⁹¹¹ Rafiqzaman, Mohammed, "The Impact of Patent Rights on International Trade: Evidence from Canada", *The Canadian Journal of Economics*, vol. 35(2), 2002, p. 307-330; Pamela J. Smith, "Are weak patent rights a barrier to U.S. exports?" *Journal of International Economics*, vol. 48, 1999, p. 151-177.

⁹¹² World Bank, World Development Indicators, Royalty and license fees.

⁹¹³ Paul J. Heald, *Property Rights and the Efficient Exploitation of Copyrighted Works: An Empirical Analysis of Public Domain and Copyrighted Fiction Best Sellers*, UGA Legal Studies Research Paper No. 07-003, January 9, 2007.

INDICATOR: Public finances**BASELINE & ANALYSIS**

IPRs have four impacts on public finances. First, they foster several industries and create employment, generating tax revenues. Second, the examination, registration, and maintenance of some IPR require the payments of fees. Third, the enforcement of IPR necessitates public spending. Fourth, governments are consumers of IPR protected goods.

CETA impacts on public finance will be mixed. The Canadian Chamber of Commerce has calculated that film piracy resulted in tax losses of \$42 million.⁹¹⁴ The Business Software Alliances goes as far as estimating that reducing software piracy by 10% in 2 years could generate 2 billion dollars in extra taxes.⁹¹⁵ However, several NGOs consider that the government “should not be required to devote excessive resources to the overzealous enforcement of possible intellectual property violations.”⁹¹⁶ They are especially concerned over CETA’s border measures that could “shift the burden of private rights enforcement to the public”⁹¹⁷ at the expense of taxpayers.

Moreover, the public sector, as a consumer of IPR-protected goods, might face additional spending, notably for educational books (educational institutions accounted for 23.4% of book sales revenues in Canada) and pharmaceutical products (the public sector finances 45% of prescribed drug expenditure). This is likely for pharmaceuticals because, as mentioned under the “Access to pharmaceuticals” indicator hereto, a number of measures, including adoption of patent term extensions and the extension of data protection term could delay the entry of genetic products into the market. A study commissioned by the Canadian Generic Pharmaceutical Association concludes that these measures would represent additional public expenditure of \$1.3 billion yearly, including \$551 million from the Government of Ontario and \$412 million from the Government of Quebec.⁹¹⁸ Public expenditures could also increase for education books if the duration of copyright protection is extended, fair dealing exceptions are restricted and digital locks are protected.

⁹¹⁴ Canadian Intellectual Property Council, *A Time for Change: Toward a New Era for Intellectual Property Rights in Canada*, Ottawa, The Canadian Chamber of Commerce, 2009, p. 13.

⁹¹⁵ The Business Software Alliance, *Piracy Impact Study: The Economic Benefit of Reducing Software Piracy*, Washington, BSA, 2010.

⁹¹⁶ Trans-Atlantic Consumer Dialogue, *Resolution on enforcement of copyright, trademarks, patents and other intellectual property rights*, June 18 2009, p. 6.

⁹¹⁷ Essential Action, *Letter to the Foreign Affairs and International Trade Canada*, July 2 2009, p. 4. See also Oxfam Canada and Oxfam Québec, *Submission regarding the Anti-Counterfeiting Trade Agreement*, July 15, 2009, p. 2

⁹¹⁸ Grootendorst, Paul and Aidan Hollis, *The Canada-European Union Comprehensive Economic & Trade Agreement: An Economic Impact Assessment of Proposed Pharmaceutical Intellectual Property Provision*, Study commissioned by the Canadian Generic Pharmaceutical Association. 2011. www.canadiangenerics.ca. For a criticism to this report, see Rx&D, *Reality Check: Analysis of the CGP’s Economic Impact Assessment of Proposed Pharmaceutical IP Provisions*, 2011, available at www.canadapharma.org.

SOCIAL ASSESSMENT

INDICATOR: % of population living under country-specific poverty line

BASELINE & ANALYSIS

It is not anticipated that CETA will have an impact on this indicator.

INDICATOR: Equity in wages

BASELINE & ANALYSIS

The impact of IPR on equity in wages is uneven and varies depending on the economic sectors involved. Most IPR intensive industries offer relatively high wages. However, several artists and creators, holders of copyright, have modest revenues.

Strengthening IPR could favour industries paying higher wages. Artists could also benefit from resale rights and enhanced cooperation of collecting societies. One study, however, suggests that increasing IPR protection decreases bonuses paid by IPR-based companies to retain knowledge and avoid divulgation of trade secrets to competitors.⁹¹⁹

INDICATOR: Product innovation

BASELINE & ANALYSIS

Exclusive rights conferred by IPR provide economic benefits to their holders, but this is not their end goal. IPR are policy instruments for the social goal of providing new products to society.

The CETA could slightly increase the number of new-to-market products in Canada. In a globalised world, however, IPR standards in larger markets are often more important to Canadian firms. This partly explains why, although Canada has weaker IPR protection than several other OECD countries, it ranks higher than OECD average in percentage of firms with new-to-market product innovation.⁹²⁰

INDICATOR: Number of in-country produced TV shows (culture)

BASELINE & ANALYSIS

In 2008, the Canadian television production industry earned \$2.2 billion in operating revenues.⁹²¹ IPR represents a significant source of revenue for this industry. Strengthening IPR could increase revenue of the television production industry. One can assume that this revenue could be reinvested to increase

⁹¹⁹ Amy Glass and Kamal Saggi, "Intellectual Property Rights and Foreign Direct Investment," *Journal of International Economics*, vol. 46, 2002, p. 387–410.

⁹²⁰ OECD, *Science and Innovation Country Notes: Canada*, Paris, OECD, 2008.

⁹²¹ Statistics Canada, *Film, television and Video Production, Service Bulletin*, 2008.

the number of in-country produced TV shows. This could be the case in the francophone market which, as opposed to the Anglophone market, consumes more Canadian than foreign programs.⁹²²

INDICATOR: Number of in-country produced movies (culture)

BASELINE & ANALYSIS

The Canadian film production industry earned \$389 million in operating revenues in 2008.⁹²³ Several stakeholders expressed major concerns regarding film piracy. Canada is said to be “a haven for the illegal recording of movies in theatres”⁹²⁴ and host 4 of the top 10 illicit BitTorrent sites in the world.⁹²⁵ According to industry, film piracy resulted in consumer spending losses of approximately \$1.8 billion in 2010.⁹²⁶

Strengthening enforcement and improving enforcement through CETA could significantly reduce the rate of film piracy. The detrimental economic effects of online and offline piracy affect the Canadian film production and distribution chain, including theatrical distributors, video publishers and television broadcasters who see their capacity to pre-finance local productions reduced. However, since most films pirated and distributed in Canada are not Canadian productions, CETA enforcement measures will likely have a minor positive impact on the indicator “number of in-country produced movies.”

INDICATOR: Number of in-country produced and/or IP-protected music (culture and employment)

BASELINE & ANALYSIS

The Canadian sound recording industry’s revenue totalled at \$887 million in 2008.⁹²⁷ This industry is especially harmed by digital music downloads and file sharing.⁹²⁸ According to the Canadian Recording Industry Association, piracy caused “a 48% (\$637 million) drop in retail sales from 1999 to 2006.”⁹²⁹ The International Intellectual Property Alliance considers that this drop, experienced all over the world, is more pronounced in Canada: “Internet music piracy remains prevalent in Canada, aided by weak and outdated copyright laws. [...] The fact is that Canada lacks the marketplace integrity required for innovative digital business models to flourish as they do in other countries.”⁹³⁰

CETA will very likely contribute to reducing piracy rates and indirectly increase the amount of produced music. However, as with the film production industry, most sound recordings legally sold or pirated are not Canadian. Foreign firms control the sound recording industry in Canada and earn more than 70% of its revenues.⁹³¹ In this context, it is important to distinguish the interests of Canadian performers from

⁹²² Canadian Radio-Television and Telecommunications Commission, *Communications Monitoring Report 2009*.

⁹²³ Statistics Canada, *Film, television and Video Production, Service Bulletin*, 2008.

⁹²⁴ Royal Canadian Mounted Police, *A National Intellectual Property Crime Threat Assessment 2005-2008*, Ottawa, RCMP, 2010, p. 9.

⁹²⁵ International Intellectual Property Alliance, *2010 Special 301 Report on Copyright Enforcement and Protection*, Washington, IIPA, 2010, p. 9.

⁹²⁶ IPSOS and Oxford Economics (on behalf of the Canadian Motion Picture Distributors Association), *Economic Consequences of Film Piracy in Canada*, 2011, available at www.cmpda.ca

⁹²⁷ Statistics Canada, *Service Bulletin: Sound Recording and Music Publishing*, 2008, p. 1.

⁹²⁸ Stan Liebowitz, “File Sharing: Creative Destruction or Just Plain Destruction?”, *Journal of Law and Economics*, vol. 49, 2006.

⁹²⁹ The Canadian Recording Industry Association, Press Release, March 2, 2006.

⁹³⁰ International Intellectual Property Alliance, *2010 Special 301 Report on Copyright Enforcement and Protection*, Washington, IIPA, 2010, p. 17.

⁹³¹ Statistics Canada, *Service Bulletin: Sound Recording and Music Publishing*, 2008, p. 1.

those of sound recording makers.⁹³² If non-Canadian sound recording makers are able to increase their revenues from enhanced protection in Canada, they might not necessarily reinvest these revenues in scouting and developing new talent specifically in Canada. It is also unlikely that an extended copyright protection will provide a sufficient incentive for performers to record more music. Some argue that overly strong copyright protection could even harm creativity.⁹³³ While CETA could increase revenues for sound recording makers, “these revenues are likely to accrue mainly to non-Canadians.”⁹³⁴

INDICATOR: Number of in-country produced and/or IP-protected literature (culture, education)

BASELINE & ANALYSIS

In 2008, operating revenues for the book publishing industry in Canada totalled \$ 2.1 billion.⁹³⁵ More than 42% of sales made were for educational books.⁹³⁶ Book publishers frequently report “continuing piracy problems in Canada with regard to infringements such as high-volume photocopying, and unauthorised uploading and downloading.”⁹³⁷

Increased IPR protection will likely generate additional revenue for book publishers. Since the majority (58%) of operating revenue of the industry is made by Canadian-controlled book publishers, it is more likely than in some other copyright-based industries that a share of this additional revenue will be reinvested to publish Canadian books.⁹³⁸

INDICATOR: Employment rates of university graduates

BASELINE & ANALYSIS

CETA is not likely to impact this indicator in any other ways than what is mentioned under the indicator “employment rate.”

INDICATOR: Access to pharmaceuticals

BASELINE & ANALYSIS

Patents have a direct impact on pharmaceutical products' prices. In Canada, the Patented Medicines Price Review Board (PMPRB), a quasi-judicial body, must approve prices of patented drugs. An OECD study concludes that this mechanism “has very likely been responsible for bringing Canada’s prices for patented medicines roughly in line with European comparators.”⁹³⁹

A number of measures, including adoption of patent term extensions, the removal of the regulatory approval exception, and the extension of data protection term, could delay the entry of generic

⁹³² Ruth Towse, *Assessing the Economic Impacts of Copyright Reform on Performers and Producers of Sound Recordings in Canada*, Report commissioned by Industry Canada, 2003, p.5.

⁹³³ Marcel Boyer, *Assessing the Economic Impact of Copyright Reform*, Report to Industry Canada, 2004, p. 42.

⁹³⁴ Ruth Towse, *Assessing the Economic Impacts of Copyright Reform on Performers and Producers of Sound Recordings in Canada*, Report commissioned by Industry Canada, 2003, p.5.

⁹³⁵ Statistics Canada, *Book Publishers*, 2008, p. 5

⁹³⁶ Statistics Canada, *Book Publishers*, 2008, p. 6

⁹³⁷ International Intellectual Property Alliance, *2010 Special 301 Report on Copyright Enforcement and Protection*, Washington, IIPA, 2010, p. 16.

⁹³⁸ Statistics Canada, *Book Publishers*, 2008, p. 22.

⁹³⁹ Valerie Paris and Elizabeth Docteur, “Pharmaceutical Pricing and Reimbursement Policies in Canada”, *OECD Health Working Papers*, Paris, OECD, 2006, p.15.

products into the market. This will not affect the average prices of patented medicines, but could increase the percentage of GDP spent on healthcare. According to a 2011 study commissioned by the Canadian Generic Pharmaceutical Association, the annual increase in cost would be in the range of \$2.8 billion per year.⁹⁴⁰

INDICATOR: Social policy space

BASELINE & ANALYSIS

Several exceptions to IPR serve social objectives, such as education, research, maintenance of archives, distance learning, and access to artistic works by persons with disabilities.⁹⁴¹

The CETA could, potentially, restrain the use of the exceptions, notably if technological protection measures are legally protected.

INDICATOR: Product Safety

BASELINE & ANALYSIS

Some counterfeiting products are substandard and pose “serious consumer health and safety risks.”⁹⁴² Substandard products have been reported in a large range of goods, including batteries, brake pads, cosmetics, children’s toys, electrical products, and pharmaceutical products.⁹⁴³ Furthermore, pirated content online also presents risks as it can also contain dangerous hidden additions, including viruses, malware and Trojans, which would enable criminal elements to damage a user or steal information or their online identities.⁹⁴⁴

The problem of substandard products is real, but it is far from being as widespread as in developing countries. The consumption level of substandard products in Canada remains low. New enforcement measures, especially targeting imported goods, could reduce even further the circulation of substandard products in Canada.

However, it should at least be mentioned that several NGOs have recalled that not all IPR infringing products are counterfeits, that not all mislabelled products are substandard, and that several IPR compliant products are also substandard. Accordingly, approaching the problem of substandardness through the lens of IPR, “not only fails to address the very real public health threat, [but also] draws public resources away from that urgent task.”⁹⁴⁵

⁹⁴⁰ Grootendorst, Paul and Aidan Hollis, *The Canada-European Union Comprehensive Economic & Trade Agreement: An Economic Impact Assessment of Proposed Pharmaceutical Intellectual Property Provision*, Study commissioned by the Canadian Generic Pharmaceutical Association. 2011. www.canadiangenerics.ca. For a criticism to this report, see Rx&D, *Reality Check: Analysis of the CGP’s Economic Impact Assessment of Proposed Pharmaceutical IP Provisions*, 2011, available at www.canadapharma.org.

⁹⁴¹ The Canadian Library Association, *Brief to Foreign Affairs and International Trade Canada on the Anti-Counterfeiting Trade Agreement*, April 30, 2008.

⁹⁴² Canadian Chamber of Commerce, *Submission to the Government of Canada on the proposed Anti-Counterfeiting Trade Agreement*, April 30 2008, p. 2.

⁹⁴³ Criminal Intelligence Service Canada, *Counterfeit Pharmaceuticals in Canada*, August 2006, p. 1. Standing Committee on Public Safety and National Security, *Counterfeit Goods in Canada – A Threat to Public Safety*, Ottawa, Canadian Parliament, 2007, p. 6.

⁹⁴⁴ Paula Greve, *Digital Music and Movies Report: The True Cost of Free Entertainment*, McAfee, 2010, 15 p, available at www.mcafee.com

⁹⁴⁵ Oxfam Canada and Oxfam Québec, *Submission regarding the Anti-Counterfeiting Trade Agreement*, July 15, 2009, p 1 ; Essential Action, *Letter to the Foreign Affairs and International Trade Canada*, July 2 2009, p. 5.

ENVIRONMENTAL ASSESSMENT

INDICATOR: Air pollution/GHG emissions

BASELINE & ANALYSIS

CETA IPR provisions are not likely to impact this indicator.

INDICATOR: Other environmental indicators

BASELINE & ANALYSIS

CETA IPR provisions are not likely to impact any other environmental indicators.

7.2.2. EU

ECONOMIC ASSESSMENT

INDICATOR: Strength of enforcement mechanisms

BASELINE & ANALYSIS

For reasons detailed under the indicator “GDP/capita”, it is anticipated that a CETA IPR chapter will have a positive but minor impact on this indicator. Industry groups such as the European pharmaceutical industry strongly support greater IPR protections under the CETA, particularly under the viewpoint that doing so could send a strong signal to the international community and help foster greater IPR protections globally over the long-term.⁹⁴⁶

INDICATOR: GDP/capita (PPP adjusted)

BASELINE & ANALYSIS

IPRs are critically important for the EU economy and contribute to a significant share of its GDP. Creative industries alone are said to generate approximately €860 billion of value added, corresponding to a 6.9% of European GDP.⁹⁴⁷ In a recent document, the Commission considered that “counterfeiting and piracy

⁹⁴⁶ EFPIA (2010).

⁹⁴⁷ Tera Consultants, *Building a Digital Economy: The Importance of Saving Jobs in the EU’s Creative Industries*, Paris, International Chamber of Commerce, 2010, p. 16.

have a dramatic and damaging effect on business and they have the potential to become even more problematical.”⁹⁴⁸

The 2009 IPR Enforcement Report of the European Commission targeted Canada among the list of “priority countries” for its relatively weak protection. Shortcomings identified in the report are related to “the lack of ratification by Canada of major IPR treaties relating to trademarks and copyright (WIPO's "Internet Treaties"), deficiencies in the protection of pharmaceuticals and of geographical indications, ineffective enforcement mechanisms (in particular regarding customs seizures), and limited sharing of information between Canadian authorities and rights holders.”⁹⁴⁹

CETA’s IPR chapter will very likely have positive impacts on Europe. These impacts will, however, be relatively minor for two reasons. Firstly, the Canadian market for European IPR-protected products is relatively small. Canada represents only 2% of world sales of sound recordings⁹⁵⁰ and around 3% of European exports in newspapers, journals and periodicals.⁹⁵¹ Canada represents a more significant market for specific products, like adult computer games, that are designed for Westerners. For those products, however, the American market is perceived by some European stakeholders as a more worrying “source of IP threats”. Although the United States offers stronger IPR protection than Canada, the potential value of the American market is also much more significant.⁹⁵²

Secondly, Canada is not a major source of physical counterfeit and pirated goods. Asian and Middle East countries are the main sources of physical counterfeit products imported in Europe.⁹⁵³ China alone is the origin of 54% of all suspect goods detained at EU borders.⁹⁵⁴ That being said, Canada serves as a transshipping point for some counterfeit and pirated goods from Asia. Moreover, Canada hosts a number of torrent sites used to pirate European copyrighted works and are accessible from within the EU. As such, increasing enforcement in Canada could have a positive impact herein.

Although it may not have a significant effect on overall GDP, a CETA IPR chapter will likely have a positive effect on European economy. It could have a significant impact in specific industries such as agri-food companies using geographical indications. If CETA raises the bar for future negotiations with third countries, including WTO talks on geographical indications, spill-over may be more important than direct and immediate impacts.

INDICATOR: Employment rate by sector/industry, FDI flows, trade balance, balance of payments

BASELINE & ANALYSIS

For reasons detailed under the indicator “GDP/capita”, it is anticipated that a CETA IPR chapter will have a positive but minor impact on these indicators.

⁹⁴⁸ European Commission, *Enhancing the Enforcement of Intellectual Property Rights in the Internal Market*, COM(2009)467, Brussels, EC, p. 3.

⁹⁴⁹ Commission Staff Working Document, *IPR Enforcement Report 2009*, Brussels, EC, p. 10.

⁹⁵⁰ Ruth Towse, *Assessing the Economic Impacts of Copyright Reform on Performers and Producers of Sound Recordings in Canada*, Report commissioned by Industry Canada, 2003, p. 22.

⁹⁵¹ Eurostat

⁹⁵² Economist Intelligence Unit, *The Value of Knowledge: European Firms and the Intellectual Property Challenge*, The Economist, 2007, p. 10.

⁹⁵³ European Commission, *Report on EU Customs Enforcement of Intellectual Property Rights, Results at the EU Border*, Brussels, EC, 2009, p. 2.

⁹⁵⁴ Commission Staff Working Document, *IPR Enforcement Report 2009*, Brussels, EC, p. 4.

SOCIAL ASSESSMENT

It is not anticipated that CETA IPR chapter will have a noteworthy social impact on the European Union, which includes an assessment on the indicator of access to pharmaceuticals among other indicators.

ENVIRONMENTAL IMPACTS

CETA IPR provisions are not likely to impact the environmental indicators employed in this SIA.

7.2.3. USA

ECONOMIC ASSESSMENT

BASELINE & ANALYSIS

Over the last few years, the US government and several US industry associations have repeatedly pressed Canada to adopt measures like the type that could be adopted in CETA.⁹⁵⁵

If Canada strengthens its IPR protection, the US might very likely increase its exports, investments and revenues from royalties and license fees. Given the size of the US economy, minor impacts are anticipated for each economic indicator, but the cumulative impact could have a moderate significance. In fact, since the US exports and invests significantly more to/in Canada than the EU, it is very likely that, thanks to TRIPs most-favoured nation treatment, the US will be the first beneficiary of CETA IPR provisions.⁹⁵⁶

On products protected by geographical indications, however, US exports to Canada could be negatively affected. For example, cheeses produced in the US but protected in Europe by geographical indications might have to be rebranded under another name to be legally exported to Canada. Under these conditions, some American producers might simply prefer to withdraw from the Canadian market.

SOCIAL ASSESSMENT

BASELINE & ANALYSIS

It is not anticipated that CETA IPR chapter will have social impact on the US, unless it directly addresses the online selling of pharmaceutical products, which is unlikely.

⁹⁵⁵ Office of the United States Trade Representative, *2010 Special 301 Report*, 2010, p. 25.

⁹⁵⁶ For example, in 2008, US exports of cultural goods to Canada reached more than \$ 3 billion and US revenues from cultural service reached more than \$ 2 billion. Statistics Canada.

ENVIRONMENTAL ASSESSMENT

BASELINE & ANALYSIS

It is not anticipated that CETA IPR chapter will have environmental impact on the US.

7.2.4. OTHER THIRD COUNTRIES

ECONOMIC ASSESSMENT

It is not anticipated that a CETA IPR chapter will have direct economic impact on these countries, unless CETA has a spill-over effect on parallel and future negotiations involving these countries (including WTO negotiation on geographical indications and other bilateral free trade agreements).

SOCIAL ASSESSMENT

INDICATOR: Access to pharmaceuticals

BASELINE & ANALYSIS

Some NGOs have expressed concern on CETA's impacts on access to medicines in developing countries. Border measures could restrict, chill, or slow down the export of drugs to those countries when in transit to Canada. According to a stakeholder, "customs authorities in Europe have wrongly detained generic medicines in transit to developing countries [and] their detention did disrupt drug procurement in destination countries where, in at least some cases, the medicines were not even on patent."⁹⁵⁷ If Canada replicates EU border measures, a similar scenario could happen when pharmaceutical products are in transit in Canada on their way to a developing country.

ENVIRONMENTAL ASSESSMENT

BASELINE & ANALYSIS

Several developing countries are providers of genetic resources and have expressed in multiple multilateral forums that a mandatory disclosure of the origin of genetic resources in patent application could strengthen the enforcement of their access and benefit sharing (ABS) laws. Currently, Canada does not formally require such disclosure but a number of European countries have introduced this

⁹⁵⁷ Essential Action, *Letter to the Foreign Affairs and International Trade Canada*, July 2 2009, p. 2; Oxfam Canada and Oxfam Québec, *Submission regarding the Anti-Counterfeiting Trade Agreement*, July 15, 2009, p. 2.

requirement.⁹⁵⁸ Moreover, references to the Convention on Biological Diversity and its principle of ABS and traditional knowledge protection are increasingly being included in recent free trade agreements.⁹⁵⁹

The inclusion of a disclosure requirement in CETA could improve the quality of patent examination, provide an additional incentive for users of genetic resources to comply with ABS requirements and allows stakeholders to better monitor their enforcement. It could also set new standards for current multilateral negotiations at the World Intellectual Property Organization and under the Convention of Biological Diversity.

⁹⁵⁸ Jean-Frédéric Morin, « La divulgation de l'origine des ressources génétiques : Une contribution du droit des brevets au développement durable », *Les Cahiers de la propriété intellectuelle*, vol 17, no 1, 2005, p. 131-147

⁹⁵⁹ David Vivas-Engui and Maria Julia Oliva, *Biodiversity and Intellectual Property in North-South Free Trade Agreements*, Geneva, CTSD, 2010.

7.3. INVESTMENT⁹⁶⁰

Overall Summary:

Regulatory and institutional reforms encouraged by CETA may remove certain barriers in Canada to EU investment; however, as the negotiations remain ongoing, this assessment is based on a set of assumptions. Removal of barriers could create certain net economic benefits. It would likely create some positive, and potentially negative, social impacts. It would likely have mixed environmental impacts.

Regarding investor-state dispute settlement (ISDS) specifically, the conflicting costs and benefits of such a mechanism make it doubtful that its inclusion in CETA would create a net/overall (economic, social and environmental) sustainability benefit for the EU and/or Canada. There is no solid evidence to suggest that ISDS will maximise economic benefits in CETA beyond simply serving as one form of an enforcement mechanism, just as state-state dispute settlement is also an enforcement mechanism. And the policy space reductions caused by ISDS allowances in CETA, while less significant than foreseen by some parties, would be enough to cast doubt on its contribution to net sustainability benefits. As such, the study's assessment suggests that a well-crafted state-state dispute settlement mechanism might be a more appropriate enforcement mechanism in CETA than ISDS.

Economic assessment summary:

The impact of CETA as a whole specifically on investment, as well as the impact of the Investment Chapter specifically on trade and intangible business linkages, could contribute to some increase in GDP growth in Canada and the EU.

More specifically, the impact of CETA as a whole on investment in Canada and the EU will likely be positive, and could be 'notable,' although in the opinion of the study would likely be less than 'significant.' For Canada, investment liberalisation in CETA is expected to reinforce existing trends in bilateral investment, with the majority of flows directed towards the financial, energy and mining sectors. More specifically, if included in the negotiations, removal of restrictions in such sub-sectors as telecom; transportation services, including water and transportation services; fisheries; finance; and mining/uranium may positively impact the level of bilateral investment in such areas. Investment in the EU would likely follow the positive trend predicted for Canada, but on a smaller scale. This is due to the relatively larger size of the EU economy compared to Canada and given Canada is currently more restricted to FDI than the EU at large.

The Investment Chapter in CETA could encourage economic benefits in Canada in terms of trade-related effects and intangible linkages, although the significance of these will likely be minor to notable at most. The Investment Chapter in CETA would provide benefits to multinational companies in particular in terms

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Introductory notes: "Investment" herein follows the definition used in NAFTA – specifically, all types of financial investments, shareholding, secured debts and typical forms of FDI. The below assessment delineates between portfolio investments and FDI where appropriate. Unlike the other cross-cutting issue sections herein, this section considers both the US and Mexico alongside the assessment for the EU and Canada, in recognition of the linkages between CETA and NAFTA, and the EU-Mexico FTA and CETA. Although the analysis focuses on investment arising out of an "Investment" chapter in CETA, particularly in reference to investor-state provisions, it also considers investment effects from CETA as a whole. This investment section, (as well as the analysis of investment-related indicators within the individual sectoral analyses), is partially informed by the FDI gravity modelling results found in Annex 3.

of fostering intangible business relationships, which may have economic benefits, and stimulating the flows of capital and differentiated goods.

However, the role of ISDS, which may be included in the Investment Chapter in CETA, as a contributor to the aforementioned economic benefits is unclear as there does not appear to be readily available empirical evidence on the matter. On one hand, simply to the extent that it serves as an enforcement mechanism, the inclusion of ISDS in CETA may contribute to some economic benefits, and the economic risks it brings are unlikely to be as significant as some stakeholders suggest. On the other hand, it is uncertain that the aforementioned economic benefits from ISDS would be maximised in a sustainable way, and the fact remains that ISDS does usually create at least some minimal economic costs to government.

The Investment Chapter in CETA will create requirements that on one hand will likely have positive economic effects, while on the other hand may also create effects that constitute a reduction in economic policy space.

Social assessment summary

There will likely be some positive, and potentially some negative, social impacts from investment encouraged under CETA as whole. Increased investment under CETA might be channelled into creating jobs in Canada and the EU that score higher on quality and decency of work indicators, although it may also create some degree of worker displacement and wage inequality. Either way, these impacts would likely be relatively limited. The impacts related to CETA-encouraged investment flows would not be attributable solely to the Investment Chapter but to the combined impacts of a number of provisions in CETA, for example those relating to other cross-cutting issues described herein, those liberalising restrictions in services (inclusive of those not related directly to investment), and those creating tariff reductions.

The policy space reductions caused by ISDS allowances in CETA would likely be less significant than foreseen by some, but still enough to cast doubt as to if they would contribute to net/overall social sustainability in Canada and the EU. (This said, it should be kept in mind that the state legally maintains the right to regulate in the face of an ISDS mechanism, although it may have to pay compensation in ISDS cases and feel dissuaded from regulating for fear of ISDS cases; and it is important to stress that a reduction in “policy space” as used in this assessment exclusively refers to the ability of governments to make policies that have clear social [as well as economic and environmental] benefits.) This assessment is based upon consideration of several arguments: the questionable utility of using ISDS as currently operating rather than domestic courts in Canada and the EU; precedent of ISDS creating some regulatory chill; risk of unrecorded regulatory chill from ISDS; lack of information on ISDS case rulings; and risk created by a ‘third country incorporation’ provision in ISDS in CETA. This brings into question the efficacy of ISDS in contributing to protection of investors’ rights premised on objectives of preventing capital flight and enhancing investment with the end goal of contributing to the “the well-being of society.” Likewise, it is doubtful that including ISDS in CETA would create a net/overall social sustainability benefit for the EU and/or Canada.

Environmental assessment summary

As mentioned in the Industrial Products section, increased FDI in the oil sands and mining sectors could lead to increased environmental impacts since these sectors are environmentally intensive. Given the relative concentration of FDI inflows in these sectors in Canada, a marginal increase in investment inflows driven by CETA and higher oil and mineral prices could lead to an increase in production capacity that would in turn lead to impacts on capital stocks, use of bio-diverse areas, water use and

contamination, toxic contaminants and effluents, and air pollution and GHG emissions. This said, although the gravity modelling for this report provides some indication that investment could increase, it is unclear how much CETA would increase investment in the oil sands and mining sectors, and if investment does not particularly increase then the directly related environmental impacts therein would clearly be lessened.

On the other hand, increased investment under CETA might have some positive environmental impacts. In particular, some investment might gravitate towards green technology, producing positive impacts in Canada and the EU.

This analysis errs on the side of caution by assuming that, while not meeting the threshold of 'significant,' ISDS in NAFTA, as well as some EU BITs, may very well have created some magnitude of reductions in environmental policy space relevant to this SIA, and thus ISDS in CETA may have some negative environmental impacts on the EU and Canada. It is therefore doubtful that including ISDS in CETA would create a net/overall environmental sustainability benefit for the EU and/or Canada.

7.3.1. EU, Canada, USA and Mexico

BASELINE

FDI and portfolio flows

Canada

Canadian direct investment abroad has rapidly expanded in the past 30 years, and Canadian firms now own more foreign operations in terms of dollar value than foreign companies own in Canada.⁹⁶¹ Outward stocks of FDI stood at \$522,069 million in 2009, representing an increase of 66% since 2000.⁹⁶² Of this stock, the EU was the second largest destination for Canadian outward investment with 25.1% of the total, representing an increase of 4.1 percentage points from 2000 figures. In 2009, the total stocks of investment in Canada amounted to \$483,472 million.

In terms of sectoral investment, the largest recipients of outward Canadian FDI are the finance and insurance industry (50.3% of all outward FDI stocks) and the energy and metallic minerals industry (23.3%). The average annual FDI inflow from 1994-2009 from the Canada to the EU was \$CAD 8,189.⁹⁶³

The average annual FDI inflow from 1994-2009 from the US to Canada was \$CAD 12,337, and the average annual FDI inflow during the same period from the EU to Canada was \$CAD 8,813.⁹⁶⁴ The EU serves as the second largest source of inward FDI in Canada, contributing 29.8% of the total stocks in 2009. Herein, the UK is the single largest contributor, holding 11.6% of the total stock of foreign investment in Canada, followed by the Netherlands (8.5%), France (3.3%), Germany (2.5%) and Luxembourg (1.8%). Overall, these countries respectively represent the 2nd, 3rd, 5th, 7th and 9th largest sources of investment into Canada in 2009. In terms of sectoral investment, inward FDI is primarily directed towards Canada's energy and metallic minerals industry (36.2%) and finance and insurance industry (19.8%). Within the former, the EU, led by the UK, holds 35.2% of all inward FDI in the sector, while in the latter the EU holds 34.8% of all inward FDI.⁹⁶⁵

⁹⁶¹ Institute for Research on Public Policy. "Dispelling Myths about Canadian Foreign Direct Investment." Canada.

⁹⁶² Statistics Canada

⁹⁶³ Constructed average from Statistics Canada data

⁹⁶⁴ Ibid

⁹⁶⁵ Statistics Canada

At the end of 2007, the market value of Canadian portfolio investment abroad totalled \$714,734.7 million consisting of \$564,138.4 million in stocks and \$150,596.4 million in debt instruments. Herein, the EU served as the second largest destination of Canadian portfolio investment with holdings of \$201,318.6 million. Within the EU, the largest destinations were the UK (33.4% of all EU holdings), France (14.8%), Germany (15.1%) and the Netherlands (7.4%).⁹⁶⁶

EU

In 2009, outward investment from the EU totalled \$366,727 million, with the main outflows originating from Luxembourg,⁹⁶⁷ the UK and France. The largest destinations for outward FDI in 2006 were the US, Canada and Switzerland. Inward investment totalled \$309,557 million, with the aforementioned countries also serving as the main sources of investment.

In terms of portfolio investment, Euro area holdings of foreign securities totalled EUR 3.8 trillion at the end of 2008, with holdings of US securities at 33% of the total and offshore financial centres 12%.⁹⁶⁸

US and Mexico

The US is the world's largest recipient of FDI. More than \$325.3 billion in FDI flowed into the US in 2008, which is a 37 percent increase from 2007.⁹⁶⁹ The \$2.3 trillion stock of FDI in the US at the end of 2008 is the equivalent of approximately 16 percent of US GDP.⁹⁷⁰ Canada is the largest source of inward investment with inflows of \$25, 813 million in 2009 followed by France with \$24,046 million and Germany with \$16,210 million. In total, financial inflows from the EU were \$83,725 million. The US also has the world's largest outward investments. Outward flows totalled more than \$3.2 trillion in 2009.⁹⁷¹ In 2009, the largest recipients of US FDI were the Netherlands (\$471,567 million), the UK (\$471,384 million) and Canada (\$259,792 million). In total, outflows to the EU were more than \$1,976 billion.⁹⁷²

FDI in Mexico for 2009 was \$11.6 billion, down 51% from the previous year. The US was the largest foreign investor in Mexico, accounting for 49.8% (\$5.8 billion FDI from the US) of reported FDI. The economic slowdown in the US in 2008 and 2009 has caused a significant decline in this figure. The Mexican Government estimate of FDI for 2010 is \$15 billion to \$20 billion.⁹⁷³

Regulatory and institutional framework

Canada and EU

International investment agreements ("IIAs") serve as the legal basis for international investment cooperation. There are several types of IIAs. These include Bilateral Investment Treaties (BITs)/Foreign Investment Promotion and Protection Agreements (FIPAs); double taxation treaties (DTTs); hybrid bilateral trade and investment agreements like CETA, often called preferential free trade and investment agreements (PTIAs); regional trade and investment agreements, some of which may be PTIAs, like

⁹⁶⁶ Statistics Canada

⁹⁶⁷ The role of Luxembourg in investment is primarily explained by its role in financial intermediation

⁹⁶⁸ European Central Bank

⁹⁶⁹ US Dept. Of Commerce – Bureau of Economic Analysis

⁹⁷⁰ CIA World Factbook

⁹⁷¹ CIA World Factbook

⁹⁷² US Dept. Of Commerce – Bureau of Economic Analysis

⁹⁷³ US Department of State

NAFTA; regional economic integration agreements; and other multilateral agreements involving foreign investment, for example, sectoral investment agreements like the Energy Charter Treaty. According to UNCTAD, as of 2005 there were over 2,400 BITs, 2,600 DDTs, and many PTIAs, regional economic integration agreements, and other multilateral agreements involving foreign investment worldwide.⁹⁷⁴

The investment environment in Canada and the EU (including EU MS) is governed by a variety of domestic and international rules. Certain EU MS have particularly well developed domestic regulatory and institutional environments for FDI and portfolio flows. Both Canada and the EU, as members of the WTO, are bound by WTO agreements including GATS and the Agreement on Trade Related Investment Matters (TRIMS).

Canada and the EU have a number of trade and economic agreements with foreign countries, many of which include provisions on investment. A listing of these agreements for can be found in the Tables 72 and 73 in the “Third Countries” section below.

Additionally, Canada and the EU each have a range of investment-specific agreements with other nations. Canada’s FIPAs with third countries are listed in a Table 74 in the “Third Countries” analysis below.⁹⁷⁵ EU MS have concluded 1,200 BITs with other countries.⁹⁷⁶ BITs typically include provisions defining standards of treatment, protection from expropriation, the right to freely transfer capital, prohibitions on certain performance requirements, and investor-state dispute settlement.⁹⁷⁷ Under Article 207(1) of the Treaty on the Functioning of the European Union (TFEU), the new name of the EU Treaty as written under the Treaty of Lisbon, FDI now falls within the scope of EU commercial policy. The EU now has the exclusive competence to abolish barriers to foreign direct investment, whereas previously Member State BITs protected EU investors (market access was already an EU competence).

Canada and EU MS have undertaken a number of measures to facilitate investment among one another specifically. Canada has FIPAs with 6 EU MS: the Czech Republic, Hungary, Latvia, Poland, Romania, and Slovakia. Canada and EU MS have made commitments through the OECD to one another to mutually facilitate investment, including via the OECD Code for Liberalisation of Capital Markets and Code for the Liberalisation of Invisible Operations and the Guidelines for Multinational Enterprises. These commitments do not include investment protection provisions, such as expropriation and investor-to-state dispute settlement. The OECD National Treatment Instrument is a non-binding agreement. The 2008 Joint Study suggests that no Canadian provinces and territories have arrangements with EU MS on Canadian Direct Investment Abroad (CDIA) outside of the informal mechanisms set up by Ontario. Regional businesses and commerce groups importantly facilitate commerce and trade between the EU and Canada.⁹⁷⁸

⁹⁷⁴ UNCTAD (2005). “Investor-State Disputes Arising From Investment Treaties: A Review.” UNCTAD Series on International Investment Policies for Development. New York and Geneva. http://www.unctad.org/en/docs/iteit20054_en.pdf

⁹⁷⁵ Canadian FIPAs contain the following major components: 1. Definitions; 2. Treatment of Investments - General and Specific Obligations; 3. Protection of investments - Expropriation, Compensation, and Transfers; 4. Subrogation (this is an insurance term, used for situations where the insurer has the rights of its insured after it makes an insurance payment) 5. Dispute Settlement Mechanisms; 6. Entry Into Force; 7. Exceptions and Special Provisions. More on the structure of FIPAs can be found at URL: <http://www.bilaterals.org/spip.php?article497>

⁹⁷⁶ EC (2010). “Memorandum 10/303: Q&A: Commission launches comprehensive European international investment policy.” 7 July 2010.

⁹⁷⁷ Gallagher, Kevin P (2010), “Policy Space to Prevent and Mitigate Financial Crises in Trade and Investment Agreements.” G-24 Discussion Paper Series, UNCTAD.

⁹⁷⁸ 2008 Joint Study

Canada, EU, US and Mexico

The US has a particularly well developed investment environment, and Mexico has an investment environment that has seen marked improvement and transformation over the last few decades. The US has one of the most developed systems for FDI and portfolio flows in the world. Mexico has a well-established environment for investment with the US and Canada under NAFTA, and with the EU under the EU-Mexico FTA which entered into force in 2000. More than 18,000 companies with US investment have operations in Mexico, and the US accounts for more than 40% of all FDI there.⁹⁷⁹ However, Mexico opted out of making commitments for investment in its energy sector under NAFTA, which has ultimately hurt Mexico.⁹⁸⁰

As mentioned, the important investment relationship between Canada, the US and Mexico is governed by NAFTA. Box 33 below summarises certain key provisions in Chapter 11 of NAFTA, which deals specifically with investment.

Box 33: Select provisions in Chapter 11 of NAFTA

- Article 1102 of NAFTA requires national treatment in investments between NAFTA countries. Sub-article 2 (Article 1102:2) applies to investors and investments in “like circumstances,” which may allow for difference in interpretation when considering the applicability of different sized companies and/or investments in different sectors. (Note: As stipulated by Article 1108, Article 1102 does not apply to government procurement; subsidies or grants; nor does it apply to measures that relate to aboriginal affairs, minority affairs or social services such as health, child care and social welfare.)
- Article 1103 of NAFTA requires all concessions in investment be extended to investors from the US and Mexico in what is known as a most favoured nation (MFN) clause. Sub-article 2 (Article 1103:2), like Article 1102:2, applies to investors and investments in “like circumstances,” which may allow for difference in interpretation when considering the applicability of different sized companies and/or investments in different sectors. (Note: As stipulated by Article 1108, Article 1103 does not apply to government procurement, subsidies or grants.)
- Article 1105 of NAFTA requires members to observe minimum standards within “international law.”
- Article 1106 on NAFTA prohibits performance requirements in terms of export quantity requirements, domestic content, and technology transfer, among other requirements.
- Article 1110 of NAFTA states that “No Party may...take a measure tantamount to nationalization or expropriation of such an investment...” except under certain circumstances.⁹⁸¹

Certain provisions herein have been used as the basis for private investors to sue the state over claims that the government limited their investment opportunities/their rights have been violated under the

⁹⁷⁹ US Department of State <http://www.state.gov/r/pa/ei/bgn/35749.htm>

⁹⁸⁰ Hufbauer, G.C. and J.J. Schott. (2005)

⁹⁸¹ Article 1110 of NAFTA states: “No Party shall directly or indirectly nationalize or expropriate an investment of an investor of another Party in its territory or take a measure tantamount to nationalization or expropriation of such an investment (“expropriation”), except: (a) for a public purpose; (b) on a non-discriminatory basis; (c) in accordance with due process of law and the general principles of treatment provided in Article 1105; and (d) upon payment of compensation in accordance with paragraphs 2 to 6.”

agreement. These are so called “investor-state” provisions, which form the basis for what is called investor-state dispute settlement (ISDS). Article 1102, 1105 and 1110 have been frequently used in this regard.

The application of Chapter 11 is limited by sectoral, reciprocal and investment review reservations listed in Annexes 1, 2 and 3 of NAFTA.⁹⁸²

NAFTA allows companies of any nationality incorporated in a NAFTA country to bring a Chapter 11 case.⁹⁸³

ANALYSIS

ECONOMIC ASSESSMENT

INDICATOR: Impact on institutional and regulatory environment for investment (focus on FDI)

Canada and EU

FDI restrictions and liberalisation

The OECD has compiled an FDI Restrictiveness Index which is useful at a basic level to assess the investment climate in Canada and the EU (and the US and Mexico). The index uses 4 categories of restrictions against investment, i.e. equity restrictions, screening and prior approval requirements, restrictions on key foreign personnel/directors, and an “other restrictions” category.⁹⁸⁴ It calculates scores for several sectors and weights the sector scores (using FDI/trade weights)⁹⁸⁵ to create an overall country score. The index is not without its flaws, including that it does not take into account important determinates of investment including barriers posed by state-owned enterprises and semi-private government enterprises or special government rights,⁹⁸⁶ or stringency of enforcement and application of rules. Still, the 2010 Index has made some revisions to past methodologies,⁹⁸⁷ and is useful in providing a basic understanding of the dynamics of the institutional and regulatory investment environments in Canada and the EU (and the US and Mexico).

⁹⁸² For example, Canada carried over 48 sectoral reservations from CUFSTA under Chapter 11 of NAFTA (Hufbauer, G.C. and J.J. Schott (2005), pg 202)

⁹⁸³ See Dumberry, P. (2001). “The NAFTA Investment Dispute Settlement Mechanism: A Review of the Latest Case Law: Journal of World Investments.” 151-95; and Hufbauer, G.C. and J.J Schott (2005), pg 206 footnote 22

⁹⁸⁴ The OECD defines the 2010 index components as follows: (1) foreign equity limits (no foreign equity allowed, foreign equity allowed to be less than 50% of total equity, foreign equity is allowed to be greater than 50% but less than 100% of total equity); (2) screening and prior approval (approval required for new FDI/acquisitions of less than USD 100million or if corresponding to less than a 50% of total equity, approval required for new FDI/acquisitions above USD 100 million or if corresponding to over a 50% of total equity, notification with discretionary element); (3) restrictions on key foreign personnel/directors (foreign key personnel not permitted, economic needs test for employment of foreign key personnel, time bound limit on employment of foreign key personnel, nationality/residence requirements for board of directors – majority must be nationals, at least one must be a national); (4) “other restrictions” (establishment of branches not allowed/local incorporation required; reciprocity requirement; restrictions on profit/capital repatriation; access to local finance; acquisition of land for business purposes; land ownership not permitted but leases possible)

⁹⁸⁵ See Golub (2003) for explanation of weighting methodology

⁹⁸⁶ Mandel-Campbell. A. (2008)

⁹⁸⁷ For example, the 2010 methodology expands upon previous coverage for sectors and re-weights certain components.

Table 63: OECD 2010 FDI restrictive index for EU(24)* (0 = most open, 1 = most closed)

Country	Equity restrictions	Screening and prior approval requirements	Restrictions on key foreign personnel/directors	Other restrictions	Total index	FDI
Austria	0.058	0.009	0	0.009	0.076	
Belgium	0.014	0	0	0.002	0.016	
Czech Rep.	0.049	0	0	0.006	0.055	
Denmark	0.063	0	0	0.001	0.063	
Estonia	0.052	0	0	0.046	0.098	
Finland	0.019	0	0	0.021	0.04	
France	0.038	0	0.001	0.014	0.053	
Germany	0.02	0	0	0.004	0.025	
Greece	0.032	0.002	0.002	0.024	0.059	
Ireland	0.035	0	0	0.024	0.059	
Italy	0.069	0	0	0.004	0.073	
Hungary	0.065	0	0	0.001	0.066	
Latvia	0.051	0	0	0.034	0.085	
Lithuania	0.036	0	0	0.014	0.05	
Luxembourg	0.003	0	0	0	0.004	
Netherlands	0.003	0	0	0.001	0.004	
Poland	0.058	0	0	0.053	0.111	
Portugal	0.003	0	0	0.003	0.006	
Romania	0.008	0	0	0	0.008	
Slovak Rep.	0.049	0	0	0	0.049	
Slovenia	0.011	0	0	0	0.012	
Spain	0.019	0	0	0	0.019	
Sweden	0.028	0.027	0	0.001	0.057	
UK	0.036	0	0	0.022	0.059	
EU (24) Average	0.034	0.002	0.000	0.012	0.048	

*OECD 2010 FDI Restrictiveness Index does not provide data for Malta, Cypress, and Bulgaria
Source: Data compiled from: Kalinova, B., A. Palerm and S. Thomsen (2010)

As can be seen in the above table (although not accounting for Malta, Bulgaria or Cypress given lack of data), the EU overall has a relatively low FDI restrictiveness index of 0.048 out of 1. Members with the highest investment restrictiveness include Poland and Estonia. Members with the least restrictive index include the Netherlands and Luxembourg.

Table 64: OECD 2010 FDI restrictive index for Canada, EU (24)*, US and Mexico (0 = most open, 1 = most closed)

Country	Equity restrictions	Screening	Key Personnel	Operational Restrictions	Total Index	FDI
Canada	0.067	0.082	0.000	0.005	0.153	
EU (24)*	0.034	0.002	0.000	0.012	0.048	
US	0.100	0.000	0.008	0.008	0.116	
Mexico	0.131	0.095	0.000	0.037	0.264	

*OECD 2010 FDI Restrictiveness Index does not provide data for Malta, Cypress, and Bulgaria

Source: Data compiled from: Kalinova, B., A. Palerm and S. Thomsen (2010)

As can be seen in the above Table 64, Canada has a more restrictive investment environment than the US or EU24, although less restrictive than Mexico. As is evidenced in Table 64, Canada's most significant restrictions to FDI are in the media and fishing sectors. It is least restrictive in the agricultural and forestry as well as real estate sector. Still, the full impact of this restrictiveness on the grand scheme of investment flows should be contextualised, as the Canadian Competition Panel among others have noted Canada does attract noteworthy amounts of FDI. Indeed, as a proportion of GDP its stock of inbound FDI is relatively high among developed countries.⁹⁸⁸ Canada experienced a significant change in its OECD FDI restrictiveness in the last 4 years, as in 2006 its FDI restrictiveness index score was about 0.359⁹⁸⁹ making its 2010 score of 0.153 roughly 53% lower, although it is unclear how much of this is due to a reduction in restrictiveness or a result of changes to the OECD restrictiveness index methodology between 2006 and 2010.⁹⁹⁰

Table 65: Canada's 2010 OECD FDI Restrictiveness Index by sector⁹⁹¹ (0= most open, 1 = most closed)

Sector	Canada's FDI restrictiveness index
Agri. & For.	0
Fishing	0.6
Mining	0.15
Manuf.	0.1
Electricity	0.1
Construction	0.1

⁹⁸⁸ Competition Review Panel. *Compete to Win*. Ottawa: Government of Canada. 2008.

⁹⁸⁹ Data from: Blanka Kalinova, Angel Palerm and Stephen Thomsen (2010), "OECD's FDI Restrictiveness Index: 2010 Update", *OECD Working Papers on International Investment*, No. 2010/3, OECD Investment Division, www.oecd.org/daf/investment

⁹⁹⁰ See Ibid at pg 7 which makes a note on comparing 2006 vs. 2010 FDI restrictiveness indexes

⁹⁹¹ The OECD offers the following further description of what some of the sectors herein include: Business services (legal services, accounting and audit, architectural services, and engineering services); other finance (including securities and commodities brokerage, fund management, custodial services, etc.); telecommunications (fixed telecoms, mobile telecoms); media (radio and TV broadcasting, other [newspapers, etc.]); transport (land, maritime, air); electricity (general distribution); food and other manufacturing (including textiles, wood, paper and publishing, other manufacturing); mining and quarrying (including oil exploration and drilling)

Notes: (1) The score for Financial Services has been calculated on the basis of a National Treatment instrument. Canada's position under the Codes of Liberalisation in the area of financial services is discussed in the July 2009 Report by the Investment Committee to the OECD Council (www.oecd.org/daf/investment/instruments).

(2) The scores for Fishing, Maritime Transport, Media and Telecoms have been calculated on the basis of Canada's list of exceptions under the National Treatment instrument. The corresponding sectoral reservations under the Capital Movements Code are under review by Canada.

Distribution	0.1
Hotels & res.	0.1
Transport	0.267
Media	0.7
Telecom	0.35
Financial Serv.	0.067
Business Serv.	0.1
Real Estate	0
Total FDI Index	0.153

Source: Kalinova, B., A. Palerm and S. Thomsen (2010)

Table 66: Canada's 2006 OECD FDI Restrictiveness Index by sector (0= most open, 1 = most closed)

Sector	Canada's FDI restrictiveness index
Business service (total)	0.175
Legal	0.200
Accounting	0.200
Architecture	0.150
Engineering	0.150
Telecoms (total)	0.525
Fixed	0.525
Mobile	0.525
Construction	0.150
Distribution	0.150
Finance (total)	0.219
Insurance	0.200
Banking	0.225
Hotels & Restaurants	0.150
Transport	0.413
Air	0.675
Maritime	0.300
Road	0.250
Electricity	0.350
Manufacturing	0.150
Total FDI Index	0.228

Source: Koyama, T. and S. Golub (2006)

CETA may not reduce any current investment barriers in the EU to a significant degree given the EU's already comparatively low level of investment restrictiveness. The impact of this reality on FDI flows is

discussed under the “FDI and portfolio flows...” indicator(s) below. This is not to deny that CETA may encourage some reductions on investment barriers in EU MS with higher investment restrictiveness.⁹⁹²

Regulatory and institutional reforms encouraged by CETA may remove certain barriers in Canada to EU investment; however, without further details of the agreement it is difficult to tell exactly what barriers may be removed. Also, without further details, it is difficult to tell if these barriers will be removed specifically because of the CETA negotiation process or were in the process of being liberalised anyway.

It is also worth noting that CETA may affect restrictions in the inter-provincial investment in Canada. Requirements on administrative processing of paperwork that must be completed and submitted to agencies at different levels of government acts as an impediment to investment. Lack of harmonisation can also lead to delays in zoning, licensing and permit requirements. CETA may prioritise reduction of at least some of these internal barriers to investment in Canada, which are of concern to EU companies operating in Canada as well as to domestic Canadian companies.

Enforcement provisions in investment and trade & investment agreements

Logic behind using investor-state provisions in investment and trade & investment agreements

Investor-state provisions are included in investment (e.g. BITs) and trade & investment agreements (like NAFTA) as the basis for ISDS, i.e. for private investors to sue the state in international arbitration over claims that the government limited their investment opportunities/their rights have been violated under the agreement. They deal with disputes over property rights and other treatment of investments. A brief overview of commonly invoked investor-state clauses from NAFTA, found in Chapter 11 of that agreement, can be found in Box 33 of the baseline section. The remainder of this analysis considers investor-state provisions in CETA that would likely be worded in a broadly similar manner to those in NAFTA Chapter 11.

It is important to note that investor-state provisions are not unique to NAFTA or (if included) to CETA; however, while EU MS have many BITs with investor-state provisions the EC has not included investor-state provisions in an EU-wide trade & investment agreement with third countries. CETA would be a first in this regard.⁹⁹³ Such provisions are very common in IIAs signed all over the world over the past decade or so, and it is now more unusual to have such an agreement without their inclusion.⁹⁹⁴ Cases are often heard by the World Bank’s ICSID; the Permanent Court of Arbitration, according to UNCITRAL rules; or the International Court of Arbitration in Paris, an arm of the International Chamber of Commerce. As noted by UNCTAD, the UN agency dealing specifically with trade, the increase in investor-state disputes usually arises as increased international investment flows lead to more occasions for such disputes, and more occasions for disputes taken together with more IIAs are likely to lead to more cases. Also, with increased numbers of investment agreements in place, more investor-state disputes are likely to be within the realm of ISDS. Another reason for the increase may be the increased complexity of recent IIAs and other regulatory hurdles in their actual implementation. Additionally, as investors hear about successful claims, more investors may be encouraged to use the mechanism.⁹⁹⁵

Advocates of ISDS, and BITs at large, argue that these provide added security to investors, which ultimately creates economic benefits for society. Specifically, as ISDS is undisputedly intended as a core

⁹⁹² Note that although Poland has a more restrictive FDI environment than Estonia according to the OECD index, Poland has signed an FIPA with Canada, implying that its FDI restrictiveness with Canada would be comparatively lower than it is with the RoW under the OECD index.

⁹⁹³ Sinclair, S. (April 2010), pg 15

⁹⁹⁴ A database of BITs can be found at UNCTAD’s website here: http://www.unctadxi.org/templates/docsearch_779.aspx

⁹⁹⁵ UNCTAD (2005)

mechanism for protecting investors' rights, it intuitively should also contribute to the wider stated objectives of its advocates in protecting such rights, i.e. preventing capital flight and maintaining investment, "enhancing"/increasing investment, and through these actions contributing to the "the well-being of society."⁹⁹⁶ For example, advocates say investor-state dispute settlement prevents capital flight in the event of a problem with investment. Also, there is a related rationale for including investor-state provisions in an agreement like CETA because "Investor-state is such an established feature of investment agreements that its absence would in fact discourage investors and make a host economy less attractive than others."⁹⁹⁷

The implications of these objectives for CETA are discussed further in the "FDI and portfolio flows..." indicator section, below.

Investor-state allowances vs. domestic law and domestic adjudication

As with any binding commitment, investor-state provisions require enforcement mechanisms since without a mechanism of enforcement investment commitments have relatively little meaning. However, some suggest that tribunals, at least as currently operating, are not necessarily the most appropriate institutional settings in which to hear investment-specific cases. Gus Van Harten of Osgoode Hall Law School suggests tribunals are "fragmented and non-hierarchical adjudicative structure of investor-state arbitration." He suggests that investor-state tribunals have in the past "been more likely to base damages awards on violations of the standard of fair and equitable treatment, in particular, than expropriation provisions in investment treaties." Further, he says "...governments are not acting responsibly to the public purse if they assume, when passing a measure, that future tribunals will favour a state-friendly as opposed to an investor-state interpretation."⁹⁹⁸ Also, some draw attention to the apparent inability to challenge cases heard under ICSID rules.⁹⁹⁹ These concerns extend to ISDS under CETA, as it appears to be on track to use the same method of tribunal arbitration. Others may disagree with the aforementioned assessment, finding that international tribunals provide an environment to hear cases that is in fact less bias than domestic courts in certain countries. And some sources emphasis

⁹⁹⁶ Trade negotiators from the European Commission, February 2011 suggest investor state provisions may increase investment (consultations with EC trade negotiations, February 2011). The EC finds in EC (2010c) "Memorandum..." page 1 that "Investors are not the only beneficiaries of investment agreements. Investment, being an important driver for economic and social development, equally benefits all stakeholders. Thus, protection of investors' rights is not an aim in itself, but serves a wider objective: to enhance investment and contribute to the well-being of society." In another publication the EC finds that "Investor-state dispute settlement, which forms a key part of the inheritance that the Union receives from Member State BITs, is important as an investment involves the establishment of a long-term relationship with the host state which cannot be easily diverted to another market in the event of a problem with the investment." (EC (2010d). "Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions Towards a comprehensive European international investment policy." COM 343 final. 7.7. 2010, pgs 9-10)

⁹⁹⁷ Ibid, confirmed by consultations with DG Trade investment and service negotiators, March 2011. Also, aforementioned consultations specifically suggest that EU and/or Canadian investment might be diverted to a country like China if not protected by ISDS in CETA. And it was inferred that this investment loss could be compounded if China were to sign an agreement with ISDS with Canada, for example, if CETA did not include ISDS. In response, it must first be recognised a wide variety of pull factors unrelated to any push factors in CETA exist in China which make it a highly attractive market to EU and Canadian investment. (And Canada's resource endowments in particular, not the prospect of ISDS, make Canada attractive to Chinese investors.) Second, while China has more recently included certain ISDS provisions in investment agreements, for example in its latest BIT with Germany, no recorded ISDS case has ever been brought against China to date. It is likely that this trend is explained in that foreign businesses might feel they would jeopardise their operations in China if bringing an ISDS case, and in fact one reason for ISDS being allowed in recent Chinese investment agreements is likely the flexibility in the scope of what is committed and the fact that such allowances could practically be more so to protect Chinese interests abroad than vice versa (see Prud'homme, Dan (2011) "Recent ISDS trends in investment agreements with China." Working Paper.)

⁹⁹⁸ Consultations with Gus Van Harten, Osgoode Hall Law School, York University, February 2011

⁹⁹⁹ Allen & Overy LLP (2010). "Investment Treaty Arbitration: Protecting and Promoting Foreign Investments." <http://www.allenoverly.com/AOWeb/binaries/51290.pdf>

that the ICSID Convention, for example, does not override domestic laws relating to sovereign immunity from the awards process, and arbitration decisions can be annulled or revised on review.¹⁰⁰⁰

More specifically, the utility of ISDS between developed countries in particular can be questioned, for example between the EU and Canada under CETA, given the strength of their existing institutional environments. Herein, a commonly held viewpoint from some opponents of investor-state provisions in agreements between countries like the US and Canada, i.e. those developed countries in NAFTA, is that investors from countries with well developed legal systems for hearing disputes will “abuse” such provisions in an effort to challenge government regulation.¹⁰⁰¹ As a note, when involving developing countries, investor-state arbitration is also not without its flaws, and in fact may be sometimes disproportionately burdensome on these countries,¹⁰⁰² although, at least theoretically, on the other hand these countries might benefit more from ISDS if they in fact bring investor security that exists comparatively more in developed countries.

Box 34: treatment of firms from third countries under certain ISDS provisions

NAFTA allows companies of any nationality incorporated in a NAFTA country to bring a Chapter 11 case (hereafter sometimes referred to as the ‘third country incorporation provision’).

As a note, the application of this provision may be somewhat limited by provisions included in NAFTA to protect against “treaty shopping,” a situation where investors search for home countries that have treaties with host countries where investments will be made. The potential for such treaty shopping was recognised in the drafting of Chapter 11 of NAFTA, which includes a provision allowing a party to deny the benefits of the agreement to investors that have no “substantial business activities” in their putative home country.¹⁰⁰³

Without further details of CETA it is unclear how the agreement might address the aforementioned

¹⁰⁰⁰ EIU (2010). “Evaluating a potential US-China bilateral investment treaty.” EIU report for the US-China Economic and Security Review Commission. EIU, London. http://www.uscc.gov/researchpapers/2010/EIU_Report_on_US-China_BIT--FINAL_14_April_2010.pdf

¹⁰⁰¹ See Public Citizen. <http://www.citizen.org/Page.aspx?pid=2309>

¹⁰⁰² On one hand, the relationship between developed and developing countries in particular might best be protected by such arbitration given the often underdeveloped nature of the dispute settlement institutions within developing countries. For example, a number of studies discuss the utility of ISDS where investors are concerned about the strength of domestic reforms implemented in countries with higher perceived risk and/or corruption, i.e. usually certain developing countries (for example, see Vandeveld, K. (1998). “Investment Liberalization and Economic Development: The Role of Bilateral Investment Treaties”. *Columbia Journal of Transnational Law*). On the other hand, it is interesting to note that the NAFTA experience suggests that there is no clear evidence of more ISDS being initiated against developing countries than developed countries, as 28 cases were brought against Canada whereas only 17 cases were brought against Mexico (a developing and emerging country as defined by the IMF, although a member of the OECD). This said, trends in NAFTA alone cannot be extrapolated to assessing the ISDS relationship between all developed countries and developing countries, and further analysis is warranted in this area.

Monetary payouts, combined with the clear concerns raised by UN panels over the impacts of investor-state provisions on developing countries in particular -- among others see UNCTAD (2007) and other groups, for example, Osogoode Law School (2010) -- suggest a need for improved arbitration of investor-state cases or dramatic changes in the system, for example moving towards contract-based approaches to ensure investment rather than IIAs. To take an example from NAFTA even, Mexico has been compelled to pay over \$187 million in damages under NAFTA (data from Sinclair (October 2010)). This is the highest amount of damages paid by any NAFTA country, and clearly has higher monetary burden on the Mexican government than it would on the US or Canada given its comparatively smaller budget.

¹⁰⁰³ Article 1113.2. For further discussion on this issue see UNCTAD (2005)

issues. The implications of including the third country incorporation provision in CETA are discussed further in the “Cost of ISDS...” and “Policy space” indicators sections, below.

Certain government officials consulted have pointed out that NAFTA Chapter 11 cases brought under NAFTA tribunals could instead be brought to domestic courts under domestic law (regardless of the existence of NAFTA), and this would also apply to CETA.¹⁰⁰⁴ This point is further analysed below.

NAFTA allows a wider breadth of recourse than in domestic law in allowing a private foreign individual to challenge a foreign government, for example in certain circumstances depending on the related commitments in terms of MFN, national treatment, minimum standards of treatment, monopolies and state enterprises, performance requirements, requirements on senior management and board of directors, among others. These provisions deal with treatment of companies along a relatively specific set of commitments.

Moreover, NAFTA provisions related to “expropriation” go beyond domestic law on the same subject (also called “takings law”). Domestic law in NAFTA countries requires compensation for direct expropriation, which under a simplified definition is when the government takes over property rights. In NAFTA, for example, provisions allowing protection of expropriation are worded in a rather unique way: allowing protection against acts “tantamount to expropriation” and wider indirect expropriation. These provisions have been applied more liberally than US domestic takings law in terms of “diminution of value,” “conceptual severance,” “police power” and the “ripeness rule.”¹⁰⁰⁵ The US takings law is known to be more complex than Canadian takings law. As such, a CETA with investor-state provisions for expropriation similarly worded to NAFTA would inferably open the door to more ambitious interpretations and usages than allowed under domestic takings laws in Canada.

Other investment enforcement mechanisms outside ISDS

The standard enforcement mechanism outside ISDS to protect investors’ rights in a trade/trade & investment agreement, and also intended to meet the same end objectives of ISDS as previously listed, is state-state dispute settlement. In state-state dispute settlement, disputes go through state representatives and tariffs are allowed to be raised or agreement concessions or obligations suspended as punitive measures.

¹⁰⁰⁴ Consultations with trade negotiators from the European Commission, February 2011

¹⁰⁰⁵ Herein “diminution of value” refers to the level of loss required to constitute expropriation; whereas the *Metalclad Corp v. United Mexican States* case (hereafter “*Metalclad*”) shows that NAFTA required “significant” impairment of the investment value, not the stricter destruction of nearly the entire value as required in US takings law. “Conceptual severance” refers to splitting the value of takings into components of space, time and function to determine the value of takings; while this concept is not typically allowed in domestic US law when determining the value of a land taking, rulings from *Metalclad*, *Pope & Talbot vs. Canada* (hereafter “*Pope & Talbot*”), and *S.D. Myers Inc. vs. Canada* (hereafter “*S.D. Myers*”) by NAFTA tribunals applied this concept. “Police power” refers to the unintentional loss of property or other economic disadvantage from ordinary, non-discriminatory state actions like regulation and taxation; whereas some suggest *Metalclad* makes a comparatively limiting judgment on the breadth of police power allowed under Chapter 11 when compared to domestic US law. The “ripeness rule” under US law finds that one must exhaust state procedures for remedy before filing a case with federal court; however, sources suggest that in *Metalclad* the ripeness rule was not required (although as a note, consultations are required before formal litigation in the NAFTA tribunal). Sources: Text of NAFTA Chapter 11, US eminent domain law, and related jurisprudence – for example, e.g. *Metalclad*, *Pope & Talbot*, and *S.D. Myers* decisions at www.naftalaw.org. Also, among secondary sources see: Shenkman, E. (2002) “Could principles of Fifth Amendment takings jurisprudence be helpful in analyzing regulatory expropriation claims under international law?” *New York University Environmental Law Journal* 11(1): 174-197; Porterfield, M. C. (2004) “International expropriations rules and federalism.” *Stanford Environmental Law Journal* 23(3): 4-90; and Been, V. and J. C. Beauvais. (2003). “The global Fifth Amendment? NAFTA’s investment protections and the misguided quest for an international ‘regulatory takings’ doctrine.” *New York University Law Review* 78 (1): 30-143.)

Drawing on other conclusions in this assessment, it is the opinion of this study that a well-crafted state-state dispute settlement mechanism might be a more appropriate enforcement mechanism than ISDS in CETA. First, given state-state dispute settlement does not bring with it the same sustainability concerns as ISDS (as described in the economic, social and environmental assessments hereto), it would have fewer negative impacts if included instead of ISDS in CETA. Second, (as described in the economic, social and environmental assessments hereto), while advocated by a variety of business groups, there is no strong evidence to suggest ISDS brings with it more/maximises net benefits (economic, social or environmental) than state-state dispute settlement. Herein, it should be noted, however, that it would seem that there is at least some risk that if not carefully awarded, remedies (raised tariffs or suspension of agreement concessions or obligations) in state-state dispute settlement might have some negative impacts, including impacts on industries indirectly related to the investment disputes at hand. Also, there would inevitably be concerns among businesses over the effectiveness and efficiency of such a mechanism when compared to ISDS. As such, both caution and tact need to be exercised in using state-state dispute settlement.

By way of context, while there has been a trend in new generation trade agreements to include ISDS, there are prominent recent examples of trade & investment agreements between developed countries which exclude ISDS.¹⁰⁰⁶ For example, the US-Australia FTA, signed in 2004 and entered into force on 1 January 2005, does not include ISDS given opposition to including such a mechanism in a trade agreement with developed countries with robust institutions. That agreement, however, includes a provision to allow reconsideration of the FTA's enforcement mechanism if warranted. Given this precedent and recent policy statements, it would not be surprising if the Australian government seeks to keep ISDS out of the Australia-Japan FTA, negotiations on which started in 2007.¹⁰⁰⁷ The recent EU-Korea FTA (like other EU-wide FTAs to date), signed in 2009 does not include ISDS.

US and Mexico

If CETA removes certain barriers in Canada to EU investment – directly or indirectly – it could directly or indirectly remove barriers to US and Mexican FDI into Canada. This is due to the Chapter 11 MFN and national treatment provisions under NAFTA that would extend to investors in “like” circumstances under CETA.

There is also an automatic extension of liberalisation afforded under NAFTA in what is known as the “ratchet” mechanism. The mechanism is invoked in instances of “autonomous” liberalisation, i.e.

¹⁰⁰⁶ “Developed” herein used in-line with the IMF categorisation

¹⁰⁰⁷ One update from the Australian authorities finds “We will continue consultations with Australian stakeholders on the merits of including investor-state dispute settlement (ISDS) in an FTA with another developed country.” (Australia-Japan Free Trade Agreement: Newsletter Update 2. http://dfat.gov.au/fta/ajfta/newsletter_update/update_2.html); whereas recent policy statements clearly indicate the Gillard government does not intend to use ISDS in trade agreements, at least those with developing countries: “In the past, Australian Governments have sought the inclusion of investor-state dispute resolution procedures in trade agreements with developing countries at the behest of Australian businesses. The Gillard Government will discontinue this practice. If Australian businesses are concerned about sovereign risk in Australian trading partner countries, they will need to make their own assessments about whether they want to commit to investing in those countries.” (Australian Government Department of Foreign Affairs and Trade (2011). “Gillard Government Trade Policy Statement: Trading our way to more jobs and prosperity.” <http://www.dfat.gov.au/publications/trade/trading-our-way-to-more-jobs-and-prosperity.html#investor-state>)

liberalisation that is considered unilateral, and applies to areas listed in Annex I of NAFTA although it does not apply to areas listed in Annex II (exclusions) of NAFTA.¹⁰⁰⁸

There remain some questions about the applicability of the NAFTA ratchet mechanism in relation to CETA. Consultations with trade negotiators suggest that CETA is unlikely *per se* to trigger the ratchet mechanism given Canada “generally liberalises on an autonomous basis.”¹⁰⁰⁹ While there could be a chance that CETA would encourage the use of Chapter 11 by the US and Mexico in situations where it otherwise would not have been used, i.e. if CETA were not implemented, these chances appear to be relatively limited.

Specifically, there is evidence that negotiations in CETA in particular could liberalise a number of services listed in NAFTA Annex II, Schedule of Canada, and while not fully clear what regulatory implications this would have for the US and Mexico they appear to be limited. CETA may liberalise sectors also listed in some form in NAFTA Annex II, Schedule of Canada, such as certain air transportation services, water transportation services, government finance, and telecom services. For example, within Annex II of NAFTA, CPC 752 Telecom Services, CPC 7549 – “Other Telecommunications Services Not Elsewhere Classified (limited to telecommunications transport networks and services)” is listed as having reservations in terms of national treatment, MFN, and senior management and boards of directors. Notably, NAFTA Annex IV, Schedule of Canada also sets reservations for “telecommunications transport networks and telecommunications transport services.”¹⁰¹⁰ In addition, the aforementioned liberalisation does not seem to constitute “autonomous” liberalisation, since available evidence suggests it would result at least partly as a result of CETA negotiations. This suggests that if CETA were to liberalise CPC 7549, such liberalisation would not automatically extend to the US and Mexico under the NAFTA ratchet. However, further details of CETA would be required to specifically analyse all types of telecom services and government finance and the related reservations in NAFTA Annex II, compared to what is being asked for in CETA in order to determine the application of the NAFTA ratchet and/or if the US and Mexico would have recourse under investor-state provisions if not extended similar treatment. A similar assessment could be performed for air transportation services and water transportation services, although these sectors would not seem to extend to the US and Mexico even if liberalised for the EU under CETA, given stipulations in Annex IV of NAFTA.

¹⁰⁰⁸ Consultations with trade negotiators from the European Commission, February 2011

¹⁰⁰⁹ Consultations with DG Trade services trade and investment negotiator in February 2011

¹⁰¹⁰ NAFTA Annex IV, Schedule of Canada reads: “Canada takes an exception to Article 1103 for treatment accorded under all bilateral or multilateral international agreements in force or signed prior to the date of entry into force of this Agreement. For international agreements in force or signed after the date of entry into force of this Agreement, Canada takes an exception to Article 1103 for treatment accorded under those agreements involving: (a) aviation; (b) fisheries; (c) maritime matters, including salvage; or (d) telecommunications transport networks and telecommunications transport services (this exception does not apply to measures covered by Chapter Thirteen (Telecommunications)).” It is notable that the aforementioned reservation (d) does not appear to include all telecommunication services that might be liberalised under CETA.

INDICATOR: FDI and portfolio flows (from CETA as a whole), FDI and portfolio flows (from Investment Chapter in CETA alone, trade flows (from Investment Chapter in CETA alone), FDI and portfolio flows (from ISDS alone), trade flows (from ISDS alone)

Canada

The following section will analyse the potential economic impacts of (1) CETA as a whole on investment, (2) an Investment Chapter in CETA, and (3) the role of ISDS, within the Investment Chapter, as a contributor to the aforementioned impacts. The analysis will draw heavily upon trends in investment and trade patterns resulting from BITs/FIPAs and hybrid trade and investment agreements like NAFTA.

FDI flows caused by relevant trade agreements and implications for CETA as a whole

It is generally recognised that investment liberalisation when combined with certain other policies encourages investment and growth.¹⁰¹¹ For example, there is a general consensus that NAFTA clearly increased FDI in Mexico.¹⁰¹² These analyses, however, may not be as relevant to CETA, as they typically involve developed countries' interactions with developing countries.

Generally, to the extent that a trade and investment agreement like CETA removes barriers to FDI it may increase FDI flows. Specifically, gravity modelling performed in this study generally supports the argument that removal of restrictions may positively impact the level of bilateral investment in such areas. See Annex 3 for further details of these results.

The impacts of NAFTA on US-Canada investments provide a useful indicator of the possible impacts of CETA on EU-Canada investment. There is evidence that NAFTA as a whole contributed to some increased investment between the two countries in certain sectors, for example in the automotive sector;¹⁰¹³ however, it is unclear as to how much the specific impact of the Investment Chapter of NAFTA contributed to the aforementioned investment flows. Moreover, Hufbauer and Schott (2005) suggest that overall (i.e. inclusive of all provisions in the agreements) "the CUSFTA and NAFTA did little to enhance the already mature direct investment relationship between Canada and the United States."¹⁰¹⁴ As such, while NAFTA in its entirety has encouraged certain investment between Canada and the US, evidence suggests its contribution to overall investment increases between the two countries has not been particularly significant.

The impact of CETA on investment in Canada will likely be larger than the relatively insignificant impacts from CUSFTA and NAFTA. The impacts will be more significant than those between Canada and the US under NAFTA because the EU is not as integrated with Canada as the US was pre-CUSFTA and pre-NAFTA.

On the other end of the spectrum, CETA will likely have a less significant impact on investment than those predicted for trade agreements between developed and developing countries. This is because there is not the same potential for investment growth present in the CETA relationship as there would be between Canada, or the EU, and certain developing nations. In a related vein, the impact of CETA will be more limited than would be found in an agreement involving developing nations given the advanced

¹⁰¹¹ For example, among others see: Kirkpatrick, C., C. George and S. S. Scriciu (2004). "Implications of Trade and Investment Liberalisation for Sustainable Development: Review of Literature." Impact Assessment Research Centre at Institution of Development Policy and Management, University of Manchester. 19 May 2004.

¹⁰¹² Among others see Hornbeck, J.F. "NAFTA at Ten: Lessons from Recent Studies." *CRS Report for Congress*. 13 February 2004; and Dee, P. and J. Gali (2003) "The Trade and Investment Effects of Preferential Trading Arrangements", NBER working paper 10160.

¹⁰¹³ Hufbauer, G.C. and J.J. Schott. (2005), Chapter 6, discusses the growth of the automotive industry (including via investment and other means) as a result of NAFTA.

¹⁰¹⁴ Ibid, pg 36

nature of the institutions and high incomes in the EU and Canada, whereas higher income countries in many cases attract less capital flows than those with lower incomes (refer to the gravity modelling in Annex 3 for related statistical correlations herein). As such, quantitative estimates in studies of agreements between developed and developing countries, for example in the EU-Andean SIA on the EU-Andean FTA,¹⁰¹⁵ or among developing countries,¹⁰¹⁶ do not provide particularly relevant estimates that can be extended to the EU-Canada CETA context.

Some studies might be used to gauge the specific impact of CETA on encouraging investment, an exercise requested by the Contracting Authority, although the studies producing quantitative results should be extending to the CETA context with great caution. For example, IBM (2008), predicts an increase of investment resulting from the EU-Korea FTA given that the FTA is a “deep FTA” and that cross-border investment between the EU and Korea would increase and third countries will also invest in Korea to benefit from improved market access. Based on these basic assumptions, the study then assumes a lower bound rise in FDI equivalent to 30% of the EU investment in Korea (slightly below \$1 billion/year) and an upper bound 60% rise in FDI (equivalent to an annual increase of FDI slightly below \$2 billion), for the purpose of inputting these assumptions into econometrics predicting according rises in GDP from the FTA over a eight year period.¹⁰¹⁷ It is beyond the scope of this SIA to assess in detail how these specific estimates might apply to CETA; however, it is quite clear that the aforementioned assumptions are just that, and while perhaps a general metric there is little reason to believe they can be used as a reliable proxy for investment increases under CETA.

By way of another comparison, a variety of studies that reach qualitative conclusions on investment encouraged by the trade agreement between the US and Australia should provide useful to generally gauging the amount of investment CETA may stimulate. This FTA is likely the best comparison to CETA available considering general similarities of the US with the EU, and Australia with Canada. Monash (2001) predicts that the FTA would not only encourage US investors to invest in Australia but also may additionally encourage them to use Australia as a base for operations in the Asia-Pacific region, and generally emphasises the ‘head-turning’ impact of generating increased interest in investing in Australia.¹⁰¹⁸ USITC (2004) finds that *“The markets in both the United States and Australia are substantially open to foreign direct investment under current policies. Therefore, according to several U.S. industry representatives, the U.S.-Australia FTA is not expected to have a significant impact on the level of U.S. direct investment in Australia, or the level of Australian direct investment in the United States.”* (emphasis added)¹⁰¹⁹ It is notable that Stoler (2009) finds that in fact several years after the FTA was in force, US investment in Australia dropped for a number of years, and Australian investment in the US surprisingly grew to exceed American investment in Australia, although also notes that a longer period of time would need to be considered before tying such trends to the US-Australia FTA.¹⁰²⁰

¹⁰¹⁵ See DEVELOPMENT Solutions et. al. (2009).

¹⁰¹⁶ Among other quantitative projections on increased investment resulting from FTAs with developing countries see Jaumotte, Florence (2004). “Foreign Direct Investment and Regional Trade Agreements: The Market Size.” IMF Working Paper: WP/04/206. <http://www.imf.org/external/pubs/ft/wp/2004/wp04206.pdf>

¹⁰¹⁷ IBM Belgium et al. (2008). “Trade Sustainability Impact Assessment of the EU-Korea FTA: Final Report – (Phase 3)” <http://www.eu-korea-sia.org/uploads/filedir/Docs/Front%20Page%20T/EU%20Korea%20FTA%20SIA%20Phase%203%20Final%20Report.pdf>

¹⁰¹⁸ Monash (2001). “An Australia-USA Free Trade Agreement: Issues and Implications.” Report for DFAT, APEC Study Centre, Monash University. http://www.dfat.gov.au/publications/aus_us_fta_mon/aus_us_fta_mon.pdf

¹⁰¹⁹ USITC (2004). US-Australia Free Trade Agreement: Potential Economywide and Selected Sectoral Effects.” USITC Publication 3697. Pg 104. <http://www.usitc.gov/publications/docs/pubs/2104f/pub3697.pdf>

¹⁰²⁰ Stoler, Andrew (2009). “Economic Impact of the AUSFTA.” Institute for International Trade. Paper for Fulbright Symposium, Canberra, Australia.

Given the aforementioned findings, it seems reasonable to assume that CETA, like the US-Australia FTA, might encourage investment in Canada and the EU to the extent envisaged by the aforementioned studies. In other words, it could encourage investment, but not significantly increase investment. This also at least leaves open the possibility that such an increase could be closer to a ‘minor’ rather than ‘significant’ magnitude.

While the US-Australia FTA is the best proxy available to evaluate investment under CETA, by way of additional analysis, there is reason to believe that investment realised under CETA could be at least slightly more significant than that under that agreement. It should be noted that Australia is significantly less restricted to FDI from the RoW than Canada in sub-sectors like fishing and telecom, which put some upward pressure on Canada’s *overall* FDI restrictiveness – whereas Australia’s overall OECD FDI Restrictiveness index was 0.270 in 2003 vs. Canada’s 0.352, and Australia’s 2010 index was 0.138 vs. Canada’s .153 (and the EU24’s was 0.048). As such, CETA may encourage investment in Canada in these sub-sectors more so than the US-Australia FTA would encourage investment in such sectors in Australia. The effects of reducing investment barriers in creating economic benefits in Canada will likely be magnified by other provisions of CETA, particularly if these provisions are ambitious – for example those on government procurement, IPR, labour mobility, competition policy, and free circulation of goods (as well as those provisions typically found in FTAs in terms of trade facilitation, all provisions liberalising restrictions in services, and tariff reductions). These provisions may act along with other provisions of CETA to encourage investment flows, particularly in sectors where EU-Canada economic activity occurs as a result of global and regional value chains, investment and sales by foreign affiliates, and flows of people and technologies.¹⁰²¹ For these reasons, it is the opinion of the study that CETA might encourage ‘notable’ investment, and this might be somewhat greater than the investment realised under the US-Australia FTA.

In summary, it is the opinion of the study that CETA might encourage ‘notable’ investment, but it is less likely that it will be ‘significant.’ The metrics herein are defined in the methodology of this SIA, and are supported by relevant economic literature.

Impact of BITs on investment flows and trade, and implications for an Investment Chapter in CETA

Certain studies suggest BITs themselves are not significant determinants of investment flows, and emphasise other factors are more significant determinants of investment flows. For example, Hallward-Driemeier (2003) and Rose-Ackermann (2005) use empirical analysis to find BITs are not significant determinants of investment flows.¹⁰²² UNCTAD (2003) finds that “BITS play a minor role in influencing global FDI flows” and in another part of the report says “the policy framework [of BITS] is at best enabling, having by itself little or no effect on FDI flows.”¹⁰²³ However, it should be highlighted that the same study does suggest that provisions in BITs do provide an “enabling” function for IIAs to ensure investors certain security in their investments after they decide to invest in a country.¹⁰²⁴ Specifically, factors that encourage FDI may include reduction of numerous NTBs restricting investment, and pull

¹⁰²¹ Goldfarb, D and L. Theriault (2010). “Canada’s ‘Missing’ Trade With the European Union.” The Conference Board of Canada

¹⁰²² Hallward-Driemeier, M. (2003). “Do Bilateral Investment Treaties attract FDI?” http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2003/09/23/000094946_03091104060047/Rendered/PDF/multi0page.pdf; Rose-Ackermann (2005). “Foreign Direct Investment and the Business Environment in Developing Countries: the Impact of Bilateral Investment Treaties.” Yale University.

¹⁰²³ See UNCTAD (2003). *World Investment Report 2003*, pgs 89 and 91 respectively

¹⁰²⁴ For example, see UNCTAD (2003). *World Investment Report 2003*. For a comparison of the conflicting economic theories on foreign investment see Sornarajah, M. (2004) “The International Law on Foreign Investment.” 2nd edition, Cambridge.

factors such as market size, infrastructure, human capital, and certain tax rules/incentives,¹⁰²⁵ among other elements.

In contrast, other studies find a positive correlation between the *number* of BITs signed and the foreign investment received by a country. Importantly, these findings do not suggest that signing a BIT in itself increases investment, although do somewhat support the economic utility in signing BITs.¹⁰²⁶ Still, even while establishing correlation of investment flows with the number of BITs signed, a number of other explanatory variables outside the BITs themselves would appear to be at work contributing to such increases in investment.

Other studies critique Hallward-Driemeier (2003) directly, noting that the study does not fully consider the international integration that BITs in fact do foster. They suggest a country may benefit from a BIT if the treaty allows them to enhance international connections, like those related to expansion of trade or to increase value added in products. Swenson (2008)¹⁰²⁷ follows this line of thought, and focuses on BIT's effect on trade rather than just investment, analysing trade flows from 1975 to 2000. The study's results suggest that investment treaties improve capital goods and differentiated goods, particularly for multinational companies. One reason used to explain why past studies did not find BITs to be statistically significant facilitators of commerce is that expanded activity via foreign presence of multinational firms does not necessarily imply that the host country will see high value foreign investments given the firms' main investments may take an intangible form rather than one in fixed assets. The study also suggests, although not supported with specific evidence, that this may increase multinational technology transfer and finds "if BITs encourage high value trade, their presence may bring the benefits such as enhanced rates of country growth that are hoped for by signatory countries."¹⁰²⁸

Although the literature is mixed on the precise economic benefits of BITs as trade and investment enhancing agents, what is clear in the studies that find BITs/the signing of more BITs to be trade and/or investment enhancing is that the level of any benefit is much less when involving a high income country with strong institutions. Specifically, the effects of BITs are far more significant when involving low income countries than when involving high income countries. Swenson (2008) makes this point. Blonigen and Wang (2005),¹⁰²⁹ Subramanian and Wei (2007),¹⁰³⁰ and Wheeler and Mody (1992),¹⁰³¹ while

¹⁰²⁵ However, it should be noted that Blonigen and Davis (2000) suggest that tax treaties specifically can discourage FDI as they can be used to reduce tax evasion and not only make it easier to avoid double taxation. Source: Blonigen, B. and R. Davis. 2000. "The Effects of Bilateral Tax Treaties on U.S. FDI Activity." NBER Working Paper 7929. Cambridge: National Bureau of Economic Research.

¹⁰²⁶ Egger, P. and M. Pfaffermayr. (2004) "The impact of bilateral investment treaties on foreign direct investment" *Journal of Comparative Economics*, 32(4):788-804. Egger, Peter and Valeria Merlo. (2007) "BITs and FDI Dynamics." *World Economy*; Salacuse, J. and N. Sullivan. (2004) "Do BITs Really Work? An Evaluation of Bilateral Investment Treaties and Their Grand Bargain," *Harvard International Law Journal*: 46(1); Neumayer, E. and L. Spess (2005). "Do Bilateral Investment Treaties Increase Foreign Direct Investment?" *World Development*, 33(10): 1567-1585. Note: Egger and Pfaffermayr (2004) look at OECD investment, while Salacuse and Sullivan (2004) and Neumayer and Spess (2004) use larger sets of countries.

¹⁰²⁷ Swenson, D. (2008). "Bilateral Investment Treaties and International Integration." University of California Department of Economics. Working Paper.

¹⁰²⁸ Ibid at Pg 14

¹⁰²⁹ Blonigen, B. A. and M. Wang. (2005) "The Inappropriate Pooling of Wealthy and Poor Countries in Empirical FDI Studies", in T. Moran, E. Graham and M. Blomstrom (eds.) "Does Foreign Direct Investment Promote Development? Washington D.C.: Institute for International Economics, 221-243.

¹⁰³⁰ Subramanian, A. and SJ Wei. (2007) "The WTO Promotes Trade, Strongly but Unevenly," *Journal of International Economics*, 72(1):151-175.

¹⁰³¹ Wheeler, D. and A. Mody. (1992) "International Investment Location Decisions: The Case of US Firms." *Journal of International Economics*, 33:57-76.

not all analysing BITs specifically, emphasise that the magnitude of trade and investment differs notably when measuring the effects of international trade and investment agreements by grouping countries with different levels of development. Nunn (2007)¹⁰³² and Levchenko (2006)¹⁰³³ find that investment protections are associated with an increase in the quality of trade, and that these impacts are most prominent in countries with weaker institutions and infrastructure needed to facilitate trade. As mentioned, the gravity modelling in Annex 3 of this study further lends support to the concept that capital generally moves from higher income countries to lower income countries.

The above findings in their entirety do not provide a strong consensus that signing a BIT by itself will either prevent capital flight or enhance/increase investment, although there are certainly elements of evidence that indicate that under certain circumstances they could increase trade and commerce more generally. Specifically, BITs do appear to have economic benefits in that they provide benefits to multinational companies; foster forms of intangible business relationships, which may have economic benefits; stimulate the flows of trade in terms of capital and differentiated goods in countries with lower incomes; and in the sense that the signing of more BITs is positively associated with FDI flows (although a number of other explanatory variables outside the BITs themselves would appear to be at work contributing to such increases in investment). It is noteworthy herein that the studies that most strongly tout the benefits of signing a single BIT suggest the effects will be felt more in areas that *are not* measured in conventional investment statistics. Given these findings, an Investment Chapter in CETA by itself will appear to have a positive impact in terms of encouraging trade, and less evidence suggests it might encourage investment as commonly measured.

This said, there is good reason to believe that the economic benefits created by an Investment Chapter in CETA would be less than significant, i.e. on a level of minor to notable but less than significant. This conclusion is reasonable given the mixed evidence as to the magnitude of economic benefits from BITs, none of which suggest that they lead to *significant* increases in trade, intangible linkages, or investment specifically, and many of which specifically suggest they in fact do not lead to significant increases in investment. The conclusion is also based on the fact that the trade, commerce and investment institutions in the EU and Canada are among the best in the world and citizens of Canada and EU MS enjoy some of the highest per capita incomes in the world – which, according to the literature, would mean they would see relatively less benefits from an agreement like CETA than if the agreement were to involve a developing nation(s) with lower per capita incomes. This likely also explains why all of the 6 FIPAs Canada has signed with EU countries are with relatively less developed countries as opposed to with its most important investment partner in Europe – the UK.¹⁰³⁴

¹⁰³² Nunn, Nathan. (2007) "Relationship-Specificity, Incomplete Contracts and the Pattern of Trade." *Quarterly Journal of Economics*, Vol. 122, No. 2.

¹⁰³³ Levchenko, A. (2006) "Institutional Quality and International Trade." *Review of Economic Studies*.

¹⁰³⁴ It would be useful to analyse what additional areas of liberalisation might be afforded by CETA investment provisions vs. existing EU BITs and Canada FIPAs. For example, compared to the bilateral Canada-Poland FIPA/BIT, or through the Canadian and EU accession to the OECD Code on for Liberalisation of Capital Markets. This comparison would also be helpful in determining the specific impact of ISDS under CETA. Unfortunately, given the lack of details of CETA among other limitations, it is beyond the scope of this SIA to perform such an exercise.

Box 35: FDI vs. portfolio flows*FDI vs. portfolio flows*

Further research and analysis is needed to distinguish the specific impacts of an Investment Chapter in CETA on FDI vs. portfolio flows. There are distinctions in decision-making behind portfolio investments compared to FDI. Generally, the aforementioned impacts regarding investment flows specifically apply to FDI given its relative importance in the economic studies reviewed. Still, extending the economic logic exhibited in the gravity modelling in this report, portfolio flows will likely be encouraged through CETA to the degree that barriers currently inhibiting flows are removed, although the significance of this is uncertain. This would facilitate capital flows to firms that rely on portfolio investment, for example the finance industry. As with FDI, however, the impact of CETA in this regard would be lessened given the advanced nature of the institutions currently in Canada.

Impact of BITs on FDI flows and trade, and implications for ISDS provisions in particular

The role of ISDS in *particular* as a contributor to the aforementioned economic benefits of an Investment Chapter in CETA is unclear, as there does not appear to be readily available empirical evidence on the matter. Care should be taken not to confuse causality between the increased investment that CETA could foster by reducing barriers to investment in Canada via an Investment Chapter as a whole and the impacts of investor-state provisions in CETA in particular.

In the absence of such results, one could make three different assumptions as to the role of ISDS in contributing to these benefits. These assumptions would be that ISDS is an enabler in the economic benefits that are created by BITs, as it is clearly a core pillar of enforcement in such agreements; ISDS does not contribute to these overall benefits; or that the allowance of ISDS in BITs actually reduces the level of economic benefits otherwise created by BITs.

The first of these assumptions is the most intuitive and provides some support for the idea that ISDS allowances in CETA would contribute to the overall economic benefits attributed to an Investment Chapter in CETA. Given the findings of Swenson (2008) that BITs provide economic benefits to multinational companies, it appears reasonable to suggest that many multinational companies at least are aware of the security provided by ISDS. However, given the lack of available surveys suggesting otherwise, it seems reasonable to suggest that most SMEs would not consider ISDS as providing “security” to their investments as the economic benefits of ISDS appear to be most significantly realised by MNCs and given the general trend among SMEs in lacking resources for large scale legal action like the type typically involved in ISDS cases. Still, there are examples of individual investors or families of investors bringing Chapter 11 cases against Canada, for example. Also, as discussed in the “Impact on institutional and regulatory environment for investment” indicator hereto, ISDS most certainly serves a role in the functioning, and thus as some kind of contributor to the economic benefits realised from BITs, which are tantamount to an Investment Chapter in CETA. To be sure, without an enforcement mechanism there is no reason to believe that an Investment Chapter in CETA would stimulate the same positive economic impacts as predicted earlier in this analysis.

However, even the aforementioned assumption does not convincingly support the conclusion that ISDS as currently structured maximises sustainable economic benefits. First, and again, the assumption cannot be made with full confidence and would need to be subject to empirical testing. Second, an

important distinction should be drawn between ISDS as a general enforcement mechanism, just as state-state dispute settlement is an enforcement mechanism, vs. investor-state provisions in particular.

The question then becomes what is the ideal structure for an investment enforcement mechanism in maximising what is referred to hereafter as ‘sustainable economic benefits.’ As discussed under the “Impact on institutional and regulatory environment for investment” indicator, opponents of ISDS have not only expressed criticism over the existence of investor-state provisions but many appear more critical of the compounded effect such provisions have when implemented by existing tribunals in terms of lack of transparency, fairness and other issues. This suggests that the ISDS mechanisms as currently functioning are not ideal in the sense that they deserve to be improved in order to more clearly create sustainable economic benefits. In analysing the economic benefits of ISDS one would have to consider how much of a magnifying effect investor-state provisions will have in contributing to the economic benefits from an Investment Chapter. Further, even if ISDS is an enabler within the Investment Chapter of CETA in creating economic benefits, what additional benefits might be realised if ISDS provisions in CETA operated in a different, arguably improved/less partial, manner than ISDS at present? And how would this compare to the state-state dispute settlement mechanism, as mentioned in the “Impact on institutional and regulatory environment for investment” indicator? Moreover, do the monetary benefits from ISDS outweigh the potential negative economic costs as mentioned under the “Economic costs and benefits of ISDS” indicator below?

Note: Even if it was found that ISDS as currently structured in CETA is ideal and would contribute to maximise the economic benefits realised from an Investment Chapter and CETA as a whole, several questions must be answered before concluding that ISDS provisions in CETA will produce *net* sustainability benefits.¹⁰³⁵

Conclusion

The impact of CETA as a whole on investment in Canada will likely be positive, may be ‘notable,’ but is expected to be less than ‘significant.’ More specifically, CETA will likely positively impact investment in certain sectors in particular. Investment liberalisation in CETA is likely to reinforce existing trends in bilateral investment, with the majority of flows expected to be directed towards the financial, energy and mining sectors. If on the table, removal of restrictions in such sectors as telecom; transportation services, including water and transportation services; fisheries; finance; and mining/uranium sub-sectors may positively impact the level of bilateral investment in such areas. While consultations with the Contracting Authority suggest that CETA negotiations would not actively seek liberalisation of the media content sector in Canada, and thus it was not looked at in-depth in this SIA,¹⁰³⁶ it should importantly be noted that stakeholders, for example the Canadian Media Production Association (CMPA), have expressed concern that liberalisation of telecoms could in-turn lead to pushes to liberalise certain cultural industries.¹⁰³⁷ For more specific information on CETA’s impact on investment in certain sectors refer to the sectoral assessment sections of this SIA.

¹⁰³⁵ In particular, it would need to be carefully considered if the monetary benefits discussed therein would outweigh the potential negative economic, social and environmental impacts mentioned in both the “Economic costs and benefits of ISDS” and economic, social, and environmental “policy space” indicators hereto. It is unclear if ISDS as currently structured in CETA would create any such net benefits, and there is reason to be concerned that it would result in net losses.

¹⁰³⁶ Consultations with the Contracting Authority at the Project Steering Committee Meeting in September 2010. As a note, if CETA were to liberalise the media sector in Canada, which has the highest level of restrictiveness of any sector in Canada, this would encourage investment in this sector.

¹⁰³⁷ Feedback from the CMPA, finds that “The CMPA is therefore of the view that any move to significantly liberalize the FDI rules in telecommunications, as contemplated by the CETA, would inevitably lead to comparable liberalization of FDI rules for broadcasting and broadcasting distribution – irrespective of the fact that the EU professes that it is currently not seeking

The Investment Chapter in CETA in particular could encourage economic benefits in Canada although the significance of these will likely be minor to notable at most. An Investment Chapter in CETA could provide benefits to multinational companies and foster forms of intangible business relationships, which may have economic benefits; and stimulate the flows of capital and differentiated goods. Evidence is much weaker that it will specifically increase FDI flows. It is unclear if an ISDS mechanism as currently structured within an Investment Chapter would in itself create net economic benefits, although there is doubt that the mechanism as operating is maximising sustainable economic benefits, let alone maximising such benefits in a way state-state dispute settlement in CETA could not.

EU

Investment in the EU under CETA would likely follow the positive trend predicted for Canada, but on a smaller scale. This is due to the relatively larger size of the EU economy compared to Canada, which makes a percentage increase in Canadian investment in the EU less significant in the EU than the impact in Canada of same increase in EU investment in Canada. Also, given Canada is currently more restricted to FDI than the EU at large (see “Quality of institutional and regulatory environment” indicator above), reduction of investment barriers in CETA will likely encourage new investment in Canada more so than in the EU. CETA is likely to reinforce existing trends in Canada-EU bilateral investment. This assessment is generally supported by the FDI gravity modelling performed for this report (see Annex 3).

With regards to ISDS in CETA in particular, given limitations in research and analysis on the subject, it is not possible to decompose the economic impacts such provisions may have on the EU. On one hand, as mentioned in the Canada section, it seems intuitive that ISDS allowances in CETA would contribute to the overall economic benefits attributed to an Investment Chapter in CETA and CETA overall. However, again, this assumption cannot be made with full confidence and would need to be subject to empirical testing.

Several questions must be answered before concluding that ISDS as currently structured in CETA will produce net sustainability benefits. In the absence of such research and analysis it is unclear if an ISDS mechanism as currently structured within an Investment Chapter would in itself create net economic benefits. And even if it can be generally ascertained that ISDS provisions in CETA would contribute to the overall economic benefits realised from an Investment Chapter in CETA and CETA as a whole, it is doubtful whether the mechanism is operating in maximising sustainable economic benefits.

US and Mexico

CETA would have a minor or perhaps lesser impact on investment into the US and Mexico, and may encourage investment from these countries in Canada. Chapter 11 of NAFTA automatically extends MFN and national treatment status to the US and Mexico in “like” circumstances that may occur under CETA, and thus the US and Mexico in certain cases would be granted the same opportunities to invest in Canada that the EU would enjoy under CETA. However, the legalities herein are nuanced, and thus there may not be many benefits from CETA realised under this mechanism as a result (see the “Quality of institutional and regulatory environment for FDI” indicator for more information herein). Of course the US and Mexico would not be granted the same opportunities Canada would gain to invest in the EU,

liberalization of FDI rules as they apply to Canada’s cultural industries.” (submission to study team by Norm Bolen, CMPA, 11 April 2011)

although it should be considered that Mexico recently signed an FTA with the EU, which would likely make this mostly a non-issue for Mexico.

To the degree that EU or Canadian investment is diverted from the US and/or Mexico as a result of CETA, this would clearly negatively impact investment flows to these countries. In the US in particular, some have warned that the combined effect of the EU signing trade agreements with Canada and Korea could undermine US trade policy, investment inclusive, which has failed thus far to move forward with certain trade agreements, like the one with Korea.¹⁰³⁸ The degree of this diversion is uncertain.

INDICATOR: GDP

It is a well documented phenomenon that investment liberalisation when combined with trade and certain other policies encourages GDP growth.¹⁰³⁹ CGE modelling results from studies conducted on trade agreements between developed countries such as the US and Australia, EU and Korea, and Japan and Australia,¹⁰⁴⁰ and between developed and developing countries like the EU-ASEAN FTA¹⁰⁴¹ suggest a strong growth in GDP from increases in trade and FDI, particularly in the long-run. Long-run capital mobility is partially responsible for this suggested growth. This body of quantitative evidence also suggests that the overall positive effects in the various sectors tend to accrue more towards services given the predominance of FDI flows to that sector.

Some studies might be used to gauge the specific impact of CETA on encouraging investment and related impacts on GDP, an exercise requested by the Contracting Authority, although the studies producing quantitative results should be extending to the CETA context with great caution. As mentioned in the “FDI and portfolio flows...” indicator, IBM (2008), assumes a lower bound rise in FDI equivalent to 30% of the EU investment in Korea (slightly below \$1 billion/year) and an upper bound 60% rise in FDI (equivalent to an annual increase of FDI slightly below \$2 billion) for the purpose of inputting these assumptions into econometrics predicting according rises in GDP from the FTA over an eight year period. The study then finds a “rather significant macroeconomic impact” on Korea, with an average annual real GDP growth rate over the eight year period tested (2008-2015) that is 0.2% higher than in the lower bound scenario without the increased investment and almost 0.4% higher than in the upper bound scenario without the increased investment.¹⁰⁴² While it is beyond the scope of this SIA to assess in detail how these specific estimates might apply to CETA, it is quite clear that the aforementioned assumptions are just that, and while perhaps a general metric there is little reason to believe they can be used as a reliable proxy for investment and related GDP increases under CETA.

More generally, however, given the findings in the “FDI and portfolio flows...” indicator, it is reasonable to suggest the impact of CETA as a whole on investment in Canada will likely be positive, could be of a notable magnitude, and thus this could contribute to some increases in GDP growth in Canada and the EU. Certain increases in efficiencies of investment under CETA could have a multiplier effect in positively impacting GDP. This conclusion is further supported by the fact that an important amount of the EU-

¹⁰³⁸ Cooper, William H. et al. (2011) “The EU-South Korea Free Trade Agreement and Its Implications for the United States.” CRS Report for Congress. 7-5700.

¹⁰³⁹ For example, among others see: Kirkpatrick, C. et al (2004)

¹⁰⁴⁰ Centre for International Economics (2005)

¹⁰⁴¹ Institute for International Development and Economics (2009). *Trade Sustainability Impact Assessment for FTA between EU and ASEAN*. March 2009.

¹⁰⁴² IBM Belgium et al. (2008). “Trade Sustainability Impact Assessment of the EU-Korea FTA: Final Report – (Phase 3)” <http://www.eu-korea-sia.org/uploads/filedir/Docs/Front%20Page%20T/EU%20Korea%20FTA%20SIA%20Phase%203%20Final%20Report.pdf>

Canada economic relationship, for example the Canada-UK economic relationship, is based on investment and more intangible connections.

The Investment Chapter in CETA in particular could encourage economic benefits of a minor to notable magnitude, yet this chapter by itself would likely result in negligible increases in GDP growth. An Investment Chapter in CETA could encourage a number of economic benefits in Canada which are not necessarily investment-related effects, although as mentioned in the “FDI and portfolio flows...” indicator the significance of these benefits will likely be minor to notable at most. Given the high level of development of both economies it is unlikely that this will lead to measurable increases in GDP growth in percentage terms. As such, ISDS allowances within an Investment Chapter in CETA would not have a measurable positive effect on GDP in either Canada or the EU.

INDICATOR: Economic costs and benefits of ISDS

Canada

Canadian stakeholders have expressed concern that investor-state provisions in CETA would lead to ISDS cases with significant costs in terms of damages and legal fees, as well as a significant number of such cases. The following analysis assesses these concerns of stakeholders using Canada’s experiences under NAFTA as a tool of comparison. Specifically, this section (1) assesses the significance of the monetary damages and legal fees borne by NAFTA signatories vs. the objectives of ISDS in terms of monetary benefits, and (2) assesses the trends in terms of number of ISDS cases over the last 16 years post-implementation of NAFTA, and determines if including ISDS in CETA would create similar trends.

Costs of NAFTA ISDS in terms of damages and legal fees

While CETA provisions modelled off on NAFTA Chapter 11 would indeed likely cost Canada directly paid-out damages on successful cases, the significance of these payments deserves further analysis. For example, from 1994 to early 2011 there were only 4 cases against Canada under Chapter 11 that resulted in monetary settlements.¹⁰⁴³ One case filed in 1997 by the Ethyl Corporation, a US chemical company suing over a ban on import and inter-provincial trade of the gasoline-additive MMT, resulted in \$US 13 million in damages. A 1998 case involving S.D. Myers Inc., a US waste disposal company suing over a temporary ban of toxic PCB wastes, resulted in payment of \$US 5 million (plus interest). And the third case, also filed in 1998, involving Pope & Talbot Inc., a US lumber company that challenged Canada’s export quota system, resulted in a payment of \$CAN 915,000.¹⁰⁴⁴ In August 2010, the Canadian government agreed to pay \$CAN 130 million to Abitibi Bowater Inc. in an out-of-court settlement over measures taken by the local government of Newfoundland and Labrador to return to the timber and water usage rights held by the company to the state and expropriate certain assets and lands associated with the company’s usage rights.¹⁰⁴⁵ This single case is particularly significant from a monetary standpoint as it constitutes approximately 83% of all investor-state damages (as valued in \$CAN) awarded during the 16 years in which NAFTA has been in force.¹⁰⁴⁶

¹⁰⁴³ Review of cases as listed in Sinclair (Oct. 2010). The Trammel Crow Co. case, filed in 2001, resulted in an out-of-court settlement that did not involve payment of damages

¹⁰⁴⁴ Review of cases as listed in Sinclair (Oct. 2010)

¹⁰⁴⁵ All figures taken from review of cases as listed in Ibid

¹⁰⁴⁶ Author’s calculations using figure of \$CAD 157 million mentioned in Ibid (which appears to incorporate at least some interest rate and exchange rate calculations).

The aforementioned four cases are out of a total of 28 cases filed under Chapter 11 against Canada from 1994-2010, and out of a total of 64 cases formally brought by NAFTA countries against one another during that time.

The importance of the payments under these four cases is debatable. These cases account for a miniscule percentage of the \$CAD billions in average annual trade flows among Canada and its NAFTA partners. As another illustration, on one hand it might be more relevant to compare the damages paid under Chapter 11 cases to money that could be spent on environmental protection programs, given these four cases deal with environmental issues in some manner; however, this could be a skewed comparison given the uncertainty of ISDS as a contributor to economic benefits (see “FDI and portfolio flows...” indicator) and given that, depending on a number of factors, a dollar increase in government spending may have a higher or in fact lower than 1:1 cost-to-sustainability-benefits ratio.

As an alternative comparison, Table 67 not only considers average bilateral FDI flows among NAFTA countries but also NAFTA’s contribution, in percentage terms, to FDI flow from the US (the source of all the winning investor-state cases) to Canada. It shows that NAFTA investor-state provisions have produced relatively little economic costs as a percentage of bilateral FDI flows from the US to Canada over the last 16 years.

Table 67: \$ Costs of US Chapter 11 cases against Canada vs. avg. annual bilateral FDI inflows from US (millions of \$CAD)

Total Chapter 11 damages paid by Canada since NAFTA implemented/yr*	Avg. annual FDI inflow from US to Canada	Damages as % of FDI inflow from US
\$10.5 (yearly avg.)	\$12,337	0.0%

*From \$CAD 157 in Sinclair (Oct. 2010), unclear from source if this amount also includes any awards of legal costs (see note 3, pg 22 Sinclair (Oct. 2010)). Sources: Damage amounts from Sinclair (October 2010), FDI statistics from Statistics Canada. FDI avgs. from 1994-2009 (data for 2010 unavailable)

The legal fees Canada has incurred defending against these specific cases and in defending all other cases (i.e. those that are still pending or did not result in the award of damages to the complainant) should additionally be considered. It has been suggested that the cost of administering a NAFTA arbitration panel usually falls between \$500,000 to \$1 million or more, and the losing party typically pays the costs of the arbitration itself; additionally, governments “routinely incur costs of several million dollars or more” when defending themselves in NAFTA cases.¹⁰⁴⁷ One might question these numbers, for example, using cost estimates of the Canadian *Tembec Inc. vs. the US* case, which sources report resulted in the costs of the proceedings (which appears to be all of the costs) of only \$271,000 to be paid to the US government. Still, some sources suggest that the legal defence costs of ISDS could be particularly extreme, citing examples where EU MS have had to pay \$USD 10-15 million in defending themselves under bilateral investment treaties.¹⁰⁴⁸ Other sources suggest that any ISDS costs should be contextualised by comparing the costs of domestic legal fees for a case of expropriation vs. legal fees incurred in the ISDS tribunal.¹⁰⁴⁹ Tribunals decide how to divide legal costs among parties to disputes. Table 68 considers how the costs of defending an investor-state case *combined* with the damages that

¹⁰⁴⁷ Sinclair (Oct. 2010), pg 24

¹⁰⁴⁸ Consultations with Gus Van Harten, Osgoode Hall Law School, York University, February 2011

¹⁰⁴⁹ Consultations with DG Trade services trade and investment negotiator in February 2011

may be paid out upon losing such a case compare to FDI flows. It also considers the economic benefits of ISDS in NAFTA vs. costs in terms of impacts on policy space.

Table68: Cost-to-benefit in Canada of NAFTA ISDS (money figures in millions of \$CAD)

ISDS damages paid by Canada since NAFTA implemented PLUS avg. legal costs of defending all cases/yr*	Avg. annual FDI inflow from US to Canada	Damages PLUS legal costs as % of avg. annual FDI inflow from US	Economic benefits for Canada from ISDS in NAFTA	Costs to Canada from ISDS in CETA in terms of impacts on policy space***
\$29/yr avg.	\$12,337	0.2%	May have/continue to contribute to some overall trends in NAFTA to: Increase in trade, and relationships stimulating output and VA = Uncertain. And even if contributed to the aforementioned benefits, overall benefit has been less than significant**	Potential costs from ↓ policy space as relevant to the SIA = Uncertain. Likely less than significant but could be minor to notable

* Uses \$CAD 157 in Sinclair (Oct. 2010) as amount of damages, unclear from source if this amount also includes any awards of legal costs (see note 3, pg 22 Sinclair, S (Oct. 2010)). Uses the extreme upper bound of \$CAD 10 million as the cost of every one of the 28 investor-state cases brought against Canada since 1994 (this is extreme given the average costs are likely far less and given that if the defendant is successful they often are at least partially compensated for their costs). Herein, costs of successful cases only would be \$CAD 197 million. **Finding from Hufbauer and Schott (2005) *** Economic, social and environmental “policy space” as relevant to this SIA and as further analysed under the policy space indicators hereto. FDI avgs. from 1994-2009 (data for 2010 unavailable). Sources: Damage amounts from Sinclair (Oct. 2010), FDI statistics from Statistics Canada

Drawing from Table 68, even when adding in an extreme upper bound for legal costs, the aforementioned conclusion remains the same, i.e. that NAFTA ISDS has produced relatively little costs when compared to US-Canada investment flows since the implementation of NAFTA. However, and importantly, NAFTA ISDS also has not produced a relatively significant/quantifiable monetary benefit. There are also policy space implications of such ISDS, which are discussed further in the “Policy space” indicator(s) hereto.

It is worth noting that there has been some discussion in Canada over who will pay the damages of NAFTA Chapter 11, which could have implications for individual provinces’ budgets. The issue here is over if or to what extent the federal government of Canada should be responsible for paying the damages of Chapter 11 against the actions of local governments. Most recently, after the Abitibi Bowater settlement the Canadian Prime Minister is reported as saying “I have indicated that in future, should provincial actions cause significant legal obligations for the government of Canada, the government of Canada will create a mechanism so that it can reclaim monies lost through international

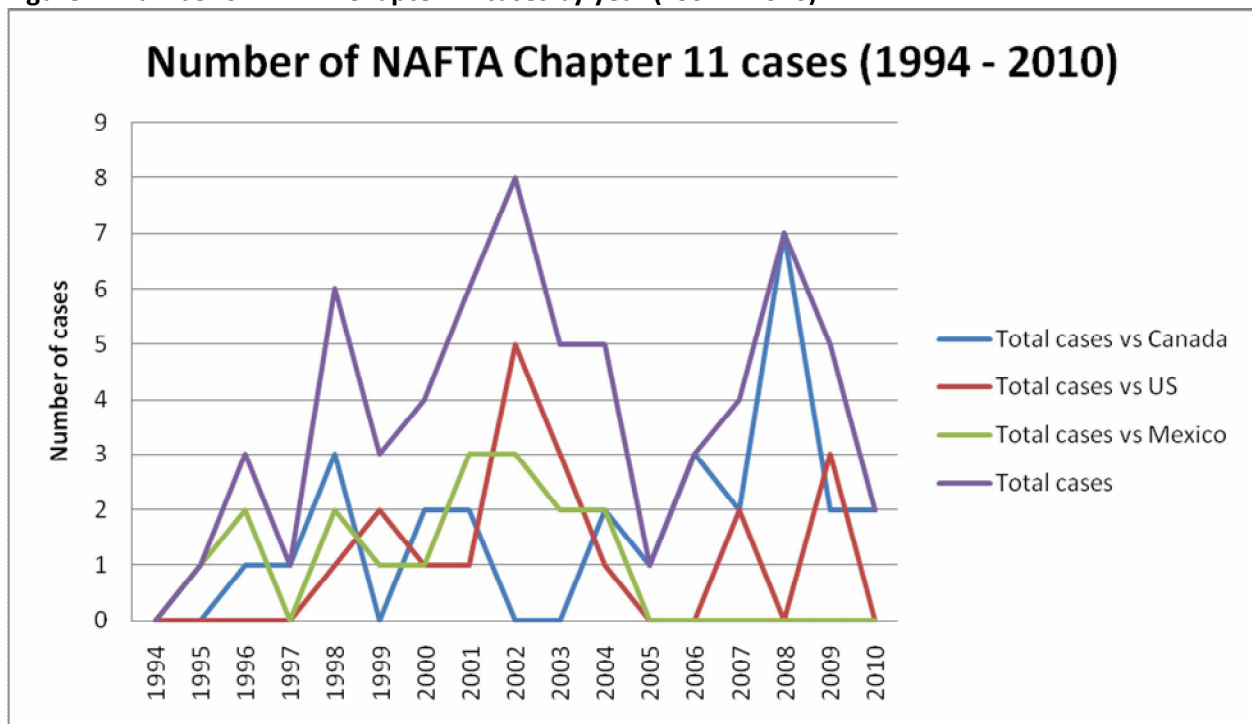
trade processes.”¹⁰⁵⁰ It is unclear how this mechanism might work, although if provinces are made responsible for paying damages this would put a new source of pressure on their budgets.

Number of ISDS cases under NAFTA

As mentioned, there have been 64 Chapter 11 cases formally filed from 1994- 2010. US investors brought 43 cases (27 cases against Canada and 16 against Mexico), Canadian investors brought 18 cases (17 against the US and 1 against Mexico), and Mexican investors brought 3 cases (2 against the US and 1 against Canada).

There does not appear to be a clear trend in the overall number of Chapter 11 cases brought over the last 16 years. Figure 7 below illustrates this point. However, one could cautiously point out a few trends. First, there is a trend in recent years towards not bringing cases against Mexico. There does appear to be somewhat of an increased trend in bringing cases against Canada (brought by US investors). There does not seem to be a particularly identifiable trend in cases brought by Canadian investors.

Figure 7: Number of NAFTA Chapter 11 cases by year (1994 – 2010)



Sources: Cases tallied from Sinclair (Oct. 2010)

Despite these findings, it is worth noting that at the international level the frequency of ISDS cases have risen dramatically since 1994. As mentioned previously, UNCTAD suggests that the increase in investor-state disputes has arisen as increased international investment flows and more IIAs lead to more occasions for such disputes and related cases. Also, with increased numbers of investment agreements in place, more investor-state disputes are likely to be within the realm of ISDS. Another reason for the increase may be the increased complexity of recent IIAs and other regulatory hurdles in their correct

¹⁰⁵⁰ *The Globe and Mail*, August 27, 2010, page B3

implementation. Additionally, as investors hear about successful claims, more investors may be encouraged to use the mechanism.¹⁰⁵¹

The four successful Chapter 11 cases brought against Canada to date are out of a total of 28 cases filed under Chapter 11 against Canada from 1994-2010, although only 13 cases appear to have been completed¹⁰⁵² and some sources suggest that only 8 cases in fact have led to a publicly confirmed final result in arbitration.¹⁰⁵³ These figures suggest that 14% of NAFTA investor-state cases against Canada have resulted in awarding of damages to date. Although, when calculating this as a percentage of decided cases, depending on the number one uses for decided cases this means either 31% or 50% of cases have resulted in awarding of damages. It is worth noting that Canada has defended against the highest number of investor-state cases under NAFTA.¹⁰⁵⁴

As a further note, there does not appear to be a particularly significant trend in terms of the industries in which Chapter 11 cases have been brought against Canada, as these 28 cases include a wide array of industries: chemicals; recreation (outfitting/hunting); water disposal; water transport; lumber, paper and forestry; mining; fishing; oil and gas; courier services; real estate; media; dairy; healthcare; construction; pharmaceuticals; and on energy-related taxation policies.

Conclusions:

This analysis puts into perspective the direct monetary cost of the damages awarded and trends in terms of number of cases brought under Chapter 11 under NAFTA 16 years after implementation. The costs are not as significant as some stakeholders suggest but at the same time have not produced a significant quantifiable net monetary benefit. There has not been a clear trend in the overall number of Chapter 11 cases. This understanding is useful when considering the potential impacts of ISDS in CETA.

Damages and number of ISDS cases under CETA

Consultations with EC trade negotiators suggest that the fact that CETA is unlikely to liberalise the Canadian market much beyond what is afforded to the US and Mexico under NAFTA should serve to reduce the significance of damages and legal fees and the number of cases brought under CETA's ISDS mechanism.¹⁰⁵⁵

Allowing ISDS in CETA will clearly open a new avenue for EU investors to sue Canadians, as the EU is not a party to NAFTA (although technically EU firms seemingly have had some chance to utilise ISDS under NAFTA given its 'third country incorporation' provision). Further, judging both from consultations with EC trade negotiators and stakeholders, CETA would at least provide certain types of liberalisation not currently afforded to the US and Mexico in NAFTA. These advances may be in the mining (uranium), transportation services, fisheries, and finance sub-sectors. As discussed in the "FDI and portfolio flows..." indicators, these advancements will likely create some economic benefits, however minor. At the same time, however, these advances clearly increase the probability that investor-state cases would be initiated against Canada.

¹⁰⁵¹ UNCTAD (2005)

¹⁰⁵² Review of cases as listed in Sinclair (Oct. 2010)

¹⁰⁵³ Consultations with Gus Van Harten, Osgoode Hall Law School, York University, February 2011

¹⁰⁵⁴ Specifically, 9 more than the US and 11 more than Mexico (or 9 depending on if one considers the "Halcehtte" and "Scott Ashton Blair" arbitrations as listed in Sinclair (2010) that according to that same source never commenced). Since no notice of arbitration was even provided for these 2 cases they are ignored throughout this analysis. The US had 19 cases filed against it and Mexico had 17 cases filed against it from 1994 – Oct. 1, 2010. Source: Review of cases in Sinclair (Oct. 2010)

¹⁰⁵⁵ Consultations with DG Trade services trade and investment negotiator in February 2011

Herein, the level of litigiousness of EU investors would be one determinant of the frequency and monetary costs Canada would incur as a result of including ISDS in CETA. For the sake of analysis, assuming the EU is as generally as litigious as the US, and if the same basic liberalisation is afforded to the EU as afforded to the US under NAFTA, this would imply that Canada could expect to be on the defensive for the same number of cases and pay damages and legal fees roughly around the same as incurred under NAFTA to date. Specifically, taking from the upper bound estimates in Box 36, this would mean that from 2012 to 2028 (assuming CETA goes into effect in 2012), Canada might expect around 43 CETA ISDS cases from the EU, the successful of which might cost \$197 million in combined damages and legal costs. Overall, Canada might expect ISDS in CETA to cost it around \$CAD 437 total in the 16 years post-implementation of CETA, which averages to \$CAD27.3 million per year. Taking from the numbers in Box 36 in section on the EU below, Canada might expect an average initial claim to be around \$USD 564 million. Canada might even expect more significant numbers herein given CETA will liberalise some areas more so than NAFTA, although at the same time the impacts of this 'additional' liberalisation could be just as well offset by lesser liberalisation in other areas than that afforded to the US and Mexico under NAFTA. The aforementioned figures are obviously only rough estimates, meant to provide a general idea of the number of cases and level of damages and legal fees Canada might expect under ISDS in CETA and can be adjusted in level of magnitude from there given a number of considerations. As mentioned in the below section for the EU, the frequency with which intra-EU ISDS cases have been brought and the sizeable claims in those cases indicate that it is not unreasonable to compare the level of litigiousness in the EU with that in the US.

Box 36: Can an investor from any country sue Canada under CETA?

NAFTA allows for companies of any nationality incorporated in a NAFTA country to bring a Chapter 11 case. For example, this implies that an EU company incorporated in Canada can already bring a case against Canada under Chapter 11. This allowance does not appear, at least judging from the names of the complainant's in Chapter 11 cases, to have been used thus far. This could be for any number of reasons, most likely of which is that investors are unaware this mechanism exists.

Still, including this allowance in CETA creates a sizeable risk of investor-state litigation against Canada. While on one hand the existence of this allowance would seem to imply that the impact of CETA should be relatively limited, given investors from EU nations (or other third countries) already incorporated Canada, the US or Mexico could technically have already brought cases against such countries under NAFTA. Still, it is clear that if CETA were to include a similar mechanism it at very least would be opening up a significant channel for litigation. Moreover, if by including the mechanism in CETA this were to heighten awareness that the same mechanism existed in NAFTA, litigation could increase under both NAFTA and CETA rules.

Table 69: \$ Potential costs-to-benefits to Canada of including ISDS in CETA (\$CAD)

Potential damages PLUS legal costs* from cases against Canada under CETA ISDS/yr	Potential number of cases against Canada under CETA ISDS/yr	Avg. annual FDI inflow from EU to Canada**	Damages PLUS legal costs as % of avg. annual FDI inflow from EU	Economic benefits for Canada from ISDS in CETA++	Costs to Canada from ISDS in CETA in terms of impacts on policy space**
\$27.3 million/yr avg.*	2.7/yr avg.	\$8,813 million	0.3%	May lead to: Increase in trade and otherwise foster relationships stimulating output and VA – lack of maximisation of sustainable economic benefits in ISDS as structured = <i>Uncertain. Likely less than significant</i>	Potential costs from ↓ policy space = <i>Uncertain. Likely less than significant but could be minor to notable</i>

*Uses the extreme upper bound of \$CAD 10 million as the cost of defending every one of the 28 Chapter 11 investor-state cases brought against Canada since 1994 (this is extreme given the average costs are likely far less and given that if the defendant is successful they often are at least partially compensated for their costs). FDI avgs. from 1994-2009 (data for 2010 unavailable). ++ Based on analysis in the “FDI and portfolio flows...” indicator hereto. **Policy space as defined and discussed in the “Policy space” indicator hereto. Sources: NAFTA damage amounts from Sinclair (Oct. 2010), Statistics Canada, and sources cited in aforementioned indicators

In conclusion, as shown in Table 69 above, while including ISDS in CETA indeed *may* create some economic benefits it is uncertain that they would be maximised in a sustainable way. (Moreover, it is unclear that ISDS would create a net/overall sustainability benefit for Canada.) A careful judgement is required in determining if the threat in terms of number and monetary costs of including ISDS in CETA would outweigh the economic benefits. On one hand, there is a risk for Canada in including ISDS in CETA. On the other hand, when put into a proper context, the monetary costs of defending against ISDS cases brought by the EU through CETA will not be as significant as certain stakeholders suggest nor will they have a significant impact on investment flows. This latter point is reinforced by consultations with Gary Hufbauer of the Institute of International Economics in Washington D.C. who suggests that “Given the maturity of both Canada and the EU in investment matters, I would subscribe to the view that the investment provisions [in CETA] are more like an insurance policy against rare but damaging events. And because the adverse events are rare, the impact on investment flows will be quite small.”¹⁰⁵⁶ A more detailed understanding of the dynamics herein can be ascertained by reading through the “Policy space” and “FDI and portfolio flows...” indicators.

EU

¹⁰⁵⁶ Consultations with Gary Hufbauer, Institute for International Economics, February 2011

As mentioned in the “Impact on institutional and regulatory environment...” indicator section, it is unclear if the experiences of developing countries are a useful proxy for assessing the implications on the EU of ISDS under CETA. The EU only contains five “emerging and developing countries” as defined by the IMF (Romania, Latvia, Bulgaria, Poland and Lithuania). Canada has already signed FIPAs with three of these countries (Latvia, Poland, and Romania) (and the remainder of its EU MS FIPAs are with some of the less wealthy countries in the EU, i.e. the Czech Republic, Hungary and Slovakia) and thus ISDS in CETA is not a particularly new instrument in dealing with these specific countries. Moreover, the vast majority of EU states are developed, some with some of the highest levels of economic development in the world. As such, a consideration of ISDS experiences in or otherwise involving developing countries is foregone in this analysis.

There are some incentives in CETA ISDS that could lead to cases being brought against the EU, and thus result in damages paid by the EU. Given Canada to date has not signed a comprehensive agreement like NAFTA with provisions allowing all Canadian investors to sue EU governments, although it does have FIPAs with 6 EU countries, CETA will allow Canadian and certain other investors a wider mandate to sue the EU over the policies of its MS.

The significance of ISDS under current EU BITs in terms of cost and number of investor-state cases should be contextualised by a number of factors. First, it must be considered that the EU has 1,200 BITs already in place, so investor-state provisions are not new to MS. At the same time, there remain concerns from different groups over the regulatory structure of BITs as they have been instituted in the EU, suggesting that in fact this experience has not been entirely positive. Under Article 207(1) of the TFEU, FDI now falls within the scope of EU commercial policy. The EU now has the exclusive competence to abolish barriers to foreign direct investment, whereas previously Member State BITs protected EU investors (market access was already an EU competence). Recently, the EC has discouraged individual MS from signing BITs in favour of an EU-wide approach to signing investment agreements.

Other information regarding current EU BITs in terms of cost and number of investor-state cases deserves consideration. There have been numerous relevant cases of intra-EU ISDS disputes, some of which have led to sizeable damages paid by governments. For example, the *Vattenfall vs. Germany* case, named after the Swedish state-owned power company, was settled with the German government in 2010. Although the awards in this case seem to be kept secret, given the sizeable sum of the original claim of €1.4 billion plus interest, it could be possible that a substantial sum was paid in this case. It should be noted that this case refers to intra-EU ISDS rather than ISDS with non-EU countries.

Importantly, ISDS in CETA would bind the EU in its entirety in a way it has never before committed in any ISDS mechanism. These obligations would put an increased burden on the EC, particularly when becoming responsible for defending against investor-state cases brought against any number of the governments within MS in the EU.

Who is more litigious in Chapter 11 disputes, the US or Canada?

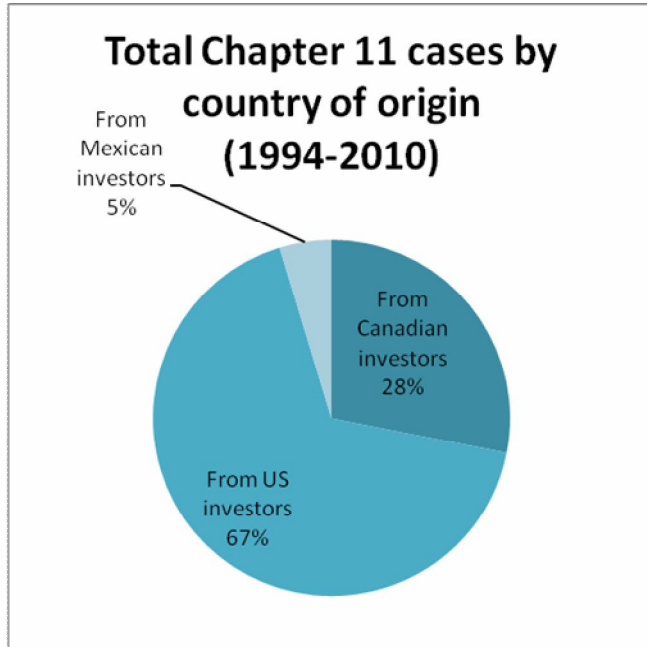
Some stakeholders have pointed to the commonly circulated notion that US is the most litigious country on earth to infer that the number of cases and size of the claims brought under ISDS in CETA would inevitably be less than those brought under NAFTA, as the US would not be a signatory to CETA. While it may be the case that the US is particularly litigious at large, this assertion and its extension to CETA deserves further analysis.

Number of Chapter 11 cases (1994-2010):

The below Figure 8, which measures the total number of NAFTA Chapter 11 cases by country of origin since implementation of NAFTA, supports the aforementioned assertion. 67% of Chapter 11 cases have

been brought by US investors, while only 28% of cases have been brought by Canadian investors and 5% by Mexican investors.

Figure 8: Chapter 11 cases by country of origin (1994 – 2010)

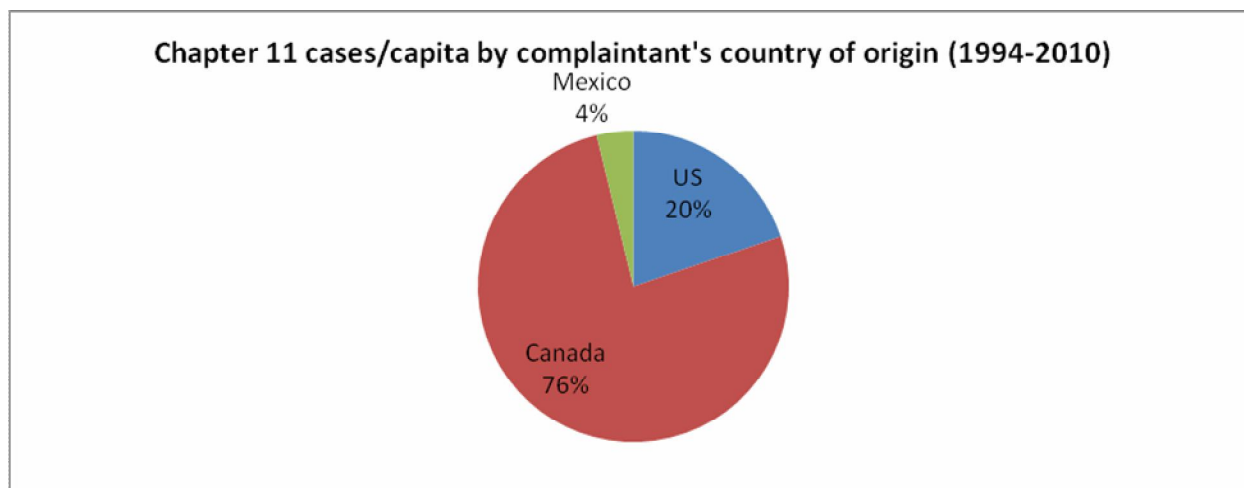


Source: Cases tallied from Sinclair (Oct. 2010)

However, when considered on a per capita basis, Canada in fact is more litigious in Chapter 11 cases than the US. Per capita, a Canadian investor is 3.9 times more likely to bring a Chapter 11 case than a US investor. And a Canadian investor is 20.1 times more likely to bring a Chapter 11 case than a Mexican investor.¹⁰⁵⁷

Figure 9: Chapter 11 cases per capita by complainant's country of origin (1994-2010)

¹⁰⁵⁷ For simplicity, this assumes roughly the same number of investors per capita in the US, Canada and Mexico.



Sources: Cases tallied from Sinclair (Oct. 2010), population statistics from CIA Factbook 2011

Average claims in Chapter 11 cases (1994-2010):

In addition to having a higher propensity to bring Chapter 11 cases, Canadian investors are also more likely to bring higher value claims than US investors, although not higher than Mexican investors. Canadian Chapter 11 claims are on average 2.5 times higher than US claims. And in fact Mexico has the highest average claims record out of any NAFTA country; however, this result is heavily skewed given the 2009 *CANCAR* case brought by Mexican investors requests “\$2 billion annually” (considered for this exercise simply as \$2 billion), given information is only available for this and one other Mexican claim brought to date (*Signa SA*), and given Mexico has only brought three Chapter 11 cases since 1994.

Table 70: Average claim (millions \$USD) in Chapter 11 cases by complainant’s country of origin (1994-2010)

Complainant’s country of origin	Avg. Chapter 11 claim
Mexico	\$1025*
Canada	\$979
US	\$387

Notes: Does not include damages awarded to complainants for legal fees. Claims listed in \$CAD in Sinclair (Oct. 2010) considered 1:1 with \$USD. *2009 *CANCAR* case brought by Mexican investors requests “2billion annually,” although for the purposes of this exercise only \$2billion used. *Grand River Enterprises Six Nations Ltd* (2003) claim of “between \$310 and \$664 million” thus avg. cost of \$487 used. No amounts available for 2009 Cemex case brought by Mexican investors. US claims exclude *Peter Pesic* case and *Georgia Basin Holdings* (as well as *Scott Ashton Blair* and *Halchette*, which apparently involve US investors vs. Mexico), as no data is available on these cases. Source: data compiled from Sinclair (Oct. 2010)

By a different comparison, Canadians do not bring claims that are as high on average; however, they still remain higher than those brought by the US. Specifically, among Chapter 11 cases brought either by Canadian investors vs. the US or US investors vs. Canada, the claims of Canadian investors are on average 1.8 times higher than those brought by US investors.

Table 71: Average claim (millions \$USD) in Chapter 11 cases brought either by Canadian investors vs. US or US investors vs. Canada (1994-2010)

Complainant's country of origin	Avg. Chapter 11 claim
Canada	\$1030
US	\$564

Notes: Does not include damages awarded to complainants for legal fees. Claims listed in \$CAD in Sinclair (Oct. 2010) considered 1:1 with \$USD. *Grand River Enterprises Six Nations Ltd* (2003) claim of "between \$310 and \$664 million" thus avg. cost of \$487 used. US claims exclude *Peter Pesic* case and *Georgia Basin Holdings*, as no data available on these cases. Source: data compiled from Sinclair (Oct. 2010)

In conclusion, the assertion that the impacts of ISDS in CETA would inevitably be less serious than under NAFTA because the US would not be a signatory to CETA is seriously misleading. In fact, when analysing the data, a Canadian investor is 3.9 times more likely to bring a Chapter 11 case than a US investor and on average brings Chapter 11 claims that are 2.5 times higher than US claims. However, it should also be noted that it does not appear that Canada (or Mexico) has won a Chapter 11 case that has resulted in the defendant paying damages, although in some cases they have split the costs of the case with the defendant. Nonetheless, these findings have obvious implications for CETA, specifically that the EU should be more wary about Canada bringing more investor-state cases than perhaps otherwise assumed.

There are other issues of concern with ISDS under NAFTA, which could also apply in CETA, that appear to be overlooked. As mentioned, NAFTA allows for companies of any nationality incorporated in a NAFTA country to bring a Chapter 11 case, and if CETA were to include this same allowance it would create a sizeable risk of litigation against EU. For example, a US company incorporated in the EU could in theory bring an investor-state case against the EU under CETA ISDS. Given the fact that the US is perceived as one of the most litigious country in the world, this possibility brings sizeable risk. Moreover, if by including the mechanism in CETA this were to heighten awareness that the same mechanism existed in NAFTA, litigation could increase under NAFTA and CETA rules.

Given these findings, as with Canada, a careful balancing act is required in determining if the threat in terms of number and monetary costs of including ISDS in CETA would outweigh the economic benefits. The table below provides a cost-to-benefit comparison of including ISDS in CETA.

Table 72: \$ Potential costs-to-benefits to the EU of including ISDS in CETA (millions of \$CAD)

Potential damages PLUS legal costs* from cases against the EU under CETA ISDS/yr	Potential number of cases against EU under CETA ISDS/yr	Avg. annual FDI inflow from Canada to EU**	Damages PLUS legal costs as % of avg. annual FDI inflow from Canada	Economic benefits for the EU from ISDS in CETA++	Costs to the EU from ISDS in CETA in terms of impacts on policy space**
\$10.6/yr avg.*	1.1/yr avg.	\$8,189	0.1%	Increase in trade and otherwise foster relationships stimulating output and VA – lack of maximisation of sustainable economic benefits in ISDS as structured = <i>Uncertain. Likely less than significant</i>	Potential costs from ↓ policy space = <i>Uncertain. Likely less than significant but could be minor to notable</i>

*Uses the extreme upper bound of \$CAD 10 million as the cost of defending every one of the 17 Chapter 11 investor-state cases brought by Canada since 1994 (this is extreme given the average costs are likely far less and given that if the defendant is successful they often are at least partially compensated for their costs) . FDI avgs. from 1994-2009 (data for 2010 unavailable). ++ Based analysis in the “FDI and portfolio flows...” indicator hereto. **Policy space as defined and discussed in the “policy space” indicators hereto. Sources: NAFTA damages from Scott Sinclair (Oct. 2010), Statistics Canada, and sources cited in aforementioned indicators

In conclusion, as shown in Table 72 above, while including ISDS in CETA indeed may create some economic benefits it is uncertain that they would be maximised in a sustainable way. (Moreover, it is unclear that ISDS would create a net/overall sustainability benefit for the EU.) On one hand, there is a risk for Canada in including ISDS in CETA. On the other hand, when put into a proper context, the monetary costs of defending against ISDS cases brought by the EU through CETA will not be as significant as certain stakeholders suggest nor will they have a significant impact on investment flows. A more detailed understanding of the dynamics herein can be ascertained by reading through the “Policy space” and “FDI and portfolio flows...” indicators.

US and Mexico

Investor-state provisions in CETA are unlikely to have a significant impact on costs borne by, or the number of cases against, either the US or Mexican government. While CETA could theoretically increase the damages awarded by the Canadian government to US and Mexican companies under NAFTA investor-state provisions given the usage of the ratchet mechanism, as discussed in the “Impact on institutional environment” indicator hereto, these situations could be limited. Given these factors, it seems unlikely that the damages from any such litigation would be particularly significant.

INDICATOR: Impacts on economic policy space

Canada, EU, US and Mexico

BASELINE & ANALYSIS

An Investment Chapter in CETA clearly would create reductions in regulatory flexibility in the EU and Canada. These reductions would first be caused by liberalising certain sectors. They would be caused by preventing foreign governments from denying national treatment and MFN to investors. They would be caused by other requirements that are standard in most trade agreements, for example requirements for a minimum standard of treatment, restrictions on expropriation, and prohibitions on performance requirements, among other requirements depending upon the agreement. CETA may also institute investor-state arbitration to enforce these requirements. While all these examples indeed constitute a reduction in regulatory flexibility, as explained in the methodology section, the “policy space” indicator in this SIA is exclusively used to measure reductions in the ability of governments to make policies that have clear economic, social or environmental benefits.

Some of the aforementioned reductions in regulatory flexibility will contribute to the economic benefits discussed under previous indicators in this section, however others may also constitute a reduction in economic policy space as it is used in this SIA. However, further analysis would be needed in this area in order to create a fuller assessment of these impacts. Particularly when considering the extent to which ISDS in CETA might be more liberal than domestic takings laws in Canada and the EU in its definition of expropriation, this might have some negative implications on economic policy space in the EU and Canada (refer to the “Impact on institutional and regulatory environment.” indicator for more on this issue). As mentioned in the “...social policy space” indicator in the Social Assessment below, ISDS in CETA may reduce economic policy space by putting some limits on otherwise useful capital controls. Regulatory reductions on performance requirements may create some risk of reducing economic policy space of the type assessed in this SIA, although, again, without a more thorough assessment herein, which is outside the scope of this SIA, this is unclear (the discussion on offsets in the Government Procurement section in this SIA sheds light onto some questions that may need to be answered before making a fuller assessment herein).

There are few if any impacts expected on economic policy space in the US and Mexico.

SOCIAL ASSESSMENT

INDICATOR: Impacts on social policy space (and spill-over effects on other types of policy space)

Canada

Canadian stakeholders have expressed concern that ISDS under CETA would lead to reductions in Canadian policy space. The main concerns of stakeholders are that investor-state provisions and their application in ISDS under CETA would threaten policy space by creating regulatory chill, reversal and/or undermining of public policies already in practice, and make it difficult to reverse failed privatisations. There are also concerns that CETA’s potential liberalisation of current investment policy and laws will limit policy space. While one could consider the impacts ISDS has had on developing countries in assessing the impacts ISDS in general could have on Canada, there are many obvious institutional, regulatory and other differences between developing countries and Canada and the EU at large. As such, the following analysis assesses the aforementioned stakeholder concerns using a more robust and directly relevant comparison – Canada’s experiences under NAFTA. As explained in the methodology

section, the “policy space” indicator in this SIA is only used to measure reductions in the ability of governments to make policies that have clear economic, social or environmental benefits.

Regulatory chill and other reductions of policy space

Stakeholders have expressed concerns that ISDS under CETA will lead to “regulatory chill” or other forms of reduced policy space that will have negative impacts on public welfare. Regulatory chill as defined in this analysis is a situation where the government does not enact new ‘socially desirable’ laws and regulations – i.e. those to improve areas like human rights (including human health, safety, and education) and environmental protection – in fear that foreign investors may seek compensation under certain legal agreements, like a trade agreement, and/or doing so could lead to capital flight.¹⁰⁵⁸ The analysis uses this definition as opposed to a wider definition of regulatory chill given analysis based on a wider definition would stray from an SIA analysis. Some scholars suggest there are generally three types of regulatory chill or reduced policy space: (1) proposed regulatory measures may be abandoned or modified before they are introduced in the legislative or other rule-making process, (2) proposed measures may be abandoned or modified after they are introduced but before they are adopted, and (3) measures may be abandoned or modified after they are adopted.¹⁰⁵⁹

It is difficult to comprehensively analyse the extent of regulatory chill caused by a trade agreement. Among other reasons, a case does not necessarily have to be brought in order to cause a wave of regulatory chill, as the mere existence of investor-state provisions in a trade agreement can cause regulatory chill. This said, turning to NAFTA, while it will never be known if certain measures in Canada were not enacted in the past because of a chilling effect, it seems reasonable that if the chilling effect was significant enough, given Canada’s solid institutions and communication mechanisms, as well as an informed population, then government, academics, or other stakeholders would have pointed to the most significant and solid examples of regulatory chill. Still, and again, there is some uncertainty in this assumption.

Box 37: Reductions in Canadian policy space caused by Chapter 11: A questionnaire

In an effort to add some more clarity to this situation, a questionnaire was distributed in mid February 2011 to the Attorney General’s offices in all Canadian provinces and territories, as well as to the office at the national level, to assess the impacts of regulatory chill and other forms of reduced policy space in Canada caused by NAFTA Chapter 11 and the predicted impact under CETA ISDS. The results from one questionnaire, ultimately answered not by the Attorney General’s office but the Ministry of Economic Development and Trade in Ontario, indicated that NAFTA has had a “Non-existent or negligible” impact in terms of regulatory chill and did not create any other limits on policymaking and/or policy implementation in Ontario. Also, the same results suggest that investor-state provisions if included in CETA will likely have a “Non-existent or negligible” impact on policymaking in Ontario. This feedback downplays the importance of certain examples of regulatory chill in Ontario cited by some scholars.¹⁰⁶⁰

¹⁰⁵⁸ For definitions of “regulatory chill,” among other sources see: Cotula, L. (2008). “Reconciling regulatory stability and evolution of environmental standards in investment contracts: Towards a rethink of stabilization clauses.” *Journal of World Energy Law & Business. Oxford Journals*. June 2008. 1(2): 158-179.; and Neumayer, E. (2001) “Greening trade and investment: environmental protection without protectionism.” Earthscan Publications, London.

¹⁰⁵⁹ Consultations with Gus Van Harten, Osgoode Hall Law School, York University, February 2011

¹⁰⁶⁰ For example, see: Kukucha, C. (2008). *The Provinces and Canadian Foreign Trade Policy*. UBC Press, Vancouver. 2008.

Results from the questionnaire sent to New Brunswick provide no rankings on NAFTA's or CETA's impact on policy space given the stated sensitive nature of the NB Attorney General office's involvement in the CETA negotiations. Feedback from the questionnaire sent to Alberta only suggests that the province takes a range of issues into account when making regulations, including Canada's international trade obligations. No other responses were received.

Below is a broad and brief overview of NAFTA investor-state challenges that have been claimed will or actually have led to regulatory chill or otherwise reduce policy space in Canada. This is followed by a summary analysis of what these examples mean for CETA.

Effect on public services/would-be public services

Auto insurance: Perhaps the most clear-cut example of regulatory chill directly resulting from NAFTA investor-state provisions is where New Brunswick abandoned a public auto insurance proposal after threat of a Chapter 11 lawsuit. Sources suggest that Ontario also backed away from an automobile insurance plan given the precedent in the New Brunswick case.¹⁰⁶¹ It should be noted that regulation of auto insurance may not conventionally be thought of as part of 'socially desirable' regulation and thus the extent to which these instances are considered regulatory chill under the definition used in this SIA is debatable.

Postal services: In 2005, concerns were expressed over the UPS Chapter 11 case challenging the cross-subsidization of the Canadian Postal Service within the Canadian postal market, which was seen by some stakeholders to threaten the monopoly and undermine state regulation in the sector.¹⁰⁶² However, the case was subsequently dismissed.

Health: British Columbia requested a clear definition of what social services were committed in Annex II (exclusions) of NAFTA, and were assured that "public education, public training, health and child care" were included in provisions related to cross-border investment and services.¹⁰⁶³ In other words, none of these services fall under the full purview of the NAFTA investor-state mechanism. Also for context, there are provisions in NAFTA Chapter 11 to allow companies to operate services for public health and education without fear of being sued.¹⁰⁶⁴ Also, as stipulated by NAFTA Article 1108, Article 1102 does not apply to measures that relate to social services such as healthcare (or childcare and social welfare).

On healthcare specifically, particularly private healthcare, as distinguished from wider 'health-related' measures which are mentioned below, no successful investor-state case has been brought against Canada since NAFTA has been enacted. The most recent case on healthcare in Canada, *Centurion Health Corporation vs. Canada* which disputed that the Canada Health Act had limited investment opportunities in Canada by monopolising the healthcare market, was dismissed on procedural grounds in August 2010.

¹⁰⁶¹ Ibid

¹⁰⁶² Public Citizen (2005). "NAFTA's Threat to Sovereignty and Democracy: The Record of NAFTA Chapter 11 Investor-State Cases 1994-2005." February 2005. <http://www.citizen.org/documents/Chapter%2011%20Report%20Final.pdf>

¹⁰⁶³ Kukucha, C. (2010). "Provincial Pitfalls: Provinces and the Canada-EU Trade Negotiations." University of Lethbridge. URL: <http://www.cpsa-acsp.ca/papers-2010/Kukucha.pdf>

¹⁰⁶⁴ NAFTA Chapter 11, Article 1101, sub-article 4. "Nothing in this Chapter shall be construed to prevent a Party from providing a service or performing a function such as law enforcement, correctional services, income security or insurance, social security or insurance, social welfare, public education, public training, health, and child care, in a manner that is not inconsistent with this Chapter." (emphasis added)

Nonetheless, concern exists about the regulatory chill investor-state provisions/ISDS in NAFTA may create on health-related regulations. While not solely related to health issues, the Government of Canada abandoned a regulation in December 2001 to prohibit the display of “light” and “mild” descriptors on tobacco packing after Phillip Morris International protested the ban.¹⁰⁶⁵ Salazar (2010) suggests that recent NAFTA tribunal decisions confirm that “...a non-discriminatory regulation that may affect foreign investors’ property rights, but advances a public purpose may not constitute expropriation.”¹⁰⁶⁶ In other words, in practice leeway exists in policymaking for public purposes under the investor-state provisions in NAFTA Chapter 11, particularly Article 1110. However, the same analysis goes on to suggest there are still significant uncertainties in Chapter 11 which may cause regulatory chill, particularly in areas related to Canada’s pro-healthy eating policies.¹⁰⁶⁷

Also, as further discussed below, there have been a notable number of environmental cases brought under Chapter 11, some of which also touch somewhat upon the issue of public health. For example, there is the aforementioned *S.D. Myers Inc.* case where a US waste disposal company sued and won over a temporary ban of toxic PCB wastes. There is also the aforementioned *1997 Ethyl Corporation* dispute, where the Canadian government settled out of court with the Ethyl Corporation over Canada’s ban on the import and inter-provincial trade of the gasoline additive MMT, a suspected neurotoxin. There is the ongoing case, filed in August 2008, in which *Dow Agro Sciences* alleges the 2006 Quebec ban on the use of pesticides for cosmetic lawn care was imposed without a scientific basis or opportunity for the company to prove the pesticides are safe, and that the ban is tantamount to expropriation.

Education: No investor-state cases regarding education have been brought against Canada to date.¹⁰⁶⁸ Readily available evidence does not suggest NAFTA has created significant regulatory chill on measures promoting education.

Environment

There have been a number of environmental cases brought under Chapter 11 of NAFTA. In fact, as of a decade after NAFTA was in force, over ¼ of all investor-state disputes involved environmentally-related concerns.¹⁰⁶⁹ The aforementioned *S.D. Myers Inc.* and *Ethyl Corporation* cases involved environmental issues. While not only related to environmental issues, some observers raise environmental concerns over the August 2010 *Abitibi Bowater Inc.* out-of-court settlement over measures taken by the local government of Newfoundland and Labrador to return to the state timber and water usage rights held by the company and expropriate certain assets and lands associated with the company’s usage rights.¹⁰⁷⁰ Among other issues, the case concerns the role of Abitibi Bowater, who was in bankruptcy, in paying to clean up the environmental pollution it left at several former properties. These cases are of great

¹⁰⁶⁵ Pavey, B. and T. Williams (2003). “The North American Free Trade Agreement: Chapter 11.” Parliamentary Research Branch, Library or Parliament of Canada. 26 February 2003.

¹⁰⁶⁶ Salazar, A. V. (2010). “NAFTA Chapter 11, Regulatory Expropriation, and Domestic Counter-Advertising Law.” *Arizona Journal of International and Comparative Law*, 27 (1): 32

¹⁰⁶⁷ Ibid

¹⁰⁶⁸ Review of cases as listed in Sinclair (Oct. 2010)

¹⁰⁶⁹ Hufbauer and Schott (2005)

¹⁰⁷⁰ Sinclair (Oct. 2010) at pg 25 suggests “...the *Abitibi Bowater* settlement entails an open-ended, excessive conception of property rights that goes well beyond reasonable protections and domestic legal norms...Whenever natural resource concessions are revised or revoked, however legitimate the government’s reasons, investors can now be expected to invoke NAFTA’s Chapter 11.”

concern to a variety of stakeholders who are worried they will erode protection of plant, animal and human safety.¹⁰⁷¹

There are a number of ongoing NAFTA investor-state cases that involve environmental issues and have raised concerns that they might reduce policy space to the detriment of the environment. For example, Bilcon Corporation is suing the Canadian government under NAFTA Chapter 11 for over \$188 million for rejecting a development project in White Point Quarry, which lies along a coastal area near the Bay of Fundy biosphere reserve.

Capital controls

Recent studies have expressed concern over the restrictions investor-state provisions can put on a government's flexibility to institute capital controls.¹⁰⁷² The proper usage of capital controls has wide-ranging implications in terms of maintaining the macroeconomic health of an economy, which in turn has implications on controlling inflation, curtailing wage inequality, among other social issues.

Box: 38 Frequency of cases citing the expropriation provision and breadth of expropriation protections

It is important to note that not all investor-state brought against Canada under NAFTA to date were based on the particularly controversial expropriation clause, although 79% were. For example, while the expropriation aspect of NAFTA cases often receives the most publicity, 6 cases out of the 28 NAFTA cases brought to date – *United Parcel Service of America Inc.* (2000); *Trammel Crow Co.* (2001); *Peter Pesic* (2005); *Mobil Investments Canada, Inc. & Murphy Oil Corporation* (2007); *Bilcon Inc.* (2008); and *Centurion Health Corporation* (2008) – 21%, do not invoke the expropriation provision in Chapter 11.¹⁰⁷³ Half of these cases were already mentioned in this “Policy space” indicator as being of concern to stakeholders, and the *Mobil* case, which has not been mentioned thus far, is also of concern to some. Of these cases the *Bilcon* and *Mobil* cases are still under review and the others have ended without known damages.

The frequency of the usage of expropriation clauses, when considered alongside the principle that the allowances for cases on expropriation under NAFTA are wider than those under domestic Canadian law, produces a stronger force to reduce policy space. Still, there is not persuasive evidence that this will necessarily result in reductions of policy space considered relevant to this SIA. The significance of the expropriation flexibility in particular is uncertain given the relatively limited NAFTA jurisprudence on the issue. On one hand, one could suggest the limited jurisprudence on the subject allows for the possibility that this allowance is a relatively minor issue; however, many cases in NAFTA are still undecided (i.e. 15 or 20 depending on one what information one consults as to the state of such cases). Also, there does not seem to be much utility, let alone equity, in allowing foreign investors to bring cases regarding expropriation in way not allowed to domestic investors.

¹⁰⁷¹ Among others, see The Council of Canadians. “NAFTA’s Chapter 11 investor-state dispute process: New challenges to Canadian environmental and health policy call NAFTA into question.”

¹⁰⁷² Gallagher, K. (2010)

¹⁰⁷³ Review of cases in Sinclair (Oct. 2010)

Given the lack of clear implications of these issues under NAFTA precedent, there is not enough evidence to suggest that under CETA they will have clear impacts on policy space that will be of significance. Still, they are cause for concern.

In addition to the aforementioned examples, which focus largely on regulatory chill concerns, certain sources infer that allowing ISDS like that in NAFTA in an agreement could actually lead to reversal and/or undermining of public policies currently in practice and this would have negative impacts on public welfare.¹⁰⁷⁴ For example, stakeholders suggest some NAFTA cases have indeed undermined currently in force domestic and international laws.¹⁰⁷⁵ Without a rigorous legal analysis it is not possible to fully assess the extent of these claims.

Difficulty in reversing 'failed' privatisations

As discussed in the government procurement section, investor-state provisions in CETA could conceivably discourage private services (including those that were formerly public and then made private) from being made public. Stakeholders have expressed particular concern that failed privatisations might not easily be remedied by making such services public for fear of investor-state litigation. Examples are cited where investor-state provisions have made reversing failed privatisations costly.¹⁰⁷⁶

However, these trends should be put into context. To the extent these concerns arise from the protection against expropriation allowed in CETA, domestic takings laws require compensation for typical forms of expropriation anyway (as discussed in the "Impact on the institutional and regulatory environment..." indicator). In other words, a lawsuit on expropriation issues could be brought, and can already be brought, in domestic courts *without* CETA investor-state provisions, with some rather rare exceptions as discussed in the "Impact on the institutional and regulatory environment..." indicator and again mentioned in the above Box 38. Also, it should be recognised that the government retains the right to act in what it considers the public interest, for example in nationalising failed private services, although if it loses an investor-state case it may have to pay compensation.

Regarding the latter example on nationalising failed privately delivered services, the below Box 39 briefly considers if investor-state provisions in CETA could make it more difficult to nationalise certain services, and includes a mention of water delivery and management services which were not covered in NAFTA in the same way stakeholders suggest they may be in CETA. It should be stressed that the impact of nationalisation, privatisation, and the difficulties that implementing either one has on the actual end quality of public services, which is a major focus of privatisations in addition to controlling the costs to government of otherwise providing such services, deserves an analysis of its own which is outside the scope of this SIA.

¹⁰⁷⁴ Public Citizen (2005)

¹⁰⁷⁵ For example, respectively referencing the *S.D. Meyers* (1998) and *Pope & Talbot* (1998) cases under NAFTA Chapter 11 against Canada, Public Citizen (2005) finds "...the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and the U.S.-Canadian Softwood Lumber Agreement, were both successfully challenged using NAFTA investor-state system and damages were awarded in both cases."

¹⁰⁷⁶ See examples in, among others: Sinclair (Oct. 2010)

Box 39: Will investor-state provisions in CETA make it more difficult to nationalise certain services?

Certain provisions in CETA on services and investment may compound the indirect, long-term trends towards forms of privatisation of certain services that are not currently as competitive as they would be with CETA as mentioned in the “Quality of goods and services” indicator in the Government Procurement section; however, it is unclear to exactly what extent this will make it more difficult to reverse failed privatisations in Canada or the EU. Stakeholders warn that CETA will in part push privatisation through a ban equity caps, performance requirements and certain other services-related provisions that will ultimately be locked in law and protected with a dispute resolution system, including via investor-state provisions.

Indeed, certain services could be subject to investor-state cases under CETA; however they must first meet some criteria (again, assuming the functioning of the Investment Chapter in CETA will be structured similar to NAFTA). For example, they should not be directly related to government procurement. They should be actually committed in CETA and legally susceptible to investor-state provisions (i.e. they are not excluded by sectoral,¹⁰⁷⁷ reciprocal and investment review reservations). To single out the expropriation clause within investor-state provisions, the government would actually have to want to nationalise/further nationalise a service that is private in some form (for a discussion on forms of nationalisation and privatisation see the box on privatisation in the “Quality of goods and services” indicator in the Government Procurement section). Lastly, and obviously, an investor-state case would actually also have to be brought.

Herein, how and why an investor-state case could challenge a nationalisation plan requires further analysis. The investor obviously needs to meet the legal requirements for bringing a case against a nationalisation. But also, the rationales behind investors bringing a case and the approaches/forms of nationalisation the government attempts to institute also requires further consideration. Specifically, what form of nationalisation is sought and what state of privatisation the target service provider is in will be a factor in determining if cases are even considered in the first place.

Additionally, and as alluded to under this indicator, it is unclear to what degree the threat of a case, or even a formally lodged case, with or without a win, would cause regulatory chill or other regulatory pressures that would complicate or actually prevent a nationalisation plan. And without this certainly there is uncertainty in how difficult it would be to actually nationalise certain services.

As such, the aforementioned limitations combined with the analysis on NAFTA precedent (i.e. only on the results of cases brought to date) suggest that it will not necessarily be as difficult to nationalise certain services under CETA as certain stakeholders seem to suggest. However, this certainly does not mean it will be easy, nor in certain cases without investor-state challenges which will cost money and may indeed derail such efforts. Also, this conclusion is based on evidence of the results of past NAFTA cases and many cases are still pending. Further, even if governments do not attempt to nationalise ‘failed privatisations’ this should not necessarily detract from certain stakeholders’ views that privatisations may result in certain negative impacts.

This issue warrants further study. For example, privatisation of water services, which were not covered

¹⁰⁷⁷ Note: Canada carried over 48 sectoral reservations from CUFSTA under Chapter 11 of NAFTA (Hufbauer and Schott (2005), pg 202.)

in NAFTA in the same way stakeholders suggest they may be in CETA, has been recorded to have mixed impacts depending on the circumstances.¹⁰⁷⁸ In fact, there is a notable amount of literature pointing out the significant negative impacts that can result from privatisation.

Liberalising current investment policy and laws

In addition to the impacts on the regulatory system caused by potential investor-state provisions in CETA, stakeholders have different views on CETA's overall impact (not only limited to ISDS) in terms of liberalising and binding liberalisation of certain Canadian laws. Some stakeholders are concerned that CETA may directly liberalise and bind liberalisation of Canada's investment requirements and this would in turn limit Canadian policy space. For example, Canada may reduce the equity cap on foreign investment in the telecom industry as a result of CETA. On the other hand, other stakeholders suggest more competition resulting from telecom liberalisation in particular is better for Canadian consumers as they pay notably more for their telecommunication services than do consumers in the EU.

At a surface level, this obviously would limit the government's flexibility in economic policymaking as previous investment restrictions would no longer be allowable; however this in itself does not indicate it would reduce the type of 'policy space' that is relevant to this SIA. An in-depth assessment of all of Canada's investment rules that may be liberalised within CETA, their utility in policymaking, and an assessment of related results would be needed to fully assess positive and negative consequences herein.

Conclusion

The full effects in terms of regulatory chill from undecided NAFTA investor-state cases has yet to be assessed, and thus it is difficult to use these examples in a way that might specifically predict the impacts of similar provisions in CETA – nonetheless, some conclusions can be made. Although certainly creating some limitation on policy space there does not appear to be sufficient evidence to suggest investor-state claims under NAFTA to date have significantly undermined Canada's domestic rules for health/safety or education, nor substantially inhibited Canada's ability to propose and implement essential environmental regulations (see Environmental Assessment below). Consultations to date with Canadian government regulators, albeit limited to Ontario (other government consultations did not produce direct answers), support this. And for context, there are provisions in NAFTA (and the GATT) that stipulate the agreement should not prevent enactment of certain justifiable measures to protect human, animal or plant life or health,¹⁰⁷⁹ which may have contributed somewhat indirectly to this outcome.

This assessment is based on imperfect information and there is some information that suggests that NAFTA has created what could be defined as regulatory chill and other reductions in policy space. Clear examples of regulatory chill as defined by some include abandonment of an auto insurance plan in New Brunswick and Ontario, as well as abandoning a plan on packaging on cigarettes. Although 3 of the 4 successful Chapter 11 cases against Canada involved regulatory inflexibility that should not be blamed solely on NAFTA but also on unrelated difficulties in domestic policymaking, they also could have somewhat reduced policy space via challenging bans on MMT, export quotas on lumber, and a

¹⁰⁷⁸ Among others see: Gleick et al. (2002)

¹⁰⁷⁹ See footnotes on related point in "Quality of goods and services" indicator and baseline for the Environmental Assessment in Government Procurement section.

temporary ban of toxic PCB wastes. Some continue to predict dire consequences for provincial and local regulatory authorities as a result of NAFTA ISDS, pointing to the 4th successful Chapter 11 case, *Abitibi Bowater*, and pending cases including the *Dow Agrosiences* and *Bilcon* case, among others. Further, there could be other forms of regulatory chill that have resulted from ISDS in NAFTA, although their regulatory significance is unclear, which compound the level of significance of such instances.

It is important to again stress that a reduction in policy space as it is sometimes defined by stakeholders is not necessarily negative, and thus it is essential to fully consider in detail the actual significance of the aforementioned initiatives as impacting the policy space indicator as defined in this SIA. While considering this, some, for example Public Citizen (2005), go to extremes in criticising ISDS in NAFTA specifically. Others, while less extreme still find that available evidence from NAFTA suggests that ISDS may “lead to reductions in policy space and that those reductions are significant in light of the risk of large awards and the general cost to the public of failures or omissions to regulate in areas of public health and environmental protection and the delivery of public services. In the absence of further study, it is not possible to rule out this troubling outcome.”¹⁰⁸⁰ This analysis disagrees with these levels of wariness over ISDS in NAFTA, and thus ISDS in CETA, for the reasons mentioned below, although also as mentioned below agrees with a need for wariness of ISDS in CETA (and NAFTA).

The available evidence does not convincingly suggest that investor-state provision in NAFTA to date have created *significant* reductions of the type of policy space relevant to this SIA. To be sure, this conclusion is reached using a reasonable threshold for burden of proof (minding the obvious dangers of thresholds that are too low or high), i.e. following the same approach to what constitutes a “significant” impact as described in the methodology of this SIA. It considers the details of the examples provided in the above section, including via a review of tribunal rulings.¹⁰⁸¹ As such, many of the extreme concerns over Chapter 11 seem misleadingly overstated, a conclusion also reached by prominent experts on the impacts of NAFTA.¹⁰⁸² Many of these concerns often continue to be based more on a scenario of ‘what if’ in terms of past and future impacts rather than the available evidence from 16 years of precedent, sometimes draw upon the questionably relevant experiences of developing countries, and appear to undervalue the nuanced sustainability implications of ISDS discussed in other indicators hereto.

Nonetheless, this analysis errs on the side of caution by concluding ISDS in NAFTA likely has created and will continue to create some reductions in policy space, i.e. policy space as relevant to this SIA, in

¹⁰⁸⁰ Consultations with Gus Van Harten, Osgoode Hall Law School, York University, February 2011

¹⁰⁸¹ Primary sources on all cases: http://www.naftalaw.org/disputes_canada.htm. For information on the 4 cases in particular:

(1) For *S.D. Myers Inc. vs. Canada* (partial award, Nov. 2000) main opinion

<http://www.naftalaw.org/Disputes/Canada/SDMyers/SDMyersMeritsAward.pdf>, separate concurring opinion at

<http://www.naftalaw.org/Disputes/Canada/SDMyers/SDMyersMeritsAwardOpinion.pdf>

(2) The final decision on *Ethyl Corporation vs. Canada* was kept secret although there are 1998 opinions available on place of arbitration, jurisdiction, and confidentiality: http://www.naftalaw.org/disputes_canada_ethyl.htm

(3) For *Pope & Talbot Inc. vs. Canada* (final award on merits, April 2001)

<http://www.naftalaw.org/Disputes/Canada/Pope/PopelInterimMeritsAward.pdf>

(4) The final decision on *Abitibi Bowater vs. Canada* appears to be kept secret per request of one or both of the parties. No notice of confidentiality appears to be available. Information on notice of intent and arbitration at

http://www.naftalaw.org/disputes_canada_abitibi.htm. Limited information is available on the final ruling, although some is available at sources such as Sinclair (Oct. 2010), and Best, C. (2010). “The Federal Government Settles AbitibiBowater’s NAFTA Claim.” The Court.ca, August 27, 2010.

¹⁰⁸² This same general conclusion was made by Hufbauer and Schott (2005) at pg 249, although not necessarily for all the same reasons provided herein and it should be noted that their book was also published before the 2010 *Abitibi Bowater* decision. Additionally, in consultations with Gary Hufbauer, Institute for International Economics, February 2011, he warns of overemphasising the value of discriminatory practices meant to upkeep an often abstract concept of policy space, citing that these are dimensions of policy space (as it is often vaguely defined) that trade and investment agreements like CETA seek to limit.

Canada which may have negative impacts on social sustainability. This conclusion has implications for CETA.

The policy reductions caused by ISDS allowances under CETA would likely be less significant than foreseen by some observers, but not necessarily insignificant and could indeed have negative impacts on social policy space. They might be on the magnitude of minor to notable. As stated, this opinion was reached after a careful weighing of relevant available evidence and erring on the side of caution for following reasons: (1) the seeming lack of utility in using investor-state arbitration panels between the EU and Canada, who have some of the most advanced legal systems in the world combined with the shortcomings of ISDS tribunals as currently operating; (2) the potential pressure that the number of investor-state cases and costs in terms of damages and legal fees may have had and continue to create in terms of regulatory chill; (3) the likelihood of the existence of unrecorded regulatory chill and other impacts reducing policy space that may have some negative impacts; (4) given there is some indication that ISDS cases under NAFTA and EU BITs have led to reductions in policy space, and this is only part of the picture as Chapter 11 legal opinions are publicly available for only 50% of NAFTA Chapter 11 cases against Canada ending in payment of damages and limited information is also available on EU ISDS cases; and (5) given that including a provision allowing companies of any nationality incorporated in a CETA country to bring an investor-state case would compound these concerns.

Taken individually, and especially when taken together, these issues provide a solid reason for concern that ISDS in CETA may reduce SIA-relevant social policy space in Canada. And as such, it is doubtful that including ISDS in CETA would create a net/overall social sustainability benefit for Canada.

EU

It is clear that the EC has been meeting some difficulties recently in ensuring that its policy objectives are met with regards to BITs. The EC has stated “EU investment policy has to be consistent with the other policies of the Union and its Member States, including policies on the protection of the environment, health and safety at work, consumer protection, cultural diversity, development policy and competition policy.”¹⁰⁸³ Yet there remain concerns from different groups over the regulatory structure of BITs as they have been instituted in the EU, suggesting that in fact this experience has not been entirely positive. Under Article 207(1) of the TFEU, FDI now falls within the scope of EU commercial policy. The EU now has the exclusive competence to abolish barriers to foreign direct investment, whereas previously Member State BITs protected EU investors (market access was already an EU competence). Recently, the EC has discouraged individual MS from signing BITs in favour of an EU-wide approach to signing investment agreements.

The significance of ISDS under current EU BITs in terms of threats to policy space as defined in this SIA should be contextualised by a number of factors. On one hand, it must be considered that the EU has 1,200 BITs already in place, so investor-state provisions are not new to MS. On the other hand, many of these BITs are between certain MS and third countries that are developing and are not particularly litigious. There have been at least 35 known cases already brought against EU states, although as there is little publicly available information on many of these cases it is difficult to measure the policy impacts therein.

Although the aforementioned findings provide general uncertainty as to the impacts of ISDS on EU policy space, when taken together with details of trends in ISDS against MS that are available, they provide a real concern that ISDS will reduce policy space in the EU. In recent years there has been

¹⁰⁸³ EC (2010). “Memorandum: Q&A...”

concern over the application of intra-EU BITs in particular. For example, the EC has expressed concerns over a number of cases, for example in the *Eureko v. Slovakia* arbitration, *Eastern Sugar v. Czech Republic*, *AES v. Hungary*, and *Electrabel v. Hungary* cases. Some conclude concerns over these cases may reflect that intra-EU BITs serve as “a source of inequality between EU citizens as well as a hindrance to the harmonized development of EC law.”¹⁰⁸⁴ The *Vattenfall* claim, named after the state-owned Swedish power company, involves a decision by the Hamburg city council in Germany and has generated a notable amount of press attention.¹⁰⁸⁵ Some note that the *Vattenfall* case concerns a range of health, climate change and conservation concerns, and will likely raise concerns over regulatory chill among local decision makers in Germany.¹⁰⁸⁶ While it is still not fully clear to what extent these trends should be extrapolated to EU-wide BITs with a foreign nation like Canada, they do provide relevant experiences that are cause for at least some concern.

The aforementioned potential reductions in policy space in the EU resulting from current ISDS will likely be compounded in CETA given that current investment agreements do not bind the EU in its entirety as would investor-state provisions in CETA. Since the EU as a whole has not included investor-state provisions in its EU-wide trade and investment agreements it will take some time for the EU to adjust to investor-state cases arising from CETA. Although Canada already has FIPAs with 6 EU countries, CETA will provide Canadian (and certain other investors if the ‘third countries incorporation’ provision is included in CETA) a wider mandate to sue the EU’s oversight institution over the policies of its individual MS. These obligations would put an increased burden on the EC by becoming responsible for defending against investor-state cases brought against any number of the governments within MS in the EU.

In conclusion, the EU could experience limits on policy space from investor-state provisions in CETA that will have negative impacts on social sustainability. These limits could be on the magnitude of minor to notable. The rationale herein follows the same rationale in the Canada section, i.e. is based upon consideration of the (1) questionable utility of using ISDS as currently operating rather than domestic courts in the EU, (2) precedent of ISDS creating some regulatory chill, (3) risk of unrecorded regulatory chill from ISDS, (4) lack of information on ISDS case rulings, and (5) risk created by a ‘third country incorporation’ provision in ISDS in CETA. While the significance of ISDS cases under CETA may not be of the magnitude as that experienced under NAFTA to date, it is reasonable to suggest that CETA will likewise produce reductions of policy space. Further, at a minimum, it appears that CETA would reduce policy space in a way that would burden an EC that is at present struggling to steer the ISDS tendencies of its MS onto the right track. And this risk would be compounded by the propensity of Canada to bring investor-state cases, which counter to conventional belief is in fact noteworthy when dealing with a developed competitor like the EU (see “Cost of investor-state provisions...” indicator).

Taken individually, and especially when taken together, these issues provide a solid reason for concern that ISDS in CETA may reduce SIA-relevant social policy space in the EU. And as such, it is doubtful that including ISDS in CETA would create a net/overall social sustainability benefit for the EU.

US and Mexico

¹⁰⁸⁴ Von Krause, C. (2010). “The European Commission’s Opposition to Intra-EU BITs and Its Impact on Investment Arbitration.” Kluwer Law International. <http://kluwer.practicesource.com/blog/2010/the-european-commission%e2%80%99s-opposition-to-intra-eu-bits-and-its-impact-on-investment-arbitration/>

¹⁰⁸⁵ Bryant, C. (2009). “Germany faces action over power plant.” *Financial Times*. April 2, 2009.

¹⁰⁸⁶ Consultations with Gus Van Harten, Osgoode Hall Law School, York University, February 2011

Investment provisions in CETA are not likely to have notable effects on policy space in the US and Mexico. This said, it is not fully clear if the inclusion of a ‘third country incorporation’ provision in CETA might impact policy space in the US or Mexico.

INDICATOR: Inequality in wages, displacement of workers, decency and quality of work, knock-on effects in innovation

BASELINE & ANALYSIS

Canada, EU, US and Mexico

The overall social impacts of an Investment Chapter in CETA fundamentally depend on its implications for policy space and economic growth. For analysis on related impacts on policy space see the “Policy space” indicator above.

The specific effects of an Investment Chapter in CETA on employment and wage inequality are mixed. Theoretically, when combined with other provisions of CETA, investment provisions in CETA could encourage some labour market frictions with employment shifts among sectors and wage inequality among workers.¹⁰⁸⁷ However, trade and investment effects together would create this effect, and an Investment Chapter in CETA would likely have little impact on its own. The extent of shifts depends on the level of liberalisation in CETA. These negative effects could be at least somewhat offset by the positive effects mentioned below.

There may be some positive impacts from investment encouraged under CETA; however, these impacts would most likely be realised when combining the impacts the Investment Chapter in CETA might have on stimulating investment with the number of other provisions in CETA, for example, those on labour mobility, free circulation of goods, competition policy, IPR, government procurement, trade facilitation, provisions liberalising restrictions in services (inclusive of those indirectly related to investment), and tariff reductions. Investment may be channelled into certain industries that benefit human health (and the environment), for example green technology. Investment also would likely be channelled into job creation overall, some of which may simply make-up for job loss in other areas but nonetheless could be concentrated in industries that have higher scores on certain decency of quality work indicators.

For more on the social impacts caused by CETA-encouraged investment refer to the sectoral analyses in this report.

ENVIRONMENTAL ASSESSMENT

¹⁰⁸⁷ For example, for discussion of related impacts from NAFTA see Hornbeck (2004).

INDICATOR: Biodiversity, water usage and contamination, toxic contaminants and effluents, air pollution and GHG emissions
BASELINE & ANALYSIS
Mining

Energy is the fastest growing sector for investment in Canada, with \$87 billion in 2006, up from \$30 billion in the late 90s. In 2006 it represented 20% of total inward FDI. The reason for this can be seen in the rising cost of oil and the dramatic growth in oil sands production in Alberta. Mining is also a fast rising target for investment, totalling 8.7% of inward FDI in 2006. Growth in mining and oil and gas extraction decreased in 2009, after successive years of growth. The average of the five-year growth rate was 15.2%. Oil and gas extraction rose 2.7% in 2008 to reach \$78.8 billion, representing 14.4% of all industries. Mining's growth rate decreased to 0.6% in 2009, representing \$25.4 billion. The stock invested by the UK in mining and energy dropped \$4.4 billion.¹⁰⁸⁸

As mentioned in the Industrial Products section, if CETA increased FDI in the oil sands and mining sectors this could lead to increased environmental impacts since these sectors are environmentally intensive. Given the relative concentration of FDI inflows in these sectors in Canada, a marginal increase in investment inflows driven by CETA and higher oil and mineral prices could lead to an increase in production capacity that would in turn lead to impacts on capital stocks, use of bio diverse areas, water use and contamination, toxic contaminants and effluents, and air pollution and GHG emissions. This said, although the gravity modelling for this report provides some indication that investment could increase, it is unclear how much CETA would increase investment in the oil sands and mining sectors.

A full analysis of these potential impacts is available in the "Industrial Products" section.

Other sub-sectors

According to FDI gravity modelling performed for the study, increased investment might gravitate more towards sectors like transportation services and fisheries if barriers in these relatively protected sectors are reduced under CETA. Increased investment in the maritime transportation services could somewhat neutralise some polluting effects realised in other transportation services, for example via land transport. Increased investment in the fisheries sector could put some further stress on fish stocks, although feedback from stakeholders suggests Canada in particular has a strong record on sustainable fishing and is committed to maintaining such a record under CETA.¹⁰⁸⁹

Further details on these impacts can be found in the environmental assessments per the individual sub-sectors.

INDICATOR: Environmental policy space, institutional and regulatory environment
BASELINE & ANALYSIS

Depending on its provisions, and as mentioned, CETA could also impact indicators such as environmental policy space and institutional and regulatory environments. Under NAFTA, the introduction of investor-state provisions to protect investment led to widely publicised investor-state disputes. As mentioned in the "Policy space" indicator in the Social Assessment section, as of a decade after NAFTA was in force over ¼ of all investor-state disputes involved environmentally-related

¹⁰⁸⁸ Government of Canada Statistics (2010). http://www.international.gc.ca/economist-economiste/performance/state-point/state_2010_point/2010_6.aspx?lang=eng

¹⁰⁸⁹ Feedback from Patrick McGuinness, Fisheries Council of Canada, 1 April 2011

concerns.¹⁰⁹⁰ The broad interpretation of NAFTA's investor-state provisions, combined with a panel process that was perceived as lacking transparency, as well as concerns about the lack of independence, public accountability, fairness, and participation of such processes led to much criticism from both public servants and civil society, and continues to receive criticism. Some argued, and some continue to argue, that NAFTA's Chapter 11 provisions on investment create a regulatory chill that prevents the introduction of new environmental regulations.

The available evidence does not convincingly suggest that investor-state provisions in NAFTA to date have created *significant* reductions of the type of environmental policy space relevant to this SIA. Both the EU and Canada have concluded numerous bilateral and regional investment agreements in the past 16 or so years after NAFTA, and their regulatory frameworks have proven adaptable and robust enough to prevent a significant decrease in policy space and an erosion of their environmental regulatory frameworks.¹⁰⁹¹ Furthermore, the chilling effect on the introduction of new domestic regulations subsequent to NAFTA does not appear to be significant after 16 or so years as provinces and federal government have continued introducing environmental regulations. For these reasons, unless CETA would introduce provisions that move away from current EU or Canadian practice, it will likely not have significant environmental policy impacts.

This said, this analysis still errs on the side of caution by concluding, while not meeting the threshold of 'significant,' ISDS in NAFTA, as well as EU BITs, may very well have created and will continue to create some magnitude of reductions in environmental policy space relevant to this SIA, and thus ISDS in CETA may have some negative environmental impacts on the EU and Canada. In other words, the environmental policy reductions caused by ISDS allowances under CETA would likely be less significant than foreseen by some, but not necessarily insignificant. The rationale for this conclusion is based on the findings under this indicator as well as the rationale in the "Policy space" indicator in the Social Assessment. The potential for specific investor-state challenges to stall legitimate regulatory action is real and as such should be closely monitored. For instance, the impacts of the recent *Abitibi Bowater* case and ongoing investor-state cases related to the environment should be monitored closely to the extent they may show gradual erosion of environmental protections. As a note, some stakeholders have expressed concerns on the potential impact of investor-state provisions on the future ability of Canada to curtail greenhouse gas emissions in the Alberta oil sands.¹⁰⁹²

Taken individually, and especially when taken together, these issues provide a solid reason for concern that ISDS in CETA may reduce SIA-relevant environmental policy space in the EU. And as such, it is doubtful that including ISDS in CETA would create a net/overall environmental sustainability benefit for the EU and/or Canada.

¹⁰⁹⁰ Hufbauer and Schott (2005)

¹⁰⁹¹ Among other sources describing the impact of investor-state provisions in NAFTA on the environment see Gaines, S. E. (2006). "Environmental Policy Implications of Investor-State Arbitration." Third North American Symposium on Assessing the Environmental Effects of Trade, Montreal, 30 November – 1 December 05. CEC. February 2006. For example, pg 36 of that report finds: "What was surprising, even in retrospect, is that such a high proportion of the early Chapter 11 arbitrations concerned environmental measures. This high proportion led to reasonable concerns among environmental policy makers and advocates that Chapter 11 could have a broad constraining effect on governments considering new environmental restrictions on economic activity. This reasonable concern, however, has become exaggerated through claims of casual or partly-informed commentators, sometimes based on erroneous information about the nature of the compensation claims being made, the factual background, or the legal grounds on which compensation was paid or awarded..."

¹⁰⁹² Shrybman, S. (Nov. 2010). "Potential Impacts of the Proposed Canada-European Union Comprehensive Economic and Trade Agreement (CETA) on the Pace and Character of Oil Sands Development: A Legal opinion." Council of Canadians, et al. November 2010.

For further analysis on CETA's impact on policy space, which is not limited to environmental policy space, see the "Policy space" indicator in the social assessment section.

7.3.2. OTHER THIRD COUNTRIES

BASELINE

The EU and Canada have a number of key trade and economic agreements with foreign countries. Additionally, it appears that Canada has concluded or is still working on 35 FIPAs with other countries. These FIPAs are listed below. EU MS collectively have 1,200 BITs with foreign countries, and thus are too extensive to list in this section.

Table 73: Multilateral trade and economic agreements and negotiations for the EU and Canada

Type of Agreement	EU	Canada
FTA		North American Free Trade Agreement (1994): US and Mexico
		European FTA (2009): Iceland, Liechtenstein, Norway and Switzerland
FTA Negotiations	Colombia and Peru	Andean Community Countries: Bolivia, Colombia, Ecuador and Peru
	GCC	Caribbean Community: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago
	Central America	Central America: El Salvador, Guatemala, Honduras and Nicaragua
	ASEAN ¹⁰⁹³	Free Trade Area of the Americas: 34 democratic governments in the Americas
	MERCOSUR ¹⁰⁹⁴	
Economic Partnership Agreement	CARIFORUM states (2008): Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Saint Christopher and Nevis, Suriname, Trinidad and Tobago	
EPAs under negotiation	EAC: Burundi, Kenya, Rwanda, Tanzania, Uganda	
	ESA: Comoros, Madagascar,	

¹⁰⁹³ March 2009 the Joint Committee agreed to "take a pause" in the regional negotiations

¹⁰⁹⁴ Negotiations on hold between 2004 and 2009 but restarted in 2010

	Mauritius, Seychelles, Zambia and Zimbabwe	
	Pacific: Papua New Guinea, Fiji	
	SADC: Botswana, Lesotho, Namibia, Mozambique, Swaziland	
Trade and Investment Cooperation Agreement		MERCOSUR (1998)
		Andean Community (1999)

Source: adapted directly from chart compiled in EU-Canada SIA Inception Report (2010)

Table 74: Bilateral trade and economic agreements and negotiations for the EU and Canada

Type of Agreement	EU	Canada
FTA	Faroe Islands (1997)	Israel FTA (1997)
	Norway (1973)	Chile FTA (1997)
	Iceland (1973)	Costa Rica FTA (2002)
	Switzerland (1973)	Colombia FTA (2008)
	Croatia (2005)	Peru FTA (2009)
	Albania (2006)	Jordan FTA (2009)
	Montenegro (2008)	
	Bosnia and Herzegovina (2008)	
	The former Yugoslav Republic (2004)	
	Serbia (2010)	
	Chile (2002)	
		Mexico (1997)
FTA Negotiations	Ukraine	Ukraine
	Morocco	Morocco
	Korea	Korea
	Egypt	Dominican Republic
	India	India
	Singapore	Singapore
	Israel	
	Jordan	
	Lebanon	
	Libya	
	Occupied Palestinian Territory	
	Syria	
	Tunisia	
Customs Union	Andorra (1991)	
	Turkey (1996)	
	San Marino (1992)	
Association Agreement	Algeria (2005)	Palestinian Authority (1999)
	Egypt (2004)	
	Israel (2000)	
	Jordan (2002)	
	Lebanon (2002)	
	Morocco (2000)	
	Palestinian Authority (1997)	
	Syria (1978)	

	Tunisia (1998)	
	Chile (2005)	
Trade, Development and Co-operation Agreement	South Africa (2000)	South Africa (1998)
Trade and Economic Cooperation Agreement		Australia (1995)
Interim Economic Partnership Agreement	Ivory Coast (2009)	
	Cameroon (2009)	
Economic Partnership Agreement Negotiations	Ghana	
Trade and Cooperation Agreement Negotiations	China	
	Iran	
	Iraq	
	Russia	
Other Negotiations	Kazakhstan (Agreement on trade in certain steel products)	
	Vietnam (trade in textile and clothing products)	

Source: adapted directly from chart compiled in EU-Canada SIA Inception Report (2010)

Table 75: Canadian Foreign Investment Promotion and Protection Agreements (FIPAs)

Partner Country for Canadian FIPAs	In force date/status
Bahrain	Negotiations concluded
Tunisia	Pending
Tanzania	Pending
Indonesia	Pending
Madagascar	Negotiations concluded
Vietnam	Pending
Mongolia	Pending
India	Pending
China	Pending
Jordan	14 Dec 2009
Kuwait	Pending
Peru	20 June 2007
Croatia	30 January 2001
Costa Rica	29 September 1999
Lebanon	19 June 1999
Uruguay	2 June 1999
El Salvador	Signed 31 May 1999
Armenia	29 March 1999
Thailand	24 September 1998
Panama	13 February 1998
Venezuela	28 January 1998

Egypt	3 November 1997
Ecuador	6 June 1997
Romania	11 February 1997
Barbados	17 January 1997
Philippines	13 November 1996
Trinidad and Tobago	8 July 1996
South Africa	27 November 1995
Latvia	27 July 1995
Ukraine	24 July 1995
Hungary	21 November 1993
Argentina	29 April 1993
Czech and Slovak Federal Republic	9 March 1992
USSR	27 June 1991
Poland	22 November 1009

Source: adapted directly from DFIAT "Negotiations and Agreements"¹⁰⁹⁵

ANALYSIS

CETA-inspired investment reforms in Canada in particular (given its higher restrictiveness to investment than the EU as measured by the OECD FDI Restrictiveness Index) may also have minor spill-over effects, making Canada more attractive to FDI from a variety of third (non-EU MS) countries. This might occur if the reforms do not provide access solely to EU firms and go beyond investment provisions in Canada's FIPAs and other investment-related agreements. Although the effects tied to an Investment Chapter in CETA alone will likely be less than significant, when combined with other provisions of CETA – for example those on labour mobility, free circulation of goods, competition policy, and trade facilitation – these effects may be more significant.

¹⁰⁹⁵ DFIAT. "Negotiations and Agreements." <http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/index.aspx>

7.4. TRADE FACILITATION

Summary: *Trade facilitation aims to promote transparency, facilitate customs clearance, enhance government effectiveness in collecting duties and help in the fight against fraud and corruption.*

Given the relatively sophisticated state of existing customs and border regimes in Canada and the EU overall, but with exceptions for certain individual EU Member States, it is unlikely that there will be as significant economic, social or environmental impacts from related trade facilitation reform under CETA compared to if the Agreement was signed between the EU and a developing country. However, incorporating provisions under CETA to reform and improve trade facilitation could assist with reducing trading costs, which would be particularly useful in limiting the costs of compliance that will inevitably increase with the introduction of new rules of origin under CETA.

7.4.1. CANADA & EU

BASELINE

For the purposes of this section the narrowest definition of trade facilitation as it is most often applied in a technical sense is used, i.e. removing obstacles to the movement of goods across borders in terms of simplification and harmonisation of customs procedures and systems. Improving trade facilitation systems is therefore a means to removing trade barriers and increasing both the speed and quantity of trade flows.

The apparent impact and costs presented by inefficient customs procedures have motivated WTO members to review and clarify existing GATT provisions. Trade facilitation became a topic of discussion at the WTO at the Singapore Ministerial Conference in December 1996, and WTO Members formally agreed to launch negotiations on trade facilitation in July 2004 on the basis of modalities contained in Annex D of the so-called “July package.” Those negotiations aim to clarify and improve the existing WTO provisions encompassing the following three elements: (1) Increasing the transparency of trade regulations (GATT Article X); (2) Simplifying, standardising and modernising import, export and customs procedures (GATT Article VIII); and (3) Improving conditions for transit of goods (GATT Article V).

It is useful to note the relevance of rules of origin (RoO) in trade facilitation. In order to enjoy preferences under a trade agreement, members of the agreement have to prove the origin, and thus the eligibility, of a portion of their imported products are created by countries within the area established by the agreement. Businesses face costs of complying with such RoO and governments face costs in instituting and maintaining mechanisms for the RoO system. Two costs that are invariably incurred in gauging RoO, and related to trade facilitation, are 1) the cost of bookkeeping and recordkeeping ensuring that the rules themselves are complied with and 2) the costs of enforcing the rules at the borders.

Under CETA, improvements in mutual recognition in numerous areas of customs control standards could serve to improve trade between the EU and Canada. As identified in the 2008 Joint Study, these areas could include:

- The development and sharing of best practices in modern customs techniques: risk management, simplified procedures, pre-arrival processing, post entry audit, and “single window” coordination of controls.
- Promotion of common application of international rules, standards and guidelines in the field of customs and international trade, including simplification and harmonisation of import and export data and, where possible, use of documentation and procedures that are in line with relevant international standards of the World Customs Organization (WCO), the UN and other organisations.
- Cooperation in the field of electronic data exchange with the aim of facilitating trade (e.g. in line with the results of the G7 initiative on trade facilitation), once the EU and Canada have completed their respective electronic data interchange systems.¹⁰⁹⁶

Canada

Even prior to the Cancun Ministerial conference Canada consistently made trade facilitation proposals, indicating that it has confidence in its systems. Canada’s customs policy is developed by federal government departments such as Finance Canada, Health Canada and the Canada Border Services Agency. With significant advances in automation and the incorporation of the latest technologies in risk management, from a technical standpoint Canada consistently demonstrates a high level of efficiency with respect to its custom regimes. Further, due in part to joint efforts with the US and Mexico implemented under NAFTA, Canada has developed a strong trade facilitation system. In 1998, Canada and the EU concluded an agreement on customs co-operation and mutual assistance in customs matters.

Canada ranks 38th in the world on the World Bank’s Index of Indicators of Trade Costs¹⁰⁹⁷ (see Table 76 below).

Table 76: Indicators of Trade Costs in Canada vs. OECD average (2010)

Indicators of Trade Costs in Canada vs. OECD average (2010)							
	Documents for exports (number)	Time for export (days)	Cost to Export (US \$ per container)	Documents for import (number)	Time for Import (days)	Cost to import (US \$ per container)	World Bank Ranking (1 – 183)
Canada	3	7	1610	4	11	1160	38
OECD (avg)	4.3	10.5	1089.70	4.9	11.0	1145.9	14 (avg.)

Source: World Bank, 2010

EU

Over the past 30 years, EU Member States have made considerable efforts with regards to improving trade facilitation. According to the Doing Business 2010 Report from the International Finance Corporation and the World Bank, four of the top ten indexed countries were the EU Member States of

¹⁰⁹⁶ 2008 Joint Study, pg. 66.

¹⁰⁹⁷ World Bank (2010). Indicators of Trade Costs. www.worldbank.org

Estonia, Finland, Denmark and Sweden.¹⁰⁹⁸ Individual scores of EU MS on the World Bank's Indicators of Trade Costs in the EU can be found in Table 77 below.

Table 77: Indicators of Trade Costs in EU vs. OECD average (2010)

Indicators of Trade Costs in EU vs. OECD average (2010)							
EU country*/OECD avg	Documents for exports (number)	Time for export (days)	Cost to Export (US \$ per container)	Documents for import (number)	Time for Import (days)	Cost to import (US \$ per container)	World Bank Ranking (1 – 183)
Austria	4	7	1180	5	8	1195	24
Belgium	4	8	1619	5	9	1600	43
Bulgaria	5	23	1551	7	21	1666	106
Cyprus	5	7	820	6	5	1030	15
Czech Rep	4	17	1060	7	20	1165	53
Denmark	4	5	744	3	5	744	6
Estonia	3	5	730	4	5	740	3
Finland	4	8	540	6	8	620	4
France	2	9	1078	2	11	1248	25
Germany	4	7	872	5	7	937	14
Greece	5	20	1153	6	25	1265	80
Hungary	5	18	1225	7	17	1215	70
Ireland	4	7	1109	4	12	1121	21
Italy	4	20	1231	4	18	1231	50
Latvia	6	13	600	6	12	801	22
Lithuania	6	10	870	6	11	980	28
Luxembourg	5	6	1420	4	6	1420	31
Netherlands	4	6	895	5	6	942	13
Poland	5	17	884	5	25	884	42
Portugal	4	16	685	5	15	999	19
Romania	5	12	1275	6	13	1175	46
Slovak Rep.	6	20	1445	8	25	1445	113
Slovenia	6	20	1075	8	21	1130	84
Spain	6	9	1221	8	10	1221	59
Sweden	4	8	697	3	6	735	7
UK	4	9	1030	4	8	1160	16
OECD (avgs)	4.3	10.5	1089.70	4.9	11.0	1145.9	14 (avg.)

Source: World Bank, 2010. *Data unavailable for Malta¹⁰⁹⁹

In the EU, an important part of developing a customs union for the region has been the development of a common customs regime. Laws are developed at the EU level and then enforced by Member State customs authorities, which cooperate closely with one another. However, as evidenced in the above table, there exists a large variance in the results of the EU Member States. The average ranking among EU countries on the World Bank's 2010 Indicators of Trade Costs was approximately 38th (note: the EU-26 was not taken as an individual country in the world ranking and thus the average of EU countries' overall rankings had to be constructed). While Estonia and the Scandinavian countries scored well,

¹⁰⁹⁸ World Bank and IFC (2010). *Doing Business 2010 Report*. <http://www.doingbusiness.org/Rankings>

¹⁰⁹⁹ For certain information on trade facilitation scores in Malta see "Malta Trade-at-a-glance" World Trade Indicators, 2009. URL: http://info.worldbank.org/etools/wti/docs/Malta_taag.pdf

Bulgaria, Greece, Hungary, the Slovak Republic and Slovenia all ranked poorly, far below the OECD average on individual criterion.

ANALYSIS

ECONOMIC ASSESSMENT

INDICATOR: Impact on institutional and regulatory regime

Canada and the EU

Trade facilitation measures under CETA would help strengthen the institutional and regulatory environment in Canada and the EU to the degree they follow the areas for cooperation outlined in the 2008 Joint Study (refer to baseline section above for a listing of these).

To the degree that CETA proposes new RoO that Canadian companies must meet to trade under certain preferences in the CETA, trade facilitation measures will become increasingly important. In fact, new trade facilitation measures will become necessary in managing an increasingly complicated and costly institutional and regulatory environment that would result from CETA introducing new RoO to a 16 year old trading relationship where NAFTA RoO have been the most significant RoO among Canada, the US and Mexico. Specifically, the accounting changes required to comply with new RoO are not only costly for businesses to follow and government to oversee, but this is magnified by the fact that Canadian companies actually have a significant interest in trading with the EU. This will lead Canadian companies to certain shifts in production to ensure a portion of their goods actually comply with CETA RoO, which in turn puts increasing importance on trade facilitation mechanisms between Canada and the EU.

Canada's trading system placed 38th in the world on the World Bank's 2010 Indicators of Trade Costs, indicating that it has a relatively solid trade facilitation system although it is not the most efficient in the world. CETA may provide the opportunity for Canada to at least marginally strengthen this system, although this is also out of necessity to manage RoO changes brought about by CETA.

The average ranking among EU countries on the World Bank's 2010 Indicators of Trade Costs was approximately 38th,¹¹⁰⁰ the same as Canada's overall world ranking, thus showing the EU also has a relatively solid trade facilitation system although it is not the most efficient in the world. This particular score appears to be due to a number of under-performing MS, indicating that the EU could improve its trade facilitation system if its underperforming MS were to improve their systems in particular. While there are opportunities to significantly enhance trade facilitation in recent years, it is important to note that increased security measures have played a role in slowing progress as MS try to find a balance between implementing policies to increase speed and efficiency while at the same time ensuring public safety.

It can be inferred that there could be gains from reform of customs procedures for the most underperforming nations in the EU, for example Bulgaria, Greece, Hungary, the Slovak Republic and Slovenia. To the degree that CETA encourages trade facilitation measures that in particular benefit these MS it would very likely lead to a strengthening in the EU's overall performance in trade facilitation.

¹¹⁰⁰ Note: the EU-26 was not taken as an individual country in the world ranking and the average had to be constructed

INDICATOR: Costs to government of RoO, costs to business of RoO***EU and Canada***

As mentioned, government and companies incur costs in complying with RoO. Government accounting for RoO entails the cost of bookkeeping and record keeping ensuring compliance of according rules, and the costs of enforcing the rules at the borders. Companies also incur costs to establish RoO on their products. CETA will inevitably impose RoO requirements for Canadian goods that will differ from NAFTA RoO on Canadian goods.

As such, there will be costs involved in accounting for new changes in RoO in CETA. These will be incurred by government authorities as well as businesses. Out of all businesses, SMEs in particular, given their size, will likely feel the highest burden in terms of cost of compliance. Certain studies have suggested that such costs in trade agreements could be significant. As noted in Harris and Rankin Staples (2009): *“If the costs of complying, and demonstrating compliance, with the prerequisites for preferential treatment exceed the value of the preferences, then the obligation to comply with these requirements regarding the rules of origin and the certification thereof disappears as the goods enter and pay the MFN tariff. While this reality imposes a helpful upper limit on the distortionary potential of RTAs, it also limits the degree to which the tariff reductions can boost trade.”*¹¹⁰¹

Specific estimates on these costs of complying with new RoO under CETA are unfortunately unavailable, and it is beyond the scope of this study to attempt such estimates. However, there is evidence that improvements in trade facilitation systems can reduce the barriers imposed by RoO, including helping reduce costs incurred by businesses in complying with RoO.¹¹⁰² Beyond this, at present it is unclear to what degree the increased trade facilitation efforts between the EU and Canada under CETA would offset the increased costs of compliance due to changing RoO under CETA.

INDICATOR: Production costs, output, exports, consumer prices***Canada and EU***

Unlike past SIAs dealing with lesser developed countries than Canada, the CGE model was not used to measure changes in trade facilitation in this report.¹¹⁰³ However, findings from past SIAs on the benefits of trade facilitation measures might be generally applied to the EU-Canada FTA. The CGE model for this study predicts an increase in overall output in both Canada and the EU. Given past SIA results, increased output combined with improvements in trade facilitation lead to reduced producer costs. Thus, improved trade facilitation resulting from the CETA could lead to an overall reduction in production costs in Canada and the EU. This may in turn lead to some positive impact on output, exports, and consumer prices in both Canada and the EU. However, these positive impacts would be less than envisaged by many studies that have modelled the benefits of trade facilitation reforms in certain developing countries, as the EU and Canada have comparatively solid trade facilitation systems and thus there would be less efficiency gains from their reform.

As mentioned under the “Impact on regulatory and institutional regime” indicator above, certain newer MS would benefit most from improved trade facilitation systems. Although given the relatively larger

¹¹⁰¹ Harris, J. and B. R. Staples (2009). “Origin and Beyond: Trade Facilitation Disaster or Trade Facility Opportunity?” Inter-American Development Bank. IDM Working Paper Series #IDB-WP-147. Pg 3-4

¹¹⁰² Ibid

¹¹⁰³ For example, the EU-Andean SIA modelling measured trade facilitation using a 1% reduction of producer costs for a modest liberalisation scenario and a 3% reduction in producer costs for an ambitious liberalisation scenario. See: DEVELOPMENT Solutions et al (2009). *EU-Andean SIA: Final Report*. October 2009.

size of the EU economy compared with the Canadian economy this will limit the benefit of such reforms for the EU as a whole.

Canada would likely improve most in terms of reduced costs to import and costs to export given their relatively lower scores in these areas as gauged by the World Bank's 2010 Indicators of Trade Costs. Still, these reductions in Canada in particular would be offset at least partially by increased costs of complying with CETA RoO rather than NAFTA RoO. As noted under the "Costs to government of RoO, costs to business of RoO" indicator, it is unclear to what degree the increased trade facilitation efforts between the EU and Canada under CETA would offset the increased costs of compliance due to changing RoO under CETA. And it is clear there will be increased costs of compliance for Canada in particular. To the extent that trade facilitation does not fully offset the increased costs of compliance, this would negate the previously mentioned positive impacts on output, exports, production costs, and consumer prices. Specific estimates on the costs of complying with new RoO under CETA are unfortunately unavailable, and it is beyond the scope of this study to attempt such estimates.

SOCIAL ASSESSMENT

Canada and EU

As discussed under the economic pillar, the CETA may result in some reduction of producer costs and consumer prices, and may lead to some increases in output and exports. As a result this may have some positive social impacts. Directly related employment effects may be minor/limited,¹¹⁰⁴ and thus impacts on other social issues, such as poverty, health, education and equity are also expected to be relatively minor/limited. This said, as noted throughout the analysis, to the extent that trade facilitation does not fully offset the increased costs of compliance with CETA RoO, this will negate even the minor/limited positive impacts mentioned for Canada in particular.

ENVIRONMENTAL ASSESSMENT

INDICATOR: Energy consumption, waste generation, air pollution, institutional and regulatory environment, policy space

Canada and EU

As limited change is forecasted in the economic results for trade facilitation measures under CETA, there is not expected to be significant environmental impacts, although there may be some impacts. Any impacts that would be attributed to improved trade facilitation would be from increased energy consumption and waste generation, and secondly attributed to potential impacts stemming from some

¹¹⁰⁴ While there is evidence that trade facilitation efforts can lead to increases in employment, the majority of this focuses on developing countries. (For example, see, among others, Hewitt, A. and Gillson, I. (2003). "Income Distribution Impact of Trade Facilitation in Developing Countries – Background Document for the International Forum on Trade Facilitation." Second International Forum on Trade Facilitation, organised by CTIED at UN/CEFACT on 14 and 15 May 2003 in Geneva.) Given this, as well as the uncertainty of the RoO impacts of CETA, this analysis avoids a more specific discussion on shifts or gains in employment in Canada and the EU resulting from trade facilitation measures in CETA. Still, given the developed nature of the trade facilitation systems in Canada and the EU, as mentioned, it appears reasonable to suggest that CETA trade facilitation measures in and of themselves will not have a significant impact on net employment in Canada or the EU.

increased air and marine transport between Canada and the EU. Still, trade facilitation reform would likely not in itself directly lead to significant environmental impacts in these areas.

CETA could possibly modify how Canadian environmental regulations are developed or implemented or how environmental objectives are set. But given that both Canada and the EU already have relatively sophisticated and efficient trade facilitation regimes, it is not expected that CETA will have dramatic impacts on the policy space of environment and regulatory regimes.

7.4.2. USA, MEXICO & OTHER THIRD COUNTRIES

BASELINE

Refer to baseline in “Canada & EU” section above as this also forms the most important background for this section.

ANALYSIS

USA & MEXICO

One on hand, trade facilitation measures by themselves in CETA may have some limited negative impacts on the US and Mexico. To the degree that CETA proposes new RoO which Canadian companies must meet to trade under certain preferences in the CETA, trade facilitation measures will become increasingly important as they relate to distinguishing NAFTA RoO accounting from CETA RoO accounting. It is unclear to what exact degree the increased trade facilitation efforts between the EU and Canada under CETA would offset the increased costs of compliance for Canada to meet CETA RoO. But to the extent that trade facilitation measures make this shift to CETA RoO easier/reduce the costs of compliance, they will act as an incentive to shift certain production away from the US and Mexico.

On the other hand, to the degree that trade facilitation measures in CETA reduce trading costs on products exported from the US and Mexico to Canada and the EU, the US and Mexico may see some benefits.

Both the potential positive and negative impacts mentioned would be limited by the current level of integration among the Canadian, US and Mexican economies, including in their customs systems.

OTHER THIRD COUNTRIES

Trade facilitation provisions in CETA may have some positive impact on other third countries outside the US and Mexico. In the short run, implementing trade facilitation measures in the EU and Canada could also produce static efficiency effects in third countries which may benefit from improved performance of specific export industries and reduced costs of the EU and Canada border procedures. This said, for context, trade facilitation improvements unrelated to CETA within developing countries with which the EU and Canada trade (including those with which both have trade agreements), will likely have a much more significant impact on those countries trade with Canada and the EU.¹¹⁰⁵ But, if trade facilitation

¹¹⁰⁵ See evidence from: Wilson, J. S. & Mann, C. L. and Otsuki, T. (2004). “Assessing the potential benefit of trade facilitation: A global perspective.” World Bank Policy Research Working Papers, number 3224.

measures in CETA are in fact extended to bilateral agreements between the EU or Canada and third countries, it is reasonable to assume that the simplification of trade procedures in the former might increase transparency, facilitate customs clearance, enhance government effectiveness in collecting duties and help in the fight against fraud and corruption in such third countries.¹¹⁰⁶

¹¹⁰⁶ As an illustration, the negotiations between the EU and Mercosur include trade facilitation measures which, among the static efficiency gains, would produce higher fixed capital formation through increased FDI since investing companies require cheap, quick, transparent and predictable customs services. See EC (2008). http://trade.ec.europa.eu/doclib/docs/2008/november/tradoc_141396.pdf

7.5. LABOUR MOBILITY¹¹⁰⁷

Summary: *Labour mobility provisions in CETA focused on workers in professional business services could result in a more efficient allocation of skills and increased productivity in Canada and the EU, as well as increase innovation that could lead to some social and environmental benefits.*

7.5.1. CANADA & EU

BASELINE

Canada

Movement of Foreign Workers in Canada

General allowances on temporary movement of foreign workers

Like many countries, Canada grants foreign nationals the right to remain and work in its borders temporarily. The number of individuals admitted annually on a temporary basis has been growing faster than the number of permanent immigrants. Some of these non-permanent residents are admitted under the Temporary Foreign Worker Program (TFWP) expressly to fill jobs in Canada. Canada's federal government currently has the TFWP in place to allow employers to hire foreigners to work in Canada for an authorised period of time if they can demonstrate that they are unable to find suitable Canadians or permanent residents to fill the jobs and that the employment of these workers will not negatively impact the Canadian labour market. This assessment is made via a formal evaluation opinion on the labour market.

In order to address skill shortages and to help meet program and international trade commitments, Canada has admitted thousands of workers each year. In 2007, Canada admitted more than 120,000 temporary foreign workers. In 2006, there were more than 112,000 non-permanent residents employed in Canada. Europe accounted for more than 24% of the total with some 27,000 workers entering Canada from EU Member States, predominantly from France, Germany, Ireland and the UK.¹¹⁰⁸ While the majority of temporary workers in Canada are employed in predominantly manual labour positions in the agriculture and construction industries, European workers in Canada tend to be professionals in more knowledge based, service industries.¹¹⁰⁹

While this program is in place to address issues with regards to foreign workers entering Canada, there are a number of instances where a work permit is not required. Business visitors may come to Canada to engage in international business activities without a work permit. There are a number of other categories where workers also do not require a work permit. These workers include military personnel,

¹¹⁰⁷ **Introductory notes:** This assessment focuses on labour mobility in the narrow context of professional business persons moving across borders to work on a temporary basis, as this is the focus of labour mobility provisions likely to be included in the CETA. The assessment involves consideration of temporary movement of foreign workers, intra-country labour mobility and mutual recognition agreements on both types of such labour mobility. This considers border issues such as authorisation requirements for temporary entry, work permits and labour market tests, as well as issues that go beyond the border such as licensing and accreditation. The baseline for this section is largely adapted from the 2008 Joint Study.

¹¹⁰⁸ Statistics Canada

¹¹⁰⁹ Human Resources and Skills Development Canada

foreign government officers, foreign representatives and their family members, students working on campus, athletes and coaches, performance artists, news reporters, expert witnesses and investigators, healthcare students, civil aviation inspectors, accident or incident investigators, crew members and emergency service providers.

In order to ensure that the TFWP is responsive to regional skills and labour shortages, the Canadian government works closely with officials from the provinces and territories. The development of labour market opinions is of significant importance in helping to determine the existence of gaps in the Canadian labour market. Labour market data used in the opinions, including market information on wages, skills and labour shortages and labour standards, is provided by officials from the provinces and territories. The government also works with Canadian employers and industry associations in order to develop a greater understanding of the current and emerging needs of the labour market.

Multi-lateral Commitments on Movement of Temporary Workers

Canada is a signatory to several agreements that allow for the freer movement of temporary workers.

They include, among others, NAFTA, GATS, and the Asia-Pacific Economic Cooperation Forum. Under NAFTA, traders and investors, intra-company transferees, business visitors and specific categories of professionals are processed more easily. GATS mode 4 commitments provide for liberalised trade in services including the movement of professionals and technical experts. The Seasonal Agricultural Workers Program (SAWP) between Canada, Mexico and a number of Caribbean countries provides for the expeditious movement of farm workers. Canada's Live-in Caregiver Program provides for the temporary movement of caregivers and child care workers to Canada from abroad.

In relation to GATS, Canada has made commitments in three broad categories: business visitors, intra-corporate transferees, and professionals (both contract service suppliers and independent professionals). Through the WTO Doha Round, Canada has tabled two offers, which reflect several improvements in mode 4 commitments. The first offer provided for a modification of Canada's commitments on professionals to differentiate between contract service employees (employees of an enterprise) and independent professionals (those who are self-employed). The offer included provisions to increase the length of stay for business visitors, executives, managers and professionals. Included in the offer was after-sales and after-lease service providers in the business visitor category as well as adding senior computer specialists to the professional category. In addition, a new category which facilitates the entry of spouses and common-law partners of intra-corporate transferees and professionals has been added.

Bilateral and Regional Agreements on Temporary Entry of Business Persons

In bilateral and regional FTAs to date, Canada has used two different approaches. One approach has been to negotiate agreements which include a comprehensive, reciprocal stand alone chapter on the temporary entry of business persons. The other approach has been to include a chapter which strongly urges each party to reaffirm their existing GATS commitments.

Foreign Credential Recognition

Requirements and procedures with respect to recognising foreign credentials vary greatly by jurisdiction. Numerous bodies are involved in recognising, certifying, registering and licensing applicants.

Under the Canadian system, the assessment of foreign credentials is shared between the federal government and the provinces and territories. The federal government is responsible for border issues

and immigration, determining labour market policies and for providing leadership and national tools which serve to strengthen the economic union; whereas the provincial and territorial governments are charged with the regulation of most skilled trades and most professions. Authority has been delegated to provincial regulatory authorities to regulate most professions, particularly via determining licensing and certification requirements. Recognition of credentials in non-regulated occupations remains the responsibility of employers.

The government of Canada recently announced that it would spend \$395,000 on initiatives designed to boost foreign credential recognition between Canada and EU countries and foster labour mobility for workers on both sides of the Atlantic.¹¹¹⁰ The government will also fund work by the Environmental Career Organization (ECO) of Canada to develop a mutual certification framework for environmental workers in Europe and Canada.

Inter-provincial Labour Mobility

20% of Canadian workers are employed in regulated occupations or trades¹¹¹¹ of which most are professionals, skilled technicians, or work in compulsory trades. Under Canada's federal system, the provinces are responsible for determining what occupational standards are needed to ensure, for example, that heavy equipment operators, paramedics, accountants and other skilled workers are properly qualified and will not put their clients, patients, students, or the public safety at risk. To ensure that provincial standards do not unduly impede labour mobility, the provinces have established various programs to reconcile competing standards where this is appropriate.¹¹¹²

In Canada, the provinces and territories are charged with the responsibility for regulating professions and trades. There are over 440 occupational regulatory bodies in Canada, representing over 100 different occupations and millions of workers.¹¹¹³

The Agreement on Internal Trade (AIT) was signed by the federal, provincial and territorial governments in 1994 with an aim to reducing internal barriers to trade including labour mobility. In December 2008, Canadian trade officials approved the 9th Protocol of Amendment to substantially expand the application of the labour mobility provisions of the AIT which came into effect on April 1, 2009. Article 706:1 of that updated agreement provides that:

"...any worker certified for an occupation by a regulatory authority of a Party shall upon application, be certified for that occupation by each other Party which regulates that occupation without any requirement for any material training, experience, examinations or assessments as part of the certification procedure."

Under this new amendment, a worker certified by any provincial regulator is entitled to work anywhere in Canada. Each province will still be entitled to maintain higher certification standards; however, they cannot impose these on workers certified by other provinces unless they can prove that their higher standard is necessary to achieve a legitimate objective.¹¹¹⁴

¹¹¹⁰ Human Resources and Skills Development Canada, 2009

¹¹¹¹ Industry Canada

¹¹¹² Impediments to labour mobility are now addressed through *Mutual Recognition Agreements* among regulatory agencies, and the *Red Seal Program*.

¹¹¹³ Human Resources and Skills Development Canada

¹¹¹⁴ Article 708:2 of the amendment allows a party to impose a higher standard where a party can demonstrate that:

Although much progress has been made in the past 16 or so years, inter-provincial barriers to labour mobility in Canada still exist. It has been asserted that provincial and territorial differences in licensing and qualifications are one of the major hurdles to improving labour mobility in the Canadian market. These impediments are seen as hindering the inter-provincial movement in regulated occupations across the country and affect Canadian and internationally trained workers.

The Red Seal Program

The Interprovincial Standards Red Seal Program was established to provide greater mobility for skilled workers across Canada. The Red Seal program allows qualified trades people to practice their trade anywhere in Canada where the trade is designated without having to write further examinations. To date, there are 49 trades included in the Red Seal Program on a national basis, which account for over 88% of all apprentices and more than 80% of the total trades' workforce in Canada.¹¹¹⁵

Mutual Recognition Agreements

Canadian Mutual Recognition Agreements (MRAs) are cross-border and cross-sectoral agreements among jurisdictions in Canada or between Canada and foreign entities.

Since the creation of the WTO, international MRAs have been included in free trade agreements with increased frequency. MRAs cover the varied components of professional qualifications and are intended to facilitate the mutual recognition of foreign credentials and experience thereby easing the movement of professionals from one nation to another.

In Canada, the provinces and territories as well as self-regulated professional associations are responsible for the recognition and licensing of professionals. The Government of Canada only encourages and supports the negotiation of MRAs between professional bodies through the provisions negotiated as part of international trade agreements. Provisions in existing FTAs (for example, NAFTA and the Canada-Chile FTA) and ongoing FTA negotiations provide for the inclusion of non-binding and voluntary licensing and recognition guidelines. These provisions provide the framework and offer practical guidance for professional bodies entering into MRA negotiations.

Discussions on mutual recognition agreements are strongly supported by Canada's professional bodies, particularly those which are export oriented. The Government of Canada often consults with national professional associations regarding their potential interests in pursuing mutual recognition with their counterparts in other countries. However, the ultimate decision to pursue the negotiation of an MRA lies solely with the professional body. The MRAs are then signed by the national professional associations on behalf of the provincial and territorial regulatory bodies who then must ratify and implement the agreement once it has been adopted.

"...(a) there is a material difference between the scope of practice of the occupation for which the worker is seeking to be certified in its territory and the scope of practice of the occupation for which the worker has been certified by the regulatory authority of another Party; and

(b) as a result of that difference, the worker lacks a critical skill, area of knowledge or ability required to perform the scope of practice of the occupation for which the worker seeks to be certified."

¹¹¹⁵ Service Canada, URL <http://www.servicecanada.gc.ca/eng/goc/aig/redseal.html> Retrieved: 21 October 2010

EU

Movement of Foreign Workers in the EU

General allowances on temporary movement of foreign workers

Canadian business people entering into most EU Member States for stays of less than a three to six month period should follow the requirements for the Schengen acquis. The borderless zone created by the Schengen Agreements, the Schengen Area, currently consists of 25 European countries, covering a population of over 400 million people and an area of 4,312,099 square kilometres. The UK and Ireland have not signed up to the Schengen Convention and therefore decide their involvement on a case by case basis. The participating Member States also have the option of requiring a work permit. In order to gain entry, a number of conditions must be met: possession of a valid travel document; justification of the business purpose and conditions of the intended stay; proof of sufficient means of subsistence for the entire stay as well as for repatriation to the country of origin; the absence of an alert on the Schengen Information System; and the determination that no threat to public policy, internal security, public health or the international relations of any Member State exists.¹¹¹⁶

Multi-lateral Commitments on Movement of Temporary Workers

The EU has undertaken a number of obligations on the temporary entry of business persons with regards to their multilateral trade agreements. The EU is a signatory to GATS and as such enjoys the facilitated access for temporary entry WTO parties have committed to under GATS mode 4.

Bilateral and Regional Agreements on Temporary Entry of Business Persons

With regards to trade in services in its bilateral and regional trade agreements, the EU has employed a different methodology from Canada. Similar to the methodology used in GATS, the EU uses a positive list approach. Therefore, commitments made under bilateral and regional agreements are similar in scope and structure to the ones made in GATS.

Foreign Credential Recognition

With the exception of some professions in the health and architectural industries (doctors, dentists, general care nurses, midwives, pharmacists, veterinarians and architects), the majority of professions in the EU are regulated by the individual Member States. As such, the competent national authorities in each Member State must recognise the qualifications of foreign workers. This also applies to third country nationals wishing to work in the EU.

Each Member State may have different procedures for recognising foreign diplomas and assessing foreign diploma certificates for third-country workers. While Member States generally appear to recognise foreign qualifications and those of nationals equally, in other instances (for example, in Denmark) the recognition of diplomas and certificates depends on the existence of an international agreement with the worker's country of origin.

¹¹¹⁶ For the complete acquis, including the fundamental Agreement and Convention and certain subsequent acts and instruments see: EC (2000). "Official Journal of the European Communities - The Schengen Acquis" (in English). 2000-09-22. http://eur-lex.europa.eu/LexUriServ/site/en/oj/2000/l_239/l_23920000922en00010473.pdf.

Intra-EU Mobility

The European Union originally developed a system for the mutual recognition of professional qualifications in order to ensure the success of the Single European Market. Specific Directives based on the principle of harmonisation relating to only a few professions (including architects) were expanded upon through Directive 2005/36/EC (hereafter the “General Directive”), which introduced a system applicable to all other professions.¹¹¹⁷ The system allows those professionals who meet the criteria within the General Directive to move within Europe by claiming access to the national title of professionals who do the same work. The system is based on the education and/or professional diplomas awarded in each Member State and the nature of the activities which comprises the profession in each Member State.

The new directive which took effect on 20 October 2007 maintains the three main systems of recognition:

- 1.) Directive 2005/36/EC grants automatic recognition of the professional titles of doctors, dentists, nurses, midwives, pharmacists, veterinary surgeons and architects on the basis of harmonised minimum training requirements laid down in that directive.
- 2.) The Directive provides for similar automatic recognition approach for various activities of craft, commerce and industry sectors listed in its annex. In contrast to the first system, this approach is based on the recognition of consecutive periods of experience and skills (and not just on the possession of formal qualifications or diplomas).
- 3.) The Directive provides for general rules applying to all other regulated professions not covered by the above-mentioned systems. Under these rules, called the “general system,” access to a profession shall be granted to a professional who is fully qualified for the profession in question in another Member State. However, if the duration or the content of training of a migrant differs substantially from those required in the host Member State, compensatory measures can be imposed on the migrant, i.e. either an adaptation period or an aptitude test.

The Directive makes provisions for a variety of rules on third country qualifications held by EU citizens. Member State nationals holding third country qualifications may be permitted to pursue a regulated profession in accordance with Member State rules to which they are applying. However, in case of those professions for which EU law provides for minimum training conditions, the recognition shall respect these conditions. In order to be considered equivalent EU qualifications, third country qualifications must include a minimum of three years of professional experience in the Member State which has recognised these qualifications.

Under certain conditions, third country nationals can benefit from EU law on the recognition of professional qualifications, for instance if they have the status of a long term resident under Directive 2003/109/EC or if they are family members of an EU citizen within the meaning of Directive 2004/38/EC. Both directives provide for equal treatment with EU nationals which means that once they obtained their first recognition in one EU Member State (on the basis of a bilateral agreement or other agreement) and once they have worked in this EU Member State for three years, their third country professional qualification is considered equivalent to a qualification from the EU. If a third country worker then leaves this EU Member State of first entry, the second Member State where he moves has to apply the

¹¹¹⁷EC. Internal Market Qualifications. http://ec.europa.eu/internal_market/qualifications/future_en.htm Retrieved: 22 October 2010.

system of recognition of professional qualifications as laid down in Directive 2005/36/EC (hereafter the “Directive”) to this “third country qualification.”

The most important innovation of the Directive is the new regime to facilitate the provision of services, namely the right of a national of one Member State to pursue his or her profession on a “temporary and occasional basis” in another Member State without having to apply for recognition of qualifications. Pursuant to these rules, a Member State shall not, as a matter of principle, restrict, for any reason relating to professional qualifications, the free provision of services in the Member State if the service provider legally exercises the same profession in another Member State.

However, the professional is subject to the rules and regulations of the host Member State that are directly connected to professional qualifications, such as malpractice and disciplinary provisions.¹¹¹⁸ In addition, the first time the service is to be provided, the host Member State may require that the professional inform the host Member State in advance of the details of insurance coverage for professional liability.¹¹¹⁹ The professional may also be required to submit the following documents: proof of nationality; an attestation that the professional is legally entitled to practice in the original Member State; evidence of professional qualifications; proof that the professional has practised this profession for at least two years during the previous ten years if the original Member State does not regulate this profession; and, for professions in the security sector, evidence of no criminal convictions.¹¹²⁰ Exceptionally, a prior check of qualifications is allowed in case of regulated professions having public health or safety implications.

A move towards closer administrative cooperation and collaboration between the competent authorities of the Member States is also provided for under the new Directive.

Mutual Recognition Agreements

The EU has MRAs that are cross-border or cross-sectoral among jurisdictions in the EU or between EU entities and entities in third countries. European professional associations have been actively negotiating MRAs as well as reciprocal agreements and common understandings for a number of professions including accountants, architects, engineers, chiropractors and information systems specialists.

MRAs only work with third parties or within the EU where there is substantial commonality between the nature of the professional activities (and therefore the professional education and training which underpins the professional qualification) in the professions in both the home country and the host country. Where there are minor differences in those professional activities, the Directive mentioned in the intra-EU labour mobility section allows for the applicant to remedy the deficiency either by undertaking an aptitude test or by undergoing a period of supervised work experience.

¹¹¹⁸ Article 5, section 3 of the Directive

¹¹¹⁹ Article 7, section 1 of the Directive

¹¹²⁰ Article 7, section 2 of the Directive

ANALYSIS

ECONOMIC ASSESSMENT

INDICATOR: Output, exports

Canada and EU

Several studies that have examined the temporary and permanent movement of workers in certain circumstances, for example between developed and developing countries, have found evidence of a positive correlation between labour mobility and efficiency growth.¹¹²¹ Studies have more specifically focused on the relationship between migration and trade between developing and developed countries. Herein, there are different models of trade whereas one suggests that cross-border flows of goods act to reduce cross-border labour mobility, and others suggest a positive correlation between trade and migration. Still, generally, it is cited that increased trade encourages migration of skilled labour from non-industrialised/industrialising countries to industrialised countries. This trend is labelled the South-North “brain drain.”¹¹²²

While these studies primarily look at the movement of labour in general, as well as the movements among developing and developed countries, the focus of CETA and thus this analysis is the much smaller movement of business professionals among Canada the EU. Generally, taking from the theory established in the literature, trade and flows of skilled temporary labour like the type being discussed would be complements under CETA. Given the majority of the countries of the EU are well developed there would be far less demand for labour movement of skilled workers between the EU and Canada than between a developing country and either country/area. Nonetheless, the movements that would take place by decreasing barriers to movement would likely encourage efficiency. This may increase exports depending on if the areas in which the efficiency gains are realised are exporting industries, and of course depending on export demand.

INDICATOR: Rate/volume of FDI flows

Canada and EU

Generally, improved labour mobility is likely to have a positive effect on FDI. Labour mobility has been found to have a positive impact on investment between sending and receiving countries. A 2005 WTO study examining the relationship between FDI and the temporary movement of people found that a 10% increase in temporary movement correlated to an 8% increase of FDI inflows and 7.1% of outflows of FDI.¹¹²³

While these figures relate at large to the movement of temporary labour workers in the non-services sectors, the effects of improved labour mobility on FDI in the services sector is less clear. A recent

¹¹²¹ Among others, see: Walmsley, T. L. and L. A. Winters (2002) "Relaxing Restrictions on the Temporary Movement of Natural Persons: A Simulation Analysis", University of Sheffield; and Winters, L. A., T. L. Walmsley, Z. K. Wang, and R. Grynberg (2003). "Liberalising Labour Mobility Under GATS." Economic Paper 53, Commonwealth Secretariat, London.

¹¹²² Ghose, A. K. (2002). "Employment Paper 2002/33: Trade and international labour mobility." International Labour Organization. URL: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_142364.pdf

¹¹²³ Jansen, M. and Piermartini, R. (2005). "The Impact of Mode 4 Liberalization on Bilateral Trade Flows," WTO Economic Research and Statistics Division, November 2005.

analysis by the University of St. Gallen has implied that the positive effects from general labour mobility claimed in the literature are likely only for a limited subset of services.¹¹²⁴ More empirical analysis would be required to assess the specific effects of labour mobility provisions regarding professional services in CETA on FDI flows.

SOCIAL ASSESSMENT

Canada and the EU

Labour mobility provisions in CETA could allow for increased competitiveness which could translate into certain social benefits in Canada and the EU, although the magnitude of these benefits is uncertain. One of the clearest social benefits, outside those stemming directly from the potentially positive impacts on employment mentioned in the Economic section, is the encouragement of innovation. The extent to which business persons can more easily move across borders will have a direct impact on how quickly enterprises can adapt to technological changes or how quickly competitive advantages can be exploited.¹¹²⁵ Including provisions for labour mobility in professional services may facilitate improved flows of ideas like the types needed to create innovations that will benefit society.

ENVIRONMENTAL ASSESSMENT

Canada and the EU

No noteworthy negative environmental impacts for labour mobility provisions under CETA are predicted. This is due to the focus on professional service industries in which negative environmental externalities are limited.

Moreover, in the mid- to long-term, including provisions for labour mobility in professional services may facilitate improved flow of ideas like the types needed to create environmentally-friendly technology. This would have a positive impact on the environment. And when combined with certain other provisions of CETA, for example those on investment, among others, this could magnify such benefits.

7.5.2. USA, MEXICO & OTHER THIRD COUNTRIES

BASELINE

Refer to the baseline in “Canada & EU” section above as this also forms the most important background for this section.

¹¹²⁴ Henneberger, Fred and Ziegler, Alexandre (2006). “Employment Effects of Foreign Direct Investment in the Service Sector: A Systematic Approach.” Research Institute for Labour Economic and Labour Law, St. Gallen University. May, 2006

¹¹²⁵ Radcliffe, Brent (2008). “The Economics of Labour Mobility”, October 2008.

ANALYSIS

If the labour mobility provisions in CETA extend to other countries outside Canada and those in the EU, they may have positive impacts on the US, Mexico and other third countries. This would allow freer movement of professional business service workers. This could have particularly positive effects in lesser developed third countries by allowing skilled workers from these countries to gain knowledge and experience abroad and in turn use it to potentially develop the economic, social and environmental spheres in their home country (for example, through development of innovative technologies built with skills they learned abroad). This of course is contingent on these workers returning to their home country, rather than creating a “brain drain” by staying in the EU or Canada or moving to another developed country or region.

However, in the opposite scenario, if the provisions do not extend to other trading partners of the EU and Canada, this could provide some advantage for movement of professional service workers among the EU and Canada over professional workers from other countries. Without specifics on such provisions in CETA it is not possible to further assess the significance of these potential impacts.

7.6. FREE CIRCULATION OF GOODS¹¹²⁶

Summary: *Similar to non-tariff barriers that exist in international trade, internal trade barriers often distort production and consumption costs, raising the purchase prices of goods paid for by consumers, businesses and governments. The negative impact of internal barriers created by Canadian labelling rules in particular are not exclusively encountered by Canadian companies, as incoming goods from the EU and other countries are also subject to the same rules. Thus, reducing these internal trade barriers increases efficiency in the Canadian market and while the EU does not face the same issues internally with respect to the free circulation of goods that Canada does, the benefits expected to be realised within Canada as a result of CETA, or at least CETA-encouraged inter-provincial reform, will likely have a favourable effect on the EU.*

While governments within Canada have made efforts in the past to reduce internal trade barriers, including those to free-circulation of goods, the pace of progress has been slow and CETA provides an opportunity to bring the federal and provincial governments together to enact major reform. Provisions allowing freer circulation of goods could improve Canada's productivity and would be particularly focused within the agriculture and agri-foods sector. Additionally, addressing this internal issue will likely have a more general positive influence on investment in the country by changing the current global perception that Canada has many internal impediments to free circulation of goods.

7.6.1. CANADA & EU

BASELINE

Canada

Although Canada has contributed to the liberalisation of international trade and signed bilateral free trade agreements as a complement to the multilateral system, it has not as actively reduced its own internal trade barriers at the same pace. In a 2007 speech from Prime Minister Harper, the Canadian government recognised that, “despite the globalization of markets...it is often harder to move goods and services across provincial boundaries than across our international borders.”¹¹²⁷

Although Section 121 of the Canadian constitution prohibits the use of inter-provincial tariffs, subsequent judicial interpretation has allowed provinces to implement non-tariff barriers which have fragmented the country's internal market and provide obstacles to pan-Canadian standards. After the implementation of NAFTA, the Canadian federal government managed to bring the provinces together and negotiated an Agreement on Internal Trade (AIT), although not without resistance from groups for provincial protectionism. The AIT took effect in 1995 but as it required separate legislative and

¹¹²⁶ **Introductory Notes:** While barriers to labour mobility and investment as well as government procurement issues are often discussed in conjunction with the free circulation of goods and services, the former elements have been analysed in their own sections. This section focuses primarily on the movement of goods (foreign or Canadian) among jurisdictions within Canada.

¹¹²⁷ Text of Prime Minister Stephen Harper's speech from the throne, Oct. 16 2007

administrative actions by each of the provincial governments to take effect, implementation started slowly and little progress was made.¹¹²⁸

However, under the Harper government there has been a renewed interest in removing the internal barriers and recent progress has been made albeit only by some provinces. In 2006, the governments of British Columbia and Alberta signed a Trade, Investment and Labor Mobility Agreement (TILMA). With certain exceptions, TILMA phases out existing barriers to free circulation of goods and creates a mechanism for dispute settlement that is accessible by businesses, NGOs and individuals. The governments of Ontario and Quebec are said to be considering talks on a related agreement of their own.

While internal trade barriers impede a number of different sectors, the most prevalent internal trade impediments exist in the agriculture and agri-foods sectors. For example, restrictions are in place that limit inter-provincial shipments of supply-managed commodities such as wheat, dairy and poultry products; prohibitions are in place on bulk shipments of fruits and vegetables; different labelling rules and food packaging requirements discourage internal trading; and meat inspection requirements often overlap which prevents shipments to processors in other provinces or territories.

The negative impact of internal barriers created by labelling rules in particular are not exclusively encountered by domestic companies, as incoming goods from the EU and other countries are also subject to the same rules. In many cases, stakeholders have claimed that numerous provincial laws have not been harmonised with federal regulations. This creates a problem where labelling is therefore not possible during production or before shipment but instead must take place in Canada. This can lead to shipping delays and increased costs for operators. Also, as the issue is at the provincial and not federal level, products not meeting requirements are often not stopped at the border but are instead only discovered during spot checks once the goods have arrived at retail locations.

These practices have been justified by noting that many health and safety-related labelling requirements fall under the jurisdiction of individual provinces and territories. Contrary to certain stakeholder claims, the Canadian Competition Bureau has stated that most requirements have been harmonised or reciprocal agreements put in place to address such issues. Nonetheless, the bureau has recognised that further negotiations need to be conducted with an aim to establishing less burdensome and less costly requirements for labels.

EU

The European Union has been considerably more successful than Canada in eliminating internal trade barriers with respect to the free circulation of goods. Since 1992, the EU has worked towards the mutual recognition and harmonisation of different laws, regulations and administrative provisions of individual Member States that previously hindered the movement of goods throughout the union. As a result of the integration, both physical and technical barriers have been virtually eliminated. Border checks of goods were abolished, EU-wide quotas against restricted outside country goods were adopted, customs forms were standardised, the requirement for bilateral permits that rationed truck transportation between countries was eliminated, and Value Added Tax (VAT) and excise taxes were harmonised as were product health standards.¹¹²⁹

¹¹²⁸ DFIAT. "Domestic Trade Barriers." <http://www.international.gc.ca/trade-agreements-accords-commerciaux/ait/domestic-trade-barriers.aspx?lang=en>

¹¹²⁹ Chapman, A. "Economic Union: A Comparison of Canadian Government Proposals and the Plans of the European Community." Government of Canada.

ANALYSIS

ECONOMIC ASSESSMENT

INDICATOR: Institutional and regulatory regime

Canada

Canadian governments have recently implemented a number of potential improvements to facilitate inter-provincial investment, and to the degree that CETA builds on these measures it could further allow for more efficient circulation of goods. CETA may propose a number of initiatives to allow more flexibility in Canada's institutional and regulatory regime, one being to change product labelling protocols.

EU

The inter-state institutional and regulatory systems for circulation of goods in the EU will likely not be strengthened much further by CETA.

INDICATORS: Output, exports, real income, production costs, employment, market prices

Canada

Proponents of improving the free circulation of goods through the reduction of internal trade barriers also believe that the barriers between provinces stifle economic growth and hamper business development. Others have argued, however, that the barriers are minimal. In an analysis of the economic case for TILMA, Lee and Weir (2007) conclude that "there are very few obstacles to trade and investment among provinces, and no evidence that such obstacles entail significant economic costs."¹¹³⁰ They argue that, in addition to using faulty methodology, a number of studies of the effects of barriers consistently overlook the economic benefits of those same barriers that allow government to act in the public interest.¹¹³¹

Different estimates have been produced on the cost of inter-provincial trade barriers in Canada. In a 2006 hearing, the chairman of the Canadian Senate's Standing Committee on Banking, Trade and Commerce cited estimates on the costs of current inter-provincial trade barriers at between \$10 and \$25 billion dollars annually¹¹³² (\$25 billion would equate to 2.23% of Canada's GDP in 2007).¹¹³³ Certain empirical studies done in the 1980s and 1990s show that inter-provincial barriers in Canada impose a comparatively smaller cost on the overall economy, estimating that removing such barriers would increase Canada's GDP by less than 0.5 per cent.¹¹³⁴ (The dated nature of these latter studies may affect their applicability to the current market in Canada, although this does not necessarily imply the 2006 figures are more accurate.)

¹¹³⁰ Lee, M. and E. Weir (2007). "Behind the Numbers: The Myth of Interprovincial Trade Barriers and TILMA's Alleged Economic Benefits." Canadian Centre for Policy Alternatives. pg 1

¹¹³¹ Ibid

¹¹³² Sands, C. (2007). "Canada's Problem: Domestic Trade Barriers." *The American*. www.american.com/archive/2007/may-0507

¹¹³³ Calculations using Canada's 2007 GDP of \$1.089 trillion

¹¹³⁴ Whalley, J. (1983) 1(995). "Induced Distortions of Interprovincial Activity: An Overview of Issues" and "The Impact of Federal Policies on Interprovincial Activity." In M.J. Trebilcock et al. (eds.), *Federalism and the Canadian Economic Union*. Ontario Economic Council.

Although there may be disagreements on the magnitude of the effects, it is reasonable to state that internal trade barriers in Canada increase production costs and result in higher consumer prices. This in principle also results in less choice for consumers. Further, such inter-provincial trade barriers contribute to additional costs that are ultimately passed on to the public through increased taxes, inferior services or increased debt.¹¹³⁵

While free circulation of goods is not the only trade barrier among provinces in Canada (as noted in the introductory notes to this section), it is one of the major barriers. As a significant amount of the internal barriers for circulation of goods are concentrated in the agriculture and agri-foods industry, if CETA removed such barriers the impacts will be most present in these sectors. As a result, input costs to producers could be lowered and suppliers who had previously faced barriers could have greater access to markets in other provinces and territories.

In summary, increasing the free circulation of goods by removing internal trade barriers will most likely benefit Canada economically. However, the magnitude of the benefit will depend on CETA's specific provisions and on Canada's implementing legislation.

EU

As previously noted, the EU does not face the same issues internally with respect to the free circulation of goods that Canada does. However, the benefits expected to be realised within Canada as a result of CETA, or at least CETA-encouraged inter-provincial reform, will likely have a favourable effect on the EU. In particular, CETA could importantly provide a mutual recognition or reconciliation of key standards and regulations, including technical standards and barriers pertaining to agricultural products. This harmonisation would allow European companies to more easily conduct business throughout all of Canada's provinces and territories. This would likely lead to a lowering of production costs and thus increased production. As a significant amount of the internal barriers for circulation of goods in Canada are concentrated in the agriculture and agri-foods industry, these impacts will be felt within this industry in the EU. The magnitude of these benefits will increase when combined with reduced tariffs for EU agricultural, PAPs and fisheries products, but overall depends on CETA's specific provisions and on Canada's implementing legislation.

SOCIAL ASSESSMENT

No significant social impacts are predicted outside those directly linked with the positive economic impacts mentioned in the Economic section above.

ENVIRONMENTAL ASSESSMENT

No significant impact predicted.

¹¹³⁵ Macmillan, K. E. and Grady, P. (2007). "A New Prescription: Can the BC-Alberta TILMA Resuscitate Internal Trade in Canada?" C.D. Howe Institute Backgrounder No.106.

7.6.2. USA, MEXICO & OTHER THIRD COUNTRIES

BASELINE

Refer to baseline in “Canada & EU” section above for further details as this also forms the background for this section. It is worth noting that relative to both market size and distance, Canadian enterprises are 12 times more likely to trade goods (and 30 times more likely to trade services) between provinces than with the US.¹¹³⁶

ANALYSIS

To the degree that CETA reforms the Canadian market to allow for free circulation of all goods regardless of nationality, this would likely have positive effects on US and Mexican companies as well as those from other third countries currently restricted by such limitations. This may allow for lowering of production costs and thus increased production. As a significant amount of the internal barriers for circulation of goods in Canada are concentrated in the agriculture and agri-foods industry, these impacts will be most present in this industry in the US and Mexico. However, these benefits would be offset to a certain degree by Canadian tariffs on agriculture and agri-foods, among other policies. The magnitude of the benefits will depend on CETA’s specific provisions and on Canada’s implementing legislation.

¹¹³⁶ Helliwell, J. (2002). *Globalization and Well-being*. UBC Press. 2002.

7.7. COMPETITION POLICY

Summary: *A competition policy chapter in CETA will likely focus on removing discriminatory measures imposed by Canada's provincial liquor control boards and its Wheat Board, include provisions on international letter delivery, and make changes to EU and Canadian state aid policies.*

If CETA removes discriminatory practices of the Canadian liquor control boards this could improve the transparency of the Canadian regulatory regime and encourage competition. Evidence suggests that this would not necessarily undermine public health and safety objectives as the Canadian government would retain the most important policy tools for reducing over-consumption of alcohol, i.e. being able to set price floors and impose taxes on beer, wine and spirits.

Removal of discriminatory practices of the Wheat Board could improve sales and wages of wheat farmers in Canada if they prove themselves more competitive without the Board. While some stakeholders allege it could also result in a reduction of the value of wheat farmer's lands, which would limit/eliminate an important source of funding for farmers to pay their bank debt and significantly limit the amount of money otherwise received by selling the land to fund their retirement plans, other evidence appears to limit these concerns. The EU wants to remove discriminatory practices of the Wheat Board in an effort to increase market share in the grains regulated by the Board.

International letter delivery in Canada has already been opened to foreign competition under budget Bill C-9, passed in July 2010, and thus CETA itself would not open up this sector although it would bind such access in a trade agreement. Changes in market share and employment in Canada Post resulting from Bill C-9 and also stipulated by CETA would depend on Canada Post's ability to compete with EU producers in this cross-section of the market. No notable negative effects would be expected in regards to quality of services.

Without further details of CETA and an in-depth analysis beyond the scope of this report it is unclear how revision of state aid policies under CETA would affect wages and working environments in Canada and the EU.

Overall, the competition policy chapter of CETA is not expected to have significant environmental impacts.

7.7.1. CANADA & EU

BASELINE

Regulatory and institutional framework

Competition policy is not explicitly addressed in any WTO agreements despite that it was introduced as an issue for discussion by the WTO 1996 Singapore Ministerial Declaration; however, sections on competition policy have already been included in a number of in force or proposed bilateral and regional agreements negotiated separately by Canada and the EU. For example, Chapter 15 of NAFTA sets-forth provisions on competition policy between Canada, the US and Mexico. Due to potential losses in welfare and fairness caused by the lack of good competition policy, both Canada and the EU have advocated including basic competition policy principals in their FTAs.

Prior to the commencement of CETA negotiations, Canada and the EU had already initiated bilateral cooperation between the regions with the implementation of the Agreement between the Government of Canada and the European Communities regarding the Application of their Competition Laws (hereafter in this section the “Competition Agreement”), which was signed at the EU/Canada Summit in Bonn, Germany in June 1999. In Canada, the Competition Agreement is administered by the Competition Bureau, and in the EU it is administered by the EC Directorate-General for Competition (DG COMP).

The Competition Agreement is designed to assist in the process of increasing cooperation between the two regions in terms of enforcing their respective competition rules. Namely, the Competition Agreement includes provisions related to the following:

- Requiring reciprocal notification of cases being investigated by either authority if a case may have an effect on important interests of the other party;
- Rendering assistance to one another and allowing for possible coordination of enforcement activities by the two authorities;
- Allowing for one party to take into account the important interests of the other party in the course of its enforcement activities (traditional comity) and for the additional possibility of one party requesting the other to take enforcement action (positive comity); and
- Allowing for the exchange of information not affecting either party’s confidentiality obligations.¹¹³⁷

As gauged from stakeholder consultations and a literature review, the following competition policy issues are the most relevant to CETA:

- Specific boards (provincial liquor control boards, Wheat Board)
- Other specific public monopolies (Canada Post)
- State aid/subsidies

Provincial liquor boards in Canada (also discussed in the Agriculture, PAPs and fisheries section)

Each province and territory within Canada has a body that oversees control, distribution and sale of alcoholic beverages within its jurisdiction. With the exception of Alberta, which is the only Canadian province to have privatised its alcohol distribution system, each of these liquor boards are granted a quasi-monopoly position over the import, supply and distribution of alcoholic beverages. These liquor control boards (LCBs) operate under two primary objectives: revenue generation and limitation of abusive/excessive alcohol consumption.

Operating independently (i.e. not at a federal level), these liquor boards establish ‘reference’ or ‘floor’ pricing standards, which set the minimum retail price for each product category. These prices are enforced within the retail and distribution system operated by these liquor boards. Where off-site point of sale is allowed, e.g. in licensed bars, restaurants and hotels, etc., the retailer is required to purchase their products through the liquor board outlet.

The LCBs also importantly place quota systems on imported products. Liquor board purchasing groups have strict sales quotas for all brands listed. Brands not reaching their quota are discounted at the supplier’s cost, sold out and denied future access to the retail network.

¹¹³⁷ 2008 Joint Study

Canadian Wheat Board (also discussed in the Agriculture, PAPS and fisheries section)

An additional area of state-trading in Canada that has received particular attention is that of the Canadian Wheat Board (CWB). Established in 1935 by the Canadian Parliament as a means of controlling the price of grains, the CWB is a state-trading company that is granted monopoly status as the country's chief exporter of wheat and barley. With Canadian farmers located predominantly in the Western Prairies¹¹³⁸ required to sell their wheat and barley to the CWB, the CWB is the largest wheat and barley marketer in the world, accounting for 20% of the world's wheat and barley sales.¹¹³⁹

De-regulation of Canada Post

After attempting several times to deregulate international letters, in July 2010 the Canadian government passed the C-9 budget bill which removes previously enjoyed privileges by Canada Post on delivery of letters intended for an address outside Canada.¹¹⁴⁰ International mail options at Canada Post include Priority Worldwide (partnered with FedEx), Xpresspost International, Light Packet International, International Parcel – Air, Small Packet International – Air, International Parcel Surface, and Small Pack International – Surface.¹¹⁴¹ Private international firms have for years delivered certain Canadian mail abroad, including brochures, checks, and invoices.¹¹⁴²

State aid

Canada and the EU take different approaches to state aid. EU Member States must comply with strict rules set out in the Treaty establishing the European Community when granting state aid (the Treaty of Lisbon does not change these rules) in order to ensure that it does not adversely affect competition. In Canada, state aid is self-regulated at both the federal and provincial/territorial levels.

State aid programs in Canada offer, among other benefits, cash grants, low interest loans, tax breaks, and government equity participation and are most predominant in the agriculture, fishing, forestry, automobile and mining industries. Each of these sectors is considered for the geographical concentration of their activities. In some cases, for example in agriculture, producers have become dependent on government support although Canada has transitioned away from commodity-specific and market-price support to a whole-farm approach.

Canadian subsidy programs are targeted to address potential externalities and tend to revolve around initiatives that supply funds for research and development, technology adoption, research joint ventures and training or apprentice programs. Some programs also are in place to assist certain minority groups such as First Nations, inhabitants of remote communities and the disabled.

Like Canada, the EU has also transitioned away from commodity-specific and market-price support and has reduced its market distorting export subsidies in the agriculture sector. Reforms to the Common Agricultural Policy (CAP) implemented from 2005 are phasing out specific subsidies in favour of flat-rate

¹¹³⁸ Farmers in Eastern Canada and in most of British Columbia are not under the Board's authority and may market their grain on the open market

¹¹³⁹ Statistics Canada

¹¹⁴⁰ See Section 1885 of Bill C-9 (2010) amending Section 15, sub-section (2) of the *Canada Post Corporation Act*

¹¹⁴¹ www.canadapost.ca "Shipping Products & Services"

¹¹⁴² Consumer Postal Council (2009) 'Canada – Canada Post: Index of Postal Freedom.'

[http://www.postalconsumers.org/uploads/1/Canada - Canada Post.pdf](http://www.postalconsumers.org/uploads/1/Canada_-_Canada_Post.pdf)

payments based only on the area of land in cultivation, as well as adopting environmentally beneficial farming methods.

Other sectors in the EU supported by subsidies include fishing, mining, energy (nuclear, gas, coal and renewable energy), and telecommunications.

Both the EU and Canada have rules that include regulations to implement countervailing and/or anti-dumping measures to balance certain negative market effects of certain subsidies on products and services from third countries.

ANALYSIS

ECONOMIC ASSESSMENT

INDICATOR: Impact on institutional and regulatory regime, economic policy space

Canada

Liquor board

While the concerns over liquor control boards in Canada have in part been addressed bilaterally through the 1989 EC-Canada Agreement on trade and commerce in alcoholic beverages and the 2004 EU-Canada Wine and Spirits Agreement, the issue remains unresolved due to continued concern from the EC over lack of enforcement/compliance at the provincial level and continued ongoing discriminatory behaviour. The EU has taken issue with the Canadian provinces' monopoly control over distribution and retail, arguing that liquor boards "appear discriminatory and substantially hinder the access of European alcoholic beverages to the Canadian market."¹¹⁴³ Garnering particular contention from the EU has been the complaint of discriminatory listing procedures, pricing and quota systems that favour domestic over imported products. The liquor boards' listing procedures require any supplier of beer, wine or spirits wishing to sell their product(s) in a province to first obtain a listing from the provincial marketing agency.

The EU has complained about a number of issues concerning Canadian liquor control boards. Generally, decisions by the boards pertaining to listing requests lack transparency, while such decisions have seemed to discriminately exclude entry of imported products.¹¹⁴⁴ Further, it is claimed that the monopoly status of these boards, which for example has made the Liquor Control Board of Ontario the world's largest purchaser of alcoholic beverages, has allowed these provincial liquor boards to leverage their position to inflict further "onerous commercial conditions on suppliers, once an imported product is listed."¹¹⁴⁵ Also, the EU claims that provincial liquor boards in Ontario, Quebec and British Columbia provide discriminatory pricing mechanisms that favour locally produced wines and that some liquor boards apply discriminatory cost of service differentials on imports of EU wines.¹¹⁴⁶ Additionally, the EU has also claimed that the sales quota for liquor brands imposes discriminatory sales quota systems for

¹¹⁴³ EC Market Access Database. http://madb.europa.eu/madb_barriers/barriers_details.htm?barrier_id=960047&version=6

¹¹⁴⁴ Market Access Database

¹¹⁴⁵ Market Access Database

¹¹⁴⁶ These include: (1) minimum and maximum price requirements on certain imported products; (2) waiver or reduction of various charges to the domestic industry (e.g. freight, direct delivery mark ups, costs of marketing programmes) that are unavailable to imported products; (3) Ontario authorises its Liquor Control Board to charge an additional 5% reduction on all sales of Ontarian wines to restaurants and bars; (4) British Columbia allows its Liquor Board to implement a mark-up discount on the province's wines, which is said not to benefit imported wines.

imported wines that make it difficult for EU products to meet the sales quota and therefore maintain the ability to be sold in state-run retail stores.

If CETA deregulates the Canadian liquor control boards, it goes without saying that this would reduce regulatory flexibility Canadian provinces currently have in this area. This may in fact have positive impacts in terms of improving the transparency of the Canadian regulatory regime and encouraging competition (see below indicator), and there is limited evidence to suggest it would lead to reductions in the type of policy space relevant to this SIA, i.e. negative regulatory impacts, that could not be mitigated by domestic policy tools allowed outside CETA (see social assessment below).

Wheat board

Although the CWB was reformed to meet free market conditions under NAFTA and the WTO, it continues to receive complaints from the US and EU that its exclusive rights over the export of wheat and barley from Canada make it non-competitive. The EU has expressed particularly negative views towards supply management practices used by the CWB, maintaining its provision of an unfair competitive advantage. The Canadian government has expressed a willingness to dismantle the CWB; however, removing discriminatory practices of the board is a controversial subject which currently divides stakeholders and will not be something which is easily achieved.

To the degree that CETA facilitates removal of discriminatory CWB practices it would decrease the regulatory flexibility afforded to authorities operating the board. As mentioned in the next section, this could have positive benefits, and although some observers fear it could reduce policy space, i.e. have some negative social impacts, there is evidence to limit these concerns (see social assessment below).

Deregulation of certain letters delivered by Canada Post

Stakeholders' have complained that the CETA may 'deregulate' the Canadian postal service's control over business in certain types of letters, specifically the international letter service. Stakeholders claim that the postal service needs international letters and other letters for revenue and that there is little public support for the deregulation of Canada Post.¹¹⁴⁷ However, the 2010 C-9 budget bill passed in July 2010 removes previously enjoyed privileges by Canada Post on delivery of letters intended for addresses outside Canada. As such, while including such provisions in CETA will bind the liberalisation afforded under Bill C-9 in an international agreement, thus making it more difficult to alter these commitments, it would not propose a new type of liberalisation *per se*.¹¹⁴⁸

State aid

Depending on how state aid policies are reformed under CETA this may reduce the regulatory burden of implementing directly and indirectly related regulations or may in fact increase this burden if the reforms are relatively extensive and complex. This might affect policy space.

EU

Competition policy reforms under CETA would have mixed effects on the institutional and regulatory environment in the EU, most of which would not particularly affect the type of policy space relevant to this SIA, in the EU. As potential reform of the liquor control boards, CWB, and Canada Post under CETA

¹¹⁴⁷ Trade Justice Network. "CETA and public postal service." <http://tradejustice.ca/en/section/15>.

¹¹⁴⁸ See Section 1885 of Bill C-9 (2010) amending Section 15, sub-section (2) of the *Canada Post Corporation Act*

only directly relates to the institutional and regulatory system in Canada, reforms therein will not have any significant direct impacts on the institutional and regulatory system of the EU. As such, there would not be a direct affect on policy space. However, the same potential impacts predicted for Canada in terms of the state aid issue also apply generally to the EU.

INDICATOR: Market share, employment

Canada and the EU

Liquor boards

To the degree that CETA encourages a significant reduction in the provincial boards' monopoly status, this could allow greater access for Europe's alcoholic beverages industries in Canada. These alcohol products are the most widely exported processed food products into Canada and exhibit sizeable demand in Canada. As such, CETA could produce significant market gains for the European alcoholic beverage industry. Changes in market share and employment for Canadian alcohol producers would depend on their ability to compete with EU producers in the same cross-section of their respective markets. Refer to the beverages sub-section in the Agriculture, Processed Agricultural Products and Fisheries section for further details on related impacts.

Wheat board

There are mixed views as to if reducing discriminatory practices of the CWB will positively benefit Canadian and/or EU wheat farmers. Certain farm groups consulted in Canada suggest that dismantling the discriminatory practices of the CWB would allow Canadians to increase sales of Canadian wheat.¹¹⁴⁹ Meanwhile, other consultations and literature suggest the CWB guarantees wheat prices and in fact provides optimal prices for wheat for individual farmers operating outside large farming conglomerates. This is said to be primarily due to the fact that the CWB has established a "Canadian" brand for western grain which allows it to earn premium prices on the world market.¹¹⁵⁰ As mentioned, the EC appears to desire dismantling of discriminatory practices of the CWB to allow EU wheat farmers improved opportunities to compete with Canadian wheat farmers.

The role that CETA has on the overall trade in wheat and barley between Canada and the EU will likely be influenced by changes to the CWB, but future trade in these products also importantly depends on other factors of competitiveness outside the CWB. As predicted in the preliminary CGE modelling (see discussion of wheat in the "agriculture" sub-section in Agriculture, Processed Agricultural Products and Fisheries section), the CETA is expected to have a positive impact on the Canadian wheat sector.¹¹⁵¹ To the degree that CETA deregulates the CWB and this allows for more competition in Canada, it may allow for the EU to compete more for market share in wheat. However, the extent of this impact will likely be limited at least somewhat by Canada's competitiveness in wheat due to reasons not only attributable to the CWB.

Deregulation of international letters delivered by Canada Post

Stakeholders claim that the Canadian postal service needs international letters and other letters for revenue. The EU is particularly competitive in the delivery of international letters, led by DHL and TNT.

¹¹⁴⁹ Consultations with Grain Growers of Canada, November 2010

¹¹⁵⁰ Consultations with CWB in October 2010 and individual wheat farmers

¹¹⁵¹ Note: the CGE model considers imported wheat as imperfect substitutes of domestically produced wheat, and models Canada's wheat import tariff as zero.

As such, the EU could very well see some market gains in the international letters monopoly by including provisions allowing for competition with Canada Post in CETA, but, as mentioned, CETA itself would only be binding this market access already granted in Bill C-9 passed in Canada in July 2010.

Changes in market share and employment for Canada Post would depend on its ability to compete with EU producers in the same cross-section of their respective markets. It is notable that private international firms have for years delivered certain Canadian mail abroad, including brochures, checks, and invoices. This has continued despite the 2004 court ruling determining outbound international mail was an exclusive right of Canada Post,¹¹⁵² and now is explicitly allowed by Bill C-9 passed in 2010. Also, key EU service providers, for example DHL and TNT, as well as other key foreign-service providers like FedEx, continue to operate a variety of postal services in Canada. As such, Bill C-9 and CETA, taken together, may allow EU firms to expand within Canada's international letter delivery service, and by gaining more of a foothold in that market in the mid- to longer-term they may be able to enhance their existing domestic operations. Shifts in market share and employment may result, and would involve competition not only between EU companies and Canada Post but also with FedEx (who cooperates with Canada Post in the "Priority Worldwide" international delivery service, for example) as well as other foreign firms. Economic gains could be realised by a number of enterprises to the extent that CETA encourages new business operations and increased letter mail abroad, to Europe for example.

State aid

To the degree that CETA changes state aid policies this may in the short term alter the balance of market share of companies in the EU and Canada currently enjoying these preferences. Without an in-depth analysis, which is beyond the scope of this report and cannot be performed without specifics on state-aid provisions from CETA, it is not possible to assess exactly how these changes may play out to the benefit of either Canada or the EU.

Still, it is worthwhile to note that reform to state aid policies under CETA or resulting as a by-product from CETA may affect certain industries specifically because they currently enjoy state aid. To recall, state aid policies in Canada particularly take the form of cash grants, tax breaks, low interest loans and government equity participation in the agriculture, fishing, forestry, automobile and mining industries; they could also affect minority groups such as First Nations, inhabitants of remote communities and the disabled. In the EU they particularly deal with subsidies to EU agriculture, fishing, mining, energy (nuclear, gas, coal and renewable energy), and telecommunications industries.

SOCIAL ASSESSMENT

Canada and EU

Liquor boards

Opponents of the proposed CETA's encroachment on the provincial liquor boards claim dismantling the liquor boards will undermine the government's ability to "implement policies that reduce the substantial social and economic harm caused by alcohol consumption."¹¹⁵³ Herein, these opponents cite increases in

¹¹⁵² Consumer Postal Council (2009)

¹¹⁵³ Grieshaber-Otto, J. (2010). 'Protecting Ontario's Alcohol and Public Health Policies in Negotiations on the Proposed Canada-EU Treaty'. Alcohol Workgroup: Ontario Public Health Association.

drunk driving convictions and sales to minors following privatisation in Alberta.¹¹⁵⁴ Additional concerns over the potential negative social impact revolve around employee benefits derived through the liquor board owned distribution system's usage of union employees. Specifically, concern has been raised over the impact on Alberta's employees in the alcohol industry who have seen privatisation lead to lower pay and benefits as well as decreased job security.¹¹⁵⁵

A number of factors determine alcohol consumption levels. The impact of prices on alcohol consumption, with higher prices both reducing consumption and creating certain related negative consequences, is well documented.¹¹⁵⁶ There is also evidence that the ratio between price and alcohol content creates consumption incentives, i.e. to consume beverages with a lower cost-to-alcohol content ratio (for example, among different types of beer), and that these perverse incentives currently exist in Canada due to alcohol pricing policies that could benefit from reform.¹¹⁵⁷ Also, and importantly, increases in population growth and disposable income allow for increased alcohol consumption. For example, sources suggest these factors are the more likely explanatory variables for the aforementioned increased alcohol consumption in recent years in Alberta rather than the privatisation of liquor sales there.¹¹⁵⁸

CETA will likely have some effect on the abovementioned factors related to alcohol consumption, although there does not appear to be strong evidence to suggest this will necessarily lead to an increase in alcohol abuse in Canada. It is likely that increased competition among directly competitive beers, wines and spirits encouraged by the competition policy chapter in CETA would lead to some reduction in prices. Still, the *precise* impact of CETA on prices of wine and spirits, particularly those prone to be abused via over-consumption, is not fully clear and thus the related social impacts are also not fully clear. However, as mentioned below, key policies to control alcohol prices would not be affected by CETA. CETA is not envisaged to alter the price-to-alcohol content ratio pricing policies in any way beyond ensuring national treatment for EU products in Canada. The effect of CETA on population growth and disposable income as it relates to alcohol consumption is far too much of an indirect impact to warrant analysis in this section.

CETA commitments would not restrict policy space to make alcohol taxation and pricing policies, which are identified as among the "most effective policies available to government to combat alcohol abuse."¹¹⁵⁹ As mentioned, evidence suggests these policies need to be reassessed in Canada regardless of if CETA is implemented. Importantly, consultations with the EC suggest that CETA will not disallow the LCBs from setting price floors for beverages.¹¹⁶⁰ Also, the Canadian government would retain the ability to apply within-border taxes to beer, wine and spirits if applied in a non-discriminatory manner. These are strong tools to prevent over-consumption of alcohol and as such should serve to considerably limit concerns over related negative social impacts caused by CETA.

As a final point, evidence clearly suggests that liquor control boards need not employ discriminatory practices favouring domestic suppliers in order to protect public health and safety. For example, the EU Member State of Sweden's Systembolaget is itself a government-owned chain of liquor stores that

¹¹⁵⁴ National Union of Public and General Employees. Canada's Liquor Boards. <http://www.nupge.ca/content/3387/canadas-liquor-board-unions-join-fight-save-lcbo>

¹¹⁵⁵ Ibid

¹¹⁵⁶ See, among others, Chaloupka, F. J. et al. "The Effects of Price on Alcohol Consumption and Alcohol-Related Problems." *Alcohol Research & Health*. Vol. 26, No. 1, 2002.

¹¹⁵⁷ Stockwell, T. et al. (2007). "Alcohol Consumption in British Columbia and Canada: A Case for Liquor Taxes that Reduce Harm." Centre for Addictions Research of BC. Bulletin 2 – December 2007. pg 2

¹¹⁵⁸ *Vancouver Sun*. "Putting a price on alcohol abuse shows a simple first step." June 13, 2008.

¹¹⁵⁹ Stockwell (2007) pg 2

¹¹⁶⁰ Consultations with EC representatives in Ottawa, November 25, 2010

maintains the sole right in retail of alcoholic beverages exceeding 3.5% alcohol content by volume. Similar to Canada, the Systembolaget is maintained as a means of ensuring public health by reducing the abuse and excessive consumption of alcohol;¹¹⁶¹ then again, while similar in regards to health and safety, differences between Sweden and Canada exist in Systembolaget's expressed mandate of being brand-neutral and selecting its products based on consumer demand.¹¹⁶² As such, opponents' concerns that the CETA cannot put an end to discriminatory practices while ensuring public health may be unfounded.

Wheat Board

Removal of discriminatory practices of the CWB as a result of CETA could have positive effects on Canadian wheat farmers. It could improve their earnings if they prove themselves more competitive without the board (for example, it could more generally allow farmers to sell at higher prices than those regulated by the CWB), which would be a notably positive effect.

In contrast, some stakeholders suggest that as a result of reducing the CWB's discriminatory practices farmers who have borrowed money to purchase their farms could end up owing more to the bank than their un-subsidised farm would then be worth. In other words, the value of their land would not be worth as much as when they received subsidies from the CWB.¹¹⁶³ Also, under this situation, retiring farmers looking to sell their land could face a significantly reduced retirement fund with new entrants into the farming industry looking to purchase unsubsidised farms at lower costs.

Upon initial investigation, there appears to be evidence to limit the aforementioned concerns raised over negative impacts on land value resulting from CETA's removal of discriminatory practices of the CWB. First, there is at least some ambiguity as to the type and impact of the 'subsidies' being provided by the CWB.¹¹⁶⁴ Also, consultations with some stakeholders suggest that significant portions of loans to wheat farmers go towards farming equipment, not just to land costs and thus CETA's impact on the repayment of loans is in fact not as significant of an issue. Moreover, the value of land on which wheat is grown is not only calculated according to the value it might generate farming wheat, with or without the CWB, but also in terms of its value for producing other grains and crops.¹¹⁶⁵ Generally, in support of the latter statement, the Municipality Property Assessment Corporation (MPAC) of Canada finds "Farmland values are based on the land's productive capability and other factors such as location."¹¹⁶⁶

Deregulation of international letters delivered by Canada Post

As mentioned, passage of Bill C-9 has already allowed for open competition in international letter delivery in Canada, while CETA would only further bind these commitments. The impact of this opening

¹¹⁶¹ Swedish National Institute of Public Health (2006). "If Retail Alcohol Sales in Sweden were Privatized, what would be the Potential Consequences?"

¹¹⁶² Systembolaget.se

¹¹⁶³ Certain consultations suggest that if farm subsidies were to be removed it could likely lead to a significant drop in farm real estate prices (especially in communities where farming, particularly wheat farming, is the only or most prevalent use of land). It is thus argued by some that as the overwhelming majority of farmers have not fully paid the land mortgage on the land on which they farm, they could end up owing more to the banks than this land is worth. Bankruptcy rules are strict in Canada and it is not particularly easy to walk away from mortgage responsibilities.

¹¹⁶⁴ For example, the Canadian Wheat Board itself claims to offer no "subsidies" to wheat growers except in cases of natural disasters; however, they do offer programs which are viewed as subsidies by numerous external groups. These programs include: (a) Value Added Incentive Program where \$3 per tonne premium is paid to grower if wheat is delivered directly to eligible mills and malting plants; (b) Growers are eligible to borrow up to \$400,000 from the board with the first \$100,000 being interest free; and (c) A pricing guarantee is offered by the board for all wheat produced.

¹¹⁶⁵ Consultations with Grain Growers of Canada, November 2010

¹¹⁶⁶ MPAC. "Assessment Procedure for the Valuation of Farm Properties."

http://www.mpac.ca/pages_english/procedures/procedure_for_valuation_of_farm_properties.asp

may encourage changes in wages and the working culture of Canada Post, although without an in-depth analysis on the competitiveness of Canada Post vs. European firms (and factoring in competition from other foreign firms) the extent of these effects are uncertain.

Given the high level of service that both the EU and Canadian private letter carriers provide it is unlikely the aforementioned opening would have a substantial effect on the quality of delivery of letters. Moreover, as the main issue herein is opening of international letter delivery services, even binding the provisions of Bill C-9 under CETA would not directly affect the delivery of domestic letters within Canada, although as mentioned in the “Market share...” indicator it could in the mid- to longer-term allow foreign providers to expand their domestic operations somewhat in Canada.

State aid

Without further details of CETA and an in-depth analysis, which is beyond the scope of this report, it is unclear how revision of state aid policies would affect wages and working environments in Canada.

EU

Limited/minor overall effects in the EU are expected, but there may be some potential positive social impacts. Some increases in wages in sectors where the EU becomes more competitive as a result of removing discriminatory measures could be expected. No significant and direct effects on public health, safety or quality of services are expected.

ENVIRONMENTAL ASSESSMENT

Canada and the EU

No direct environmental impacts are expected from a competition policy chapter in CETA. To be sure, this chapter should not affect how the Canadian and EU environmental regulations are developed or implemented or how environmental objectives are set, and so its impacts on the policy space and regulatory framework. Other production-focused environmental indicators would not be particularly affected.

7.7.2. US, MEXICO & OTHER THIRD COUNTRIES

BASELINE

Refer to the baseline in “Canada & EU” section above as this also forms the background for this section.

ANALYSIS

Economic assessment

Limited/minor direct, short-term impacts on policy space and the institutional and regulatory environment in the US, Mexico and other third countries are predicted from a competition policy chapter in CETA. Although, in the long-run the aforementioned changes under CETA could encourage the US, Mexico and other third countries to adjust their regulatory and institutional environments, particularly in terms of state aid policy, to adapt to relevant changes made in Canada and the EU.

If CETA were to make some of the discussed changes to competition policy in Canada and the EU it may result in some positive economic gains in the US, Mexico and other third countries. Removal of discriminatory LCB practices and binding market access for the international letters businesses, if not legally restricted to only benefiting the EU, could provide increased opportunities for US businesses in particular to better participate in the Canadian market. Removal of discriminatory practices of the CWB, if not legally restricted to only benefiting the EU, could allow increased opportunities to the US in particular to better participate in the Canadian market. To the degree that state aid reforms (e.g. in fisheries and agriculture) resulting from CETA are substantial enough and not only worded to benefit Canada and/or the EU, any number of other countries that are competitive in such industries could gain market share and accompanying economic benefits.

Social assessment

Limited/minor overall effects are expected for the US, Mexico and other third countries, but there may be some potentially positive social impacts. Some increases in wages and potentially in employment in sectors where other countries become more competitive as a result of removal of discriminatory measures mentioned could be expected. For example, these might be realised in the US wheat sector given the removal of discriminatory practices of the CWB. Also, to the degree that state aid reforms (e.g. in fisheries and agriculture) resulting from CETA are substantial enough and not only worded to benefit Canada and/or the EU, any number of other countries that are competitive in such industries could gain market share and enjoy some accompanying social benefits. No notable effects on public health and safety are expected.

Environmental assessment

No significant environmental impacts are predicted.

8. Policy Recommendations

8.1 Overview

The policy recommendations herein, also called flanking measures, are based on the results of the sustainability assessment of potential economic, social and environmental impacts that were discussed in detail in the preceding sections of the report. The proposed policy recommendations cover both enhancement and preventative/mitigation measures, i.e. measures needed to reinforce any significant positive sustainability impacts and to prevent or at least mitigate negative sustainability impacts.

Recommendations are presented in two main categories:

- Measures related to provisions that will likely be included in CETA (“trade measures”)
- Measures, not directly related to provisions in CETA, for cooperation that may accompany the agreement (“cooperation measures”)

Section 8.2 summarises the major potential impacts that were identified in the preceding SIA analysis. Section 8.3 details the proposed flanking measures relating to these major impacts.

8.2 List of Major Impacts

Agriculture, PAs & Fisheries

Economic

- **Beef:** if beef is liberalised to a significant degree, the CETA could lead to significant increases in exports from Canada to the EU. This would be accompanied by increases in output in Canada and decreases in the EU, though this depends on the quota allowed to Canadian producers. It is unlikely that the ban on GM beef in the EU will be lifted, but Canadian producers could be induced to increase hormone free production if the quota increases are large enough. Creation of a separate tariff line for bison meat could help Western Provinces diversify. Rules of origin are important and depend on whether origin is determined by place of birth or slaughter.
- **Pork:** If liberalisation occurs, it could lead to significant increases in exports from Canada to the EU. This would be accompanied by increases in output in Canada and decreases in the EU. Rules of origin are important and depend on whether origin is determined by place of birth or slaughter.
- **Dairy:** Significant degrees of liberalisation would substantially benefit the EU, while leading to declines in output and domestic market share in Canada. Dairy producers in the EU would be expected to see significant increases in exports and output with the removal of tariffs in Canada. Results would likely depend on the fate of supply management in Canada. Nevertheless, the EU

could realise gains through improved minimum access commitments for certain products (i.e. specialty cheeses). Protection for EU GI cheeses could also confer benefits onto the industry.

- **Other PAPs:** Canada's manufacturers of processed foods could potentially see increases in output and exports, though this impact is contingent on the openness of the CETA's rules of origin with respect to sugar. Cooperation on harmonisation of ingredient and labelling regulations could provide benefits to both sides. The EU could benefit from increased exports of cereals and flours (e.g. pastas, bread, biscuits), while removal of Canada's compulsory container size requirements could lower costs for EU exporters.
- **Alcoholic beverages:** EU producers and exporters would likely benefit from the removal of discriminatory practices in place at the provincial level that are implemented through the Liquor Control Boards. Either greater compliance or enforcement could lead to greater export sales in Canada, benefiting the EU alcoholic beverages industry. This could potentially lead to reduced domestic market share for Canadian producers.
- **Fisheries:** Canada would likely benefit from the full removal of tariffs on fish and seafood (mostly in frozen seafood). Facilitating access to Canadian GM salmon could provide significant gains to Canada's aquaculture industry. Liberalisation could also benefit processors and consumers in the EU. Removal of investment restrictions in Canada could lead to greater investment opportunities for EU processors.

Liberalisation of tariffs on Canadian imports into the EU could potentially impact the fisheries sectors in Greenland and Saint-Pierre-et-Miquelon (SPM) by eroding preferences enjoyed under the Overseas Association Decision. For SPM, this could disrupt plans to utilise preferential access to the EU to transform the archipelago into a transshipment hub, harming the sustainability of the industry and limiting its ability to diversify its economy. For Greenland, the liberalisation of tariffs on shrimp and Greenland halibut could reduce competitiveness of Greenland's two most important exports, resulting in moderate losses for the economy.

Social

- **Beverages:** A CETA leading to removal of LCBs would likely have a negative social impact. Nevertheless, LCBs can be non-discriminatory while maintaining their public health role (as with Sweden's Systembolaget).
- **Cross-sectoral:** In Canada, workers in agriculture are generally subject to provincial regulation and are often regulated differently from workers in other sectors. Given that many provinces exempt a number of workers involved in agriculture and certain types of processing from minimum employment standards, greater shifts into the sector could lower the overall level of standards that the workforce is exposed to. This would also create greater levels of temporary employment, given the nature of the work, which in Canada could disproportionately be filled by foreign labour under the Seasonal Agricultural Worker Program. Further, as agriculture and food processing tend to have some of the highest rates of work related injuries and fatalities, expansion of employment in Canada and the EU's agriculture and food processing sectors could expose a greater number of workers to working conditions that are more unsafe than average.

This could, in turn, produce negative consequences for the level of work-related stress of employees in both Canada and the EU.

Environmental

- If significant degrees of liberalisation are achieved, there is potential for the CETA to contribute to the intensification of agriculture, potentially increasing to greater use of chemical inputs, changing the distribution of crop production and potentially encroaching onto marginal or other productive lands. Any changes hereto would affect land usage and quality, water usage and quality, air pollution, biodiversity and waste creation.
- Liberalisation of beef and pork, in particular, could potentially lead to greater herd size in Canada, potentially leading to increased release of methane as a by-product.

Industrial Products

Economic

- **Mining:** removing foreign ownership restrictions on uranium mining could lead to substantial increases in EU investment in the sector in Canada.
- **Cross-sectoral:** tariffs are low on many manufactured products making it likely that removal of NTBs and restrictions on investment will foster the greatest economic gains in many cases.
- **Automotive industry:** removal of tariffs could positively benefit auto manufacturers in Canada and the EU leading to greater exports and output over the long-term. This impact would be contingent on the openness of the CETA's rules of origin. This could also facilitate greater investment by Canadian manufacturers in meeting EU emission standards, helping to upgrade the industry and enhance competitiveness vis-à-vis producers in the US.
- **Textiles:** Tariff removal would likely benefit the textiles industries of both Canada and the EU. Exports and output would be expected to increase, with the EU seeing gains in apparel, textiles and leather manufacturing. The EU could see further benefits from the removal of NTBs that limit interprovincial circulation. Rules of origin are important and would influence Canada's ability to benefit from reductions in tariffs. Greater IPR enforcement (border seizures and anti-counterfeiting) would likely further benefit the EU.

Social

- **Cross sectoral:** A chapter on Trade and labour could help foster greater implementation of the ILO's core labour standards and perhaps lead to ratification of ILO conventions in Canada.
- **Cross sectoral:** a mechanism that fosters regular dialogue and cooperation between Canada and the EU could include commitments to and exchange on reducing occupational injuries, perhaps fostering improved safety over the long-term.

Environmental

- Greenhouse gas emissions are expected to increase in the oil sands sector if the combined effect of higher world prices and increased EU investment increase output in that sector.
- Water contamination and water use could increase if the CETA, combined with higher world prices leads to increased investment in Canada's extractive industries.

Services

Economic

- **Maritime transport:** The CETA will likely have a positive impact in both Canada and the EU, with greater liberalisation increasing gains. Liberalisation of feeder services and repositioning in Canada would lower costs, increase competitiveness and also spur greater levels of FDI in Canada's maritime transport sector. This could also assist in the development of Canada's short-sea shipping industry. Additional benefits include the upgrading of Canada's maritime fleet through the potential removal of prohibitive tariffs on imported new vessels (25%) as well as increased investment in Canada's ports and greater attractiveness as port-of-calls vis-à-vis U.S. ports along the Atlantic, Saint Lawrence and Great Lakes.
- **Telecom:** Removal of foreign ownership restrictions would likely have a significant impact on Canadian output and exports. FDI from the EU to Canada would likely increase significantly. Competitiveness of the Canadian telecom sector would improve as would technological acquisition, which would help to stimulate expansion of Canadian telecom services into foreign markets over the long-term. Canadian consumers would likely benefit from lower costs, greater selection and better service. EU exports via mode 3 would increase.
- **Business services:** Liberalisation of both at-the-border and behind-the-border restrictions on temporary movement of professionals would likely serve to increase the level of cross-border trade as well as the investment and trade occurring via foreign affiliates. In order to realise the greatest gains it will be important for the CETA to foster mutual recognition agreements allowing professionals to have their qualifications/certificates recognised in both Canada and the EU. This, however, is complicated by the fact that the power to negotiate MRAs resides with professional organisations at the national/provincial level.

Social

- **Maritime transport:** The CETA could have a positive impact on quality and decency of work by putting in place a mechanism for cooperation and dialogue on labour issues as well as promotion of the ILO's Maritime Labour Convention in third countries. It could also contribute to greater collaboration on safety and security issues associated with maritime transport services.

Environmental

- Increased maritime transportation as a result of CETA is likely to lead to increased demand for infrastructure and dredging, especially in the St-Lawrence River. Increased maritime transportation may also increase the risk of accidental spills and other types of accidents.
- GHG emissions from road, air and other transport sectors, including maritime transport, are expected to increase as a result of the agreement.

Cross-cutting issues

Government Procurement

Economic

- The competition caused by GP provisions, like those in CETA, will likely result in increases in welfare. These increases may translate into lower cost public goods and services.
- EU companies would likely see some increase in market share as a result of GP provisions in CETA, and Canadian companies could also gain although overall are likely to see comparatively less increases in market share.
- CETA would encourage more firms to participate in the GP process, which should reinforce the trend that companies that provide quality services win contracts; however, beyond this theoretical statement there is not enough available evidence to suggest this will have a significant positive or negative impact on the end quality of goods and services tendered in the EU and Canada.
- CETA is unlikely to result in any significant loss of domestic employment to companies operating in the GP market that have not established a foreign presence in Canada and are not employing people living in Canada.
- GP provisions in CETA would limit Canada's regulatory flexibility, and, to a lesser extent, limit the EU's regulatory flexibility. However, any simultaneous loss of policy space herein needs to be contextualised in terms of thresholds and the fact that CETA will be based on international standards.
- If set-asides for Aboriginal and minority businesses are prohibited, it would have some negative effects on employment (and culture), at least in the near term, on those currently benefiting from such preferences. And this would create a negative social impact, not just an economic impact. However, such concerns over Aboriginal businesses specifically may be unnecessary as consultations with the EC suggest it intends to respect set-asides with a social dimension.

Social

- Prohibition of offsets in Canada's schedule could have some negative economic/social impacts in the short-term at least, but a comprehensive analysis would be needed to gauge the full impacts therein.
- Overall, CETA's affect on decency and quality of work in the GP market would be limited by the strong domestic laws and institutions in the EU and Canada. CETA's impact on "fair wage" and other "social consideration" GP policies in the EU and Canada is unclear without further details of the Agreement, although government consultations suggest both parties remain committed to preserving such policies.

Environmental

- A GP Chapter in CETA would likely have mixed environmental impacts, although the full extent of these impacts is unclear without further details of the Agreement. CETA's prohibition of offsets could have some mixed environmental impacts, particularly in Canada. If CETA restricts initiatives on green procurement it would have a significant negative impact in Canada and the EU according to a number of environmental indicators; however, this may very well be a non-issue given the current commitment of the parties to green procurement policies.

IPR

Economic

- The CETA will likely have significant adverse impacts on consumers of pharmaceutical products in Canada
- The CETA could potentially have a positive impact on R&D spending in Canada
- The CETA will likely significantly reduce counterfeiting and piracy levels in Canada.

Investment

Economic

- Regulatory and institutional reforms encouraged by CETA may remove certain barriers in Canada to EU investment, which could increase investment at a 'notable' magnitude. Investment in the EU would likely follow the positive trend predicted for Canada, but on a smaller scale. These gains could contribute to some increases in GDP growth in Canada and the EU.
- The Investment Chapter in CETA specifically would provide benefits to multinational companies and foster forms of intangible business relationships, which may stimulate the flows of capital and differentiated goods. The evidence is far less persuasive that it would by itself increase FDI flows.
- The Investment Chapter in CETA will create limitations in regulatory flexibility that on one hand will likely have positive economic effects while on the other hand may to some extent constitute a reduction in economic policy space.

Social and Environmental

- There may be some mixed social and environmental impacts from investment encouraged under CETA as a whole.
- Regarding investor-state dispute settlement (ISDS) specifically, the conflicting costs and benefits of such a mechanism make it doubtful that its inclusion in CETA would create a net/overall (economic, social and environmental) sustainability benefit for the EU and/or Canada. There is no solid evidence to suggest that ISDS will maximise economic benefits in CETA beyond simply serving as one form of an enforcement mechanism, just as state-state dispute settlement is also an enforcement mechanism. And the policy space reductions caused by ISDS allowances in CETA, while less significant than foreseen by some parties, would be enough to cast doubt on its contribution to net sustainability benefits.

Trade facilitation

Economic

- Incorporating provisions under CETA to reform and improve trade facilitation could assist with reducing trading costs, which would be particularly useful in limiting the costs of compliance that will inevitably increase with the introduction of new rules of origin under CETA.

Labour mobility

Economic

- Labour mobility provisions in CETA focused on workers in professional business services could result in a more efficient allocation of skills and increased productivity in Canada and the EU.

Social and environmental

- Could foster innovation which would in-turn lead to some social and environmental benefits.

Free circulation of goods

Economic

- Provisions allowing freer circulation of goods could improve Canada's productivity and would be particularly focused within the agriculture and agri-foods sector.

Competition policy

Economic

- If CETA removes discriminatory practices of the Canadian liquor control boards this could improve the transparency of the Canadian regulatory regime and encourage competition.
- Removal of discriminatory practices of the Wheat Board could improve sales and wages of wheat farmers in Canada if they prove themselves more competitive without the Board. The EU could also potentially increase market share in the grains regulated by the Board. There is evidence to limit concerns that such liberalisation would create net negative impacts on the value of farmers' land holdings, which would in turn impact their retirement plans.
- Provisions on state aid policies could have a variety of different impacts, although the specifics therein are unclear without further details of CETA.

Social

- Evidence suggests that removing the discriminatory practices of the Canadian liquor control boards would not necessarily undermine public health and safety objectives as the Canadian government would retain the most important policy tools for reducing over-consumption of alcohol, i.e. being able to set price floors and impose taxes on beer, wine and spirits.

8.3. Recommendations

8.3.1. Trade Measures

- **T1:** Include a Trade and Sustainable Development chapter in the Trade Pillar of the Agreement. The proposed Trade and Sustainable Development chapter could include a requirement that both parties commit to the effective implementation of core environmental regulatory measures. Also within this chapter, include a section on trade and labour that commits to implementation the ILO's core labour standards and Decent Work Agenda (see T 2). (See C1 on a monitoring mechanism for this chapter).
- **T2:** Include a section on trade and labour within a Trade and Sustainable Development chapter (see T1) that commits to implementing the ILO's core labour standards and Decent Work

Agenda. While labour standards in Canada and the EU are strong relative to most countries, greater commitment to the ILO's standards could help ensure greater implementation while helping to foster greater cooperation in international fora such as the WTO. Further, cooperation could help lead to eventual ratification of all Core Labour Standards that have not yet been ratified in Canada due to conflicts such actions would have with provincial labour laws. This could assist with improving rights of collective bargaining and association at the provincial level. Included in this chapter should be a framework ensuring oversight and enforcement while also creating an impartial review panel that can hear and rule on complaints.

- **T3:** Establish an appropriate timetable for the phased reductions in tariffs and non-tariff barriers in the sectors which are likely to be significantly impacted in Canada and the EU. Canada is a major competitor in beef, pork and fish and seafood and the injudicious removal of barriers could significantly impact EU producers, particularly in the pork sector. The EU OCT's of Saint-Pierre-et-Miquelon and Greenland could be particularly impacted by liberalisation in the fisheries sector, making it imperative than reductions in tariffs for sensitive fisheries products be phased in gradually. In Canada, providing increased access to EU dairy imports is likely to negatively impact domestic producers. To the degree that this leads to a removal of supply-management, the impact on Canadian dairy producers will be significant, likely requiring a longer phasing-in period. Outside of agriculture, it would also be important to establish an appropriate phasing-in period for liberalisation in textiles and transport equipment so that producers have time to adjust to changing incentives.
- **T4:** Create a separate tariff line in the EU for meat products derived from bison. Such an action would not harm European producers given the lack of bison production in Member States, but would allow Canadian producers greater access to the EU market without subjecting their imports to the tariff-rate-quota for beef. Although it is not clear whether EU consumers would exhibit demand for bison, additional access could assist with diversification efforts undertaken by Canada's Western Provinces.
- **T5:** Ensure that access to the Canadian market for EU alcoholic beverages does not lead to the removal of Canada's provincial liquor boards but rather better compliance by these boards to ensure an end to practices that discriminately favour local producers. Canada's liquor control boards serve an important role in helping to reduce abuse of alcohol and underage drinking, and should remain intact (after removing discriminatory barriers) so as to ensure public health objectives.
- **T6:** Rules of origin should be carefully considered in the negotiations, with a special group of EU and Canadian officials formed to deal with the issue. Interests should be carefully balanced between (i) restricting the ability of third countries (most notably the U.S.) to capitalise from Canadian preferential access to the EU; and (ii) ensuring Canadian producers are able to benefit from improved access to the EU. At the sectoral level, special attention should be given to the following:

- Beef and pork. With sufficient improvements to the TRQ for beef and pork, Canadian producers would likely shift some of their production to hormone free products and invest in slaughterhouses that meet EU standards. This could also induce producers to ensure that, over the long-term, these cattle and hogs are born and slaughtered in Canada to ensure they meet EU rules of origin. With limited improvements in market access, however, the benefit of meeting all of these criteria would be significantly diminished, limiting gains for the industry.
- Automotive products. Integration with the United States makes it unlikely that Canadian producers would be able to benefit from an agreement that adopts EU rules of origin. At the same time, rules of origin that are too relaxed will likely allow U.S. producers to take advantage of Canadian access granted under the CETA. EU emissions standards will also play a role, and allowing greater access to Canadian producers while ensuring their products can qualify as originating could help promote environmental goals by inducing greater investment in Canada to meet higher emissions standards than those presently in place within North America.
- Textiles. Canada's textiles industry has become increasingly integrated with its NAFTA partners and as such it would favour rules of origin that are more open than the EU's double transformation rule. Special care should be given to ensure, however, that the rules established are not injurious to LCDs who benefit from the EU's generalised system of preferences and rule of single transformation.
- **T7:** In order to promote environmental goals it is recommended that trade in green technologies and environmental resources be fully liberalised.
- **T8:** Restrictions on investment in the Canadian telecom sector should be liberalised or removed completely. Liberalisation could lead to an influx of FDI from the EU, helping to improve competitiveness of the Canadian telecom sector, while creating jobs, reducing costs for consumers and improving service.
- **T9:** In liberalising investment in Canada's telecom sector, it is recommended that a phase-in period be carefully considered. This should take into account the recommendations of the Telecommunication Policy Review Panel which call for two 5 year phase-in periods. It is further recommended that divisions be made between carriage and content so as to ensure the maintenance of Canadian cultural objectives. Specifically, it is recommended that liberalisation follow the findings of a 2003 report by the House of Commons Standing Committee on Industry, Science and Technology that recommended that foreign investment restrictions should be eliminated while maintaining restrictions on investments in broadcasting.¹¹⁶⁷ Given the increased integration of these services, however, it is important that the Agreement establish

¹¹⁶⁷ <http://cmte.parl.gc.ca/Content/HOC/committee/372/inst/reports/rp1032302/instrp03/14-chap4-e.htm#6>

rules for determining when an investment can be defined as encroaching on cultural objectives so as to eliminate ambiguities and encourage investment.

- **T10:** Liberalising feeder services within Canada's maritime transport services is encouraged. Such an action could increase infrastructural investments over the long-term while helping to improve Canada's underdeveloped short-sea shipping industry. This could improve the efficiency of logistics in Canada, but could also serve an important environmental role by helping to shift land transport to maritime transport. Similarly, removal of the 25% tariff on new vessels could help Canada's shipping industry upgrade its aging fleet.
- **T11:** To increase bilateral trade and investment in services, it is recommended that measures be taken to streamline the visa process for professionals seeking to temporarily work in Canada or the EU. Canada should review its requirements for 'needs tests' for certain professionals under the TFWP, with specific attention to facilitation of intra-corporate transfers between the EU and Canada.
- **T12:** Both Canada and the EU made important progress in environmental regulation and awareness. The CETA can enhance this by calling for harmonisation of environmental regulation. In addition, this could be extended to third country trade partners. Sectors that need particular attention are: fisheries, mining and oils, forestry and livestock.
- **T13:** The agreement should leave sufficient flexibility to its signatories for implementing policies that are required by their specific legal, economic, social, industrial, and cultural environment. To ensure a minimal level of flexibility, it is recommended to duplicate the language of *TRIPs agreement* article 7, 8, 13, and 30 as well as the language of the *Declaration on the TRIPs Agreement and Public Health* in the introduction of CETA IPR chapter.
- **T14:** Ensure that language in CETA's Competition Policy Chapter clearly states that alcohol price floors are not prohibited under the agreement and that the ability to use legitimate regulations, i.e. alcohol taxation and pricing policies is maintained.
- **T15:** Ensure sufficient reductions in state aid policies with little net sustainability benefits while preserving state aid that does produce clear sustainability benefits.
- **T16:** Explicitly allow for Social Considerations in Public Procurement, including fair wages, in the General Notes of both Canada and the EU in the GP Chapter. Provide some criteria of what constitutes these policies. (And create a monitoring body to oversee that these allowances are not being abused, and allow renegotiation on the language herein if the monitoring body reports abuse. The monitoring body might be set up through the Trade and Sustainable Development Chapter. See C13 for details on the monitoring body).
- **T17:** Explicitly allow for green procurement policies in all 'standard' forms in the General Notes of both Canada and the EU in the GP Chapter. (And a monitoring body might be set up to ensure these policies are implemented in a way that is legitimately furthering the objectives to improve the environment with limited adverse costs to business. The monitoring body might be set up

through the Trade and Sustainable Development Chapter. See C13 for details on the monitoring body.)

- **T18:** GP Chapter should explicitly allow for preferential treatment for those with officially documented disabilities.
- **T19:** Explicitly allow set-asides for Aboriginals in Canada's schedule in the GP Chapter, however make such exception more stringent than the one allowed in NAFTA and the GPA. Specifically, require that any preferences to be given under these exclusions are based on cultural considerations and/or go to those who meet an 'economically disadvantaged' criterion. (The 'economically disadvantaged' assessment to be conducted by the appropriate bureau in Canada or by a committee established under the Trade and Sustainable Development Chapter in CETA. See T1 about the chapter and C13 about the committee.)
- **T20:** Consider keeping set-asides for minority business in Canada's schedule in the GP Chapter but make this contingent that this group is distinguished from Aboriginals, better defined than under current regulations, and also meets a similar if not the same 'economically disadvantaged' criteria mentioned for Aboriginal set-asides. (The 'economically disadvantaged' assessment to be conducted by the appropriate bureau in Canada or by a committee established under the Trade and Sustainable Development Chapter in CETA. See T1 about the chapter and C13 about the committee.)
- **T21:** Include environmental protection provisions in the GP Chapter like that in Note 7 of Canada's GPA Annex 2 that states "Nothing in this Agreement shall be constructed to prevent any provincial or territorial entity from applying restrictions that promote general environmental quality in that province or territory, as long as such restrictions are not disguised as barriers to international trade." (Also see T17)
- **T22:** Include a provision in the General Notes of the EU's GP commitments similarly worded to that mentioned in T21 but applying to localities in EU MS. (Also see T17)
- **T23:** Allow exclusions, in the General Notes section of the GP Chapter for Canada and the EU, of provisions on agricultural products made in furtherance of human feeding programs. Language could generally follow that listed in NAFTA Annex 1001.2b, General Notes, Schedule of Canada, sub-article 1(f) – however, the language should be tightened, for example it should only exclude programs that 'if abandoned would clearly jeopardise emergency human feeding programs.'
- **T24:** Under certain circumstances, allow GP offsets for projects in Canada in the same sectors as those listed in the Annex II/exclusions annex of the Investment Chapter in CETA.
- **T25:** Do not include a full-stop prohibition on GP offsets for municipalities, but rather include an 'offset justification provision' pertaining exclusively to municipalities. The provision would only generally be drafted like Article XVI (2) of the 1994 GPA, which allows offsets for certain policy considerations when "used only for qualification to participate in the procurement process and not as criteria for awarding contracts. Conditions shall be objective and non-discriminatory." A

transparent mechanism/panel should be set-up to approve or disapprove the invoking of this 'offset justification provision.' (See C12 for details of this mechanism)

- **T26:** Consider allowing a higher GP threshold exclusively for Canadian (and possibly EU) sub-federal contracts (GP Annex II) over which offsets are prohibited. This threshold would be higher than 'main' thresholds being negotiated for the party's Annex I, II and III of CETA GP commitments, whereas offsets cannot be used in any contracts with values over this threshold. Contracts below that threshold, however, and, for example, even above the party's 'main' Annex II thresholds, are allowed to use offsets so far as they are justified under the 'offset justification provision' to the offset review panel. (See C12 for details of this review panel/mechanism)
- **T27:** As a safety valve to ensure the quality of goods and services delivered in GP, as well the maintaining of decency and quality of work standards, include the provision: "Where a procuring entity receives a tender with a price that is abnormally lower than the prices in other tenders submitted, it may verify with the supplier that it satisfies the conditions for participation and is capable of fulfilling the terms of the contract." (Canada and all EU member states should also agree to sign ILO Convention 94 on decency and quality of work in government procurement.)
- **T28:** Consider excluding the 'third country incorporation' provision in an Investment Chapter, or if it is included ensure this action is properly justified and that the drafting language prevents treaty shopping and unintended usage of such provision.
- **T29:** In the GP and Investment chapters, clearly define the rules governing bulk exports of water, particularly allowing unbound flexibility in implementing national water policies that explicitly protect water necessary to support human and ecosystem health and prohibit the export of non-renewable water resources.
- **T30:** Consider excluding ISDS from CETA, whereas well-crafted state-state dispute settlement could be used instead. Such a mechanism in CETA might be modelled off the US-Australia state-state dispute settlement mechanism, including, for example, a provision allowing for signatory parties to reconsider the details of the enforcement mechanism, and consider instituting ISDS, for example, under certain circumstances. Special attention should be given to require all remedies are only applied in relevant ways, and in ways that do not have negative sustainability implications.
- **T31:** If it is nonetheless decided that ISDS should be included in CETA, consider an 'emergency renegotiation' clause for ISDS. The clause can only be invoked under certain circumstances and after a certain amount of time of CETA being in force. An investment dispute settlement forum would be established to monitor usage of ISDS under CETA and make recommendations as to if the ISDS clause in CETA needs to be reworded or further measures need to be implemented to ensure it is creating sustainable benefits for both the EU and Canada. A mechanism should be

established for signatories to CETA to consider the forum's recommendations and take timely actions. (See C13 for details on the ISDS forum)

- **T32:** If ISDS is included in CETA, consider using expropriation language recognised to be more refined than that in NAFTA 1994, for example that similar to the “tantamount to expropriation” article from the US-Singapore FTA and US-Chile FTA; or seriously consider using language generally following the Calvo doctrine/similar to that recommended in T33 below.
- **T33:** If choose to include ISDS in CETA, draft the expropriation provision generally like the following: ‘expropriation as defined for Canada and EU/EU MS under this agreement exclusively follows the same definition of takings under the domestic takings laws of Canada and EU MS, respectively, as of the signing of this agreement and should in no circumstances provide treatment to foreign investors beyond that which is afforded to domestic investors under those domestic takings laws.’ Should any revisions be made to domestic takings laws, in order for those revisions to apply under the aforementioned clause they should treat foreign and domestic investors the same. Such revisions should also be respected by foreign investors under the Agreement, although any change must be notified to the appropriate body of the other CETA party within 1 month of it being made.
- **T34:** If choose to include ISDS in CETA, require domestic arbitration avenues are ‘fully exhausted’ before disputes move to international tribunals.
- **T35:** Exclude 'essential and basic' public services from investment commitments in CETA (e.g. certain healthcare and education services). Include exceptions in CETA like those in Articles 1102 and 1103 of NAFTA.
- **T36:** In terms of the EU OCTs Saint-Pierre-et-Miquelon (SPM) and Greenland, it is strongly recommended that EU negotiators for the fisheries sector consult with representatives from SPM and Greenland. Consultation should include a discussion of which products are sensitive in each as well as perceived impacts on the industries should the CETA lead to liberalisation in these products.

8.3.2. Cooperation measures

- **C1:** Work through a Trade and Sustainable Development Monitoring Body of EU-Canada experts, government, organised business, unions and civil society to conduct M&E on the CETA agreement. The body would review sectoral labour and environmental commitments and related impacts as well as commitments and impacts in the areas of GP, IPR, investment, labour mobility, and competition policy issues overall, as well as house the specific review bodies discussed in the policy recommendations hereto (i.e. review bodies for offsets in GP (C12), other social and environmental issues (C13), and investment dispute settlement specifically (C15)). (Only if necessary, the aforementioned Body may be divided up into distinct bodies from the outset, e.g. a Body for labour and a Body for environmental issues.)

- **C2:** A framework should be established to formalise enhanced regulatory cooperation and regular dialogue on SPS and TBT issues. Such cooperation should seek to prevent future barriers while providing greater transparency on packaging, labelling and certification requirements. An ultimate goal should be increased harmonisation and mutual recognition of food safety standards, nutrition policies and inspection processes.
- **C3:** Included in the CETA's section on trade and labour within the Trade and Sustainable Development chapter, should be a framework for increasing awareness of legal rights and obligations and fostering social dialogue. This dialogue and cooperation should be extended to include exchanges on reducing occupational injuries. The M&E body for this framework is discussed in C18.
- **C4:** It is strongly recommended that negotiators create a mechanism for fostering mutual recognition of professional qualifications. Given its limited role in this capacity, it is recommended that the Government of Canada build on efforts in past trade agreements to encourage and support the negotiation of mutual recognition agreements between relevant professional bodies in Canada and authorities in the EU. A framework should be developed that guides and encourages Canadian professional bodies, while also ensuring regular dialogue between Canada and the EU so as to identify professional bodies of importance.
- **C5:** Potential welfare loss in third countries, in particular in small economies such as Saint Pierre and Miquelon, could be mitigated by cooperation measures to promote business initiatives.
- **C6:** Cooperation between companies in the energy and minerals sectors could help to produce sound environmental governance across the EU and Canada, and also have important spill-over effects in third countries. This could include exchanges of information, technology transfers, involvement of public-private initiatives from both sides and, in the long run, the formulation of a common energy policy.
- **C7:** Canada and European governments should cooperate on the exchange of best agricultural practices to reduce the environmental impacts associated with agricultural production.
- **C8:** Collateral cooperation initiatives from the EU and Canada towards their low-income trade partners, and other dependent economies could help to strengthen social protection in these countries, particularly for vulnerable populations that will be affected by adjustment costs.
- **C9:** Promote fishery practices that are more sustainable through Canada-EU collaboration, while maintaining strict monitoring and implementation of quotas and Total Allowable Catch to remain within sustainable population levels and avoid overfishing. More R&D should be invested into environmental risk of farmed fish, and into mechanisms such as the containment tasks, to reduce impact on wild species.

- **C10:** CETA's provisions on IPR enforcement will have limited impact on global counterfeiting and piracy if they are not reproduced elsewhere. The European Union and Canada should cooperate to make sure their agreed norms on enforcement become recognized globally as minimal standards. This cooperation could be crystallized in multilateral fora (WHO, WIPO, WTO, etc.), in plurilateral settings (OECD, ACTA, etc.) and bilaterally in their respective agreement with third parties.
- **C11:** To accelerate the entry of new medicines on the market and lessen the actual use of patent extensions, the European Union and Canada should cooperate to fast-track marketing approvals for those drugs already approved by the respective regulatory agencies.
- **C12:** A GP 'offset review' panel should be set up, perhaps as a small committee within the monitoring body discussed in C1, or perhaps within the current bodies for bid challenges in the EU and Canada, to monitor the invoking of the 'offset justification provision.' The body should be well trained and informed in the sustainable utility surrounding usage of GP offsets and be able to approve applications within 2 weeks of submission as not to overly hinder the GP tendering process. (See T25 and T26 for further details on the 'offset justification provision.')
- **C13:** Create one or more bodies to monitor the application of those allowances for policies on fair wages and Social Considerations in Public Procurement, Aboriginal and minority business set-asides, as well as green procurement, as mentioned in T16, T17, T21, and T22. The body would hear reports/allegations of abuse of such provisions and ensure policies are legitimately being used to meet their intended and sanctioned objectives. The body may be incorporated along with the 'offset review panel' as mentioned in C12 (and within the larger body mentioned in C1) to create a larger 'GP sustainability review' body, or perhaps within the current bodies for bid challenges in the EU and Canada. It may draw upon initiatives currently being discussed by the US and Switzerland within the Government Procurement Committee at the WTO to monitor set-aside policies for SMEs.
- **C14:** Cooperate on a separate study (i.e. outside of this SIA) on the impact of privatisation of water sources that might in the long-term indirectly result from CETA.
- **C15:** An investment dispute settlement monitoring body/forum should be created. The forum should be created to monitor the dispute settlement mechanism, i.e. state-state dispute settlement or ISDS, included in CETA. An even larger forum should be created to monitor investment dispute settlement mechanisms, i.e. ISDS and state-state dispute settlement, in BITs and trade & investment agreements not only related to those agreements between Canada and the EU. For CETA, the forum would be composed of representatives of certain governments in the EU and Canada (national level, provinces and territories and municipalities), academics, civil society and business. Regarding ISDS, members would commit to periodic dialogues on, among other issues, the impacts investor-state provisions/ISDS in CETA are having in terms of causing regulatory chill and other reductions on policy space. Regarding state-state dispute settlement, members would commit to periodic dialogues on, among other issues, the performance of such

a mechanism in CETA in effectively and efficiently addressing the concerns of business. Notifications are required from governments on these issues at least once every 6 months. Participation required from all members. The body could be organised under the auspices of the larger Trade and Sustainable Development Monitoring Body mentioned in C1.

- **C16:** Create a short-term forum for members of various NAFTA and EU FTA dispute settlement bodies to discuss or make recommendations to CETA negotiators before final drafting of CETA.
- **C17:** The EU-Canada Joint Cooperation Committee should take on tasks similar to the Transatlantic Economic Council between the EU and US, for example to facilitate legislative convergence between the EU and Canada. A number of the entities described in the cooperation measures hereto may fit under this organisation. It should work closely with the Trade and Sustainable Development Monitoring Body mentioned in C1.
- **C18:** Continue initiatives whereby, as relevant, EU workers in the professional business services wanting to work in Canada are schooled on relevant Canadian standards, and vice versa.
- **C19:** Conduct a study on the implications of rules of origin policies being negotiated under CETA and how trade facilitation measures can best mitigate the negative impacts such policies may have. During this process may consider examples from the EU-Korea FTA and consider potential problems with NAFTA rules of origin. (Also see T6)
- **C20:** Create a clean energy partnership initiated between the EU and Canada modelled off of the EU-China Clean Energy Centre and/or US-China Renewable Energy Partnership, operating Eco-Partnerships via P3s. Foster initiatives in a number of relevant environmental areas, including in areas that might otherwise be subject to GP offsets and investment performance requirements.
- **C21:** Require that part of the role in the clean energy partnership mentioned in C20 is to foster green finance, including in areas that might otherwise be subject to GP offsets and investment performance requirements.

9. Conclusions

This Final Report for the EU-Canada SIA on the EU-Canada CETA provides a comprehensive assessment of the potential impacts of trade liberalisation under the CETA. The impact analysis assesses the economic, social and environmental impacts in Canada and the European Union, in three main sectors, sixteen sub-sectors and seven cross-cutting issues. It also assesses the potential impacts of CETA on the US, Mexico and other countries and regions, including a number of developing countries as well as the EU OCTs of Saint-Pierre-et-Miquelon and Greenland.

The study has been prepared using the standard SIA methodology which involves carrying out an evidence based assessment, where evidence is drawn from a range of sources, including economic modelling, literature review, expert opinion and stakeholder consultation. The study has included a consultation process which has been carried out in parallel with the assessment of potential impacts.

The analysis finds that the CETA will lead to overall gains in welfare, real GDP, total exports and real wages in both Canada and the EU over the long-term. While these gains are expected under the four scenarios modelled in the economic assessment, the gains are expected to be higher under an agreement that offers the highest degree of tariff and services liberalisation. Third countries are estimated to experience minor degrees of welfare loss as a result of the Agreement, though the overall impact on these countries is insignificant. The EU OCTs of Saint-Pierre-et-Miquelon and Greenland could experience economic losses through the erosion of preferences for their exports of fisheries products to the EU, though more research is needed in this regard.

At the sectoral level, the greatest gains in output and trade appear to be stimulated by services liberalisation and by the removal of tariffs applied on sensitive agricultural products. Both Canada and the EU would benefit from a CETA that provided a high degree of liberalisation in the services sector, particularly with respect to transport, telecom and business services. The formal modelling's inability to account for the impact from investment liberalisation and measures that facilitate the movement of professionals suggests that gains for both sides could surpass those estimated. In terms of Agriculture and PAPS, Canada could realise significant gains from notable improvements in access to the EU market for beef and pork products, while this would also likely negatively impact domestic producers and processors in the EU. Alternatively, EU dairy producers could experience significant increases in output and exports with the full removal of tariffs in Canada; though this would likely coincide with decreases in production and employment in the Canadian dairy sector. For a number of agriculture and agri-food products – beef, pork and other processed food products – the overall impact would likely be heavily influenced by the RoO that are agreed to under the CETA. In terms of industrial products, the low existing tariffs applied on EU-Canada trade in merchandise would likely limit the impact the CETA will have. Investment liberalisation could lead to greater EU investment in Canadian industries such as oil and mining, though it does not appear that the current restrictions have overly inhibited investment. The auto and textiles industries in both the EU and Canada would likely benefit from the removal of tariffs and other non-tariff barriers. For both products, the rules of origin agreed to in the text of the CETA will influence the impact.

The CETA could have a positive social impact where it includes text devoted to better implementation and ratification of the ILO's Core Labour Standards and Decent Work Agenda. Canada, specifically, could see its standards and rights improved with respect to collective bargaining and freedom of association with provisions that require ratification of the ILO's Convention 98, which provides legally binding

measures on such rights. In terms of the environment, increased agricultural production could lead to a greater degree of intensification and use of chemical inputs, while increased beef production could lead to greater herd size and production of methane. The environmental impact associated with energy and extractive industries is likely to be limited, though it could be exacerbated if the agreement leads to significant increases in FDI in Canada's oil sands and mining industries. Increased trade would likely increase the GHG emissions associated with transport, though this could be mitigated should the CETA replace land transport (notably between Canada and the U.S.) with maritime transport and facilitate the development of Canada's short sea shipping industry.

A number of key impacts are identified in the areas of GP and IPR. A GP chapter in CETA will have a variety of economic impacts that are positive for some and negative for others, particularly felt in terms of government savings, market share, and employment. Potential social impacts are mixed, and a GP Chapter in CETA would likely have mixed environmental impacts, although the full extent of these impacts is unclear without further details of CETA. In terms of IPR, it is assumed that CETA will lead to an upward harmonisation and call primarily for change in Canadian IPR laws. IPR-related provisions of CETA could have a minor positive economic impact on Canadian GDP growth, and may have a minor positive impact on European GDP. An IPR chapter in CETA would also have economic impacts on employment and policy space. Raising levels of IPR protection is likely to have some social impacts but unlikely to have significant environmental impacts.

Several key impacts are identified in the areas of investment and competition policy. The economic impact of CETA as a whole on investment in Canada will likely be positive, and could be of a 'notable' magnitude. As a whole, there will likely be some positive, and potentially some negative, social and environmental impacts from such investment. Regarding investor-state dispute settlement (ISDS) specifically, the conflicting costs and benefits of such a mechanism make it doubtful that its inclusion in CETA would create a net/overall (economic, social and environmental) sustainability benefit for the EU and/or Canada. In terms of competition policy, if CETA removes discriminatory practices of the Canadian liquor control boards this would support economic gains by encouraging competition. Removal of discriminatory practices by the Canadian Wheat Board could improve sales and wages of competitive wheat farmers. No significant negative impacts or unclear impacts are predicted for liberalisation in international letter delivery in Canada and revising state aid policies, respectively.

Some impacts are identified in the areas of trade facilitation, labour mobility and free circulation of goods. It is unlikely that there will be significant economic, social or environmental impacts from trade facilitation reform under CETA. Labour mobility provisions in the CETA focused on workers in professional business services could result in economic gains in the form of a more efficient allocation of skills and increased productivity in Canada and the EU, as well as increase innovation that could lead to social and environmental benefits. Provisions in CETA allowing freer circulation of goods, which will likely focus on the agriculture and agri-foods sector given the barriers in that sector, could result in positive economic impacts.

In order to minimise potential negative impacts and maximise positive impacts, it is recommended (in addition to the other proposals mentioned in Section 8) that CETA: (i) Establish an appropriate timetable for the phased reductions in tariffs and non-tariff barriers. (ii) Form a special group of officials from both sides to deal with rules of origin. (iii) Develop a framework to formalise enhanced regulatory cooperation and regular dialogue on SPS and TBT issues. (iv) Collaborate on sustainable fishery practices. (v) Remove investment restrictions on telecom, but do so in a way that includes an appropriate phase-in period while allowing Canada to continue to form and implement policies that ensure cultural objectives can be met. (vi) Streamline the visa process for professionals seeking to temporarily work in Canada or the EU and create a mechanism for fostering mutual recognition agreements for professional

qualifications and credentials. (vii) For GP, explicitly allow for Social Considerations in Public Procurement, including fair wages, and create a monitoring body to oversee that these allowances are not being abused; allow for green procurement policies in all 'standard' forms in the General Notes of both Canada and the EU in the GP Chapter and include other specific language for environment protection; explicitly allow set-asides for Aboriginals in Canada's schedule in the GP Chapter; do not include a full-stop prohibition on GP offsets for municipalities, but rather include an 'offset justification provision' pertaining exclusively to municipalities. (viii) For IPR, duplicate the language of TRIPs agreement article 7, 8, 13, and 30 as well as the language of the Declaration on the TRIPs Agreement and Public Health in the introduction of CETA's IPR chapter; cooperate to ensure agreed norms on enforcement become recognised globally as minimal standards and cooperate in multilateral fora (WHO, WIPO, WTO, etc.), in plurilateral settings (OECD, ACTA, etc.) and bilaterally in the respective agreement with third parties; and the EU and Canada should cooperate to fast-track marketing approvals for those drugs already approved by the respective regulatory agencies. (viv) For investment, consider excluding investor-state dispute settlement from CETA and instead use a state-state enforcement mechanism like that in the US-Australia FTA; consider a number of key issues when drafting dispute settlement expropriation language; emphasis domestic dispute settlement even if ISDS is included in CETA; exclude 'essential and basic' public services from investment commitments; create a dispute settlement monitoring body/forum. (vv) For overarching issues, include a Trade and Sustainable Development Chapter in CETA and within that chapter establish an effective monitoring body; ensure CETA allows usage of domestic policy tools to limit alcohol abuse; and create a clean energy partnership initiated between the EU and Canada, which could be modelled off of existing programs.

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