

The Interplay Between the United Nations Climate Regime and the World Trade Organization: Consequences, Causes and Policy Options

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1 Introduction

In this paper, we focus on a particular element of the institutional diversity or fragmentation (Biermann et al. 2007) in global climate governance, namely the overlap between the UN climate regime and the World Trade Organization (WTO). We hold that this overlap not only implies benefits, but may also entail significant drawbacks for the development and implementation of the UN climate regime. This raises the question how this overlap can be addressed in a meaningful way in a post-2012 world. Our main argument is that, when developing future strategies for managing this overlap, policy-makers should draw lessons from the past, i.e. from potential negative effects of this overlap, and from the shortcomings of previous management approaches. We base our analysis mostly on qualitative research methods, including an assessment of the relevant international legal literature and an international relations analysis of related political processes; as well as an expert stakeholder workshop we co-organized with UNEP's Economics and Trade Branch.

In section 2, we introduce major issues on which the two regimes overlap and respective management approaches, which so far have hardly yielded significant results. In section 3, we discuss policy options which may be suitable to address these unresolved issues and debates in the future. We argue that appropriate strategies need to take into account core reasons for the observed interlinkages and for previous management failures: the constellation of strategic interests and the partial lack of consensual knowledge on climate-trade overlaps. We therefore suggest bringing in further expertise on climate-trade interlinkages (e.g. via a separate chapter in the next IPCC assessment report) as well as strategic issue linking (e.g. regarding debates on biofuels and the transfer of climate-friendly technologies).

2 Analysis

2.1 Overlaps between the UN climate regime and the world trade regime

Over the last ten years, scholars from various disciplines have scrutinized the interplay between the UN climate regime and the world trade regime (see, e.g., Brack et al. 2000; Chambers 2001a; Brewer 2003, 2004, Charnovitz 2003; Stokke 2004; Frankel 2005; van Asselt and Biermann 2007; Cosbey and Tarasofsky 2007; Howse and Eliason in press). These authors have identified a whole range of overlapping issues which fall into the jurisdictional scope of both regimes, while disagreeing about the synergetic or conflictive nature of each of these issues. It would go beyond the scope of this paper to present an exhaustive overview of these overlaps, let alone the various arguments made about their potential implications. This section therefore only presents a synopsis of the most important aspects.

2.1.1 Flexibility mechanisms

One overlap which has not yet been clarified concerns one of the climate regime's core elements, namely emissions trading. Tradable allowances and credits have been established under the Kyoto Protocol, in particular under the three flexible mechanisms: the Clean Development Mechanism, Joint Implementation, and international emissions trading. Article 17 on international emissions trading 'implicitly prevents Parties not included in Annex B from acquiring, issuing, or transferring emissions allowances under the Protocol' (Werksman 2001: 170). This restriction could be considered a form of trade discrimination since it effectively excludes the large majority of developing countries as well as non-parties to the Kyoto Protocol from emissions trading.

However, this imbalance would only amount to a violation of WTO non-discrimination principles (i.e. most-favoured nation treatment or national treatment) if emission credits could be defined as either 'goods or products' under the GATT or 'services' under the GATS. Yet a classification of emission allowances as good or services is controversial and difficult to accomplish, as neither GATT nor GATS provide definitions for goods or services (Kim 2001: 252). Some scholars have advised against such an interpretation (e.g. Werksman 2001: 155f., 164). They argue that economic or financial value alone does not automatically constitute a definition as goods or services – similar to other entities such as electricity, oil or money which also do not fall under GATT or GATS requirements (Kim 2001: 252f.).¹ Given this ambiguity – which can only be clarified by further treaty amendments or case law – one cannot definitely decide whether the case of trade restrictions in emission allowances constitutes a direct regime conflict (Brewer 2003: 337).

Even when denying such a direct nature, there are further implications of emissions trading, which at least point to an indirect incompatibility. Given the abstract phrasing of Article 17,

¹ On the other hand, Voigt (2008: 58) points to evidence that the GATT covers intangible goods such as electricity.

various design options might be chosen for an emissions trading scheme (ETS). Depending on the ETS design, measures taken in the artificial market of emission allowances might also affect the trade in goods and services in existing markets. For instance, ‘brokerage, consulting and insurance services associated with emissions trading could be considered commercial services with the normal meaning of the term’ and thus potentially fall under GATS rules (Brewer 2003: 337; Martin 2007). In fact, given the variety of services which can be involved in an ETS, many scholars expect the GATS, rather than the GATT, to be applicable to international emissions trading (Petsonk 1999: 203f.; Cosbey and Tarasofsky 2007: 24).

Another important design option which might collide with WTO law is the allocation of emission allowances. Certain allocation methods could be interpreted as the favourable treatment of a domestic industry over foreign competitors, in particular if a domestic ETS stipulates the free-of-charge distribution of allowances. In fact, such a free allocation of financial assets might be classified as a subsidy (Howse and Eliason in press). However, the WTO Agreement on Subsidies and Countervailing Measures (SCM) prohibits subsidies which are specific to an enterprise or industry or subsidies which ‘can bring adverse effects to the interests of other Members’ (Article 1). The free allocation of emission allowances might hence be challenged under the SCM Agreement. In addition, allocation procedures may collide with the national treatment principle under GATT Article III. Foreign fuel producers or suppliers might claim that the free allocation of allowances to domestic producers discriminates against them: their ‘like products’ are treated differently than the subsidized products of domestic fuel producers or suppliers (Cosbey and Tarasofsky 2007: 23; Voigt 2008: 59f.).

2.1.2 Trade-related policies and measures

The Kyoto Protocol (Articles 2[1a] and 2[2]) lists various policies and measures (PAMs), by which Annex I countries shall achieve emission limitations. These PAMs include, for instance, research, development and use of renewable energy and climate-friendly technologies; reduction or phasing out of fiscal incentives, tax and duty exemptions, and subsidies in all GHG emitting sectors; and limiting and reducing GHG emissions in the transport sector. This notwithstanding, the protocol’s list lacks specificity. For instance, it does not spell out concrete steps or targets to achieve the listed items. Moreover, the list is not mandatory. Due to this low level of obligation and precision, it is not ruled out that parties apply certain trade-distorting and not fully WTO-compliant measures.²

More precisely, there is a whole range of overlaps and possible clashes, due to the potential implementation of certain fiscal measures (subsidies, tariffs, or border taxes), regulatory measures (standards, technical regulations and labelling) and government procurement practices. Annex I parties might consider such measures in order to flank their GHG emission reduction activities or to protect domestic industries that are adversely affected by the

² This can be termed an ‘indirect conflict’ with WTO rules: there is no immediate rule collision with the WTO, but the Kyoto Protocol’s permissive rules on PAMs might nonetheless induce respective behaviour (cf. Vranes 2006; Zelli 2008).

implementation of climate policies – in other words: to level the playing field between regulated domestic industries and unregulated foreign competitors (Frankel 2005: 15).

Subsidies to firms for climate-friendly products, research, development or export might not be allowed under the WTO Agreement on Subsidies and Countervailing Measures (Santarius et al. 2004: 25). The key questions are how specific a subsidy is (does it only concern selected industries?) and what injury it might cause to others (van Asselt and Biermann 2007: 501).

Governments might also choose to put burdens on energy-inefficient foreign companies, by imposing tariffs or taxes on their greenhouse gas-intensive imports. One major uncertainty about the WTO-compatibility of such measures relates to the question of product related processes and production methods (PPMs). Energy input tariffs do not apply to the end-use of a product, but to its ‘embedded carbon’, i.e. GHGs emitted during the product’s life cycle. Yet if a WTO panel – in a possible future dispute – only considered end-uses, such process-related taxes would be found to violate the national treatment principle under GATT Article III (2) which demands similar taxing for ‘like products’ (cf. Biermann and Brohm 2005: 291).

In the same vein, marginal taxes on energy-intensive goods from countries which are not party to the Kyoto Protocol or do not take ‘comparable’ climate change action might violate both the national treatment and most-favoured nation principles of the GATT. Such border adjustment measures (BAMs) might become a reality in the not too distant future. A number of industrialized countries have been considering offsetting measures at the border complementing an ETS – most recently the US Congress, the French government, as well as the European Commission (Cosbey 2008). Experts have been leading longstanding debates on BAMs, either holding that, under certain circumstances, they could be defended and sustained under WTO law (e.g. Biermann and Brohm 2005; Ismer and Neuhoff 2007; Pauwelyn 2007) or rather warning against their protectionist implications and possible violation of the GATT (e.g. Bhagwati and Mavroidis 2007; Quick 2008).

Furthermore, any product standards, labels or technical regulations, which establish minimum requirements for goods on the basis of their energy or GHG-intensity during production or use might conflict with the national treatment principle under the GATT or with the Agreement on Technical Barriers to Trade (TBT) (Santarius et al. 2004: 25). The climate regime’s PAM regulations also permit certain government procurement policies – i.e. government purchases of goods and services – which might create tensions with the WTO Agreement on Government Procurement. Yet altogether, while subsidies, tariffs and border adjustment measures might be more prone to a legal challenge, government procurement, labelling and standards (at least voluntary ones) are rather unlikely to collide with WTO rules (van Asselt and Biermann 2007: 502; van Asselt et al. 2006: 224)

In summary, there is a whole array of ‘unresolved issues’ (Brewer 2003: 228). These indirect overlaps have been acknowledged from both sides. The WTO Secretariat has referred to potential tensions arising from PAMs in various notes on the relationship with the UN climate regime (Brewer 2003: 334f.). Furthermore, both the UNFCCC (Article 3[5]) and the

Kyoto Protocol (Article 2[3]) include provisions which signal negotiators' concerns (Linnér 2006: 285), asking parties to 'minimize adverse effects' when implementing PAMs. So far, however, climate negotiations have paid very little attention to the relationship of the climate regime to WTO norms. For instance, it was not until 2003 that the UNFCCC Secretariat summarised the state of the negotiations in the WTO relevant for the climate regime (UNFCCC 2003).

2.1.3 Transfer of climate-friendly goods, services and technologies

While the two previous examples rather point to potential conflicts between the UN climate regime and the WTO, there are also win-win constellations, in particular the removal of trade barriers in favour of climate-friendly goods or services, and the development and transfer of low-emission technologies. Article 4(5) UNFCCC states that 'developed country Parties ... shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention'. This provision is based on a broad understanding of technology transfer, which includes capacity building – in terms of human resources and knowledge bases – in the receiving countries. However, instead of facilitating knowledge transfer and capacity building, companies in developed countries have much higher incentives to build new technologies completely 'in house' in order to secure maximum profits and reduce investors' risks. Only once the technology is 'ready', they might fully insist on the rules of trade liberalization, asking the receiving countries to reduce the respective import barriers.

What role does WTO law play in this constellation? On the one hand, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) strengthens the position of technology developers, since it opposes national sovereignty – and subsequent protectionism – over intellectual property rights. Moreover, the most-favoured nation provisions for goods (under GATT) and services (under GATS) guarantee that certain measures which facilitate technology transfer towards selected countries (e.g. as granted by the United States in several bilateral and multilateral treaties) are expanded to all WTO members (Brewer 2008b). On the other hand, the TRIPS Agreement might render the acquisition of technologies more costly, to the disadvantage of developing countries (Littleton 2008: 7ff.). Moreover, the WTO Agreement on Trade-Related Investment Measures (TRIMS) can constrain the ability of acquiring countries' governments to act by excluding the use of certain interventions, for example by not allowing enforcement of performance requirements on multinational corporations (Subbarao 2008: 14).

Similarly to the two earlier discussed topics, there is hence a great deal of uncertainty about the exact implications of WTO rules for climate-related policies and vice versa.

2.2 Management approaches and their shortcomings

While acknowledging these various overlaps, policy-makers in both regimes have so far fallen short of appropriate management approaches, i.e. approaches to enhance synergies or tackle the potentially negative implications. These approaches have so far largely taken place under the umbrella of the WTO – and either have ended up in narrow mandates or in stalled debates.

The EU and Switzerland submitted proposals in the WTO Committee on Trade and Environment (CTE) as early as 1996. They called for an ‘environmental window’ in favour of multilateral environmental agreements (MEAs). Such a window might take the form of a savings clause, such as an extension of the environmental exceptions under Article XX GATT, or even the adoption of a whole new WTO agreement on the relationship with MEAs. Both of these tools intended to grant certain MEA rules a permanent waiver with regard to the WTO principles on non-discrimination (Sampson 2001: 74; Santarius et al. 2004: 15-16; Zelli 2007). For the UN climate regime, this could have implied waivers for any restrictions on the trade in emission allowances or for the implementation of certain trade-restrictive PAMs. However, such proposals met considerable resistance by other parties, especially developing countries who feared that such ‘carte blanche’ was a disguise for green protectionism (Neumann 2002: 330).

After these failed attempts, the EU and Switzerland tried to reinvigorate CTE discussions at the Doha Ministerial Conference in 2001. In fact, an explicit mandate for clarification of the WTO-MEA relationship was one of the EU’s ‘must haves’ for launching a new WTO round’ (Haverkamp 2001: 5). This mandate was included in para. 31(i) of the Doha Development Agenda (DDA), to be debated in the Special Session of the CTE (CTE-SS). However, the mandate was restricted in three ways. First, due to resistance by the US, Australia and the bulk of developing countries, the formula of para. 31(i) was narrowed to the applicability of *existing* WTO rules with regard to *existing* MEA rules – i.e. leaving out any COP decisions. This interpretation significantly limits prospects for any legal concessions to a post-2012 climate agreement, since the COPs are supposed to flesh out the rather abstract regulations of such an agreement on tradable allowances, PAMs and other issues. Second, the same countries also achieved that another controversial question was ‘carved out from the mandate’s scope’ (Palmer and Tarasofsky 2007: 14), namely the application of MEA trade measures to non-parties. Third, CTE-SS debates soon got stuck in formal and technical controversies about the possible scope and procedure of the negotiations. In the end, only specific and mandatory provisions have been discussed. This implies an exclusion of trade-related PAMs, since the list of PAMs under Article 2(1a) of the Kyoto Protocol is only indicative and not specific.

A look at other Doha Round discussions – on environmental goods and services (EGS) (under DDA para. 31[iii]), market access (32[i]) and eco-labelling (32[iii]) – further confirms that developing countries have oftentimes been the most determined opponents of any concessions for MEAs in general and the UN climate regime in particular. These debates concern the third overlapping issue identified above, i.e. climate-friendly goods, services and technologies, but also are relevant for the issue of PAMs. ‘[W]hereas many industrial

countries regarded [measures such as eco-taxes or eco-labelling] as important environmental instruments, developing countries feared restrictions on their market access' (Santarius et al. 2004: 14). For instance, in 2002 Saudi Arabia tabled a proposal in the CTE and the Doha Round's Non-Agricultural Market Access Negotiating Group. In line with OPEC strategies in the UN climate regime on adverse impacts of PAMs (Articles 3[14] of the Kyoto Protocol and 4[18] of the Convention), this proposal called for the removal of energy-related subsidies in OECD countries. Most remarkably, the proposal did not only target subsidies for the coal or nuclear sectors, but also for climate-friendly sectors like renewable energies (Yamin and Depledge 2004: 256).³ But also non-OPEC members have carried the debate on adverse impacts into the WTO. A major proposal by India has largely criticized the negative effects of environmental measures on the market access for products from LDCs and other developing countries (Harashima 2008: 27).⁴ So far, these developing country proposals have met rejection from both the EU and the US.

Not too surprisingly, developing countries were far more sceptical about trade liberalization once discussions addressed access to their own markets. In the EGS debate under DDA para. 31(iii), they have strongly criticized a 'list approach' suggested by OECD countries. In their approach, the EU and the US listed a large number of environmental goods and services, including climate-friendly ones, for which trade barriers should be removed or reduced. Developing countries, in turn, held that the 'list approach' was just a disguise for a different purpose: since many of the listed goods had multiple uses, the approach rather secured wide-ranging access to developing country markets (Jha 2008: 2ff.). Therefore, India proposed a much narrower 'project approach', which only allows temporary trade liberalization for goods and services associated with an approved environmental project (ICTSD 2007: 12ff.). Moreover, India and OPEC members demanded a relaxation of intellectual property standards under the TRIPS agreement in order to support transfer of specific climate-friendly technologies (ICTSD 2008a: 6). Due to this standoff between North and South, EGS discussions have shared the fate of other CTE debates, making no major progress so far (cf. World Bank 2008: 75ff.).⁵

The various WTO-internal debates on overlaps with environmental regimes have thus largely ended up in negotiation stalemates. These stalemates are tied to the overall slow progress of the Doha Round. Since the DDA constitutes a 'single undertaking', progress on the 'trade and environment' mandate under paras. 31 and 32 depends on the success of talks on other Doha items, especially on tariff and subsidy cuts in the industrial goods and agriculture negotiations. An agreement on these issues 'would give delegates a sense of what products to include in the liberalisation agreement and would provide a more solid idea of the potential extent of any tariff cuts' (ICTSD 2008b). To take another illustration: debates on para. 31(ii) on permanent observer status of the UNFCCC and other MEAs have been hijacked by an

³ Doc. No. TN/TE/W/9. [http://www.jmcti.org/2000round/com/doha/tn/tn_te_w_009.pdf] (last accessed 10 November 2008).

⁴ Doc. No. WT/CTE/W/207. [http://commerce.nic.in/wt_cte_W207.pdf] (last accessed 10 November 2008).

⁵ In addition to the dual use problem, CTE-SS parties also disagree on the definition of environmental goods (based on environmental end-use or also on the environmental production process?) (World Bank 2008: 75ff.).

overarching conflict among WTO members. To date, members of the Arab League and countries sympathetic to the league have blocked any applications for WTO observer status by international organizations or regimes. They thereby retaliate against the ongoing denial of observer status to the Arab League.

Many of the aforementioned overlaps and the shortcomings of management approaches have exerted a rather detrimental effect on the jurisdictional scope and rule development of the UN climate regime. This is due in part to the higher degree of delegation in the WTO, where many important interpretations of WTO rules regarding the overlap of trade and the environment have been issued by its dispute settlement bodies. Scholars have argued that the shadow of WTO law and its stronger dispute settlement system may provoke anticipative or ‘chill effects’ (Stilwell and Tuerk 1999; Eckersley 2004). In order not to risk any legal challenge before the WTO dispute settlement mechanism, parties to the UN climate regime might refrain from the elaboration or implementation of more ambitious trade-relevant climate protection measures (Oberthür 2006: 57). Moreover, they might even refrain from developing more concrete provisions for the UN climate regime itself (Gehring and Oberthür 2006: 314-16).

Indeed, since the adoption of the Kyoto Protocol, negotiators have avoided any trade-restrictive modalities. For instance, the list of ‘policies and measures’ has remained purely indicative and non-exhaustive. A mandatory coordinated set of PAMs – e.g. with trade restrictions similar to those in the Montreal Protocol or the Convention on International Trade in Endangered Species – has not evolved, showing the limited degree of stringency in the climate regime. Furthermore, while a relatively strong compliance mechanism was established, trade restrictions were largely omitted. Non-compliance may lead to exclusion from emissions trading and reduction of the cap in the next commitment period. Yet although proposed by the EU, non-compliance does not entail financial penalties or a loss of carbon credits, nor does it include any other trade sanctions (Stokke 2004: 352). Finally, there has been no significant elaboration of the dispute settlement procedure of the UN climate regime, leaving the possibility that countries bring a case before the WTO dispute settlement mechanism (Chambers 2001b: 103). In other words, the UN climate regime has no ultimate clout over cases that immediately affect its jurisdiction.

By the same token, negotiators have so far not reached any legal concessions of WTO rules in favour of the UN climate regime. The various deadlocks and restrictions we discussed above rather point to a legal prevalence of the WTO on the overlapping issues. For instance, leaving party-non-party disputes *de facto* under the jurisdiction of the WTO dispute settlement mechanism makes it more likely that the non-parties to UN climate regime will challenge trade-related climate measures in the future.

In summary, it is evident that the legal *status quo* implies a lack of clarity which has negative effects for the development and implementation of the UN climate regime rather than for the WTO. This raises the question how these overlaps can be addressed in a meaningful way,

avoiding the deadlocks in which management approaches have ended up. We address this question in our final section.

3 Policy recommendations for addressing the climate-trade overlap in a post-2012 world

The previous considerations have shown, first of all, that there are still many unresolved issues and debates in the climate-trade overlap that need addressing. Management approaches in both the climate regime and the WTO have so far not resulted in cooperative and pragmatic solutions to the relationship between the two regimes. What is more, the world trade regime may result in a potential chill effect, which might harm post-2012 climate policies in the long run.

It is important to understand the reasons for the current overlaps and the shortcomings of previous management approaches. A first potential reason concerns the strategic constellation of parties. Both in the climate and trade negotiations, powerful coalitions of countries influence the outcome of climate-trade interactions. In the UN climate regime, these blocks include the EU, the Umbrella Group (a loose coalition of the US, Canada and other non-European developed countries like Australia, Canada, Russia and Japan), and the G-77 & China which in turn embraces a diverse range of sub-groups such as OPEC members, least-developed countries, and small-island developing states. In the WTO, groups are not identical and much more differentiated (especially developing country groups), but roughly follow this threefold pattern with disparate levels of in-group cohesion. The various interests of these coalitions can in part help explain the observed state of overlap between both regimes. This holds in particular for the ‘WTO-compliant’ development of the UN climate regime (i.e. its largely market-based mechanisms), and the poor outcome of CTE negotiations on WTO-MEA overlaps under para. 31(i). Another potential reason is likely to be the high uncertainties and the lack of consensual knowledge about climate-trade overlaps. Although a great body of research exists on the overlaps between the climate regime and the WTO, the IPCC reports so far do not even include a comprehensive analysis. Instead, with the exception of a 2000 special report on technology transfer, passages on the overlaps with the WTO are rather dispersed throughout the IPCC’s assessment reports. This reflects the controversy and uncertainty about many of the climate-trade overlaps, e.g. the aforementioned debates about the WTO-compliance of PAMs like subsidies or border tax adjustments, or the lack of clarity about the benefits of TRIPS relaxations for North-South technology transfer.

We conclude this paper with some preliminary policy recommendations for addressing this particular aspect of the institutional fragmentation of global climate governance.

With regard to the lack of consensual knowledge, it appears important to bring in further expertise to inform discussions on climate-trade issues and to move discussions away from mostly considering unilateral trade measures such as border adjustment measures. It is crucial to first gather more evidence on the implications of such measures, including their

environmental and economic effects, chances to discipline such measures in multilateral agreements, and indirect impact on climate negotiations (for example in light of perceptions by developing countries). Such evidence could be provided by a separate chapter in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), either on climate-trade overlaps in general, or on unilateral and multilateral trade-related approaches in particular. Moreover, the WTO CTE could open up to regular scientific advice on environmental matters, for instance, by establishing a standing advisory body.

Given the ongoing change in expertise on these overlaps, one pragmatic option for several overlap issues is to build the uncertainty into respective strategies. For instance, one option to handle BAMs could be a flexible system based on multilateral discussions. Such a system could address critical issues in the design of BAMs, such as sectoral and country coverage (taking into account country's common but differentiated responsibilities), and setting appropriate levels for the border adjustments (Climate Strategies 2008). A flexible expertise-based approach might also be an option suitable for another major issue of climate-trade overlap, the removal of trade barriers for climate-friendly goods and services. Instead of a fixed list of climate-friendly goods and services, the US and EU could propose a 'living list', which can be amended based on further scientific input. For instance, building on carbon life-cycle analyses of goods and services, sustainability criteria for the removal of trade barriers could be developed.

As regards coordination among different country coalitions, informal forums or dialogues might be a more suitable starting point to discuss management attempts first, as they are less prone to political sensitivities such as fear of protectionism. Several of these dialogues have already been initiated, e.g. the Gleneagles Dialogue, the Major Economies Process on Energy Security and Climate Change, and the Informal Trade Ministers Dialogue on Climate Change Issues during COP-13 in Bali. However, it is important to arrange the dialogue across ministries, i.e. between governmental representatives for environment, trade and development. Such a dialogue could provide a platform to discuss overlap questions outside of the WTO.

Finally, policy recommendations should accommodate the strategic interests of the involved country coalitions and the constellation of these interests. To this end, delegates in both institutions should further explore opportunities for issue-linking – more than has been the case so far. Issue-linking implies that countries or country coalitions consider aspects from related debates in their strategies. This can result in proposals for coordination, side-payments or even induce package deals. What sounds utopian at first glance has been regular practice in international politics in general and international trade in particular (ultimately in the form of the WTO which links a wide range of issues) – and has even found its way into recommendations of IPCC reports (cf. IPCC 2001: 624-27). The most noteworthy example of a constructed link among climate and trade interests is the Russian ratification of the Kyoto Protocol in early November 2004 – which secured the Protocol's entry into force (Henry and Sundstrom 2007).

The underlying intuition of ‘tactical issue linkage’ (Haas 1980; Folmer et al. 1993; Cesar and De Zeeuw 1996) – or even package deals – is that they can solve asymmetries among countries, each country gaining on a different issue, thereby making the agreement profitable to all participants (IPCC 2001: 626f.). In terms of game theory, such tactical issue-linkage can connect two separate bargaining situations, creating a new pay-off matrix with altered preferences, i.e. an overall constellation which is more conducive to cooperation. Combining climate and trade issues in an overall deal might hence produce new bargaining chips and provide new leverage to deadlocked negotiations (Zürn 1990: 166-73).

This notwithstanding, package deals are far from being a panacea. While the potential number of tactical issue-linkages between climate and trade issues is infinite, most of these linkages are neither feasible nor sensible. Caveats one needs to consider include the nature of the linked issues. As climate negotiations provide a public good, that is, a good with non-excludable benefits, incentives are high to free ride. To reduce this, issue linking is sensible especially in negotiations on issues with excludable benefits, for example deals on technology transfer. Moreover, the agendas of both post-2012 climate governance and the Doha negotiations are overburdened, which slows down progress (ICTSD 2008c). Additional topics could hence easily make matters worse. The choice of topics therefore needs to guarantee balanced benefits for all parties. Moreover, in the Doha Round, trade topics tend to be more important to parties than climate concerns. This imbalance of preferences thus needs to be taken into account.

We briefly explore two examples for which it might be feasible to further integrate country strategies in the Doha Round and post-2012 negotiations. First, the EU could consider linking its position on the relationship between the WTO and multilateral environmental agreements under DDA para. 31(i) to its position on the TRIPS agreement. In the former debate, the EU has asked for legal concessions under WTO law in favour of trade-related measures under multilateral environmental agreements, however meeting opposition from developing countries who fear green protectionism. But in the second debate, some developing countries have demanded concessions in favour of specific environmental concerns: Brazil, India and other countries have called for an amendment of the TRIPS Agreement to reflect requirements of the Convention on Biological Diversity. Moreover, some developing countries have asked for TRIPS exemptions to facilitate the transfer of climate-friendly technologies under DDA para. 31(iii). With all these debates concerning some form of legal concessions under WTO law, there is potential for strategic issue linking: for instance, movement from one side on the debate between WTO and multilateral environmental agreements could trigger progress in TRIPS-related discussions.

A second option for issue linking are overlapping discussions on environmental goods and services, and biofuels. In the Doha Round, under DDA para. 31(iii), the US and the EU have requested developing countries to liberalize trade policies to allow more transfers of environmental goods and services. Brazil and other developing countries have criticized the fact that the list of environmental goods and services presented by the EU and the US does not feature biofuels. Moreover, Brazil has included US subsidies of biofuels in a dispute it

filed in the WTO in 2007 (Brewer 2008a: 24). In light of this overlap, concessions from one or both sides on biofuels might help reinvigorate the debate on environmental goods and services. Such a concession could for instance come close to the aforementioned idea of a 'living list' which could include biofuels that fulfil certain sustainability criteria. These criteria could be developed and discussed under the UN climate regime, based on potential future IPCC work, as suggested above. This consideration of sustainable biofuels would accommodate the interests of some developing countries and raise the chances of a more comprehensive deal on trade barrier removals for environmental goods and services.

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