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EU State Aid Law, WTO Subsidy Disciplines and Renewable Energy Support Schemes:

Disconnected Paradigms in Decarbonizing the Grid

Anna-Alexandra Marhold¹

Abstract: Liberalization of the European internal market for energy by means of unbundling and third party access alone is not enough to make renewable energy on a par with fossil fuels. To increase the production of renewable energy in its Member States, the EU has in place a set of legal instruments to promote the scale up of renewable energy production through i.e. setting binding targets for renewables and providing a legal framework for support schemes. However, while arguably consistent with EU disciplines pertaining to State aid, EU support schemes can easily fall foul of WTO subsidy disciplines. This article argues that EU and WTO law are disconnected paradigms in this respect: EU legislation by its design attempts to legitimize support schemes for renewable energy, not necessarily taking into account their consistency with the WTO ASCM. WTO law, on the other hand, currently provides too little space for subsidies that further legitimate policy goals, such as environmental protection and climate change mitigation.

Keywords: EU Law; State Aid; WTO Law; ASCM; International Trade Law; International Economic Law; Energy Law; Energy Market Liberalization; Unbundling; Subsidies; Renewable Energy, Environment; Sustainable Development; Externalities; Exemptions; Exceptions

JEL Codes: D62; F1; F13; F15; F18; F19; F5; F55; F64; F68; H23; H40; H41; H71; K00; K1; K19; K21; K32; K33; L50; L51; L94; L97; L98; O24; O3; O38; O44; O52; P18; Q00; Q01; Q2; Q27; Q28; Q4; Q42; Q48; Q5; Q54; Q56; Q58.

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1 Introduction

In its efforts to decarbonize its economy and meet its commitments under international climate treaties and increasing its security of supply, the European Union (hereafter: EU) promotes the scale up of clean energy and energy efficiency. 2 To this end, the Union has extensive legislation in place to legitimize support schemes for renewable energy under EU law, i.e. by means of the Renewable Energy Directive, 2014 EU Guidelines on State Aid for Environmental Protection and Energy, the EU General Block Exemption Regulation (GBER) and supporting case law.³ As this contribution will reveal, while arguably consistent with Union law, the support schemes for renewable energy in existence in the EU may, and do, easily fall foul of World Trade Organization (hereafter: WTO) subsidies disciplines as set out in the Agreements on Subsidies and Countervailing Measures (hereafter: ASCM).4 As the EU and its Member States are members to the World Trade Organization, the rules of the multilateral trading system are binding upon them.5 Not abiding by the rules opens up avenues for other WTO Members to initiate dispute settlement proceedings against the EU.6

² Conference of Parties 21 (COP21) Paris Agreement: United Framework Convention on Climate Change (UNFCCC), UN Doc FCCC/CP/2015/L.9/Rev.1 'Adoption of the Paris Agreement' (12 December 2015) (hereafter: the Paris Agreement); Also see EU 2020 Climate and Energy Package https://ec.europa.eu/clima/policies/strategies/2020_en accessed 21 July 2017.

³ European Commission, Guidelines on State aid for environmental protection and energy 2014-2020 (2014/C 200/01) C 200/1. 28.6.2014 (hereafter: Guidelines) and European Commission, Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty Text with EEA relevance; OJ L 187, 26.6.2014, p. 1–78 (hereafter: GBER).

⁴ World Trade Organization, see <www.wto.org> accessed 21 July 2017; Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 14.

⁵ See WTO, 'The European Union and the WTO' https://www.wto.org/eng-lish/thewto_e/countries_e/european_communities_e.htm (accessed 21 July 2017).

⁶ Dispute Settlement Understanding, Dispute Settlement Rules: Understanding on Rules and Procedures Governing the Settlement of Disputes, Marrakesh Agreement Establishing the World Trade Organization, Annex 2, 1869 U.N.T.S. 401, 33 I.L.M. 1226 (1994).

This article argues that EU and WTO law are disconnected paradigms with respect to support schemes for renewable energy: EU legislation and case law attempts to legitimize support schemes for renewable energy through its legal framework, while WTO subsidies law offers too little legal space to pursue legitimate policy goals at present. This situation leads to a paradoxical and unfavorable outcome for not only the EU, but all WTO Members that wish to scale up the share of renewables in their energy mix.

To better understand the place of renewable energy support schemes in the EU, Section 2 will first explain the rationale of the EU internal energy market, including the interplay between gradually pursued liberalization and decarbonization. Section 3 will then proceed to discuss EU renewable energy law and policy and the treatment of support schemes under EU law. It will especially focus on the EU General Block Exemption Regulation, the 2014 EU Guidelines on State Aid for Environmental Protection and Energy and relevant case law. Section 4 will test current EU State aid law in the renewable energy sector against some of the intricacies of WTO subsidies regulation law and expose how both legal frameworks operate in disconnected paradigms.

2 EU Internal Energy Market Fundamentals at A Glance: The Interplay between Liberalization and Decarbonization

2.1 The Materialization of the EU Internal Energy Market

The EU Internal Market for Electricity, part of the Internal Energy Market (hereafter: IEM) is the result of gradually introducing a more coherent

⁷ The Guidelines and GBER (n 3).

EU-wide energy legislation and policy from the 1980s onwards. The culmination of process has - so far - been the launch of the Energy Union package in 2015 and the Clean Energy Package proposed by the European Commission in 2016.8 The ultimate objective is to have a fully interconnected EU energy market, that is at the same time liberalized, decarbonized and can guarantee security of energy supply for Europe's citizens.

The dimension of liberalizing the energy market of electricity and gas can be understood as extending the idea of the European single market by breaking up vertically integrated energy companies and introducing competition to these industries where possible. The consumer is ultimately at the heart of EU competition policy, and this is the underlying rationale for liberalization policies in the energy market: by making companies compete fairly with one another, efficiency is encouraged, quality and innovation increases, prices decrease and consumers have an overall broader choice. 10

Through Internal Energy Market legislation, two policy goals thus *de facto* merge into one: The completion of the EU single market by means of extending competition policy to the energy market, on the one hand, and, introducing and advancing a coherent Union-wide, increasingly integrated

⁸ European Commission, 'Energy Union Package – A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy', 25 February 2015, https://ec.europa.eu/energy/sites/ener/files/publica-

tion/FOR%20WEB%20energyunion_with%20_annex_en.pdf> and DG Energy, 'Commission Proposes New Rules for a Consumer Centred Clean Energy Transition', 30 November 2016 http://ec.europa.eu/energy/en/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition> both websites accessed 21 July 2017.

⁹ Pollitt in a brief paper provides a historical overview of the 'liberalization era' and its effects: Liberalization is characterized by its attention for competition, and unbundling is one of the tools. Privatization is often an effect of liberalization but not always, and part of the reason liberalization is not yet complete is that governments are afraid to lose the control or the power to cross-subsidize, see M Pollitt, 'The Role of Policy in Energy Transitions: Lessons from the Energy Liberalisation Era' (2012) 50 Energy Policy 128.

¹⁰ DG Competition, 'Why is Competition Policy Important for Consumers?' http://ec.europa.eu/competition/consumers/why_en.html accessed 21 July 2017.

energy policy, on the other. ¹¹ In this spirit, the EU has been progressively working towards the completion of the IEM as well as developing a coherent EU energy policy since the 1980's, increasingly liberalizing European electricity and gas markets in the process. ¹² Ownership Unbundling (hereafter: OU) and Third Party Access (hereafter: TPA), prescribed by 2009 Third Energy Package (TEP) legislation, are key elements with a dual goal in this respect: they facilitate liberalization as well as promote a Europe-wide integration of energy markets. ¹³ OU and TPA are the cornerstone legal instruments that mandate the breaking up previously vertically integrated energy companies and allowing competition in the sector.

The reason that liberalization and interconnection of network industries in the EU was introduced later to the energy sector than to most other goods and services sectors was twofold: First, energy was, for decades, a purely national matter linked to state security and security of energy supply of the separate EU Member States. There were historically relatively little cross-border interconnections of electricity grids and gas pipelines across Europe. Until today, energy remains a shared competence between the Union and its Member States, as is evidenced by Article 4.2(i) of the Treaty on

¹¹ See for an overview A Marhold, 'EU Regulatory Private Law in the Energy Community – The Synergy Between the CEER and the ECRB in Facilitating Costumer Protection' in: M Cremona and HW Micklitz, *Private Law in the External Relations of the EU* (OUP, Oxford 2016) 249, 250-254; Also see European Commission (DG Energy), 'Markets and Consumers – Integrated Energy Markets for European Households and Business' https://ec.europa.eu/energy/en/topics/markets-and-consumers accessed 21 July 2017.

¹² See European Commission, 'A Fully Integrated Internal Energy Market' https://ec.europa.eu/commission/priorities/energy-union-and-climate/fully-integrated-internal-energy-market_en (accessed 21 July 2017).

¹³ The Electricity and Gas Directives of the Third Energy Package are Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (text with EEA relevance), OJ 2009 L 211/69, and Directive 2009/73/EC concerning common rules for the internal market in natural gas and repealing Directive 2003/55, OJ 2009 L 211/94, both dated 14 July 2009. Ownership unbundling is taken up in Article 9(1) of the Electricity and Gas Directives (2009/73/EC); Third Party Access is taken up in Article 32 of the Directives.

the Functioning of the European Union (hereafter: TFEU). ¹⁴ This entails that both the EU and Member States may legislate in this area, as long as they respect the 'duty of sincere cooperation' among themselves flowing from Article 4(3) of the Treaty on the European Union (hereafter: TEU). ¹⁵ In short, the duty of sincere cooperation entail that the EU and its Member States must refrain from acting against each other's respective interests.

The specific article setting out EU energy policy is taken up in Article 194 TFEU.16 The Article in paragraph one sets out the objectives of EU energy policy, while paragraph two subsequently determines that the European Parliament and the Council can establish the measures necessary to achieve these objectives. Paragraph two of this article further emphasizes the shared nature of the competence: the EU may, for instance, not determine the internal energy mix of its Member States .17 It states that 'Such measures shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply, without prejudice to Article 192(2)(c). '18. This is somewhat paradoxical, at minimum, as the Union has set binding targets for shares of renewable energy in its Member States , although justification for this can be partially found in mentioned Article 192(2)(c) TFEU for environmental protection. 19 We can nevertheless discern a tension here between the targets and requirements set out in the EU Renewable Energy Directive discussed in this contribution and Member States'

 $^{^{14}}$ Consolidated Version of the Treaty on the Functioning of the European Union, 2008 O.J. C $^{115/47}$ (hereafter: TFEU).

¹⁵ Consolidated Version of the Treaty on European Union, 2010 O.J. C 83/01 (hereafter: TEU).

¹⁶ Article 194 TFEU (n 14).

¹⁷ Article 194.2 TFEU (n 14).

¹⁸ Ibid.

¹⁹ Art 192(2)(c) TFEU (n 14): By way of derogation from the decision-making procedure provided for in paragraph 1 and without prejudice to Article 114, the Council acting unanimously in accordance with a special legislative procedure and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, shall adopt: measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply.'

sovereignty (including sovereignty over their natural resources) to decide their energy mix. Regarding renewable energy, we can conclude that while the EU at Union level may prescribe overall renewable energy targets, the Union is not a position to decide on the actual energy mix of its Member States, nor does it have a say in what energy resources Member States can and should use.²⁰ Perhaps this is one of the reasons why the Commission in the new Clean Energy Package has proposed to do away with binding renewable energy targets on the national level, instead solely providing a binding target on the EU level, as a possible compromise to Member States in this area.²¹

A second reason why liberalization was introduced later into the European energy sector (though connected to the previous point), is that the electricity and gas industry has traditionally either been state-owned and/or operated by vertically integrated companies, often behaving as a natural monopoly owing to the sunk cost connected to energy production and infrastructure investments. ²² It thus became evident that the breaking up of these industries was to be a challenging process that could only succeed if implemented in phases. It should be noted that while the electricity and gas sector differ significantly from one another, certain core legislative changes in EU law (such as OU and TPA) were designed to apply to both sectors. This is simply because the electricity as well as the gas industry have certain

²⁰ See on this e.g. T Sveen, 'The Interaction between Article 192 and 194 TFEU' in *EU Renewable Energy Law: Legal Challenges and Perspectives* (2014) Scandinavian Inst Mar L YB 2014 (Oslo University), 157 ff.

²¹ European Commission, Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (recast), COM/2016/0767 final/2 - 2016/0382 (COD), 23.02.2017, under 1.1.

²² See generally on this T Daintith and L Hancher, *Energy Strategy in Europe – The Legal Framework* (De Gruyter, Berlin 1986).

characteristics in common, i.e. they are 'network-bound', tied to fixed infrastructures and their operational processes, from energy production to transmission and distribution, where historically heavily regulated on state level.

During the first phase of implementing the IEM in the late 1980s, cross-border transit opened for both electricity and gas, implying that Member States could no longer oppose transnational flows of energy. In the early 2000s, the Second Energy Package introduced the legal unbundling of gas and electricity sectors, mandating the minimum threshold of legal separation of the production and sale of energy from transmission and distribution activities of energy. ²³ By 2009, the Commission adopted the Third Energy Package in the form of an Electricity and Gas Directive (2009/72/EC and 2009/73/EC respectively), introducing the most stringent form of unbundling, known as Ownership Unbundling (OU). The new Clean Energy Package proposed by the Commission in the fall of 2016 attempts to take this a step further by emphasizing the need to introduce flexibility onto the grid, inter alia to accommodate prosumers and smart energy systems into the existing structure. ²⁴

As the 2016 package is merely a set of proposals on the negotiation table at present, we take a step back to the Third Energy Package that is currently in force. Ownership Unbundling, set out in Article 9 of the 2009 Electricity Directive, prescribes the complete separation of companies' electricity generation and sales activities from their transmission network activities, requiring them to be operated by strictly independent entities. ²⁵ Although all EU Member States must attain full OU in both their electricity and gas sectors, it remains difficult to realize this in all Member States in a

²³ Directives 2003/54/EC for electricity and 2003/55/EC for gas, OJ 2003 L 176.

²⁴ See European Commission, Communication on 'Clean Energy For All Europeans' Brussels, 30.11.2016 COM(2016) 860 final, 8.

²⁵ A Johnston and G Block, *EU Energy Law* (OUP, Oxford 2012) 73; ECJ, C-439/06 *Citiworks* AG (22 May 2008) and Article 9 of the Electricity Directive 2009/72/EC.

timely manner today and milder forms of unbundling are still accepted (the case in the gas sector in e.g. Hungary, Croatia and Lithuania). ²⁶ Unbundling and integrating energy markets is additionally accompanied by significant challenges: It for instance exposes the need to attract sufficient infrastructure investments in the European electricity market and the need to manage capacity remuneration mechanisms that Member States have in place. ²⁷

Another cornerstone of liberalization of the energy market the EU introduced in the Third Energy Package is concept of Third Party Access (TPA), taken up in Article 32 of the Electricity Directive. ²⁸ TPA ensures that Member States have a system in place where third parties (usually competitors to the natural energy monopoly) can access the transmission and distribution grid under objective, transparent and non-discriminative terms. ²⁹ One of the essential components of TPA is the regulation of tariffs, which have to be published, 'applicable to all eligible customers, including supply undertakings and applied objectively and without discrimination between

²⁶ In fact, none of Member States has managed to fully transpose the Electricity and Gas Directives (due date for transposition of the Directive was 2011). Note in this respect that while 'full ownership unbundling' remains the basic model and target for EU MS, vertically integrated energy companies can resort to two other alternatives: the independent system operator (ISO) and independent transmission operator (ITO) model. Under the former model, the transmission network can remain in the ownership of the energy company. Nevertheless, the transmission network itself must be managed by an ISO, which must perform all day-to-day network operator functions and must be completely separate from the energy company. In the ITO scenario, the transmission networks can also remain under the ownership of an energy consortium, but the transmission subsidiaries would be set up as independent joint stock companies carrying their own brand name and subject to stringent regulatory control. Most EU Member States whose transmission systems are controlled by vertically integrated undertakings prefer this last scheme of unbundling to comply with the Third Energy Package.

²⁷ See e.g. European Parliament Briefing, *Understanding the Electricity Markets in the EU* (Brusseles, November 2016) and JM Glachant, M Saguan, V Rious and S Douguet, 'Incentives for Investments: Comparing EU Electricity and TSO Regulatory Regimes' EUI Florence School of Regulation Working Papers, June 2013.

²⁸ Article 32 of Electricity Directive 2009/72/EC.

²⁹ Ibid. See also Article 37(6) on the regulation of tariffs. The European Court of Justice (ECJ) in *Citiworks* confirmed that TPA is paramount and essential for both competition to function in the market as well as completing the internal electricity market, ECJ, C-439/06 *Citiworks AG* (22 May 2008), paras 40 and 44.

system users.'30 Transmission System Operators as well as Distribution System Operators are the guarantors of TPA.31

2.2 EU Energy Market Liberalization: Not Enough for the Scale up of Renewable Energy

As is well-known, the EU has undertaken binding commitments under international climate treaties (most recently under the 2015 Paris Agreement), and must make active efforts to curb emissions to prevent the further heating up of the earth.³² Although liberalizing the EU energy market is one of the cornerstones of the Union's energy policy, it evidently of itself is not enough to realize a significant decarbonization of the European energy sector by means of scaling up the share of renewables in the market. Additional regulation to mitigate the negative externalities of CO₂ emissions is thus necessary.

However, it is worth briefly exploring the interplay between liberalization and decarbonization. There is evidence that liberalizing the energy sector does in fact contribute to sustainable development by increasing the share of renewables that can access the grid.³³ For instance, various eco-

 $^{^{30}}$ Article 32(1) Electricity Directive 2009/72/EC.

³¹ Johnston and Block (n 25) 75. However, since a right balance must be attained between competition policy and attracting sufficient investments in energy infrastructure, the EU maintains an exemption policy to TPA. In the electricity sector, for instance, there is currently an emphasis on building more cross-border capacity by direct current interconnectors (Article 17 of Regulation 714/2009), meaning that these can qualify if it meets certain conditions). Article 17, Regulation 714/2009/EC. See for a more in-depth analysis T van der Vijver, 'Third Party Access Exemption Policy in the EU Gas and Electricity Sectors: Finding the Right Balance between Competition and Investments' in: MM Roggenkamp, L Barrera-Hernandez, DN Zillman and I del Guayo, Energy Networks and the Law – Innovative Solutions in Changing Markets (OUP, Oxford 2012) 333, 336.

³² Paris Agreement (n 2).

³³ L Nesta, F Vona and F Nicolli, 'Environmental Policies, Competition and Innovation in Renewable Energies' (2014) 67 Journal of Environmental Economics and Management 396.

nomic and econometric studies have indicated that innovation in clean energy was more likely to thrive in countries with more liberalized markets, measured by an increase in patents filed for clean and renewable energy technologies. Moreover, a causal link was found between the degree of liberalization and the success rate of clean energy policies. Nesta, Vona and Nicolli, for instance, observe that 'In particular, the combination of environmental policies and market liberalization is the most effective method of inducing innovation in renewable energy, particularly near the technological frontier. This finding corroborates the complementarity hypothesis that environmental policies are more effective in competitive markets'. 35

Analogous studies have been conducted in the European 'brown' electricity sector. In a 2016 study, Cambini, Caviggioli and Scellato studied EU electricity market regulation and innovation in the period form 1990-2009 by considering the growing number of patents in the traditional energy sector, based on Eurostat and International Energy Agency Data. ³⁶ The authors indeed found an increase in patent activities in the traditional electricity sector as a result of market liberalization, measured along the three factors of entry barriers, public ownership and vertical integration. ³⁷ Especially, the econometric results found that policies aimed at reducing vertical integration, i.e. unbundling, have a positive influence on innovation in the European electricity sector. ³⁸ However, a further 2014 study by Nicolli and Vona points out that lowering entry barriers is in fact a more significant force in facilitating

³⁴ T Jamasb and M Pollitt, 'Electricity Sector Liberalisation and Innovation: An Analysis of the UK's Patenting Acitivies' (2011) 40 Research Policy 309.

³⁵ Nesta, Vona and Nicolli (n 33) 409.

³⁶ C Cambini, F Caviggioli and G Scellato, 'Innovation and Market Regulation: Evidence from the European Electricity Industry' (2016) 23 Industry and Innovation 734.

³⁷ Ibid.

³⁸ Ibid.

renewable energy innovation, than privatization and unbundling.³⁹ Notwithstanding, they also conclude that this varies heavily across technologies (e.g. the well-developed wind industry profits from this).⁴⁰ Finally, the introduction of a more stable regulatory framework, in this case the Kyoto Protocol, amplifies the inducement effect of energy policies and privatization.⁴¹

The fact that policies promoting vertical unbundling appear to promote innovation in the sector seems to correspond with the reality that most energy industries have been historically vertically integrated. From this data, one can conclude that liberalization of the EU electricity market inherently does promote innovation, also in the renewable energy industry, measurable in the form of more patents in renewable energy technology. This given is notwithstanding any additional legislation for the scale up of clean and renewable energies. Nevertheless, the evidence also points to the fact that this is the most effective in countries where environmental *and* liberalization policies are combined.

Moreover, while there may be strong indicators that liberalization *in* se does contribute, at least to some extent, to more clean energy technology innovation in the European electricity sector, this does not mean that it corrects for market failures adequately. Despite liberalization legislation, clean energy is still not on a par with 'brown' energy in the electricity grid. There are several reasons for this, two worth mentioning in this context: First, while the number of players in the market is increasing, it remains more challenging to change supply side of electricity mix and for clean energy firms to

³⁹ See generally F Nicolli and F Vona, 'Heterogenous Policies, Heterogenous Technologies: The Case of Renewable Energy' (2016) 56 Energy Economics 190.

⁴⁰ Ibid.

⁴¹ Ibid.

access the market. ⁴² Second, there is a whole string of other, non-cost barriers that prevent clean energy capacity to compete with fossil fuels on a level playing field. These are comprised of both regulatory and non-regulatory barriers, e.g. administrative, physical, social (information asymmetry), financial barriers, etc. ⁴³

We can conclude that for the EU to meet both objectives of liberalization and decarbonization, legislation supporting the scale up of clean energy is necessary.⁴⁴ While liberalization legislation may contribute to decarbonizing the grid by facilitating innovation, it has not been enough to correct for the negative externalities of carbon emission and it has not been able to make renewable energy compete with brown energy on the grid on a level playing field.

3 Legal and Policy Space for the Scale Up of Renewable Energy under EU Law

EU legislation to support renewable energy has been put in place with exactly this rationale in mind, to balance out this inequality between 'brown' and 'green' energy and promote the share of renewables in the IEM. To this end, the Commission has introduced binding targets for Member States for the share of renewables in their energy mix from 2009 onwards through the Renewable Energy Directive, to 20, or even 30, per cent by

⁴² Johnston and Block (n 25) 304.

⁴³ Johnston and Block (n 25) 320.

⁴⁴ See on this specifically K Struckmann and G Sapi, 'Energy and Environmental Aid' in P Werner and V Verouden (eds), *EU State Aid Control – Law and Economics* (Wolters Kluwer 2017) 663 ff.

2020.⁴⁵ Since the introduction of these binding targets in 2009, Member States have witnessed a steady rise in the share of renewables in their energy mix, evidenced by data from Eurostat.⁴⁶

The previous section described EU internal energy law and policy and touched upon the interplay between liberalization and decarbonization. This section will proceed to discuss EU law and policy currently in place for the scale up of renewable energy. The purpose of is this is to demonstrate that EU law under the existing framework provides significant legal and policy space for Member States to utilize renewable energy support schemes, which has been a relatively successful tool for the scale up the share of renewables in the mix. As we will later understand from the following section, however, if these support schemes fall into the definition of a subsidy in WTO law, they stand a significant chance of qualifying as a prohibited or actionable subsidy under the rules of the multilateral trading system. The main reason for this is that while such schemes would normally be considered State aid under EU law, the Union has a legislative framework of exemptions in place that legitimizes them. However, if such schemes qualify as a subsidy under WTO, there is much less scope for exceptions to justify them. This section unveils this by considering both EU law and case law on the matter. It will first examine the Renewable Energy Directive, followed by State aid disciplines, the Guidelines for State aid in green and renewable energy, and the General Block Exemption Regulation, followed by a discussion of relevant case law.

⁴⁵ Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ L 140, 5.6.2009, p. 16–62 (hereafter: EU Renewable Energy Directive).

⁴⁶ See Eurostat, 'Energy from Renewable Sources' http://ec.europa.eu/eurostat/statistics-ex-plained/index.php/Energy_from_renewable_sources accessed 21 July 2017.

From an economic perspective, many subsidies for clean energy are set up as investment subsidies to expand renewable energy capacity. ⁴⁷ Support schemes for the scale up of clean energy in Europe come in a variety of forms, such as investment aid, tax exemptions or reductions, tax refunds, renewable energy obligation support schemes including those using green certificates, and direct price support schemes including feed-in tariffs and premium payments. ⁴⁸

The Feed-in Tariff (hereafter FIT) is arguably the most popular financing mechanism at present, including in the EU.⁴⁹ Through a FIT, the government guarantees to pay a certain set (above-market) price per kilowatt-hour to the producers of renewable energy 'to feed it into the national energy grid'. FITs are targeted at future investments through offering new producers of clean energy long-term contracts for this elevated price.⁵⁰ To make a FIT program effective, prices must be set high and be stable enough to provide enough incentives for those investments. In turn, suppliers of electricity are then required to buy electricity generated from these clean

⁴⁷ S Charnovitz and C Fischer, 'Canada – Renewable Energy: Implications for WTO Law on Green and Not-So-Green Subsidies' (2014) EUI Working Papers, RSCAS 2014/09, 4.

⁴⁸ H Birhanu Asmelash, 'Energy Subsidies and WTO Dispute Settlement: Why Only Renewable Energy Subsidies Are Challenged' (2015) 18 Journal of International Economic Law 261, 269 citing A Ghosh with H Gangania, *Governing Clean Energy Subsidies: What, Why, and How Legal*? (Geneva, International Centre for Trade and Sustainable Development, 012); Feed-in Tariffs are a guaranteed price for clean energy by producers. In the US, a clear example of a renewable energy investment subsidy is the Federal Production Tax Credit, which gives a 2.3 cent incentive per kilowatt-hour for the first 10 years of the operation of a renewable energy facility, see Fischer and Charnovitz (n 47) 4.

⁴⁹ International Renewable Energy Agency, *Renewable Energy Auctions in Developing Countries* (Abu Dhabi, IRENA, 2013) 6; International Renewable Energy Agency, *Renewable Energy Auctions: A Guide* (Abu Dhabi, IRENA, 2015) 13 and generally United Nations Environmental Programme, *Feed-in Tariffs as a Policy Instrument for Promoting Renewable Energies and Green Economies in Developing Countries* (Geneva, United Nations Environmental Programme 2012).

⁵⁰ Fischer and Charnovitz (n 47) 5.

energy sources. These programs may be designed in a way that the amount of the subsidy gradually decreases over the years, as the renewable energy in question becomes more profitable and gains more market share in the economy. ⁵¹ Note that FITs may or may not be transferred by the government directly, or borne by the consumers by an add-on to their energy bill.

There are several reasons why FIT programs have been a successful tool in the scale up of clean energy. First of all, these programs usually have a long time frame and are therefore accompanied by long-term price guarantees, meaning that they provide a lot of stability for investors. ⁵² Another advantage is that the program design of FIT schemes is often flexible and therefore could and should be adapted the economics needs of the country in question, as well as to the changing market conditions and the advances in technology. ⁵³ Additionally, FITs may be beneficial for the development of local production of clean energy. ⁵⁴ The downside in maintaining a FIT scheme is that it often ends up being more costly than necessary. ⁵⁵ For this reason, the EU has committed to phase this instrument out over

⁵¹ Through so-called digression mechanisms. This was for instance the case in Germany, see European Commission, 'Press release, State aid: Commission Approves German Renewable Energy Law EEG 2014', Brussels, July 2014, available at: http://europa.eu/rapid/press-release_IP-14-867_en.htm; See also, European Commission, 'Press release, State Aid: Commission Approves German Aid Scheme For Renewable Energy (EEG 2012)', note 110, and European Commission, 'Press release, State aid: Commission Approves German Renewable Energy Law (EEG 2014) for Railway Sector, European Commission', Brussels, available at: http://europa.eu/rapid/press-release_IP-14-2123_en.htm) accessed 21 July 2017.

⁵² UNEP-WTO Report, *Trade and Climate Change* (Geneva, United Nations Environmental Programme and World Trade Organization, 2009) 114 ff.

⁵³ Ibid.

⁵⁴ UNEP-WTO Report (n 52) 115.

⁵⁵ This was a big challenge in Spain, where the FIT program turned into a fiasco had to be cut back due to mismanagement and the external shocks of the financial crisis, leading to a string of investment disputes against the country, see e.g. Financial Times, 'Spain pressed over solar tariffs cuts' June 23, 2013 and El Pais (English). 'Spain loses first arbitration claim over cuts to renewable energy subsidies' 5 May 2017

https://elpais.com/elpais/2017/05/05/inenglish/1493988308_857826.html accessed 21 July 2017.

As alluded to above, there is presently a multiplicity of support schemes in existence in the EU, differing in design, set-up and goal. There is no harmonization across Member States of these schemes (yet), resulting in a plethora of successful and less successful examples of the scale up of clean energy in the electricity grid.⁵⁷ Undoubtedly, it must have been a conscious decision on the EU's side not to harmonize the schemes across Europe. Reasons for this are, amongst others, the fact that the schemes as well as the renewable energy technologies are still in the early stages of development and that it would be premature to harmonize them across Member States on the EU level.⁵⁸ As with other areas, the Union seems to prefer soft harmonization and coordination at first, after which it starts to create more binding rules at the EU level.⁵⁹ While is this certainly a valid reason, for the purpose of this contribution this means that the schemes are difficult to map and monitor comprehensively at present. 60 This, in turn, makes it difficult whether these policies have been designed taking into account not only EU rules pertaining to State aid, but also subsidies rules as set out by

⁵⁶ Johnston and Block (n 25) 332.

⁵⁷ See for an overview of renewable energy support schemes in place across EU Member States the website of the European Commission 'Legal Sources on Renewable Energy' < http://www.res-legal.eu/home/> accessed 21 July 2017. For instance, the FIT scheme in Germany, that was constructed as an add-on to the consumer's bill. At the other spectrum there is Spain, where after initial subsidization of the renewable energy sector, the country had to cut back on support and incurred large amounts of debt because of, inter alia, the financial crisis and the design of the scheme (see note 55).

⁵⁸ Johnston and Block (n 25) 339-340.

⁵⁹ This type of regulatory development— moving from a voluntary system to mandatory and legally binding regulation— is very typical of the way EU law works, as noted by K Talus, *Introduction to EU Energy Law* (OUP, Oxford 2016) 124.

⁶⁰ The most comprehensive effort is the Beyond 2020 project, http://www.res-policy-be-yond2020.eu/index.html accessed 21 July, researching the design and impact of a harmonized policy for renewable electricity in Europe. Their comprehensive final report discusses pathways and possibilities for the harmonization of renewable energy across Europe, see Beyond 2020, *Final Report of the Beyond 2020 project – Approaches for a harmonisation of RES(-E) support in Europe* (February 2014).

the multilateral trading system under the WTO. This is relevant because these policies are not necessarily always designed on the national level, but on the regional level as well.⁶¹ The question is then to what extent regional clean and renewable energy policy makers are expected to be aware of not only EU law, but also multilateral WTO rules.

3.2 The EU Legal Framework for Renewable Energy: Legitimate Exemptions to EU State Aid Disciplines

3.2.1 The EU Renewable Energy Directive

The current EU Renewable Energy Directive 2009/28/EC, also known as the Second Renewables Directive, is the central legal instrument in the promotion and scale up of renewable energy in the Union. 62 It sets ambitious goals for Member States, for example the requirement that the share of renewables in the overall EU energy mix should be 20, or even 30, per cent by 2020 (Article 3). 63 Moreover, it, among others, offers a framework for promoting renewable electricity, sets out mandatory national action plans for its 27 Member States to ensure they reach their goals through binding renewable energy targets (Article 4 and 5), and provides for rules to overcome barriers to the development of renewable energy and ensure access to grid (Article 13,16). 64 More importantly, the Directive in various articles recognizes the need for support schemes to ensure that Member States

⁶¹ E.g. in Spain, see JC Kuntze and T Moerenhout, Local Content Requirements and The Renewable Energy Industry - A Good Match? (ICSTD, Geneva 2013) 23.

⁶² EU Renewable Energy Directive (n 45).

⁶³ EU Renewable Energy Directive (n 45), Article 3.

⁶⁴ Ibid; Johnston and Block (n 25) 307-308.

meet their mandatory targets as a legitimate means to an end. ⁶⁵ The 20 percent target of renewable energy in the overall EU energy mix by 2020 that is set by the EU is a complex construct by its conception and design: First, the 20 target is an aggregate target for the whole EU, not for all the Member States separately. ⁶⁶

Intricate calculations had to made to reach the overall Union total of twenty percent, which is comprised various shares of each individual Member State. The percentage of renewable energy targets each of the Member States must reach is taken up in their individual national action plans, ranging from 10 per cent (for Malta) to 49 per cent (for Sweden). ⁶⁷ Elements that were taken into consideration was the starting situation of each Member States in 2005, evaluating what percentage was possible to reach considering its fuel mix, economic development and realistic potential. Two remarks must be made in this respect. First, it should be mentioned that although the targets set by the EU for each of the Member States are binding, it is unclear what repercussions (apart from possible infringement proceedings by the Commission) follow in case the targets are not met. While the Commission requires Member States to report on their progress every two years and the Commission itself engages in monitoring and reporting, nowhere in the directive itself does it state what the consequences are of non-compliance

⁶⁵ EU Renewable Energy Directive (n 45), Article 2(k): "support scheme" means any instrument, scheme or mechanism applied by a Member State or a group of Member States, that promotes the use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased. This includes, but is not restricted to, investment aid, tax exemptions or reductions, tax refunds, renewable energy obligation support schemes including those using green certificates, and direct price support schemes including feed-in tariffs and premium payments'.

⁶⁶ EU Renewable Energy Directive (n 45), Preamble para 17.

⁶⁷ EU Renewable Energy Directive (n 45), Annex I, 'National overall targets for the share of energy from renewable sources in gross final consumption of energy in 2020'.

and/or a failure to meet the targets.⁶⁸ It is therefore quite remarkable that Member States have taken their commitments so seriously: Eurostat has indeed reported a steady increase in the energy mix of renewables.⁶⁹

In practice, many of the support schemes for renewable energy production EU Member States have in place are either *de jure* or *de facto* restrictive as only producers from the Member States in question can participate in and/or benefit from the scheme. This is arguably discriminatory both under EU law and WTO law, however more tolerated and easier to justify under the former, as will become clear below. ⁷⁰ The 'national' nature of renewable energy support schemes is expressly acknowledged and even supported in paragraph 25 of the Preamble to the Directive, especially in view of guaranteeing investor stability. This paragraph clearly condones discriminatory behavior in the form of local content requirements in Members States' support schemes and confirms that in many MS, support schemes are only available to producers from their own national territory. The paragraph speaks best for itself and states the following:

'Member States have different renewable energy potentials and operate

national level. The majority of Member State apply support schemes that grant benefits solely to energy from renewable sources that is produced on their territory. For the proper functioning of national support schemes it is vital that Member States can control the effect and costs of their national support schemes according to their different potentials.

⁶⁸ Apart from infringement proceedings by the Commission. Member States must report of their progress every two years, see Article 22 and the Commission in turn must report on the progress, see Article 23, EU Renewable Energy Directive.

⁶⁹ See Eurostat news release, 'Renewable energy in the EU: Share of renewables in energy consumption in the EU still on the rise to almost 17 per cent in 2015' (14 March 2014) and detailed Eurostat results at: http://ec.europa.eu/eurostat/web/energy/data/shares accessed 21 July 2017.

⁷⁰ If challenged in a WTO dispute, the members having discriminatory schemes in place would need to justify then under GATT Article XX, GATT 1994: General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187, 33 I.L.M. 1153 (1994).

One important means to achieve the aim of this Directive is to guarantee the proper functioning of national support schemes, as under Directive 2001/77/EC, in order to maintain investor confidence and allow Member States to design effective national measures for target compliance.

This Directive aims at facilitating cross-border support of energy from renewable sources without affecting national support schemes. It introduces optional cooperation mechanisms between Member States which allow them to agree on the extent to which one Member State supports the energy production in another and on the extent to which the energy production from renewable sources should count towards the national overall target of one or the other.

In order to ensure the effectiveness of both measures of target compliance, i.e. national support schemes and cooperation mechanisms, it is essential that Member States are able to determine if and to what extent their national support schemes apply to energy from renewable sources produced in other Member States and to agree on this by applying the cooperation mechanisms provided for in this Directive. 71

The reality remains that at present, many EU Member States still have renewable energy support schemes that are discriminatory and/or contain local content requirements, notably Spain, Italy, France, Croatia and Greece, Belgium and Sweden, although it is unlike they are the only ones. ⁷² An additional reason for this is that fiscal policies for support schemes are administered on the Member State level and not on the EU level.

The Renewable Energy Directive moreover lays out that Member States may engage in joint projects or joint renewable energy schemes. This is interesting because it means that this is apparently not a given, not only with respect to other EU MS, but to other WTO Members as well (Articles 7-11).⁷³ Article 11 of the Directive for instance states that: "f....] two or more

⁷¹ EU Renewable Energy Directive (n 45), Preamble para 25.

⁷² See Kuntze and Moerenhout (n 61) 23-24.

⁷³ EU Renewable Energy Directive (n 45).

Member States may decide, on a voluntary basis, to join or partly coordinate their national support schemes. In such cases, a certain amount of energy from renewable sources produced in the territory of one participating Member State may count towards the national overall target of another participating Member State [...]^{2,74}

3.2.2 State Aid, the Guidelines and the Block Exemption Regulation

The Renewable Energy Directive forms the legal basis for the scale up of renewable energy in Europe. We have also seen from the forgoing that there is, however, no harmonization of schemes on EU level and that many schemes are national in nature. From the set-up of support schemes, it comes as no surprise that in the EU, schemes for renewable energy are often realized through government support. They therefore must abide by EU State Aid legislation on EU level, in addition to WTO rules on the multilateral level. 75 EU State aid legislation is the EU counterpart of WTO subsidies disciplines and is taken up in Article 107-109 TFEU, elaborated further in content by case law. 76 Article 107(1) TFEU prescribes that:

'Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market.'⁷⁷

⁷⁴ However, for this certain conditions have to be met pursuant to Article 11, EU Renewable Energy Directive (n 45): if the Member States concerned: a) make a statistical transfer of specified amounts of energy from renewable sources from one Member State to another Member State in accordance with Article 6; or, b) set up a distribution rule agreed by participating Member States that allocates amounts of energy from renewable sources between the participating Member States. Such a rule shall be notified to the Commission no later than three months after the end of the first year in which it takes effect.

⁷⁵ Article 107-109 TFEU (n 14) and SCM Agreement (n 4).

⁷⁶ TFEU (n 14).

⁷⁷ Article 107.1 TFEU (n 14).

In other words, there where Member States grant State aid that affects trade between EU Member States, such aid shall deemed to be illegal. 78 According to EU State Aid rules, the Treaty generally prohibits State Aid unless it contributes to certain areas of economic development of a Member State. 79

For a measure to qualify as state aid in the sense of Article 107(1) TFEU, it must meet four cumulative criteria: First, it must concern an intervention by the State through State resources. ⁸⁰ This includes an advantage granted directly by a MS, but also those granted by a public or private body established by the State. These issues were at stake in the *PreussenElektra* case, discussed below. ⁸¹ Second, this intervention must confer a selective advantage on a recipient. Third, the intervention must be liable to affect trade between Member States. It is not necessary to prove that the measure impacts trade in reality, a threat thereof is adequate proof. ⁸² Finally, it must distort or threaten to distort competition between Member States. ⁸³ Here, much as with the previous criterion, it is not necessary to prove that the measure affects competition, it is enough to establish that it is liable to distort competition. ⁸⁴ If found to be in violation of EU State Aid law, the Member States in question must abolish the aid. ⁸⁵ Generally, when looking at the

⁷⁸ There are some exceptions, under article 107(2) and (3) of the article, as well as in favor of public service obligations (Article 106(2) TFEU) as affirmed, the cumulative conditions of which are taken up in the *Altmark* ruling (Case C-280/00 *Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH*, judgment of 24 July 2003).

⁷⁹ Article 107.3 TFEU (n 14).

⁸⁰ Article 107.1 TFEU (n 14); Also see Talus (n 59) 106.

⁸¹ PreussenElektra AG v Schleswag AG (Windpark Reußenköge III GmbH and Land Schleswig-Holstein intervening) (Case C-379/98), Judgment of 13 March 2001.

 $^{^{82}}$ As decided in T-211/05 Italy v Commission [2009] ECR II-02777, para. 152; See Talus (n 59) 118.

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ Article 108.2 TFEU (n 14).

case law, we can conclude that the European Court of Justice has been quite strict in its interpretations of what constitutes State aid in the sense of transfer of State resources with respect to renewable energy support schemes. It has ruled in various cases concerning renewable energy that the mere intention of the Member States to control certain resources was enough to fulfill the criterion of a government transfer, even if there was an entity involved that was not based on public law. Revertheless, we see that through available legal instruments, namely the Guidelines and Block Exemptions, Member States have often been able to justify the schemes as consistent with State aid.

Article 108 TFEU obliges Member States in any case to notify the Commission prior to granting any State aid, on the penalty of the aid being invalid. The However, some categories of State Aid, specified by decision of the Council, may be compatible with EU law and do not have to abide by the notification requirement, which is especially relevant for support schemes for renewable energy and this contribution.

Apart from State aid regulation in the EU Treaties, there are more specialized rules regarding granting State aid in the context of the scale up of renewable energy policies. These are taken up in the Commission Guidelines on State aid for environmental protection and energy for 2014-2020 (the Guidelines) and EU Regulation No 651/2014, also known as the General Block Exemption Regulation (GBER).⁸⁹ The Guidelines determine that

⁸⁶ Essent Netwerk Noord BV supported by Nederlands Elektriciteit Administratiekantoor BV v Aluminium Delfzijl BV (Case C-206/06), Judgment of 17 July 2008, para 70; Essent Netwerk, para 70; Vent de Colère and Others (Case C-262/12), Judgment of 7 February 2014, para 21; Germany v Commission (T-47/1), Judgment of the General Court of 10 May 2016, paras 93 and 95.

⁸⁷ Article 108 TFEU (n 14), complemented by Council Regulation (EC) No 659/ 1999, see Talus (n 59) 106.

⁸⁸ Article 107.3 (e) TFEU (n 14).

⁸⁹ The Guidelines and GBER, see supra note 3.

State aid for environmental protection, including those for early adaptation to future Union standards, investment aid for energy efficiency measures, aid for high-efficiency cogeneration, investment aid for the promotion of energy from renewable sources, operating aid for the promotion of electricity from renewable sources, including those in small scale installations '[...] shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled. '90

The Guidelines on State Aid for Environmental Protection and Energy set out additional detailed rules that Member States must fulfil for these types of State aid to be compatible with EU law, the ultimate underlying goal being to reach the 20/20/20 targets.⁹¹ While there are plenty of solid arguments that this is a legitimate policy goal and requirements to meet these exemptions are rather detailed, it is unclear whether the Guidelines have been drafted taking into account the rules of the multilateral trading system. After careful consideration, in the opinion of the author, this seems unlikely.

In addition to the Guidelines, the GBER, issued in the same year, offers an elaborate list declaring categories of aid which compatible with the EU internal market in application of Article 107 and 108 TFEU, especially Article 108(4) TFEU. 92 Section 7 (Articles 36 to 49) of the GBER offers a detailed description of State aid for environmental protection falling under the block exemption, including those for investment aid for the promotion of energy from renewable sources (Article 41), operating aid for the promotion of electricity from renewable sources (Article 42) and in small installations (Article 43). Article 42.2 of the GBER mentions that the bidding processes to award

⁹⁰ GBER (n 3) Section 7, Articles 36-43.

⁹¹ The Guidelines (n 3), Preamble, under (3).

⁹² Ibid.

aid should be non-discriminatory, ('Aid shall be granted in a competitive bidding process on the basis of clear, transparent and non-discriminatory criteria which shall be open to all generators producing electricity from renewable energy sources on a non-discriminatory basis'). The GBER is somewhat unclear in this respect. Does it denote all generators within a particular Member State? Or all generators from all EU MS?

Both the Guidelines and the GBER are part of the Commission's modernization package for State aid. ⁹³ The main objective of these instruments is to integrate renewable energy sources into the market and remove their subsidization, and to make them on a par with traditional energy sources. ⁹⁴ This can be achieved gradually by making new schemes compete for subsidies through a competitive auction process and from switching from feed in tariffs to system of feed in premiums.

Both the Guidelines and the GBER endorse a market based approach with respect to support schemes for renewable energy and eventually want to remove any support when renewable energy can compete. But until that time, support schemes, under certain conditions, are deemed to be compatible with State aid law. In this sense, the Guidelines and the GBER are *de facto* 'exceptions' to State aid incompatible support in favor of legitimate policy goals such as mitigating climate change.

In addition to this, the current framework condones the inherently discriminatory nature of schemes, an approach that is echoed by the European Court of Justice. Under WTO law, however, support schemes adversely affecting international trade are, at minimum, actionable by another WTO Member. 95 At maximum, if containing local content requirements, they

⁹³ Talus (n 59) 124.

 $^{^{94}}$ The Guidelines (n 3), under 3.3.1 para 108.

⁹⁵ Article 5 ACSM (n 4).

are prohibited.⁹⁶ No matter the actionable or prohibited nature of the scheme, it is safe to conclude they are sensitive to being challenged in WTO dispute settlement.

3.2.3 The European Court of Justice: Lenient towards Support Schemes for the Sake of Public Interest

The previous section has unveiled that EU law provides for several exceptions under EU State aid law for the support of renewable energy schemes, whether on the basis of the Renewable Energy Directive, the Guidelines or the GBER. One of the challenges highlighted in these documents is the fact that opening EU Member States schemes to participation by other EU Member States is diffucult and it is even emphasized in the Renewable Energy directive that 'For the proper functioning of national support schemes it is vital that Member States can control the effect and costs of their national support schemes according to their different potentials.' This alludes to the fact that the EU does not deem it particularly problematic that the renewable energy support schemes of the EU are discriminatory in nature and/or contain local content requirements.

The European Court of Justice (hereafter: CJEU) in its case law been moreover particularly lenient towards Member States administering discriminatory support schemes for renewable energy. In fact, the CJEU in its case law has systematically allowed Member States to establish support schemes for renewable energy that are restricted to energy produced within a particular Member State. 98 The one well-

⁹⁶ Article 3 ASCM (n 4).

⁹⁷ The EU Renewable Energy Directive (n 45), Preamble para 25.

⁹⁸ See a comprehensive description of this in K Talus, 'Renewable Energy Disputes in the European Union – An Overview of Current Cases' 135 ff and A Johnston, 'The Impact of the New EU Commission Guidelines on State Aid for Environmental Protection and Energy on the Promotion of Renewable Energies' 13 ff, both in *EU Renewable Energy Law: Legal Challenges and Perspectives* (2014) Scandinavian Inst Mar L YB 2014 (Oslo University).

known case in this respect is *PreussenElektra*, albeit handed down prior to a coherent EU (renewable) energy policy in 2001, but after the establishment of the WTO and its accompanying subsidy regulations in 1995. 99 The case involved a German FIT scheme which obliged supply companies to purchase electricity from local renewable energy sources, exclusively produced in Germany. While the scheme was *de facto* discriminatory, the CJEU was favorable towards the national scheme. 100 The CJEU in this instance considered the various issues of the case and especially focused on the positive impact of renewable energy in connection with the protection of human, animal and plant life and health set out in Article 36 TFEU and in light of international climate commitments and environmental protection requirements in Article 11 TFEU. 101

In subsequent cases, notably C-573/12 Ålands Vindkraft and C-204/12-C-208/12 Essent Belgium NV, cases that emerged after the enactment of specialized EU renewable energy legislation, the CJEU essentially followed its earlier case law in PreussenElektra. 102 In both cases, the CJEU allowed Member States in question (Sweden and Belgium) to establish support schemes for renewable energy that were restricted to subsidizing renewable energy within its territory. The cases involved the desired participation of another EU Member State in a renewable energy support scheme of another EU Member State. In Ålands Vindkraft, it even concerned renewable energy produced on Finish islands that were physically closer to Sweden than to Finland and, more importantly, physically only connected to the Swedish

⁹⁹ PreussenElektra (n 81).

¹⁰⁰ Talus (n 98) 148.

¹⁰¹ TFEU (n 14): Article 36, which is the EU equivalent of GATT Article XX, reads: 'The provisions of Articles 34 and 35 shall not preclude prohibitions or restrictions on imports, exports or goods in transit justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property. Such prohibitions or restrictions shall not, however, constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States'; Article 11 reads: 'Environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development.

¹⁰² Ålands Vindkraft AB v Energimyndigheten (Case C -573/12), Judgement of 1 July 2014; and Essent Belgium NV v. Vlaamse Reguleringsinstantie (Joined Cases C-204/12-C-208/12), Judgement of 11 September 2014; PreussenElektra (n 81).

grid, not the Finish one. Nevertheless, the CJEU opined that Sweden could refuse participation in the Swedish scheme of Finish wind energy producers located on the islands. In short, the Court stated that Member States must be allowed to establish a support scheme which provides for the award of tradable certificates to producers of green electricity solely in respect of green electricity produced in the territory of that State and is not considered to be contrary to EU law. ¹⁰³

In the same line of reasoning, the CJEU in the *Essent Belgium NV* case concluded that Member States may indeed provide incentives to domestic producers only to produce green energy. In its opinion, it held that the violation on the free movement of goods that may cause is justified by environmental considerations, and, notably, the importance of public interest in the scale up of renewable energy sources.¹⁰⁴

More recently however, in a judgement of 2016, the General Court of the European Union in *Germany v Commission T-47/15*, in contrast to *PreussenElektra*, dismissed an action brought by Germany and confirmed that the German law on renewable energy from 2012 (the EEG 2012) involved partially prohibited State aid. ¹⁰⁵ As a result, some of the measures under German law were deemed to be State aid that was deemed incompatible with the internal market and had to be recovered. Other parts of the scheme, had, however, been previously approved by the Commission and were deemed to be consistent with the internal market. ¹⁰⁶

From the WTO law perspective, this practice of limiting a support scheme to you national producers only could be justified under GATT Article III:8

¹⁰³ Ålands Vindkraft AB v Energimyndigheten (n 102) paras 1-3.

¹⁰⁴Essent Belgium NV v. Vlaamse Reguleringsinstantie (n102)paras 89-93; Also see Talus (n $98)\,151.$

 $^{^{105}}$ *Germany v Commission* (n 86) paras 93, 95 and 100 – 101; Also see General Court of the European Union Press Release No 49/16, Luxembourg, 10 May 2016 'The General Court confirms that the German law on renewable energy of 2012 (the EEG 2012) involved State aid'.

¹⁰⁶ Commission Decision (EU) 2015/1585 of 25 November 2014 on the aid scheme SA.33995 (2013/C) (ex 2013/NN) (implemented by Germany for the support of renewable electricity and of energy-intensive users) (OJ 2015 L 250, p. 122; see also Commission press release IP/14/2122).

(b). ¹⁰⁷ Notwithstanding, if such and similar schemes maintained by EU Member States qualify as subsidies in the sense of Article 1 and 2 of the WTO SCM Agreement, and they negatively affect cross-border trade, they can still be challenged by other WTO Members, notwithstanding their justification under EU State aid law. Nonetheless, it is quite understandable that the CJEU made these decisions on the basis of political realities and the Union's pressing need to curb CO₂ emissions. ¹⁰⁸

It is clear from the analysis of EU renewable energy legislation as well of the case law that the both the Commission and the Court are lenient towards support schemes with of EU Member States that would, absent specific legislation, qualify as State aid. The main argument is, and quite understandably so from a policy perspective, that the promotion of renewable energy schemes and the protection of the environment outweighs the discriminatory nature of the schemes. In its new Clean Energy Package proposals, the Commission recognizes this dilemma and vows to ensure EU schemes market competitive in addition to opening the market for renewable energy support schemes to other Members States. ¹⁰⁹

¹⁰⁷ GATT Article III:8 (b) reads: 'The provisions of this Article shall not prevent the payment of subsidies exclusively to domestic producers, including payments to domestic producers derived from the proceeds of internal taxes or charges applied consistently with the provisions of this Article and subsidies effected through governmental purchases of domestic products.'

¹⁰⁸ Talus (n 98) 150.

¹⁰⁹ Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (recast) (n 21).

4 EU Law against the Background of WTO Law: Disconnected Paradigms in Decarbonizing the Grid

The previous sections gave an insight into EU renewable energy policy and exposed that many schemes currently present currently in existence in the EU may are justified under State aid law due to existing exemptions in the Guidelines and GBER. However, this does not mean that these schemes are consistent with WTO rules on subsidies as set out in the ASCM.110 The crux of the matter is that even if an EU support scheme is deemed to be consistent with EU State aid legislation, this does not necessarily imply that it cannot still be challenged under laws of the World Trade Organization by a non-EU WTO Member. This would be the case if the State aid in question constitutes an actionable or prohibited subsidy in the sense of WTO law.111 The general dilemma with respect to energy subsidies seems to be that support schemes for clean energy production and consumption are needed to correct for market failures. Contributing to sustainable development through the scale up of clean energy, including expanding its trade, are in this sense legitimate policy goals. 112 But while EU law recognizes this in its legislation and case law, WTO law leaves little space for considering such objectives.

¹¹⁰ Agreement on Subsidies and Countervailing Measures (ASCM) (n 4).

¹¹¹ Article 5 (actionable subsidies) and Article 3 (prohibited subsidies) ASCM (n 4).

¹¹² See e.g. L Rubini, 'Rethinking International Subsidies Disciplines: Rationale and Possible Avenues for Reform' The E15 Initiative Overview Paper, November 2015 (Geneva, International Centre for Trade and Sustainable Development and World Economic Forum, 2015) 8; Rubini writes: 'Among the various obstacles to green energy and its competiveness, the existence of significant support to conventional fossil fuel energy (both in terms of subsidies to production and consumption) cannot be overlooked. At the same time, often thanks to public support, green technologies are developing extremely fast. As a result, some types of clean energy, such as solar, are almost on a par with conventional energy. This means that some degree of differentiation is needed in any new disciplines providing for exemptions to subsidies (that is, certain sources need more/less protection than others).'; Also see generally on these issues JI Lewis, 'The Rise of Renewable Energy Protectionism: Emerging Trade Conflicts and Implications for Low Carbon Development' (2014) 14 Global Environmental Politics 10 and T Meyer, 'How Local Discrimination can Promote Global Public Goods' (2015) 95 Boston University Law Review 1941.

Because the EU and its Members States are Members of the WTO, all rules of the World Trade Organization are binding on them. Moreover, because of the wide presence of energy support schemes in the European electricity sector, WTO rules on subsidies automatically become relevant to it. The rules of the Agreement on Subsidies and Countervailing Measures (ASCM) influence and bind the choices of WTO Members' governments with respect to their industrial and other policies.

The WTO has a dispute settlement based enforcement mechanism, meaning that measures of WTO Members can only be contested if other WTO Members challenge them in the forum. Notwithstanding, the current state of affairs regarding EU energy support schemes in their nature and design makes Member States and the Union easy targets in WTO dispute settlement. Another WTO Member may start dispute settlement proceedings against the EU and its Member States if its domestic industry is harmed by a renewable energy support scheme maintained by a Member State. In practical terms, one could for example imagine challenges from directly neighboring countries to the EU that export energy or goods related to renewable energy production to the Union, such as the United Kingdom (after Brexit), Switzerland and the Russian Federation. But the risk may also be further away: in 2012, China filed a request for consultations under the WTO Dispute Settlement Understanding, over local content requirements in the renewable energy support schemes of the EU, Italy and Greece. However, the request remained in the consultations stage and eventually, a panel was never established. 113

4.1 Defining Subsidies under the SCM Agreement – An Overview

¹¹³ WTO, DS452 European Union and Certain Member States — Certain Measures Affecting the Renewable Energy Generation Sector – Complaint by China (in consultations 5 November 2012).

While the vocabulary and the content of WTO subsidy rules differs from European Union rules on State aid, the parallels between the two are easily identified. As mentioned above, WTO subsidy rules are no less important for the Union and its Member States than the rules on State aid. 114 WTO Members may challenge the EU and its Member States' schemes under, inter alia, the SCM Agreement. Vice versa, the EU and its Members States can trigger subsidy disputes against third countries in the WTO forum. 115 Note, however, that the SCM Agreement is generally understood to only apply to goods, not services – this is essential to keep in mind as the energy sector for a large part consists of activities that would fall in the category of energy services and not purely trade in (energy) goods. 116

a) Prohibited, Actionable and Non-Actionable Subsidies

Not all subsidies are illegal in the WTO context and a distinction is made between prohibited and actionable subsidies. Part II of the ASCM in Article 3 lists prohibited subsidies that a Member should refrain from altogether. These are subsidies contingent on export (Article 3.1 (a) ASCM) and those conditional on the use of domestic over imported goods (local content requirements) (LCRs) (Article 3.1 (b) ASCM). Next, Part III lists actionable subsidies. These are allowed, but 'no Member should cause...adverse effects to the interests of another Member'. 117 Thus, if an actionable subsidy causes harm to a Member's industry, the Member in question may act against it. Members have two methods to seek redress for harm caused by

¹¹⁴ See generally on this issue, L Rubini, The Definition of Subsidy and State Aid – WTO and EC Law in Comparative Perspective (OUP, Oxford 2010).

¹¹⁵ The EU has been a complainant in more than 23 cases against other WTO Members in subsidies disputes; as a respondent, the EU was targeted in more than 17 cases relating to subsidies and countervailing measures <www.wto.org> (accessed 21 July 2017).

¹¹⁶ Because the ASCM (n 4) is placed under Annex 1.A of the Agreement Establishing the World Trade Organization, named 'Multilateral Agreements on Trade in Goods'.

¹¹⁷ Article 5 ASCM (n 4).

prohibited and actionable subsidies: they can impose Countervailing Duties (CVDs) or they can initiate a dispute at the WTO Dispute Settlement Body (DSB). ¹¹⁸ Originally, a third type of non-actionable subsidies was taken up in Part IV (Article 8 SCM), but expired in 2000. ¹¹⁹ Article 8 ASCM *did* consider certain legitimate policy goals and subsidies falling into this category were non-actionable. However, the major problem is that, Article 8 ASCM was temporary and due to various reasons WTO Members could not agree on the Article's renewal. ¹²⁰ Consequently, this category of subsidies has lapsed and is no longer available under WTO law. The consequences of this will be discussed in more detail below.

b) Contribution by a Government

Article 1.1(a)(1) ASCM sets out an exhaustive list of conditions under which a governmental support scheme is considered a financial contribution. The term 'government' here entails a governmental public body, and includes its regional and local authorities, as well as state-owned enterprises. ¹²¹ The Appellate Body (hereafter: AB) in *US – Softwood Lumber IV* confirmed that this list of forms of financial contributions is exhaustive but at the same time wide-ranging and includes measures such as loans and grants, government revenues that are otherwise due forgone, and government provision of goods and services. ¹²²

¹¹⁸ SCM Agreement (Part V – Countervailing Measures) (n 4).

¹¹⁹ Article 8 (lapsed) SCM Agreement (n 4).

¹²⁰ See for a comprehensive discussion on this M Wu, *Re-examining 'Green Light' Subsidies in the Wake of New Green Industrial Policies* (ICSTD and WEF E15 Think Piece, Geneva 2015) 3.

¹²¹ P van den Bossche and W Zdouc, *The Law and Policy of the World Trade Organization – 3nd Edition* (Cambridge, Cambridge University Press, 2008) 758.

¹²² WTO, Appellate Body Report, *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, WT/DS257/AB/R, adopted 17 February 2004, DSR 2004:II, p. 571, para 52.

c) Benefit to the Recipient

To qualify as a subsidy, the financial contribution must confer a benefit (Article 1.1 (b) ASCM). Demonstrating that this indeed is the case is not always a straightforward exercise. For instance, it goes without saying that may be easier to determine that a direct transfer of a sum of money confers a benefit, as opposed a scenario in which a government purchases a good, or a guarantees a set price for the good produced. 123 In Canada—Measures Affecting the Export of Civilian Aircraft, the Appellate Body was of the opinion that generally, to assess whether a benefit was conferred, one would have to look whether the financial contribution left the recipient better off than it would have been without the contribution. 124 Another benchmark may be to look at Article 14 of ASCM, which deals with calculation of the subsidy. 125 In what is known as the 'private investor'-test, the Article explains that the term 'benefit' refers to 'benefit to the recipient', using the market for private investors to help determine the amount and existence of the benefit. 126 For example, if the government provides equity capital, it shall not be considered to confer a benefit, lest the investment decision in question can be considered to be incompatible with usual investment practices of private investor in the Member state concerned. 127

d) Specificity

To qualify as a subsidy within the meaning of the SCM Agreement, the subsidy in question moreover has to be deemed 'specific' pursuant to

¹²³ Asmelash (n 48) 270, 272.

¹²⁴ WTO Panel Report, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/R, adopted 20 August 1999, upheld by Appellate Body Report WT/DS70/AB/R, DSR 1999:IV, p. 1443, para 157.

¹²⁵ Article 14 SCM Agreement (n 4).

¹²⁶ PC Mavroidis, PA Messerlin, JM Wauters, *The Law and Economics of Contingent Protection in the WTO* (Cheltenham, Edward Elgar Publishing, 2008) 325.

¹²⁷ Ibid.

Article 2 of the Agreement. ¹²⁸ The thought behind this requirement was that only specific financial contributions can lead to trade distortions through inefficient resource allocation. ¹²⁹ As the Panel in *US – Upland Cotton* put it, a subsidy is not specific if it is 'sufficiently broadly available throughout an economy as not to benefit a particular limited group of producers of certain products.' ¹³⁰ The idea is that if a subsidy is available to all producers in the country, there is not one producer or group of producers that can attract such resources at the expense of others. ¹³¹

Schemes must either be *de jure* or *de facto* specific to an enterprise (Article 2.1 (a) ASCM), industry (Article 2.1 (b) ASCM) or particular region (Article 2.2 ASCM), to qualify as a subsidy. ¹³² With regard to prohibited subsidies in Part II (contingent on export and LCRs), the specificity requirement does not have to be met: Article 2.3 sets out that these subsidies are deemed to be specific *a priori*. ¹³³

Subsidies can be applied to consumers and to producers. 134 Note though, that the dividing line is not always clear as producers can be simultaneously consumers. Nevertheless, we can generalize that the first type consists of intermediate (firms) and final consumers (households). One

¹²⁸ Article 2 SCM Agreement (n 4).

¹²⁹ PC Mavroidis, *Trade in Goods – 2nd Edition* (Oxford, Oxford University Press, 2012) 549.

 $^{^{130}}$ Panel Report, $\it United \it States-Subsidies on \it Upland \it Cotton, WT/DS267/R, Add.1 to Add.3 and Corr.1, adopted 21 March 2005, as modified by Appellate Body Report WT/DS267/AB/R, DSR 2005:II, p. 299, para 7.1142$

¹³¹ Mavroidis (n 129) 549.

¹³² Article 2.1 SCM Agreement (n 4).

¹³³ Article 2.3 SCM Agreement; Mavroidis (n 129) 549.

¹³⁴ B Clements, D Coady, S Fabrizio, S Gupta, T Alleyne and C Sdralevich (eds), *Energy Subsidy Reform – Lessons and Implications* (Washington, International Monetary Fund, 2013) 1, 2.

could think of e.g. cheaper inputs for energy intensive industries, or lower energy bills for household consumers due to subsidized energy. The second type subsidizes the producers of a certain product, such as the producers of fuel products, coal, natural gas, and electricity. ¹³⁵ FITs, the most popular instruments in the EU, in place to stimulate the scale up of renewables in the energy mix, can also be an example of producer subsidies. The subsidy disciplines of the WTO are relevant for both consumer and producer subsidies. It is important to keep in mind, however, that it is overall much easier to establish specificity in production subsidies than in consumer subsidies. ¹³⁶ The reason for this is that consumer subsidies are often more general in nature. Overall, specificity in producer subsidies is easier to distinguish: Clean and renewable energy programs (such as FITs), generally constitute subsidies in the form of regional or national programs to stimulate the *production* of clean energy and are therefore more clearly defined as 'specific'. ¹³⁷

4.2 WTO Law and Renewable Energy Support Schemes

4.2.1 Lessons learned from Canada-Renewable Energy/Feed in Tariffs

WTO rules are set up at present leads to intricate policy outcomes when it comes to support schemes for renewable energy. These support schemes remain sensitive to WTO dispute settlement as is evidenced by a recent string of cases before the DSB. 138

¹³⁵ Ibid.

¹³⁶ Asmelash (n 48)273.

¹³⁷ Asmelash (n 48) 274 points out that the 'renewable' energy market as such could already been seen as specific vis-à-vis the energy market as a whole.

¹³⁸ Examples of cases concerning renewable energy, while not all subsidies related, are, amongst others: Appellate Body Reports, *Canada – Certain Measures Affecting the Renewable Energy Generation Sector / Canada – Measures Relating to the Feed-in Tariff Program*, WT/DS412/AB/R / WT/DS426/AB/R, adopted 24 May 2013, DSR 2013:I, p. 7; Panel Reports,

Due to their policy objectives, support schemes for clean energy generally enjoy broad backing from around the world. ¹³⁹ Their main goal is, or in any case, should be, not to be protectionist in nature but rather to mitigate climate change caused by CO₂ emissions, which is traditionally associated with fossil fuel combustion for electricity generation and heat production. ¹⁴⁰ This wide-ranging consensus about the need to promote universal access to sustainable energy through the deployment of renewable energy was confirmed in the Preamble to the UNFCCC COP21 Paris Agreement in late 2015. ¹⁴¹

We have also established that producer, as opposed to consumer, subsidies are much more common to support the scale up of renewable energy. 142 Since the share of clean energies in the overall energy market is growing but still small, governments – under pressure to meet their climate

Canada — Certain Measures Affecting the Renewable Energy Generation Sector / Canada — Measures Relating to the Feed-in Tariff Program, WT/DS412/R and Add.1 / WT/DS426/R and Add.1, adopted 24 May 2013, as modified by Appellate Body Reports WT/DS412/AB/R / WT/DS426/AB/R, DSR 2013:I, p. 237; Appellate Body Report, India — Certain Measures Relating to Solar Cells and Solar Modules WT/DS456/AB/R, adopted 16 September 2016; Panel Report, India — Certain Measures Relating to Solar Cells and Solar Modules, WT/DS456/R, adopted 24 February 2016; Appellate Body Report, European Union — Anti-Dumping Measures on Biodiesel from Argentina, WT/DS473/AB/R, adopted 6 October 2010; Panel Report, European Union — Anti-Dumping Measures on Biodiesel from Argentina, WT/DS473/R, adopted 29 March 2016; DS480 European Union — Anti-Dumping Measures on Biodiesel from Indonesia (Panel composed 4 November 2015) and DS510 United States — Certain Measures Relating to the Renewable Energy Sector (Panel established 21 March 2017).

¹³⁹ See in this context also generally E Barrett Lydgate, 'Biofuels, Sustainability and Trade-Related Regulatory Chill' (2012) 15 *Journal of International Economic Law* 157-180.

¹⁴⁰ International Energy Agency, CO2 Emissions from Fuel Combustion: Highlights (Paris, International Energy Agency, 2013).

¹⁴¹ The Paris Agreement (n 2).

¹⁴² R Steenblik, 'Subsidies in the Traditional Energy Sector' in: J Pauwelyn (ed), *Global Challenges at the Intersection of Trade, Energy and Environment* (Geneva, Centre for Trade and Economic Integration, the Graduate Institute Geneva, 2010) 186.

targets – are often eager to design support schemes for the production of clean energies due to their positive effects on lowering greenhouse emissions. ¹⁴³ As we explained above in the case of the EU, we can assert that without government intervention, many of the markets for clean and renewable energy would not exist in the first place. An important element regarding renewable energy subsidies here is that the government, through its policies, may sometimes be 'creating' the market for renewable energy. It can be complex to determine the amount of the subsidy and find the proper 'market benchmark' to test against, in particular if that market was non-existent prior to governmental involvement. This was one of the issues in the *Canada-Renewable Energy/Feed in Tariff* case. ¹⁴⁴ According to the WTO Appellate Body in that case, a distinction should be made between instances where the government intervenes in an existing market and when the government creates a market through its interventions. ¹⁴⁵

With respect to WTO subsidy rules, support schemes for clean energy such as feed in tariffs, have a large chance of qualifying as a subsidy in the sense of the SCM Agreement. This understandably depends on the design of the scheme in question, and to what extent a government is involved in financing the scheme. But the crucial element is that renewable energy subsidies are quite clearly specifically designed and targeted to

143 See e.g. the 2030 Energy Strategy by the European Commission

http://ec.europa.eu/energy/en/topics/energy-strategy/2030-energy-strategy accessed 21 July 2017 and the Paris Agreement (n 2).

¹⁴⁴ Canada – Renewable Energy / Canada – Feed-in Tariff Program (n 138).

¹⁴⁵ Asmelash (n 48) 273 and Appellate Body Reports *Canada – Renewable Energy / Canada – Feed-in Tariff Program* para 5.118. and 5.169: In this instance, the Appellate Body found that the relevant market for solar and wind power electricity are the competitive markets for wind and solar-generated electricity that results from the specific energy supply-mix set by the government, but not the single market for electricity generated from all sources of energy. See Ibid, para 5.174. where a government creates a market, it cannot be said that the government intervention distorts the market, as there would not be a market if the government had not created it.

boost the production of clean energy; it is their inherent policy goal. Therefore, such subsidies will likely be limited to 'certain enterprises', namely the producers of clean energy and meet the 'specificity' requirement of Article 2.1 SCM Agreement, thereby making it easier to fit the definition of a subsidy in Article 1 ASCM. This, in turn, would make such schemes actionable subsidies in the sense of Article 5 ASCM by means of Article 1.2. That in and of itself may be not be a major problem, if the actionable subsidies in question do not cause injury to another Member and are not challenged before a WTO Panel. Nevertheless, they can have cross-border effects, especially when the subsidized energy is traded abroad over a grid, or when it is competing domestically with imported energy. Consequently, once such subsidies do cause harm to the industry of another WTO Member, a dispute may be triggered in the Dispute Settlement System.

This leads to the conclusion that the fact that these schemes in general, and those present in the EU in particular, have a large chance to fall into the actionable subsidies category, making them immediately more sensitive to WTO dispute settlement proceedings. The Appellate Body in *Canada-Renewable Energy/Feed in Tariff* must have been aware of this policy paradox, realizing that labelling the FIT in question as such would have adverse implications for renewable energy schemes around the world. Perhaps for that reason, it strategically decided that it was *'unable to complete the analysis'* whether the feed in tariff in question was a subsidy or not. ¹⁴⁶

FIT schemes may be beneficial for the development of *local* production of clean energy. Yet, it is this element that is particularly problematic in WTO subsidy legislation: In WTO law, local content requirements (hereafter: LCRs) are contrary to the SCM Agreement by means of Article 3.1(b) and

¹⁴⁶ i.e. whether the Feed-in Tariff conferred a benefit in the sense of Article 1.1(b) ASCM, AB report para 5.246 of the *Canada – Renewable Energy / Canada – Feed-in Tariff Program* (n 138) case.

Article 2.1 of the TRIMS. 147 The consequence is that under WTO law, FIT policies should in no case include any local content requirement elements. If we test this against the reality of support schemes in the EU, we see that there is a disconnect in terms of EU law, as well as of practice, as we established that there are still EU Member States that have LCRs in their schemes. 148

LCRs were also central issue in the WTO Canada-Renewable Energy/Feed-In Tariffs case. 149 In that instance, the Canadian Province of Ontario instituted a Feed-in Tariff Programme implemented by the Ontario Power Authority (OPA) in 2009. In its rules, the Authority in Article 2.1 stated that 'the FIT Contract will require that wind-power Projects and solar Projects achieve a Minimum Required Domestic Content Level'. 150 The law demanded a minimum of component parts and services from producers in Ontario. Canada that was challenged in the WTO over this regional (and not national) policy. The involvement of the Ontario province was extensive, meaning for instance that the Ontario Power Generation was responsible the majority supply of energy. Additionally, Ontario almost completely owned the high voltage transmission system, as well as the Independent Electricity System Operator. Through its FIT program, Ontario not only wanted to replace coal by cleaner options through adding wind and solar energy to the mix, but it simultaneously intended to provide incentives to enable new green industries and investments in the production of clean energy technologies. 151 To this end, Ontario did not limit itself in utilizing a FIT

¹⁴⁷ Article 3.1 (b) SCM Agreement and Article 2.1 TRIMS Agreement TRIMS Agreement: Agreement on Trade-Related Investment Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1868 UNTS 186.

¹⁴⁸ See Kuntze and Moerenhout (n 61).

¹⁴⁹ Canada – Renewable Energy / Canada – Feed-in Tariff Program (n 138) paras 5.78-79.

¹⁵⁰ Ontario Feed-In Tariff Program Rules, Version 1.3.2, 29 October, 2010, Section 6.4(a).

¹⁵¹ Charnovitz and Fischer (n 47) 2.

scheme only, but added another policy instrument to the mix, the LRC. 152 Interestingly, the EU was one of the WTO Members (together with Japan) that challenged the Canadian measure (an exemplary case of 'the pot calling the kettle black' in view of this contribution). The EU and Japan did not directly attack the FIT scheme as a violation of Article 5 ASCM (Actionable Subsidies). Instead, they based their claim against Canada on discrimination due to the local content requirement in the Rules of the Ontario Authority, invoking Article 2.1 on Trade Related Investment Measures (TRIMS) (which is by nature inconsistent with General Agreement on Tariffs and Trade, Article III:4).153 If FIT schemes qualify as a subsidy in the sense of the ASCM additionally contain local content requirements, they become prohibited subsidies in the sense of Article 3.1(b) SCM Agreement per se, leading to a de facto trade barrier. 154 There was also a stand-alone claim on the basis of General Agreement on Tariffs and Trade, Article III:4, as well as claim of violation of Article 3.1(b) and 3.2 of the SCM Agreement, depended on whether the Feed-in Tariff could qualify as a subsidy in the first place. 155 As we have seen in the preceding paragraph, the Appellate Body managed to duck that question, in a way that some call 'legal acrobatics'. 156

Returning to the issue of local content requirements, the WTO Appellate Body decided that Canada's LCRs were indeed a domestic requirement in the sense of Article 2.1 Trade-Related Investment Measures (TRIMS) and thus automatically a

¹⁵² Ibid.

¹⁵³ Article 2.1 TRIMS (n 147), Article III:4 GATT (n 70).

¹⁵⁴ See A Cosbey and L Rubini, Does It FIT? An Assessment of the Effectiveness of Renewable Energy Measures and of the Implications of the Canada-Renewable Energy/FIT Disputes (ICTSD and WEF E15 Think Piece, Geneva 2013).

¹⁵⁵ Ibid.

¹⁵⁶ See A Cosbey and PC Mavroidis, 'A Turquoise Mess: Green Subsidies, Blue Industrial Policy and Renewable Energy: The Case for Redrafting the Subsidies Agreement of the WTO' EUI Working Papers, RSCAS 2014/17, Robert Schuman Centre for Advanced Studies, Global Governance Programme – 82 and Canada – Renewable Energy / Canada – Feed-in Tariff Program, Report of the AB, para 5.246.

violation of GATT Article III:4. ¹⁵⁷ This again goes on to show that while FIT schemes, even if they may qualify as an actionable subsidy, may be relatively unproblematic, if they are not challenged by another Member under Article 5 ASCM. However, as soon as additional elements such as local content requirements are added to such schemes, the matter becomes more challenging as they easily fall into the prohibited subsidies category of Article 3 SCM Agreement. This does not mean that WTO Members, whilst knowing that local content requirements are contrary to WTO law, shy away from them. As is reiterated in this piece, there are ample countries that impose local content requirements and domestic assistance on renewable energy nevertheless. ¹⁵⁸ In fact, it is realistic to assume that a large share of WTO Members having support schemes for renewable energy in place are likely guilty of this, judging e.g. by the recent WTO disputes between the US and India. ¹⁵⁹

A negative externality of this state-of-play is that clean energy policies are often instituted on regional and local, and not on national level (as was indeed the case in *Canada-Renewable Energy* and likely the case in the EU). ¹⁶⁰ Because of this, national governments, while responsible for the actions of regional governments, may not always be in a position to oversee the design of regional subsidy programs. ¹⁶¹ Consequently, climate friendly subsidies are also at a greater risk of being targeted at the WTO for this reason, as local policymakers in the EU may be even less aware of the design of WTO rules in addition to EU rules on State aid.

¹⁵⁷ AB in Canada – Renewable Energy / Canada – Feed-in Tariff Program (n 138) para 5.33.

¹⁵⁸ Fischer and Charnovitz (n 47) 4 and OECD Joint Working Party on Trade and Environment, Domestic Incentive Measures for Renewable Energy with Possible Trade Implications (Paris, Organisation for Economic Cooperation and Development, 2011) 46.

¹⁵⁹ DS456 India – Certain Measures Relating to Solar Cells and Solar Modules and DS510 United States – Certain Measures Relating to the Renewable Energy Sector (n 138); Also generally see Meyer (n 112)

¹⁶⁰ T Meyer, 'Energy Subsidies and the World Trade Organization' (2013) Volume 17, Issue 22 ASIL Insights (10 September 2013)

¹⁶¹ Ibid.

More successful FIT policies avoid using risky local content requirements. One way is, for instance, to design programs in a way that the costs for the support are divided between electricity supply undertakings, buying clean energy, and private electricity network operators. ¹⁶² The network operators can additionally manage the implementation of the of the FIT program by means of supplier contracts. ¹⁶³ This was, as opposed to the Canadian example, the government, rather than being directly connected to the generation and supply of energy itself, has a mere regulatory role.

4.3 Inadequate Policy Space for Legitimate Policy Goals under WTO Subsidies Disciplines

The major disconnect between EU State aid law and WTO subsidies disciplines is that the former provides for exemptions, while the latter does not. Unlike is the case under EU State aid law, where the Guidelines and GBER provide for policy space for renewable energy support schemes, there are no straightforward exceptions under WTO law with regard to subsidies that further a particular policy goal.

Originally, a third type of non-actionable subsidies was taken up in Part IV (Article 8 SCM). ¹⁶⁴ Article 8 ASCM *did* take into account certain legitimate policy goals for subsidization and they were deemed non-actionable of the basis of this article, even if they caused harm to another Member's industry. Thus, there was an attempt to consider the underlying wider policy objectives for subsidization in the Agreement to a certain extent. It concerned three types of subsidies:

¹⁶² M Wilke, Feed-In Tariffs for Renewable Energy and WTO Subsidy Rules – An Initial Legal Review (Geneva, International Centre for Trade and Sustainable Development, 2011) 6.

¹⁶³ Ibid.

¹⁶⁴ Article 8 (lapsed) SCM Agreement (n 4).

- 1) those for research and development (Article 8.2(a) ASCM);
- 2) regional aid within the territory of a Member (Article 8.2(b) ASCM) and;
- 3) last but not least, environmental subsidies ('assistance to promote adaptation of existing facilities to new environmental requirements imposed by law and/or regulations which result in greater constraints and financial burden on firms,' Article 8.2(c) ASCM). 165

The category of environmental subsidies was and remains especially relevant for the scale up in clean and renewable energies, as one could easily see how such subsidies would fit this classification, despite containing problematic LCRs or discriminatory elements. The problem is that the non-actionable subsidies in Part IV were to last for an initial period of five years only, subject to renewal. ¹⁶⁶ Due to a lack of agreement on that renewal among developed and developing WTO Members, this category of subsidies under the ASCM ceased to exist as of 2000. ¹⁶⁷ The result is that environmental subsidies that originally fell in this non-actionable category, are today either actionable or prohibited subsidies in the sense of the SCM

¹⁶⁵ Article 8.2(c) (lapsed) SCM Agreement (n 4):

^{&#}x27;Notwithstanding the provisions of Parts III and V, the following subsidies shall be non-actionable:

⁽c) assistance to promote adaptation of existing facilities to new environmental requirements imposed by law and/or regulations which result in greater constraints and financial burden on firms, provided that the assistance:

⁽i) is a one-time non-recurring measure; and

⁽ii) is limited to 20 per cent of the cost of adaptation; and

⁽iii) does not cover the cost of replacing and operating the assisted investment, which must be fully borne by firms; and

⁽iv) is directly linked to and proportionate to a firm's planned reduction of nuisances and pollution, and does not cover any manufacturing cost savings which may be achieved; and

⁽v) is available to all firms which can adopt the new equipment and/or production processes.'

¹⁶⁶ Mavroidis (n 129) 566.

¹⁶⁷ Pursuant to Article 31 SCM Agreement (n 4); Mavroidis (n 129) 566.

Agreement. This is much to the discontent of many proponents of such subsidies in the context of climate change mitigation. ¹⁶⁸ It must be said, however, that during the existence of this category in Article 8 ASCM, subsidies of this kind were, interestingly enough, not notified to the WTO. ¹⁶⁹ This does not mean that there is no need for such a category or at least some form exceptions for such subsidies. Both Rubini and Howse, for instance, argue that in case non-actionable subsidies will not be reinstated in the ASCM, GATT Article XX (General Exceptions) should be available to justify them, although this proposal is not without problems itself. ¹⁷⁰

While this scenario would offer an alternative solution in case Article 8 ASCM is not reinstated, there are also opponents to this view. Mavroidis, for instance, is of the opinion that the whole idea of Article 8 of the SCM Agreement was that no recourse to GATT Article XX exceptions would be necessary. ¹⁷¹ In his view, this was the underlying reason for negotiating the Article 8 ASCM in the first place. ¹⁷² Although there is a certain overlap between the lists of GATT Article XX and Article 8 ASCM ('green' subsidies could be placed under subparagraphs (b) and (g)), ASCM negotiating history indicates that the idea was to deal with 'green' subsidies in a self-contained manner in the SCM Agreement context. ¹⁷³ Moreover, Mavroidis argues that if GATT Article XX exceptions to the SCM Agreement would be allowed,

¹⁶⁸ See notably Rubini and R Howse, *Climate Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis* (Geneva, International Institute for Sustainable Development, 2010).

¹⁶⁹ See supra Wu (n 120) 3.

¹⁷⁰ Rubini and Howse (n 168); However, Mavroidis believes allowing this would be complicated, see PC Mavroidis, *Trade in Goods – 2nd Edition* (OUP, Oxford 2012) 365.

¹⁷¹ See Mavroidis (n 170) 365 ff, arguing that allowing GATT Article XX to function as an exception to the SCM Agreement would put into question the idea of establishing a so-called 'trichotomy' between prohibited, actionable and non-actionable subsidies.

¹⁷² See PC Mavroidis, *The Regulation of International Trade – Volume 1: The GATT* (Cambridge, Massachusetts and London, England, The MIT Press, 2015) 476-477.

¹⁷³ See Mavroidis (n 170) 365 ff,

such exceptions would not meet the *chapeau* of the Article, since the chapeau calls for absence of discrimination. ¹⁷⁴ To add to this, nowhere does the ASCM establish a link with the GATT and not one panel has accepted this view so far.

Nonetheless, the frustration of those who advocate in favor of reinstating the expired Article 8 SCM or alternatively seek recourse in GATT Article XX Exceptions can be well understood from looking at the initial problem that the SCM Agreement does not consider the (policy) reason and the context of a subsidy. 175

Under current WTO subsidy rules, Members having in place support schemes for renewable energy that are prohibited or actionable thus only have one hope left: They trust that they will not cause injury to another WTO Member. And in case they do, that the affected Member in question will abstain from acting against them in WTO Dispute Settlement. The policy paradox is, however, that actionable subsidies (if they are not contingent on export or containing local content requirements), often is the only legally available policy instrument for governments to promote the production and increase the market share of clean energy. This makes renewable energy support schemes, even in absence of LCRs, sensitive to a dispute under WTO law.

When testing EU renewable energy law and practice against WTO law, we discover that the Union's leniency towards discriminatory support schemes may be effective for reaching climate goals, but, in many instances, may be contrary to WTO subsidies disciplines if these schemes fit

¹⁷⁴ Ibid.

¹⁷⁵ PC Mavroidis, G Bermann and M Wu, *The Law of the World Trade Organization – Documents, Cases and Analysis* (New York, WEST Publishing, 2010) 567.

the definition of a subsidy under the ASCM. On the other hand, it also becomes clear that WTO law offers too little space for subsidies pursuing legitimate policy goals at present. At minimum, the WTO and its Members should strive to permit subsidies for the scale up of clean energy under WTO law. The most thorough way to do this would be to drastically amend and expand WTO subsidy rules or reinstate the expired ASCM Article 8. The WTO could, for instance, take inspiration from EU existing legislation on renewable energy as set out in the Guidelines and GBER. Whatever the form, it is unavoidable that WTO subsidies rules are in need of some sort of reform. While this is easier said than done, the WTO Membership should look beyond direct obstacles and remind themselves what they committed to in the Paris Agreement in late 2015. 177 In absence of this, the applicability of GATT Article XX defenses and their applicability to the ASCM could be put to the test in dispute settlement.

5 Conclusion

It is evident from the analysis of EU renewable energy legislation as well of the case law that the both the European Commission and the CJEU are lenient towards discriminatory support schemes of EU Member States. The main argument is, and quite understandably so from a policy point of view, that the promotion of renewable energy schemes and the protection of the environment outweighs the discriminatory nature of the schemes. However, this does not diminish the dilemma that if such schemes fit the definition of a subsidy under current WTO law, this opens additional legal dimensions and challenges for the EU and its Member States.

¹⁷⁶ See M Blauberger and RU Kramer, 'European Competition vs. Global Competitiveness – Transferring EU Rules on State Aid and Public Procurement Beyond Europe' (2013) 13 Journal Ind Comp Trade 171, 181 ff.

¹⁷⁷ The Paris Agreement (n 2).

It so becomes clear from the above that the EU and the WTO operate in disconnected paradigms regarding support schemes for clean and renewable energy. The EU legal system is actively liberalizing its energy markets and has elaborate renewable energy policies in place. Present WTO subsidies regulations, on the other hand, make support schemes for renewable energy particularly sensitive to dispute settlement and provides no exceptions for clean and renewable energy support schemes that serve legitimate policy goals such as decarbonization of the grid. This can lead to paradoxical outcomes as it is highly questionable to what extent EU rules on State aid in the renewable energy sector were drafted with WTO subsidies disciplines in mind. What is clear is that the support schemes for clean and renewable energy that the EU has in place at present are easy targets for other WTO Members in WTO dispute settlement.

In the opinion of the author, there are three possible, not necessarily mutually exclusive, explanations why EU and WTO law are disconnected legal paradigms concerning decarbonizing the grid through the legal scale up of renewable energy support schemes. First, it is plausible that EU State aid rules tailored towards renewable energy were not consciously drafted against the backdrop of WTO rules. Second, as the EU did not harmonize renewable energy support schemes and does not have the fiscal competence to administer them, another possibility is that the EU intentionally left this aspect unregulated and did not actively engage with it, leaving it to the discretion of Member States. This scenario is also conceivable considering the by the EU highly valued positive effect support schemes have on the scale up of renewables and therefore the environment and climate goals. Third is a scenario where the EU is well-aware that its policies are contrary to WTO law, but believes the Union's stance towards 'exceptions' to State aid is more progressive and therefore legitimate. In addition, it may perceive the risk of challenges under WTO law relatively minor. It is true that WTO subsidy rules need reform and leave very little to no space for exceptions regarding the rationale of a subsidy at present to the detriment of the legitimate policy goals behind them. In this sense, the EU legal framework for renewable energy goes further than WTO rules by taking into account the policy rationale of the subsidy. If WTO Members were to take seriously any reform of the ASCM, or considering explicit exceptions for pursuing legitimate policy goals, the State aid exemption rules and guidelines for clean and renewable aid the EU currently has in place, would serve as an excellent starting point for what shape such rules could take in the future.