A Multifaceted Approach to Trade Liberalisation and Investment Protection in the Energy Sector

Edited by

Elena Cima and Makane Moïse Mbengue

BRILL
NIJHOFF

LEIDEN | BOSTON

Contents

CHAPTER 8

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

Disconnected Paradigms in Decarbonizing the Grid?

Anna-Alexandra Marhold

1 Introduction

In its efforts to decarbonize its economy, meeting its commitments under international climate treaties and increasing its security of energy supply, the European Union (EU) promotes the scale up of clean energy and energy efficiency.[1] The Union has several legal instruments at its disposal to further this goal, chiefly the Renewable Energy Directive, the 2014 E.U. Guidelines on State Aid for Environmental Protection and Energy, the EU General Block Exemption Regulation (GBER) and supporting case law.[2]

As this contribution will reveal, while arguably consistent with Union law, the support schemes for renewable energy currently in existence in the EU may – and likely are – inconsistent with World Trade Organization (WTO) subsidies disciplines as set out in the Agreements on Subsidies and Countervailing Measures (ASCM).[3] As the EU and its Member States are members to the World Trade Organization, the rules of the multilateral trading system are binding

1 Please note that this chapter was written based on the rules in force at the time of writing in 2018. Some rules may have been amended since then; 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' (Dec. 2015) (hereinafter the Paris Agreement); Also see EU 2020 Climate and Energy Package <https://ec.europa.eu/clima/policies/strategies/2020_en> (accessed 19 June 2018).

2 European Commission, Guidelines on State aid for environmental protection and energy 2014–2020 (2014/C 200/01) C 200/1. 28.6.2014 (hereinafter 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, 1–78 (hereinafter GBER).

3 World Trade Organization website, www.wto.org accessed 19 June 2018; Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 14.

 | DOI:10.1163/9789004463486_009

upon them.[4] Consequently, when WTO Members such as the EU maintain WTO-inconsistent policies, they open up avenues for other WTO Members to initiate dispute settlement proceedings against them.[5]

This chapter investigates to what extent 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 presently offers little legal space to pursue policy goals such as the scale up of green energy. The current situation may lead to an unfavourable outcome for not only the EU, but other 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 lay out 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 in particular focus on the E.U. General Block Exemption Regulation, the 2014 EU Guidelines on State Aid for Environmental Protection and Energy and relevant case law.[6] 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 assess whether the EU and WTO legal regime 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 Energy Market (IEM) is a product of gradually introducing a more coherent, EU-wide energy legislation and policy from the 1980s onwards. Its overall objective is to attain 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. Through IEM legislation, two policy goals

4 See WTO, 'The European Union and the WTO' <https://www.wto.org/english/thewto_e/countries_e/european_communities_e.htm> (accessed 19 June 2018).

5 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).

6 The Guidelines and GBER (n 2).

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 energy policy, on the other.[7]

The extension of the European single market to the energy sector is progressively realized by breaking up vertically integrated energy companies and introducing competition to the electricity and gas industries where possible.[8] The underlying rationale here is interest of the consumer, which is ultimately at the heart of EU competition policy: by ensuring companies compete fairly with one another, efficiency is encouraged, quality and innovation increase, prices decrease, and consumers have an overall broader choice.[9]

Liberalization and interconnection of network industries were introduced later to the energy sector than to most other goods and services sectors in the EU. One reason for this is that, for decades, the energy sector was considered a purely national matter linked to security of energy supply, industrial policy, and strategic interests of separate EU Member States. Historically, relatively little cross-border interconnections of electricity grids and gas pipelines existed across Europe. In addition to this, the electricity and gas industry has traditionally either been completely 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.[10] Due to this state of affairs, it became evident that the breaking up of these industries would be a challenging process which could only succeed if implemented in phases. During the first phase of implementing the IEM in the late 1980s, cross-border transit opened for both electricity and gas, implying that Member

7 See for an overview Anna Marhold, 'EU Regulatory Private Law in the Energy Community – The Synergy Between the CEER and the ECRB in Facilitating Costumer Protection', in Marise Cremona and Hans-W. Micklitz, *Private Law in the External Relations of the EU* (Oxford University Press, 2016) 249, 250–254; See also 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 19 June 2018).

8 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 Michael G. Pollitt, 'The Role of Policy in Energy Transitions: Lessons from the Energy Liberalisation Era', 50 *Energy Policy* 128 (2012).

9 DG Competition, 'Why is Competition Policy Important for Consumers?' <http://ec.europa.eu/competition/consumers/why_en.html> (accessed 19 June 2018).

10 See generally on this Terence Daintith and Leigh Hancher, *Energy Strategy in Europe – The Legal Framework* (De Gruyter 1986).

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.[11]

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). This form of unbundling 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.[12] 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 timely manner today and milder forms of unbundling are still accepted (the case in the gas sector in e.g. Hungary, Croatia and Lithuania).[13] Unbundling and integrating energy markets is additionally accompanied by significant challenges: for instance, it exposes the need to attract sufficient infrastructure

11 Directives 2003/54/EC for Electricity and 2003/55/EC for Gas, OJ 2003 L 176.

12 Article 9 of 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.; Angus Johnston and Guy Block, *EU Energy Law* (Oxford University Press 2012) 73; ECJ, C-439/06 *Citiworks* AG (22 May 2008).

13 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.

investments in the European electricity market and the need to manage capacity remuneration mechanisms that Member States have in place.[14]

Another cornerstone of liberalization of the energy market the EU introduced in the Third Energy Package is the concept of Third Party Access (TPA), taken up in Article 32 of the Electricity Directive.[15] 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.[16] 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 system users."[17]

Ownership Unbundling and Third Party Access form the cornerstone legal instruments that mandate the breaking up of previously vertically integrated energy companies and allow for introducing competition in the sector, serving a dual goal by facilitating liberalization as well as promoting the Europe-wide integration of energy markets. While the electricity and gas sector differ significantly from one another, the core concepts of Ownership Unbundling and Third Party Access were conceived to apply to both sectors, as the electricity and gas industry have certain characteristics in common: They are each 'network-bound', tied to fixed infrastructures and their operational processes,

14 See e.g. European Parliament Briefing, *Understanding the Electricity Markets in the EU* (Brussels, November 2016) and Jean-Michel Glachant et al, 'Incentives for Investments: Comparing EU Electricity and TSO Regulatory Regimes' EUI Florence School of Regulation Working Papers, June 2013.

15 Article 32 of Electricity Directive.

16 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.

17 Article 32(1) Electricity Directive 2009/72/EC; Transmission System Operators as well as Distribution System Operators are the guarantors of TPA, Johnston and Block (n 12) 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 Tjarda van der Vijver, 'Third Party Access Exemption Policy in the EU Gas and Electricity Sectors: Finding the Right Balance between Competition and Investments', in Martha M. Roggenkamp et al., *Energy Networks and the Law – Innovative Solutions in Changing Markets* (Oxford University Press, 2012) 333, 336.

from energy production to transmission and distribution, where traditionally heavily regulated on state level.

2.2 *EU Energy Law and Policy since Lisbon*

Energy remains a shared competence between the Union and its Member States, as stated in Article 4.2(i) of the Treaty on the Functioning of the European Union (TFEU).[18] This entails that both the EU and its Member States may legislate in this area, as long as they respect the 'duty of sincere cooperation' flowing from Article 4(3) of the Treaty on the European Union (hereafter: TEU).[19] Since Lisbon, EU energy law policy has been based on Article 194 TFEU.[20] 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.[21]

This element may be challenging, 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 191(2)(c) TFEU for environmental protection.[22] 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' 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 in a position to decide on the actual energy mix of its Member States, nor does it have a say in what

18 Consolidated Version of the Treaty on the Functioning of the European Union, 2008 O.J. C 115/47 (hereinafter TFEU).

19 Consolidated Version of the Treaty on European Union, 2010 O.J. C 83/01 (hereinafter TEU); 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.

20 Article 194 TFEU.

21 Ibid., Art. 194.2: "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)."

22 Ibid., Art. 192(2)(c): "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."

energy resources Member States can and should use.[23] This is relevant in view of the Clean Energy Package, presented by the Commission in the fall of 2016 and currently under negotiation.[24] In its proposals, the Commission recommends 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.[25]

2.3 *EU Energy Market Liberalization: Not Enough for the Scale Up of Renewable Energy*

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.[26] Although liberalizing the EU energy market is one of the cornerstones of the Union's energy policy, it in 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 CO_2 emissions is thus necessary.

However, it is worth briefly exploring the interplay between liberalization and decarbonization.[27] There is some evidence that liberalizing the energy sector does contribute to sustainable development by increasing the share of renewables that can access the grid.[28] For instance, various economic

23 See on this e.g. Thea Sveen, 'The Interaction between Article 192 and 194 TFEU' in *EU Renewable Energy Law: Legal Challenges and Perspectives* (2014), 157, 167–168.

24 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/publication/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 19 June 2018); Also see European Commission, Communication on 'Clean Energy For All Europeans' Brussels, 30.11.2016 COM(2016) 860 final, 8.

25 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.

26 Paris Agreement.

27 See for a more in-depth discussion on this Anna Marhold, 'The interplay between Liberalization and Decarbonization in the European Internal Energy Market for Electricity', in K. Mathis and B. Huber (eds), *Energy Law and Economics* (Springer, 2018) 59–75.

28 Lionel Nesta et al., 'Environmental Policies, Competition and Innovation in Renewable Energies' 67 *Journal of Environmental Economics and Management* 396 (2014).

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.[29] 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."[30]

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.[31] 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.[32] 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.[33] However, a further 2014 study by Nicolli and Vona points out that lowering entry barriers is in fact a more significant force in facilitating renewable energy innovation, than privatization and unbundling.[34] Notwithstanding, they also conclude that this varies heavily across technologies (e.g. the well-developed wind industry profits from this).[35] Finally, the introduction of a more stable

29 Tooraj Jamasb and Michaelk G. Pollitt, 'Electricity Sector Liberalisation and Innovation: An Analysis of the UK's Patenting Acitivies' 40 *Research Policy* 309 (2011).

30 Nesta et al., 'Environmental Policies' (n 28) 409; Nevertheless, there are also studies that are less confident in the decarbonizing effect of liberalization, see for instance J. Blazqueza et al, 'The Renewable Energy Policy Paradox' 82 *Renewable and Sustainable Energy Review* 1 (2018), 3, arguing that full decarbonization of the power sector is simply not feasible taking into account the current design of the markets.

31 Carlo Cambini et al., 'Innovation and Market Regulation: Evidence from the European Electricity Industry' 23 *Industry and Innovation* 734 (2016).

32 Ibid.

33 Ibid.

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

35 Ibid.

regulatory framework – in this particular study the Kyoto Protocol – is found to amplify the inducement effect of energy policies and privatization.[36]

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 these observations, 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 challenging to change supply side of electricity mix and for clean energy firms to access the market.[37] 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.[38]

We can conclude that for the EU to meet both objectives of liberalization and decarbonization, legislation supporting the scale up of clean energy is therefore necessary.[39] 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.

36 Ibid.

37 Johnston and Block, *EU Energy Law* (n 12) 304.

38 Ibid,. 320.

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

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 precisely to balance out this inequality between 'brown' and 'green' energy and promote the share of renewables in the Internal Energy Market. 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 2020, and has set higher targets for 2030.[40] 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.[41]

This section will discuss EU law currently in place for the scale up of renewable energy. The purpose of 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.[42] 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 law, there is much less scope to justify them under the latter legal framework. This section unveils this discrepancy 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.

40 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); the 2030 EU Climate and Energy Framework envisages a forty percent cut in greenhouse gas emissions, a twenty-seven percent share of renewable energy and a twenty-seven percent improvement in energy efficiency.

41 See Eurostat, 'Energy from Renewable Sources' <http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_from_renewable_sources> (accessed 19 June 2018).

42 Article 3 and 5 SCM Agreement.

3.1 *No Harmonization of Support Schemes on EU Level*

From an economic perspective, many subsidies for clean energy are set up as investment subsidies to expand renewable energy capacity.[43] 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.[44]

The Feed-in Tariff (FIT) is arguably the most popular financing mechanism at present, including in the EU.[45] 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.[46] 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 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.[47] Note that FITs may or may not be transferred

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

44 Henok Birhanu Asmelash, 'Energy Subsidies and WTO Dispute Settlement: Why Only Renewable Energy Subsidies Are Challenged' 18 *Journal of International Economic Law* 261 (2015), 269 citing Arunabha Ghosh and Himani Gangania, *Governing Clean Energy Subsidies: What, Why, and How Legal?* (Geneva, International Centre for Trade and Sustainable Development, 2012); 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 Charnovitz and Fischer, 'Canada – Renewable Energy' (n 43) 4.

45 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).

46 Charnovitz and Fischer, 'Canada – Renewable Energy' (n 43) 5.

47 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)',

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 significant stability for investors.[48] Another advantage is that the program design of FIT schemes is often flexible and therefore could and should be adapted to the economic needs of the country in question, as well as to the changing market conditions and the advances in technology.[49] Additionally, FITs may be beneficial for the development of local production of clean energy.[50] The downside in maintaining a FIT scheme is that it often ends up being more costly than necessary.[51] For this reason, the EU has committed to phase this instrument out over time and ensure that schemes are market competitive.[52]

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.[53] Reasons for the EU to not harmonize schemes in this area are, amongst others, the fact that some schemes as well as the accompanying

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 19 June 2018).

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

49 Ibid.

50 UNEP-WTO Report, *Trade and Climate Change* (n 48) 115.

51 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 19 June 2018).

52 Johnston and Block, *EU Energy Law* (n 12) 332.

53 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 19 June 2018). 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 51).

renewable energy technologies are still in the early stages of development, making harmonization on EU level premature.[54] As with other areas, the Union seems to initially prefer soft harmonization and coordination, after which more binding rules at the EU level are developed.[55] While this is certainly a valid reason, it results in the schemes being difficult to map and monitor comprehensively at present.[56] This, in turn, makes it challenging to assess whether renewable energy policies in EU Member States have been designed to take into account not only EU rules pertaining to state aid, but also subsidies rules as set out by the multilateral trading system under the WTO. This is particularly important because such policies are not necessarily always designed on the national level only, but on the (sub-)regional level as well.[57] 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.[58] 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).[59] Moreover, among others, it 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

54 Johnston and Block, *EU Energy Law* (n 12) 339–340.

55 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 Kim Talus, *Introduction to EU Energy Law* (Oxford University Press, 2016) 124.

56 The most comprehensive effort is the Beyond 2020 project, <http://www.res-policy-beyond2020.eu/index.html> (accessed 19 June 2018) 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).

57 E.g. in Spain, see Jan-Christoph Kuntze and Tom Moerenhout, *Local Content Requirements and The Renewable Energy Industry – A Good Match?* (ICTSD, Geneva 2013) 23.

58 EU Renewable Energy Directive (n 40).

59 Ibid., Art. 3.

renewable energy and ensure access to grid (Article 13.16).[60] More importantly, the Directive in various provisions recognizes the need for support schemes to ensure that Member States meet their mandatory targets as a legitimate means to an end.[61] 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: for example, the 20 target is an aggregate target for the whole EU, not for all the Member States separately.[62]

Intricate calculations were necessary to reach the overall Union total of 20 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).[63] 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. Some remarks must be made in this respect. First, the targets set by the EU for each of the Member States are binding. Non-implementation can result in possible infringement proceedings by the Commission. The question remains, however, whether the Commission is willing to take this step – so far it has not. Member States are required to report on their progress every two years and the Commission itself engages in monitoring and reporting, but the directive itself does elaborate further on any further consequences of non-compliance and/or a failure to meet the targets.[64] Nevertheless, Member States have taken their commitments seriously: Eurostat has indeed reported a steady increase in the energy mix of renewables.[65]

60 Ibid. Johnston and Block, *EU Energy Law* (n 12) 307–308.

61 EU Renewable Energy Directive (n 40), 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."

62 EU Renewable Energy Directive (n 40), Preamble, para 17.

63 Ibid., Annex I, 'National overall targets for the share of energy from renewable sources in gross final consumption of energy in 2020'.

64 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.

65 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

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.[66] The paragraph *inter alia* states that "this Directive aims at facilitating cross-border support of energy from renewable sources without affecting national support schemes." This opens the possibility for Member States to behave in a discriminatory manner, e.g. in the form of including local content requirements in their support schemes. In practice, many of the support schemes for renewable energy production EU Member States have in place are indeed 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.[67] EU Member States which still maintain renewable energy support schemes that are discriminatory and/or contain local content requirements, are Spain, Italy, France, Croatia and Greece, Belgium, and Sweden, although it is unlikely they are the only ones.[68] This is enhanced by the fact that fiscal policies for support schemes are administered on the Member State level and not on the EU level.

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.[69] EU State aid legislation may be called 'the EU counterpart of WTO subsidies disciplines' and is taken up in Article 107–109 TFEU, elaborated further in content by case law.[70] Article 107(1) TFEU sets out that any aid granted by a Member State or through

detailed Eurostat results at: <http://ec.europa.eu/eurostat/web/energy/data/shares> (accessed 19 June 2018).

66 EU Renewable Energy Directive (n 40), Preamble, para 25.

67 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).

68 See Kuntze and Moerenhout, *Local Content Requirements* (n 57) 23–24.

69 Art. 107–109 TFEU and ASCM.

70 TFEU.

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.[71] In other words, where Member States grant State aid that affects trade between EU Member States, such aid shall deemed to be illegal.[72] 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.[73]

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.[74] This includes an advantage granted directly by a Member State, but also those granted by a public or private body established by the state. 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.[75] Finally, it must distort or threaten to distort competition between Member States.[76] 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.[77]

If found to be in violation of EU State Aid law, the Member States in question must abolish the aid.[78] When considering the practice of the European Court of Justice (ECJ) in connection with renewable energy support schemes, we can conclude the Court has been quite strict in interpreting what constitutes state aid in the sense of transfer of State resources. The ECJ in various cases ruled that the mere intention of Member States to control certain resources was enough to fulfil the criterion of a government transfer, even if

71 Art. 107.1 TFEU.

72 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).

73 Art. 107.3 TFEU.

74 Art. 107.1 TFEU; Also see Talus, *Introduction to EU Energy Law* (n 55) 106.

75 As decided in *T-211/ 05 Italy v Commission* [2009] ECR II-02777, para. 152; See Talus, *Introduction to EU Energy Law* (n 55) 118.

76 Ibid.

77 Ibid.

78 Art. 108.2 TFEU (n 18).

there was an entity involved that was not based on public law.[79] Nevertheless, 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.[80] 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.[81]

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 or GBER.[82] The Guidelines determine that 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 and exempted from the notification requirement, provided that it fulfils certain conditions.[83]

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.[84] Their underlying goal remains reaching the EU 20/20/20 targets. 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

79 *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.

80 Art. 108 TFEU, complemented by Council Regulation (EC) No 659/ 1999, see Talus (n 55) 106.

81 Art. 107.3 (e) TFEU.

82 The Guidelines and GBER.

83 GBER, Section 7, Arts. 36–43.

84 The Guidelines, Preamble, under (3).

into account the rules of the multilateral trading system, which after careful consideration, in the opinion of the author, seems unlikely.

In addition to the Guidelines, the GBER, issued in the same year, offers an elaborate list declaring categories of aid which are compatible with the EU internal market in application of Article 107 and 108 TFEU, especially Article 108(4) TFEU.[85] 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).

Both the Guidelines and the GBER are part of the Commission's modernization package for state aid.[86] The objective of these instruments is to integrate renewable energy sources into the market and remove their subsidization eventually, making them on a par with traditional energy sources.[87] This can be achieved gradually by ensuring that 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 ultimately aim to remove any support when renewable energy can compete. 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 in effect 'exceptions' to State aid incompatible support in favour of legitimate policy goals such as mitigating climate change.

In addition to this, the current framework tolerates 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.[88] At maximum, if containing local content requirements, they are prohibited.[89] Notwithstanding the actionable or prohibited nature of a scheme, it is safe to conclude that European schemes are sensitive to face a challenge in WTO dispute settlement.

85 Ibid.
86 Talus, *Introduction to EU Energy Law* (n 55) 124.
87 The Guidelines (n 2), under 3.3.1 para 108.
88 Art. 5 ACSM (n 3).
89 Ibid., Art. 3.

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 up EU Member States' schemes to participation by other EU Member States is difficult 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."[90] 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 ECJ in its case law has moreover been particularly lenient towards Member States administering discriminatory support schemes for renewable energy. In fact, the ECJ has systematically allowed Member States to establish support schemes for renewable energy that are restricted to energy produced within a particular Member State.[91] One well-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.[92] 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 ECJ was favourable towards the national scheme.[93] The ECJ 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

90 The EU Renewable Energy Directive (n 40), Preamble para 25.

91 See a comprehensive description of this in Kim Talus, 'Renewable Energy Disputes in the European Union – An Overview of Current Cases' 135 ff and Angus 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 Institute of Maritime Law Yearbook* 2014 (Oslo University).

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

93 Talus, 'Renewable Energy Disputes' (n 91) 148.

commitments and environmental protection requirements in Article 11 TFEU.[94]

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 ECJ essentially followed its earlier case law in *PreussenElektra*.[95] In both cases, the ECJ 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 concerned renewable energy produced on Finnish islands that were physically closer to Sweden than to Finland and, more importantly, physically only connected to the Swedish grid, not the Finish one. Nevertheless, the ECJ opined that Sweden could refuse participation in the Swedish scheme of Finnish 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.[96]

In the same line of reasoning, the ECJ 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

94 See about the derogation from the free movement on goods and the mandatory requirements doctrine, e.g. Eleanor Spaventa, 'On Discrimination and the Theory of Mandatory Requirements' 3 *Cambridge Yearbook of European Legal Studies* 457 (2000); the TFEU: 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."

95 *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*.

96 *Ålands Vindkraft AB v Energimyndigheten*, paras 1–3.

considerations, and, notably, the importance of public interest in the scale up of renewable energy sources.[97]

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.[98] The reasoning of the court was that the funds that were generated by the German support scheme remained under the dominant influence of public authorities, which assimilated the Transmission System Operator (TSO) in charge to an entity executing a State concession.[99] Additionally, the surcharge passed on to the final consumers of electricity could be assimilated to a levy on electricity consumption in Germany.[100] 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.[101]

From the WTO law perspective, the practice of limiting a support scheme to your national producers could be justified under GATT Article III:8 (b).[102] Notwithstanding, if such and similar schemes maintained by EU Member States qualify as a subsidy in the sense of Article 1 and 2 of the WTO SCM Agreement, and they negatively affect cross-border trade, they can be challenged by other WTO Members, notwithstanding their justification under EU State aid law. Nonetheless, it is quite understandable that the ECJ made these decisions on the basis of political realities and the Union's pressing need to curb CO_2 emissions.[103]

---

97 *Essent Belgium NV v. Vlaamse Reguleringsinstantie,* paras 89–93; Also see Talus, 'Renewable Energy Disputes' (n 91) 151.

98 *Germany v Commission,* 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'.

99 Ibid., para 94.

100 Ibid., para 95.

101 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, 122; see also Commission press release IP/14/2122).

102 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."

103 Talus, 'Renewable Energy Disputes' (n 91) 150.

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.[104]

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 in existence in the EU may justified under State aid law due to existing exemptions in the Guidelines and GBER. However, this does not necessarily mean that these schemes are consistent with WTO rules on subsidies as set out in the ASCM.[105] The general dilemma with respect to energy subsidies seems to be that support schemes for clean energy production and consumption are needed to correct market failures. Contributing to sustainable development through the scale up of clean energy, including expanding its trade, are in this sense legitimate policy goals.[106] But

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

105 SCM Agreement .

106 See e.g. Luca 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 competitiveness, 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 Joanna I. Lewis, 'The Rise of Renewable Energy Protectionism: Emerging Trade Conflicts and Implications for Low Carbon Development' 14 *Global Environmental Politics* 10 (2014) and Timothy Meyer, 'How Local Discrimination can Promote Global Public Goods' 95 *Boston University Law Review* 1941 (2015).

while EU law recognizes this in its legislation and case law, WTO law leaves less space for considering such objectives.[107]

Because the EU and its Members States are Members of the WTO, all WTO rules 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 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: 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. For example, 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 neighbouring 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.[108]

4.1 *Defining Subsidies under the SCM Agreement – An Overview*

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

107 See for an elaborate comparative analysis between the EU State aid and WTO subsidies regime regarding 'green' electricity also Gracia Marín Durán, 'Sheltering Government Support to 'Green' Electricity: The European Union and the World Trade Organization' 67 *International and Comparative Law Quarterly* 129 (2018).

108 WTO, DS452 *European Union and Certain Member States – Certain Measures Affecting the Renewable Energy Generation Sector – Complaint by China* (in consultations 5 November 2012); See also in general for an interesting reading of the evolution of trade and environment disputes Mark Wu and James Salzman, 'The Next Generation of Trade and Environment Conflicts: The Rise of Green Industrial Policy', *Northwestern University Law Review* 401 (2014).

aid.[109] 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.[110] 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.[111]

4.1.1 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 or 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."[112] 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 prohibited and actionable subsidies: they can impose Countervailing Duties (CVDs) or they can initiate a dispute at the WTO Dispute Settlement Body (DSB).[113] Originally, a third type of non-actionable subsidies was taken up in Part IV (Article 8 SCM), but expired in 2000.[114] 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.[115] Consequently, this

109 See generally on this issue, Luca Rubini, *The Definition of Subsidy and State Aid – WTO and EC Law in Comparative Perspective* (Oxford University Press, 2010).

110 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 19 June 2018).

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

112 Art. 5 ASCM.

113 Ibid., Part V – Countervailing Measures.

114 Ibid., Art. 8 (lapsed).

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

category of subsidies has lapsed and is no longer available under WTO law. The consequences of this will be discussed in more detail below.

4.1.2 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.[116] 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.[117]

4.1.3 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 it 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.[118] 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.[119] Another benchmark may be to look at Article 14 of the ASCM, which deals with calculation of the subsidy.[120] 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.[121] For example, if the government provides equity

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

117 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, 571, para 52.

118 Asmelash, 'Energy Subsidies' (n 44) 270, 272.

119 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, 1443, para 157.

120 Art. 14 SCM Agreement.

121 Petros C. Mavroidis et al., *The Law and Economics of Contingent Protection in the WTO* (Edward Elgar Publishing, 2008) 325.

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.[122]

4.1.4 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 Article 2 of the Agreement.[123] The thought behind this requirement was that only specific financial contributions can lead to trade distortions through inefficient resource allocation.[124] 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."[125] 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.[126]

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.[127] 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*.[128]

Subsidies can be applied to consumers and to producers.[129] 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 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.[130] FITS, the most popular instruments in the EU,

122 Ibid.
123 Art. 2 SCM Agreement.
124 Petros C. Mavroidis, *Trade in Goods – 2nd Edition* (Oxford University Press, 2012) 549.
125 Panel Report, *United States – Subsidies on Upland 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.
126 Mavroidis, *Trade in Goods* (n 124) 549.
127 Art. 2.1 SCM Agreement.
128 Ibid., Art. 2.3; Mavroidis (n 124) 549.
129 Benedict Clements et al. (eds), *Energy Subsidy Reform – Lessons and Implications* (International Monetary Fund, 2013) 1, 2.
130 Ibid.

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.[131] 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'.[132]

4.2 *WTO Law and Renewable Energy Support Schemes*

WTO rules as 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.[133]

Due to their policy objectives, support schemes for clean energy generally enjoy broad backing from around the world.[134] Their main goal is, or in any case should be, not to be protectionist in nature but rather to mitigate climate change caused by CO_2 emissions, which is traditionally associated with fossil

131 Asmelash, 'Energy Subsidies' (n 44) 273.

132 Ibid., 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.

133 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, 7; Panel Reports, *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, 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).

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

fuel combustion for electricity generation and heat production.[135] 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 United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) 21 Paris Agreement in late 2015.[136]

We have also established that producer, as opposed to consumer, subsidies are much more common to support the scale up of renewable energy.[137] Since the share of clean energies in the overall energy market is growing but still small, governments – under pressure to meet their climate targets – are often eager to design support schemes for the production of clean energies due to their positive effects on lowering greenhouse emissions.[138] 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.[139] 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.[140]

---

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

136 The Paris Agreement.

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

138 See e.g. the 2030 Energy Strategy by the European Commission <https://ec.europa.eu/info/energy-climate-change-environment/overall-targets/2030-targets_en> (accessed 19 June 2018) and the Paris Agreement.

139 *Canada – Renewable Energy / Canada – Feed-in Tariff Program*.

140 This is one of the most controversial passages of the AB's reports, see e.g. elaborate discussions on the issue by Aaron Cosbey and Luca 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); Aaron Cosbey and Petros C. 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; Asmelash, 'Energy Subsidies' (n 44) 273 and Appellate Body Reports *Canada – Renewable Energy / Canada – Feed-in Tariff Program,* paras 5.118. and 5.169: In this instance, the Appellate Body found that the relevant market for solar

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 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 ASCM, 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.[141]

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 are contrary to the SCM Agreement by means of Article 3.1(b) and Article 2.1 of the TRIMS.[142] The

---

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.

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

142 Art. 3.1 (b) SCM Agreement and Art. 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.

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.[143]

LCRs were also a central issue in the WTO *Canada-Renewable Energy/Feed-In Tariffs* case.[144] 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."[145] 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 for 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.[146] To this end, Ontario did not limit itself in utilizing a FIT scheme only, but added another policy instrument to the mix, the LRC.[147] 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).[148] If FIT schemes qualify as a subsidy in the sense of

143 See Kuntze and Moerenhout, *Local Content Requirements* (n 57).

144 *Canada – Renewable Energy / Canada – Feed-in Tariff Program*, paras 5.78–79.

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

146 Charnovitz and Fischer, 'Canada – Renewable Energy' (n 43) 2.

147 Ibid.

148 Article 2.1 TRIMS (n 142), Article III:4 General Agreement on Tariffs and Trade (GATT) 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).

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.[149] There was also a stand-alone claim on the basis of General Agreement on Tariffs and Trade (GATT), Article III:4, as well as claim of violation of Article 3.1(b) and 3.2 of the ASCM, depended on whether the Feed-in Tariff could qualify as a subsidy in the first place.[150] As we have seen in the preceding paragraph, the Appellate Body managed to duck that question, in a way that some call 'legal acrobatics'.[151]

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 TRIMS and thus automatically a violation of GATT Article III:4.[152] 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 ASCM. 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.[153] 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.[154]

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).[155] Because

149 See Cosbey and Rubini, 'Does It FIT?' (n 140).

150 Ibid.

151 See Cosbey and Mavroidis, 'A Turquoise Mess' (n 140) 82 and *Canada – Renewable Energy / Canada – Feed-in Tariff Program*, Report of the AB, para 5.246.

152 AB in Canada – Renewable Energy / Canada – Feed-in Tariff Program (n 133) para 5.33.

153 Fischer and Charnovitz, 'Canada – Renewable Energy' (n 43) 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.

154 DS456 *India – Certain Measures Relating to Solar Cells and Solar Modules* and DS510 United States – Certain Measures Relating to the Renewable Energy Sector (n 133); Also generally see Meyer, How Local Discrimination' (n 106).

155 Timothy Meyer, 'Energy Subsidies and the World Trade Organization' (2013) Volume 17, Issue 22 ASIL Insights (10 September 2013).

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.[156] 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.

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.[157] The network operators can additionally manage the implementation of the of the FIT program by means of supplier contracts.[158] 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).[159] 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:

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;

156 Ibid.
157 Marie 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.
158 Ibid.
159 ASCM Art. 8 (lapsed).

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).[160]

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.[161] 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.[162] 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 Agreement. This is much to the discontent of many proponents of such subsidies in the context of climate change mitigation.[163] 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.[164] 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

160 Ibid., Art. 8.2(c) (lapsed):

"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."

161 Mavroidis, *Trade in Goods* (n 124) 566.

162 Pursuant to Article 31 SCM Agreement; Mavroidis, *Trade in Goods* (n 124) 566.

163 See notably Luca Rubini and Robert Howse, 'Climate Mitigation Subsidies and the WTO Legal Framework: A Policy Analysis' (Geneva, International Institute for Sustainable Development, 2010). See also Chapter 2 [Espa] and 8 [Cima] in this volume.

164 Mark Wu, 'Re-examining 'Green Light' Subsidies in the Wake of New Green Industrial Policies' E15 Initiative Think Piece (August 2015) 3.

the ASCM, GATT Article XX (General Exceptions) should be available to justify them, although this proposal is not without problems itself.[165]

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.[166] In his view, this was the underlying reason for negotiating the Article 8 ASCM in the first place.[167] 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.[168] Moreover, Mavroidis argues that if GATT Article XX exceptions to the SCM Agreement would be allowed, such exceptions would not meet the *chapeau* of the Article, since the chapeau calls for absence of discrimination.[169] 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 favour 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 ASCM does not consider the (policy) reason and the context of a subsidy.[170]

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

165 Rubini and Howse, 'Climate Mitigation Subsidies' (n 163); However, Mavroidis believes allowing this would be complicated, see Mavroidis, *Trade in Goods* (n 124) 365.

166 See Mavroidis, *Trade in Goods* (n 124) 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.

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

168 See Mavroidis, *Trade in Goods* (n 124) 365 ff.

169 Ibid.

170 Petros C. Mavroidis et al., *The Law of the World Trade Organization – Documents, Cases and Analysis* (New York, WEST Publishing, 2010) 567.

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 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.[171] 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.[172] In absence of this, the applicability of GATT Article XX defences 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 ECJ 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.

It becomes clear from the above that the EU and the WTO indeed operate in disconnected paradigms regarding support schemes for clean and renewable energy. The EU legal system is actively liberalizing its energy markets and has

171 See Michael Blauberger and Rike U. Kramer, 'European Competition vs. Global Competitiveness – Transferring EU Rules on State Aid and Public Procurement Beyond Europe' 13 *Journal of Industry Competition and Trade* 171 (2013), 181 ff.

172 The Paris Agreement.

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 challenging 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 are in need of reconsideration and currently leave very little to no space for exceptions regarding the rationale of a subsidy at present, sometimes 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, a framework inspired by EU state aid exemption rules and guidelines for clean and renewable aid, may serve as a valuable starting point of the discussion.[173]

173 See further on this Anna Marhold, 'Fossil Fuel Subsidy Reform and Climate Change Mitigation: Options for Constraining Dual Pricing in the Multilateral Trading System' ICTSD (October 2017) 16–21.

References

Asmelash, Henok Birhanu. 2015. 'Energy Subsidies and WTO Dispute Settlement: Why Only Renewable Energy Subsidies Are Challenged' 18 *Journal of International Economic Law* 261.

Barrett Lydgate, Emily. 2012. 'Biofuels, Sustainability and Trade-Related Regulatory Chill' 15 *Journal of International Economic Law* 157–180.

Blauberger, Michael and Rike U. Kramer. 2013. 'European Competition vs. Global Competitiveness – Transferring EU Rules on State Aid and Public Procurement Beyond Europe' 13 *Journal of Industry Competition and Trade* 171.

Blazqueza, J. et al. 2018. 'The Renewable Energy Policy Paradox' 82 *Renewable and Sustainable Energy Review* 1.

Cambini, Carlo et al. 2016. 'Innovation and Market Regulation: Evidence from the European Electricity Industry' 23 *Industry and Innovation* 734.

Charnovitz, Steve and Carolyn Fischer. 2014. 'Canada – Renewable Energy: Implications for wto Law on Green and Not-So-Green Subsidies' EUI Working Papers, RSCAS 2014/09.

Clements, Benedict et al. (eds). 2013. *Energy Subsidy Reform – Lessons and Implications* (International Monetary Fund).

Cosbey, Aaron and Luca Rubini. 2013. '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).

Cosbey, Aaron and Petros C. Mavroidis. 2014. '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.

Daintith, Terence and Leigh Hancher. 1986. *Energy Strategy in Europe – The Legal Framework* (De Gruyter).

Glachant, Jean-Michel et al. 2013. 'Incentives for Investments: Comparing EU Electricity and TSO Regulatory Regimes' EUI Florence School of Regulation Working Papers.

International Renewable Energy Agency. 2013. *Renewable Energy Auctions in Developing Countries* (Abu Dhabi, IRENA).

International Renewable Energy Agency 2015. *Renewable Energy Auctions: A Guide* (Abu Dhabi, IRENA).

Jamasb, Tooraj and Michaelk G. Pollitt. 2011. 'Electricity Sector Liberalisation and Innovation: An Analysis of the UK's Patenting Acitivies' 40 *Research Policy* 309.

Johnston, Angus and Guy Block. 2012. *EU Energy Law* (Oxford University Press).

Johnston, Angus. 2014. 'The Impact of the New EU Commission Guidelines on State Aid for Environmental Protection and Energy on the Promotion of Renewable Energies', in *EU Renewable Energy Law: Legal Challenges and Perspectives* (Scandinavian Institute of Maritime Law Yearbook).

Kuntze, Jan-Christoph and Tom Moerenhout. 2013. *Local Content Requirements and The Renewable Energy Industry – A Good Match?* (ICTSD).

Lewis, Joanna I. 2014. 'The Rise of Renewable Energy Protectionism: Emerging Trade Conflicts and Implications for Low Carbon Development' 14 *Global Environmental Politics* 10.

Marhold, Anna. 2016. 'EU Regulatory Private Law in the Energy Community – The Synergy Between the CEER and the ECRB in Facilitating Costumer Protection', in Marise Cremona and Hans-W. Micklitz, *Private Law in the External Relations of the EU* (Oxford University Press).

Marhold, Anna 2017. 'Fossil Fuel Subsidy Reform and Climate Change Mitigation: Options for Constraining Dual Pricing in the Multilateral Trading System' ICTSD.

Marhold, Anna 2018. 'The interplay between Liberalization and Decarbonization in the European Internal Energy Market for Electricity', in K. Mathis and B. Huber (eds), *Energy Law and Economics* (Springer).

Marín Durán, Gracia. 2018. 'Sheltering Government Support to 'Green' Electricity: The European Union and the World Trade Organization' 67 *International and Comparative Law Quarterly* 129.

Mavroidis, Petros C. 2012. *Trade in Goods – 2nd Edition* (Oxford University Press).

Mavroidis, Petros C 2015. *The Regulation of International Trade – Volume 1: The GATT* (The MIT Press).

Mavroidis, Petros C. et al. 2008. *The Law and Economics of Contingent Protection in the* WTO (Edward Elgar Publishing).

Mavroidis, Petros C. et al. 2010. *The Law of the World Trade Organization – Documents, Cases and Analysis* (WEST Publishing).

Meyer, Timothy. 2013. 'Energy Subsidies and the World Trade Organization', 17(22) *ASIL Insights*.

Meyer, Timothy 2015. 'How Local Discrimination can Promote Global Public Goods' 95 *Boston University Law Review* 1941.

Nesta, Lionel et al. 2014. 'Environmental Policies, Competition and Innovation in Renewable Energies' 67 *Journal of Environmental Economics and Management* 396.

Nicolli, Francesco and Francesco Vona. 2016. 'Heterogenous Policies, Heterogenous Technologies: The Case of Renewable Energy' 56 *Energy Economics* 190.

Pollitt, Michael G. 2012. 'The Role of Policy in Energy Transitions: Lessons from the Energy Liberalisation Era', 50 *Energy Policy* 128.

Rubini, Luca. 2010. *The Definition of Subsidy and State Aid* – WTO *and EC Law in Comparative Perspective* (Oxford University Press).

Rubini, Luca 2015. 'Rethinking International Subsidies Disciplines: Rationale and Possible Avenues for Reform' The E15 Initiative Overview Paper.

Spaventa, Eleanor. 2000. 'On Discrimination and the Theory of Mandatory Requirements' 3 *Cambridge Yearbook of European Legal Studies* 457.

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

Struckmann, K. and G. Sapi. 2017. 'Energy and Environmental Aid' in Philipp Werner and Vincent Verouden (eds), *EU State Aid Control – Law and Economics* (Wolters Kluwer).

Sveen, Thea. 2014. 'The Interaction between Article 192 and 194 TFEU' in *EU Renewable Energy Law: Legal Challenges and Perspectives.*

Talus, Kim. 2014. 'Renewable Energy Disputes in the European Union – An Overview of Current Cases', in *EU Renewable Energy Law: Legal Challenges and Perspectives* (Scandinavian Institute of Maritime Law Yearbook).

Talus, Kim 2016. *Introduction to EU Energy Law* (Oxford University Press).

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

van der Vijver, Tjarda. 2012. 'Third Party Access Exemption Policy in the EU Gas and Electricity Sectors: Finding the Right Balance between Competition and Investments', in Martha M. Roggenkamp et al., *Energy Networks and the Law – Innovative Solutions in Changing Markets* (Oxford University Press).

United Nations Environmental Programme. 2012. *Feed-in Tariffs as a Policy Instrument for Promoting Renewable Energies and Green Economies in Developing Countries* (Geneva, United Nations Environmental Programme).

Wilke, Marie. 2011. 'Feed-In Tariffs for Renewable Energy and WTO Subsidy Rules – An Initial Legal Review' (ICTSD).

Wu, Mark. 2015. 'Re-examining 'Green Light' Subsidies in the Wake of New Green Industrial Policies' (ICSTD and WEF E15 Think Piece).

Wu, Mark and James Salzman. 2014. 'The Next Generation of Trade and Environment Conflicts: The Rise of Green Industrial Policy', *Northwestern University Law Review* 401.