

Chapter 12

Special Agreements and Energy: Filling the Gaps

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Abstract This chapter examines the patchwork of regulatory responses in the field of trade and investment to the current energy challenges and reflects on the recent developments in relevant international fora in terms of their ability to take the regulatory framework for energy a step further in serving the needs of sustainable energy access for all.

Keywords Energy • Energy access • Energy security • Renewable energy • Environmental goods and services • World Trade Organization • Energy charter treaty

1 Introduction

Energy is central to every aspect of human life and activity, from lighting, heating and cooking to the functioning of all economic sectors. Still, about 2.9 billion people do not have access to modern energy services and over 1.1 billion have no access to electricity.¹ The majority of those people live in the developing and least developed countries of Asia and sub-Saharan Africa. This fact not only hampers economic development and poverty eradication but also results in premature deaths from using high-polluting solid fuels inside living quarters.²

¹Se4all (2015).

²IPCC (2014), pp. 708–709.

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The challenge of energy access has been recognised by the international community. Access to affordable, reliable, sustainable and modern energy for all is listed as the seventh Sustainable Development Goal (SDG 7) on the 2030 Agenda for Sustainable Development of the United Nations.³ The accent on sustainability of energy access is not incidental. The reliance on cheap and easily accessible fossil fuels (coal, oil and natural gas) accounts for two thirds of global GHG emissions.⁴ In order to break this negative energy-climate change nexus, one of the targets within SDG 7 is to increase substantially the share of renewable energy (RE) in the global energy mix.⁵ The expansion of RE will also help to address the issue of imminent depletion of fossil fuels against the forecasts of increasing energy demand, and also the concerns about security of energy supply in light of the dependency of many countries on fossil fuel imports from states with unstable political regimes.⁶

The process of delivering sustainable energy access for all people requires steering by state policies and regulations. There is a need for regulatory support of investments in various segments of the energy sector, be it the expansion of energy infrastructure (electricity networks, pipelines, liquefied gas terminals etc.)⁷ or the development of off-grid renewable energy projects.⁸ Appropriate regulation is equally important for energy trade, which, through various trade instruments, could strengthen competitive positions of renewable energy *vis-a-vis* fossil fuels and enable supply of electricity generated from RE from long distances and across borders.

The current state of energy regulation is however not conducive to the ambitious goal of universal sustainable energy access. Most existing legal frameworks applicable to energy trade and investment lack mechanisms to promote liberalization of national energy sectors, enhance competition on energy markets and enable access to energy infrastructure and accommodation of RE. Filling these gaps in energy regulation should be a priority and a major challenge of global energy governance.⁹

This chapter examines the patchwork of regulatory responses in the field of trade and investment to the current energy challenges and reflects on the recent developments in relevant international fora in terms of their ability to take the regulatory framework for energy a step further in serving the needs of sustainable energy access for all. Section 2 discusses the importance of an appropriate regulatory environment for attracting investment and facilitating cross-border trade in the

³See SDG 7 in United Nations General Assembly (UNGA) Resolution A/RES/70/1 ‘*Transforming Our World: The 2030 Sustainable Development Agenda*’, adopted on 25 September 2015.

⁴IEA (2013), p 15.

⁵UNGA Res A/RES/70/1 of 25 September 2015 ‘*Transforming Our World: The 2030 Sustainable Development Agenda*’.

⁶This is particularly true for the EU. See EU (2015).

⁷Gudas (2015).

⁸Schmidt et al. (2013).

⁹See e.g. Leal-Arcas et al. (2014), pp. 82–85.

energy sector. Section 3 examines the international rules applicable to energy trade and investment and identifies gaps in the international regulatory framework. Section 4 presents some of the recent developments in international fora having the potential to contribute to the improvement of energy governance. Section 5 offers concluding remarks.

2 The Role of Regulation in Addressing Contemporary Energy Challenges

The problems the energy sector faces today are multiple and complex. However, three main challenges are beyond dispute – energy access for all, transition to RE and security of energy supply. Coping with these challenges would contribute to global energy security and create synergies with the strategies of economic growth and poverty reduction. The transition from fossil fuels to RE would not only enhance energy security but would also support climate change mitigation. Meeting these challenges, however, requires unprecedented levels of investment. According to some estimates, achieving universal sustainable energy access by the year 2030 would require total investment of nearly \$1 trillion, or an average of \$49 billion per year.¹⁰ Besides the construction of energy infrastructure for the realization of existing export potential of oil and natural gas,¹¹ investments are needed for the development of large RE projects. Of vital importance is the construction of regional interconnections, or cross-border electricity networks, which would enable flows of electricity generated from hydro, solar and other RE sources over long distances.¹²

Attracting investment requires a proper regulatory environment, including high standards for investment protection, effective tax and competition laws and open trade policies.¹³ This is particularly true for the energy sector, where investments are usually associated with higher risks than in other sectors due to their high capital intensity, relative illiquidity and long periods of amortization. Thus, only well-designed regulatory frameworks that provide legal guarantees and incentives to investors, as well as non-discriminatory conditions for trade in energy and energy equipment are relevant for creating cost-effective energy systems.

¹⁰IEA (2012), p. 538.

¹¹For instance, the current problem of energy security in Europe requires huge investments in redesigning natural gas infrastructure and constructing export and import liquefied natural gas (LNG) terminals. See Espá and Holzer (2015), pp. 372–374.

¹²The need for construction of cross-border transmission lines is particularly urgent in sub-Saharan Africa in light of the development of large-scale hydropower projects in the Democratic Republic of Congo, Cameroon, Ethiopia, Kenya and Mozambique carrying great potential for electricity supply in the whole region of Central and Eastern Africa. See IEA (2014), p. 14.

¹³OECD (2015), p. 23 ff.

The experience of the EU, which has made a remarkable progress in creating a regional energy market,¹⁴ shows that an enabling regulatory framework for energy should include structural reforms and liberalization of the energy market. At the core of these reforms is the requirement of a third party access (TPA) and unbundling of energy life-cycle activities.¹⁵ Unbundling, which means putting generation and transmission in separate legal entities or even in separate legal entities with different ownership has proven to be advantageous for the development of energy transmission systems, since vertical integration of the transmission system operator (TSO) with incumbent generators tends to distort the incentive to invest in new transmission lines.¹⁶ Third party access is also important for attracting investments in energy infrastructure, since it allows private investors to participate in project funding and gain revenues. While the structure of the electricity market has undergone liberalization in the EU and other developed countries,¹⁷ the situation in many developing countries remains largely unchanged. The construction and operation of transmission links in these countries are run by state monopolies.

In addition, the EU uses regulatory incentives in order to achieve higher rates of internal electricity market interconnection. Some of these regulatory incentives address the duration of licensing procedures, others provide exemptions from some EU internal market rules, including third party access.¹⁸ Another category of regulatory incentives is related to access to the EU funding.¹⁹ EU legislation also requires national regulatory authorities to set tariffs for the use of energy infrastructure at levels ‘consistent with financing needs and the appropriate cost allocation for cross-border investments’.²⁰ Setting efficient transmission tariffs serves as a transmission price incentive and thereby stimulates investment in energy infrastructure.²¹

Proper regulation is also instrumental for the effective implementation of the off-grid energy access delivery model. Stand-alone RE based systems, such as solar panels for households, do not require power grids and can provide energy access in locations without access to energy grids in developing countries. The most salient

¹⁴In ‘A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy’, adopted by the EU Commission on 25 February 2015, free flow of energy across borders is viewed as a fifth freedom of the EU, along with the free movement of goods, services, persons and capital.

¹⁵Lowe et al. (2007), p. 24.

¹⁶Ibid.

¹⁷For example, third parties are allowed to invest in the electricity transmission lines and become eligible for regulated revenues in the EU, Australia and some US states (e.g. Hawaii), subject to certain conditions, such as the obligation to integrate renewable energy into the power production or the contribution to energy security. See Gudas (2015).

¹⁸EU Regulation 714/2009 on conditions for access to the network for cross-border exchanges in electricity.

¹⁹EU Regulation 1316/2013 establishing the Connecting Europe Facility, OJ L 348, 20.12.2013.

²⁰EU Regulation 347/2013 on guidelines for trans-European energy infrastructure, 17.04.2013.

²¹Reith et al. (2012), p. 22.

regulatory issues of off-grid projects relate to the facilitation of technology transfer and deployment, lowering of investment risks and an energy subsidy reform aimed at the reduction of support for fossil fuels.²²

As energy systems become increasingly interconnected, there is a tendency towards internationalization of energy laws,²³ not the least driven by contemporary energy challenges that transcend national borders and call for international cooperation.²⁴ The emerging global energy governance does not emanate from a single international institution. It relies on energy cooperation within different groups of countries and consists of policies and rules adopted at different fora, including various economic and environmental institutions.²⁵ The international regime for energy trade and investment is based on the international trade rules of the World Trade Organisation (WTO) and the investment protection provisions of the Energy Charter Treaty (ECT). The latter is the only international agreement, which specifically deals with energy.²⁶ It is also the only agreement that covers all or at least a significant part of the energy cycle – extraction and production (from an investment angle), and transportation (transit) and trade. With its specific focus on energy, the ECT could become a hub of global energy governance. Unfortunately, this potential has not been realized yet. The ECT experience shows that joined efforts in the field of energy by a multipolar, unequal and heterogeneous world community are bound to need a lot of time. For the time being, the international regime for trade and investment benefits from incremental steps made at different fora in support of the goals of energy security, climate change mitigation and energy access for the poor.

3 Gaps in International Legal Frameworks for Energy Trade and Investment

3.1 WTO Rules

International trade in energy is regulated by general rules for trade set out in the WTO Agreement. These rules fail to take into account the specific features of

²²See e.g. Schmidt et al. (2013), pp. 90–91.

²³Talus (2014), pp. 7–8.

²⁴Cottier (2014), pp. 40–41.

²⁵Institutions contributing to international energy cooperation and the development of global energy governance are as diverse as the Organization of the Petroleum Exporting Countries (OPEC), the International Atomic Energy Agency (IAEA), the International Energy Agency (IEA), International Renewable Energy Agency (IRENA), the World Trade Organization, the Energy Charter Treaty (ECT) and the United Nations Framework Convention on Climate Change (UNFCCC). See Leal-Arcas et al. (2014), pp. 24–25.

²⁶Signed in 1994 and entered into force in 1998, the ECT unites energy-producing, energy-consuming and energy-transiting states from all over the world, with some of them having an observer status.

energy, which makes it different to other products. Energy, and particularly electricity, is ‘special’ when it comes to its physical characteristics, storage and transportation.²⁷ First, electrical power is intangible. Second, it requires simultaneous production and consumption, or additional technological processes for its storage.²⁸ Third, energy trade relies on the availability of fixed installation necessary for energy transportation. In contrast to other networks (roads, railways, canals etc.), energy networks (pipelines and power grids) have very little room for excess capacity, as they are planned and financed based on a specific demand. Despite these peculiarities, WTO rules and in particular provisions of the General Agreement on Tariffs and Trade (GATT) apply to trade in energy much in the same way as they apply to any other products. WTO members have to observe the non-discrimination principles of the most-favoured nation (MFN) and national treatment (NT) in the application of import duties,²⁹ internal taxes and regulations on energy products, and they may not use quantitative restrictions on energy imports and exports. However, while focusing on the reduction and elimination of market access restrictions, WTO rules are poorly designed to address the practice of export taxes widespread in energy trade, not to mention the inability to capture oil production quotas used by the Organisation of the Petroleum Exporting Countries (OPEC).³⁰ At the same time, some measures necessary for maintaining stability of interconnected electricity systems, such as power flow control, congestion and shortage avoidance measures, come into contradiction with the WTO prohibition of quantitative restrictions.

Special difficulties arise from the lack of clarity regarding the status of electricity under WTO law. While electricity is listed in the goods’ schedules of concessions of WTO members and has already been treated as such in WTO disputes,³¹ it seems possible to consider electricity as a process, where electricity in generation would be treated as a good, while electricity in transmission would be treated as a service.³² In the latter case, rules of the General Agreement on Trade in Services (GATS) would apply. Energy services, however, are not listed as separate categories in the services schedules of WTO members, because they have long been perceived as accompanying elements of energy goods. The absence of energy services on the WTO’s Services Sectoral Classification List (W/120) adds difficulties to the current negotiations on liberalization of trade in environmental goods and services (EGS), including those related to RE energy equipment.

²⁷Marceau (2012), pp. 385–389. See also Howse (2009), p. 3.

²⁸Luo Xing et al. (2015), pp. 513 ff.

²⁹Some WTO members have also made tariff concessions for energy commodities, including electricity (HS 2716).

³⁰While quantitative restrictions on trade is prohibited under Art. XI GATT, it is difficult to extend this prohibition to OPEC quotas concerning goods (oil) at the extraction (production) stage.

³¹See e.g. Appellate Body Report, *Canada-Renewable Energy*, WT/DS412/AB/R, adopted on 24 May 2013.

³²See e.g. Howse (2009), p. 15.

An additional layer of complexity is due to the question of whether a regulatory differentiation in treatment of electricity generated from fossil fuels and RE sources ('grey' vs 'green' electricity) is compatible with WTO law. This has never been clarified by WTO adjudicative bodies. While it is not possible to distinguish 'green' and 'grey' electricity based on the physical properties once electricity has been fed in the transmission networks, tax exemptions for green electricity could be implemented through the certificates of origin of electricity. Whether such a scheme could pass the non-discrimination test under WTO rules or whether it would need justification under the environmental exceptions of Article XX GATT remains an open question.³³ In the latter case, space for regulatory manoeuvre would be limited, given the strictness of the conditions, under which justification of a measure could be accepted, as set out in the Chapeau of Article XX.

Legal uncertainty also exists with respect to the use of feed-in-tariffs (FIT) and other support schemes for renewable energy. The rules of the WTO's Agreement on Subsidies and Countervailing Measures (ASCM) may put them in the category of actionable subsidies, against which other WTO members could bring a complaint in the WTO dispute settlement or use countervailing duties (CVD). Moreover, in the Canada-Renewable Energy dispute, the AB ruled that the use of local content requirements in combination with a FIT scheme for solar and wind energy producers in the province of Ontario was not allowed.³⁴ Local content requirements are also the reason why India has recently lost a dispute with the US over its support program for solar energy.³⁵ The strict rules on the use of subsidies for renewable energy raise concerns about the lack of possibility for developing countries to develop their own RE production.³⁶

By contrast, fossil fuel subsidies are hardly captured by WTO rules. Fossil fuel subsidies, such as dual prices for exports and internal consumption, apply across the board to all industries and companies, and thus they are neither considered to be export or import substitution-related (and hence not prohibited) nor specific (and hence not actionable). Thus, WTO rules are unable to constrain the use of fossil fuel subsidies, which, in case of their elimination, could provide up to half of the GHG emission reductions necessary to effectively combat climate change.³⁷

Finally, WTO rules fail to meet the challenges pertinent to the use of energy infrastructure, especially those related to energy transit and third party access. Article V of the GATT, which provides freedom of transit³⁸ and regulates the

³³Holzer et al. (2016).

³⁴Appellate Body Report, *Canada-Renewable Energy*, WT/DS412/AB/R, adopted on 24 May 2013.

³⁵Panel Report, *India —Solar Cells*, WT/DS456/R, circulated on 24 February 2016.

³⁶Pierson (2015).

³⁷Meyer (2013).

³⁸Under Art. V:2 GATT, '(t)here shall be freedom of transit through the territory of each contracting party, via the routes most convenient for international transit, for traffic in transit to or from the territory of other contracting parties. No distinction shall be made which is based on the

imposition of transit charges, also applies to transit of gas through pipelines and electricity through power networks.³⁹ In addition, some recently acceded WTO members, particularly Ukraine, have undertaken freedom of transit obligation also with respect to energy in their WTO accession protocols. Yet, no disputes related to energy transit have ever been decided in the WTO, and there is lack of clarity about the application of the Article V provisions to transit of energy. The new WTO's Trade Facilitation Agreement (TFA), signed in 2013, has not advanced the law of Article V GATT as expected, despite this question being put forward by several actors in the past, including the EU and Switzerland.⁴⁰ It is unclear, for example, whether freedom of transit would bind private owners of energy infrastructure, as the WTO Agreement creates obligations for states only. Furthermore, there are no explicit provisions in the current WTO framework obliging member states to develop energy infrastructure for the benefit of other member states, nor is there a guarantee of competition and private investors access to energy infrastructure.⁴¹ In sum, WTO rules do not regulate the establishment of capacity for energy transportation and thus have no impact on the expansion of electricity networks enabling long-distance cross-border electricity trade in RE and increasing of reliability and cost-effectiveness of energy supply.

3.2 *Rules of the Energy Charter Treaty*

The Energy Charter Treaty (ECT) specifically deals with trade and investment in the energy sector.⁴² It combines legally binding ('hard') obligations – in particular with regard to investment protection, trade and transit provisions – with content that may be described as 'soft law', such as the provisions on energy efficiency and on issues as diverse as environmental protection, competition, technology transfer and access to capital.⁴³

The importance of the ECT for attracting investment in the energy sector stems from its investment protection provisions. They cover both direct and portfolio

flag of vessels, the place of origin, departure, entry, exit or destination, or on any circumstances relating to the ownership of goods, of vessels or of other means of transport'.

³⁹See e.g. Yanovich (2011), pp. 26–27; Cossy (2010), p. 115.

⁴⁰TFA contains no energy-specific provisions.

⁴¹See e.g. Ehring and Selivanova (2011), p. 81, concluding that 'the issue of construction of new transit capacity is not tackled by the GATT 1994'.

⁴²Under Articles 2 and 3, contracting parties undertake to promote long-term cooperation in the energy field and develop an open and competitive market for energy materials and products.

⁴³For instance, the Protocol on Energy Efficiency and Related Environmental Aspects (PEEERA) reinforces the commitment to undertake a good faith effort to minimize harmful environmental impacts resulting from the energy cycle. It promotes the use of market-based instruments, aiming at internalizing the full costs of the energy cycle into relevant pricing decisions. PEEERA requires its signatories to develop energy efficiency strategies and follow up on the implementation.

investments associated with a wide range of economic activities in the energy sector, such as energy exploration, extraction, refining, production, transmission, distribution and trade.⁴⁴ However, no legally binding commitments exist vis-à-vis the non-discriminatory treatment of investments at the pre-investment stage.⁴⁵ As the ECT proclaims the principle of sovereignty over energy resources, its parties are free to choose the ownership and structure of their energy sector, including whether to grant access to foreign investors or not.⁴⁶ Consequently, the ECT's legally binding non-discrimination commitments only apply to already established investments (the post-investment stage). Importantly, this commitment also extends to state-owned enterprises (state energy monopolies).

With regard to post-establishment conditions, contracting parties commit to comprehensive non-discrimination (e.g. MFN, NT). Pursuant to paragraph 1 of Article 10, investors are ensured of stable, equitable, favourable and transparent conditions, including fair and equitable treatment. Investors "shall also enjoy the most constant protection and security" and not be impaired in their management, maintenance, use, enjoyment or disposal by "unreasonable or discriminatory measures". The ECT also obliges contracting parties to observe any obligations they have entered into with an investor or an investment of an investor of any other contracting party. Expropriation is only permitted under narrowly circumscribed conditions: it needs to be in the public interest, non-discriminatory and carried out under due process of law; compensation shall be prompt, adequate and effective (Art. 13). The ECT parties are also obliged to guarantee the free transfer on investment funds (Art. 14).

The ECT's investment provisions under Articles 10–17 generally draw on the consolidated state of play with regard to bilateral investment treaties (BITs). In doing so, they reflect the sometimes contradictory interests of ECT contracting parties that include some very energy-dependent and some very energy-rich states. Whereas the ECT confirms the freedom of each contracting party to decide whether and to what extent energy resources will be developed, and whether and to what extent the energy sector will be opened to foreign investments, rules on the exploration, development and acquisition of resources must be publicly available, non-discriminatory and transparent.

The investor-state dispute settlement (ISDS), provided under Article 26, gives teeth to substantive investment protection provisions. An investor in the energy sector can initiate a dispute settlement procedure against a host state. In cases of nationalization or expropriation and impairment of investment management, maintenance, use, enjoyment and disposal by unreasonable or discriminatory measures,

⁴⁴ECT Art. 1(5) and (6).

⁴⁵This pre-authorization stage was meant to be covered by a follow-up Supplementary Treaty. See Selivanova (2011), p. 383.

⁴⁶This also includes the right to selectively earmark only certain parts of its territory for exploration and development of its energy resources, determine the conditions pursuant to which exploration and exploitation are permitted, and set the environmental and safety standards as energy producing countries deem acceptable. See Art. 18 ECT.

investors can bring complaints to the domestic courts of the host state, ICSID (if both host state and home state are parties to the ICSID Convention) or international arbitration under the UNCITRAL or Stockholm Chamber of Commerce arbitration rules.⁴⁷ About 90 cases have been brought by investors under Art. 26 of the ECT so far, of which probably one of the most famous is the Yukos case, administered under the UNCITRAL arbitrations rules by the Permanent Court of Arbitration in the Hague. In that case, the Russian oil and gas company Yukos was awarded 50 billion USD (the largest arbitration award in history) in compensation for the expropriation of the company's assets by the Russian state.⁴⁸ More recently, the ISDS under the ECT has also showed to be able to balance the interests of investors and states in matters concerning the efficiency of support schemes for renewable energy. In the case brought by the Dutch company Charanne B.V. and Luxembourg's Construction Investments S.A.R.L. against Spain, Spain's Supreme Tribunal rejected the investors' claim, which called for compensation for cuts made to a feed-in tariff for solar energy.⁴⁹

Trade-related provisions of the ECT cover the full range of energy materials and products, as well as energy-related equipment consisting of more than 70 categories of items, such as pipelines, turbines, nuclear reactors, power masts, platforms, transformers and pumps.⁵⁰ The ECT regime for energy trade is based on the WTO rules for trade in goods but extends the GATT's reach to those ECT contracting parties that are not members of the WTO.⁵¹ The main addressee of this 'WTO by reference' approach of Article 4 used to be the Russian Federation, which has in the meantime not only joined the WTO but has also stopped the (provisional) application of the ECT. However, the ECT goes beyond WTO rules in the issues of energy transit.

Article 7 ECT, which also applies to high-voltage electricity transmission grids and lines, contains generally all freedom of transit and non-discrimination rules found in Article V GATT. But in addition to the requirement to take 'necessary measures' to facilitate the transit of energy, paragraph 2 of the article stipulates that ECT contracting parties "shall encourage relevant entities to co-operate in ... (b) the development and operation of Energy Transport Facilities serving the Areas of more than one Contracting Party; (d) facilitating the interconnection of Energy Transport Facilities". Paragraph 4 further requires that "(i)n the event that Transit of Energy Materials and Products cannot be achieved on commercial terms by means of Energy Transport Facilities the Contracting Parties shall not place

⁴⁷ECT Art. 26 (2). See also Ruff et al. (2014).

⁴⁸PCA Case No. AA 227, final award of 18 July 2014.

⁴⁹Spain's Supreme Tribunal case no. 062/2012, with award rendered on 21.01.2016.

⁵⁰See Trade Amendment of 1998, Annex EQ I.

⁵¹It should be noted that in those cases, where a dispute over energy trade matters arises between ECT contracting parties, of which at least one is a non-WTO member, the ECT provides for its own state-to-state dispute settlement. However, if all parties to a dispute are WTO members, such a dispute must be resolved at the WTO. See Selivanova (2011), p. 379.

obstacles in the way of new capacity being established". Thus, the right to transit under the ECT is more effective than under the GATT, arguably allowing for the interpretation that governments will have little excuse not to authorize and support the construction of new energy transport facilities if investors are willing to pay for the construction and if, as provided in paragraph 5(a), this construction does not endanger the security or efficiency of transit country's energy systems.⁵² Nevertheless, the problem to make the freedom of transit obligation under the ECT a fully effective right lies in the relative discretion of the state to decide if the construction of transit facilities could present the risk for its security or efficiency of its energy system.⁵³ Moreover, according to paragraph 9 of Article 7, ECT contracting parties have discretion regarding the type of energy transport facilities they want to allow for the construction in their territory.

The ECT does not require mandatory third party access, which is a highly sensitive topic for countries with monopolized energy sector structures.⁵⁴ In this respect, it is worth recalling that the ECT explicitly affirms that state contracting parties enjoy full sovereignty over energy resources. While this may be a truism as a matter of principle,⁵⁵ this theme plays out prominently in the debate about the promotion of competition in the energy sector. Another drawback of the ECT energy transit regime is that although paragraph 7 of Article 7 provides for conciliation of disputes arising out of transit, it is limited to disputes over already launched transit and does not cover cases of refusal of granting transit.⁵⁶ Moreover, this possibility has never been used by states and proved to be of little help at the times of the Russia-Ukraine conflicts over gas supplies.

More effective and specific rules applicable to transit could have been provided by the Energy Transit Protocol – a treaty, which was negotiated among ECT parties but which has never been adopted.⁵⁷ It would introduce rules which would 'facilitate the construction, expansion, extension, reconstruction, and operation of Energy

⁵²Ehring and Selivanova (2011), pp. 84–86.

⁵³Ibid.

⁵⁴Wälde and Gunst (2002), pp. 209–211. It should be mentioned that to some extent the absence of the TPA obligation is mitigated by non-discrimination rules imposed on state owned energy enterprises (energy monopolies). Pursuant to Art. 22, ECT parties may not encourage or require their state enterprises to engage in practices inconsistent with any other ECT obligation of that contracting party, such as encouraging or requiring to charge a higher transit fee to foreign pipeline users. Moreover, ECT parties have to ensure that their state enterprises respect the investment-related Treaty provisions when they sell or otherwise provide goods and services. State enterprises are obliged, for instance, to supply natural gas or electricity to foreign investors at prices no higher than those charged to domestic companies.

⁵⁵Cf. UNGA Res 626 (VII) of 21 December 1952 ('sovereignty of any state over its natural resources') and the famous UNGA Res 1803 (XVII) of 14 December 1962 on 'Permanent sovereignty over natural resources' pursuant to which the 'right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development and of the well-being of the people of the State concerned.'

⁵⁶Selivanova (2011).

⁵⁷Negotiations ended in 2011 without signing.

Transport Facilities used for Transit'.⁵⁸ The draft Energy Transit Protocol contains an obligation of a contracting party to ensure a transparent and non-discriminatory procedure for the authorization of the construction of energy transport facilities.⁵⁹ Had it been adopted, this agreement would have provided a more effective and practical system of rights and obligations of states and private investors with respect to the establishment of new energy transit facilities, including electricity transmission lines. Currently, these rights and obligations remain mere intentions.

4 Recent Developments in International Negotiations on Energy

The awareness about the urgency of solutions to energy security and climate change, which has increased in recent years due to the changes in geopolitical situation and the breakthrough in climate negotiations, has given a new impetus to negotiations on energy in international fora. The most notable developments concern liberalization of trade in green energy and energy equipment and the expansion of the geographical scope of participants. In addition, energy has become a central topic of regional trade negotiations. While not being able to solve all the existing regulatory problems of energy governance, these developments can be seen as important building stones in the international regime on energy trade and investment.

4.1 *Negotiations of the Environmental Goods Agreement*

A recent development in the WTO with potentially high relevance for energy has been the launch of the negotiations of the Environmental Goods Agreement (EGA) aimed at the elimination or at least a significant reduction of tariffs on products contributing for achieving environmental protection goals. These negotiations build upon the preceding negotiations on liberalization of trade and investment in environmental goods (EG) at the regional forum for Asia-Pacific Economic Cooperation (APEC).⁶⁰ In 2011–2012, APEC countries committed themselves to the reduction of applied tariff rates on EG to 5 % by the end of 2015 or less and adopted a list of EG on which the tariffs would be reduced.⁶¹ Two years later, at the World

⁵⁸Art. 2 of draft Energy Transit Protocol. See Ehring and Selivanova (2011), p. 96, fn. 162.

⁵⁹Furthermore, various safeguards are foreseen to prevent the interruption of transit.

⁶⁰APEC consists of 21 countries of the Pacific Rim including the US, China, Japan, Australia and Russia.

⁶¹See Annex C 'APEC List of Environmental Goods' of the 2012 APEC Leaders' Declaration signed on 8–9 Sept. 2012 in Vladivostok. This initiative of APEC countries has been without prejudice to their positions in the WTO.

Economic Forum in Davos, some of those APEC countries (Australia, Canada, China, Taiwan, Hong Kong, Japan, Korea, New Zealand, Singapore and the US) were joined by some non-APEC countries (Costa Rica, the EU, Norway, Switzerland and Iceland) and together they initiated negotiations of the EGA within the WTO.⁶²

Negotiations of such an agreement within the WTO is in line with the WTO's Doha Development Agenda (DDA) adopted in 2001, which, among other tasks, mandates WTO members to start negotiations on "the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services".⁶³ EGA negotiations are based on the 'critical mass' principle: the agreement would enter into force once countries representing a critical mass in EG trade, agreed to the deal. Of course, benefits of increased market access resulted from the elimination/reduction of tariffs would be shared with all WTO members pursuant to Article I GATT. The number of participants in EGA negotiations (currently 17 countries) is close to reaching a critical mass in EG (about 90 % of pertinent trade).⁶⁴

The negotiations over liberalization of trade in EG under the new agenda of EGA are currently stalled due to disagreement among negotiating parties over the content of the EG list.⁶⁵ The draft agreed list contains 350 tariff lines and ex outs, i.e. products, which are not captured by tariff codes under the Harmonised System (HS).⁶⁶ The products included relate to such areas as clean energy, energy efficiency, air pollution control, environmental monitoring and analysis etc.⁶⁷ Some countries (e.g. China) also object to the immediate elimination of tariffs, preferring reductions to complete elimination.

The EGA negotiations use the APEC list of 54 EG as starting point. Some of the products listed are crucial for RE, such as solar panels, and gas and wind turbines. Yet, tariffs on these products are already low, as they are covered by the WTO's

⁶²See Joint Statement Regarding Trade in Environmental Goods, 24 January 2014 at Davos, Switzerland. The negotiations were later joined by Israel and Turkey, so that currently the total number of negotiating countries is 17.

⁶³Para 31 (iii) DDA.

⁶⁴What constitutes the critical mass is nowhere defined, but it is usually understood to constitute 90 % of all trade volumes in the negotiated area of trade. See Goff (2015).

⁶⁵See 'Environmental goods agreement trade talks stall ahead of Nairobi ministerial', *Bridges*, 9 December 2015. There has also been a debate in the WTO on what constitutes an environmental good and an environmental service. The questions that have been asked include: How to account for dual use of products? Should goods produced using "cleaner" processes be considered environmental? How to catch up with rapid technological changes that require corrections in the list based on HS for goods or W/120 for services classification? For more on this, see Cottier and Baracol (2009).

⁶⁶The HS of the World Customs Organisation serves as the basis for schedules of tariff concessions of WTO members. See Appellate Body Report, *EC-Chicken Cuts*, WT/DS269/AB/R, adopted on 27 September 2005, para. 199.

⁶⁷*Ibid.*

Information Technology Agreement (ITA), to which all 17 negotiating countries are parties.⁶⁸ Thus, the effects of tariff reduction (should countries not agree on complete elimination of tariffs) would be small, unless the EGA would lead to the full elimination of tariffs. However, tariffs on energy-related products which are not covered by the ITA may constitute up to 35%.⁶⁹ An important step in liberalization of EG trade would also be an exemption of EG from trade remedies. Antidumping and countervailing duties are actively used by the US against imports of solar panels and wind turbines from China, significantly raising their price in the US market. China does the same in response, turning the wheel of ‘solar and wind wars’.⁷⁰ Unfortunately, the use (or non-use) of trade remedies is not part of EGA negotiations.⁷¹

Nevertheless, the EGA is expected to be a first step towards a broader liberalization of trade related to green technologies. If concluded, this agreement might expand its scope in the future to additional EG, as technologies develop, and also to environmental services and non-tariff barriers.⁷² The reduction of trade barriers to environmental goods and services (EGS) would make RE technologies cheaper and thereby support the competitiveness of RE in relation to fossil fuel energy and facilitate technology transfer to developing countries. Thus, a successful conclusion of the EGA would be an important piece in the global energy governance puzzle.

4.2 *International Energy Charter*

Despite increasing scepticism as to the ECT’s ability to become the regulatory hub and the major point of reference for all matters related to the international regulation of energy trade and investment,⁷³ the Energy Charter might regain its appeal due to the expansion of its geographical scope, as negotiations centre for matters of high importance to developing countries. The interest of the Energy Charter to establish some distance to the EU, which was instrumental to its coming into existence, seems to concentrate its political capital on new endeavours such as the Energy Community. This coincides with the interests of China, India and other emerging economies, which are as energy-dependent (if not more so) as the EU or Japan and seem keen to have their supply interests secured. Suppliers of energy are

⁶⁸ITA currently includes 81 WTO member countries.

⁶⁹USTR (2015). One example is a tariff on energy-efficient lighting, which in India constitutes 30% (and nontariff barrier to it is equivalent to 106%). See Goff (2015), p. 6.

⁷⁰Vermulst and Meng (2016).

⁷¹Goff, p. 6.

⁷²USTR (2015).

⁷³The role of ECT has been weakened by the Ukraine-Russian gas conflict and the subsequent retreat of Russia, as well as the lack of progress with regard to several envisaged side agreements, such as the one on transit, environmental aspects and technology.

also interested in a manageable forum, where their voice can be heard and translated into international law-making. Despite their wealth, energy suppliers are technologically challenged and, in addition, concerned about the consequences of climate change. They also share a significant degree of political volatility. Hence, an organization offering to develop multilateral and mutually beneficial and reciprocally advantageous energy negotiations may prove sufficiently attractive to allow the ECT's membership base to expand.

Against this background, the ECT contracting parties adopted the Consolidation, Expansion and Outreach (CONEXO) policy aimed at winning over countries that have yet to ratify the ECT. In particular, the ECT Secretariat seems to target more than 30 observer countries inclining them to accept full membership by threatening to abolish the quasi-permanent observer status. The CONEXO process is expected to lead to an updated treaty (Energy Charter 2.0) with an enlarged membership and an extended scope of covered issues. If successful, this process may turn the ECT into the centre of gravity of global energy governance. A first step towards such an outcome was made in June 2015 with the signing of a declaration on the International Energy Charter (IEC). Under the new declaration, countries from six continents agreed to create a climate favourable to the operation of enterprises and to the flow of investments and technologies in order to achieve the objectives of sustainable energy development.⁷⁴ In particular, they undertook to attempt joint or coordinated action in the fields of access to energy sources and energy markets, liberalisation of trade in energy, promotion and protection of investments in all energy sectors, technology transfer and dissemination, energy efficiency, environmental protection and sustainable and clean energy, as well as diversification of energy sources and routes. The IEC signatories also wish to facilitate the realization of infrastructural projects aiming to provide global and regional energy security. While the IEC is non-binding, the adherence by more than 70 countries with varying roles in the global energy chain and different levels of economic development strengthens international cooperation with regard to the goal of universal sustainable energy access. It may constitute a first step towards a legally binding outcome of the ECT's reform which would be an important development regarding global energy governance.

4.3 Transatlantic Negotiations on Energy

The issues of energy trade and investment are also dealt with in regional fora. Regional cooperation is especially important for the development of cross-border interconnectors and the enhancement of security of energy supplies. It is instrumental for the establishment of power pools, development of regional energy markets and integration of renewable energy sources. With various degrees of

⁷⁴ECT (2015).

success, energy issues have also been addressed under regional trade agreements (RTAs).⁷⁵ Some RTAs contain provisions on energy trade and investment that go beyond WTO rules. The most remarkable in this respect is the North American Free Trade Agreement (NAFTA). Its Chap. 6 on Energy and Basic Petrochemicals prohibits dual pricing practices and the use of export duties in energy trade between the parties (Art. 603 and 604). However, the development of cross-border electricity network and access to energy infrastructure are not addressed by NAFTA energy provisions. In this respect, NAFTA Article 601 confirms full respect for the Constitutions of the parties, thus setting limits to the regulatory leverage of the FTA with respect to energy trade and investment in general and the establishment of energy infrastructure in particular.⁷⁶

Building on existing regional cooperation, the EU and the US address energy trade and investment within the negotiations of the Transatlantic Trade and Investment Partnership (TTIP). Indeed, the TTIP may contain a separate chapter on energy.⁷⁷ The energy negotiations in TTIP are motivated not only by the lack of international disciplines on trade in energy and raw materials, but also by the challenges experienced by the EU in the field of energy security.⁷⁸ The conclusion of an agreement between the EU and the US may result in the liberalization of the US energy export regime. This would lead to lifting export restrictions for oil and gas and facilitating the supply of the liquefied shale gas from the US to Europe.⁷⁹ Other elements discussed include transit of electricity through transmission networks, including third-party access and regulatory control of an independent regulator, and cooperation in the area of renewable energy, including support of the relevant projects.⁸⁰ If the TTIP is concluded containing the envisaged energy provisions, it will have an impact on the development of international energy regulation. The TTIP rules on energy, particularly those related to the promotion of competition in the energy market and the expansion of the share of renewable energy in the energy mix, would influence the pertinent discussion and could serve as a model for multilateral rules on energy trade and investment.

⁷⁵Cooperation in the energy sector is part of regional integration within the South African Development Community (SADC). To increase power accessibility and facilitate the integration of RE sources, nine member states of SADC have merged their electricity grids into the Southern African Power Pool (SAPP). Despite these efforts, the scale of electricity trade within SAPP remains small leading to continuing inefficiencies in the distribution of electricity in the region. See Uddin and Taplin (2015), p. 500.

⁷⁶See Art. 18 ECT and Art. 601 NAFTA, respectively.

⁷⁷EU (2013).

⁷⁸Espa and Holzer (2015).

⁷⁹Ibid.

⁸⁰EU (2013).

5 Conclusion

International rules for energy trade and investment fail to address issues critical for achieving the sustainable development goal of clean energy access for all. They fall short to effectively support renewables in their competition with fossil fuels, enable green technology transfer and meet the needs of the energy sector of developing countries, primarily with regard to the delivery of energy access to the poor. They do not explicitly address the problem of energy security, which is currently dealt with by homogeneous sub-sets of the international community, indicating that the issue seems not yet ready for being addressed at a multilateral level.⁸¹ Therefore, the recent developments in international energy-related forums, such as the negotiations of the Environmental Goods Agreement in the WTO, the declaration on the International Energy Charter and the energy negotiations under the Transatlantic Trade and Investment Partnership are welcome attempts to fill the gaps in the international framework for energy trade and investment.

International rules applicable to energy trade and investment are dispersed among several international agreements. Tackling the issues of energy trade and investment in one international agreement could bring more clarity and coherence in the international regulation of energy but it seems to require an amount of political capital that nobody is currently willing or able to spend. Anyone dealing with WTO law is reminiscent of past experiences with a special status for a 'special product' category. It took 50 years to bring agricultural products back into the realm of 'general' world trade law, despite ongoing significant differences as to how that 'general' law is applied to this product category. Efforts to classify cultural goods as *extra commercio* have, at the technical level, been largely unsuccessful: while there are very limited GATS commitments in both quantitative and qualitative terms, the creation of an a priori special regime has been rejected.⁸² 'General' trade rules, as it has been shown in that case and is visible in the very diverging tariff rates with regard to goods, allow a very significant degree of differentiation, without creating special regimes.⁸³

The creation of a truly global regulatory regime for energy is hampered by the political sensitivity of the subject. Sovereignty of states over energy resources limits the impact of international energy regulations on the organization of national energy sectors, including competition and participation of foreign investors. Divergent national norms regarding energy are the consequence. Other barriers to a

⁸¹Security of supply is addressed by the International Energy Agency (IEA), currently comprising of 29 developed countries. Under the IEA's Coordinated Emergency Response Mechanism, oil stocks of IEA member states are kept at the amount equivalent to at least 90 days of net oil imports. See Leal-Arcas et al. (2014), p. 43.

⁸²Hahn, M (2006).

⁸³Whereas the EU has internally subjected decisions on cultural goods to a different voting procedure (Art. 207 (4) TFEU), it has a priori excluded them from commitments in its free trade agreements.

single and comprehensive trade and investment regime for energy include differences in the interests of energy-exporting and energy-importing, as well as developed and developing countries. For instance, the goal of expansion of the share of RE needs to be balanced against the basic needs of electrification in some countries. Finally, special regulatory needs of certain types of energy cannot be dealt with under general conditions for energy trade and investment. This particularly applies to nuclear energy, which is regulated by separate international institutions, including the International Atomic Energy Agency (IAEA), due to nuclear safety and proliferation concerns.

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