Energy in WTO law and policy

THOMAS COTTIER, GARBA MALUMFASHI, SOFYA MATTEOTTI-BERKUTOVA, OLGA NARTOVA, JOËLLE DE SÉPIBUS AND SADEQ Z.BIGDELI [*]

KEY MESSAGES

- The regulation of energy in international law is highly fragmented and largely incoherent. We submit that pertinent issues should be addressed by a future Framework Agreement on Energy within WTO law.
- Successful regulation of energy requires a coherent combination of rules both on goods and services. Energy services require new classifications suitable to deal coherently with energy as an integrated sector.
- Rules on subsidies relating to energy call for new approaches within the Framework Agreement on Energy. A distinction should be made between renewable and non-renewable energy. Moreover, disciplines need to be developed in the context of emission trading.
- The Framework Agreement should address the problem of restricting energy production and export restrictions.
- Disciplines on government procurement are able to take into account policies on green procurement, but a number of changes to the GPA Agreement will be required to make green procurement more effective and attractive.
- In view of the close interactions between the energy sector and climate change, formulating effective rules to address energy under the WTO system will catalyse coherence and complementarity between the climate and trade regimes

A. Introduction

60 years ago, when the rules of the GATT were negotiated, world energy demand was a fraction of what it is today and so were energy prices.[1] While energy has always been a crucial factor in geopolitics, at that time liberalising trade in energy was not a political priority. The industry was largely dominated by state run monopolies and thus governed by strict territorial allocation. International trade in energy resources and products was heavily concentrated, cartelised and controlled by a few multinational companies. This explains why the rules of the General Agreement on Tariffs and Trade (GATT), and now the World Trade Organization (WTO), do not deal with energy as a distinct sector. It was felt that general rules, including the disciplines on state trading, could adequately address trade in energy. Also, no special agreement on trade in energy has emerged in any of the sectorial agreements that have been drawn up since the Kennedy Round. Yet since basic WTO rules are applicable to all forms of trade, they also apply to trade in energy goods and services.[2] Today, these rules

[*] Individual Project No. 6, 'Energy in WTO law and policy'. Contact: olga.nartova@wti.org.

[1] M. A. Adelman, 'World oil production & prices 1947-2000' (2002) 42(2) *The Quarterly Review of Economics and Finance* 170.

[2] For more see: O. Nartova, 'Trade in Energy Services Under WTO Law: The Impact of Competition Policies',

can be enforced through the WTO dispute settlement mechanism even if they were not primarily negotiated with energy in mind. [3]

Certain features of the energy sector make it different from other industries in many ways. First, energy goods have peculiar physical characteristics, which influence means of storage, transportation and distribution. Then, particular challenges are associated with the existence of natural monopolies, as well as with the role of state-owned enterprises that dominate some national energy markets. Furthermore, in the Uruguay Round, WTO Members tried but did not manage to address effectively the practice of using dual energy prices and export restrictions.[4] They also undertook very limited commitments to grant access to their energy markets to foreign service operators. Hence, we submit that current WTO rules do not deal properly with trade in energy.

In recent years, energy topics have reappeared on the negotiations agenda. There are several reasons for this:

- Several energy-exporting countries have recently joined the WTO and others are currently negotiating their accession[5], hence, a substantially larger amount of energy trade is now in the hands of WTO Members trade.
- Increasing energy needs have led to a growing interest in competition rules and export restriction practices.
- Progressive unbundling of vertically integrated state-owned entities offers a way for private operators to enter energy markets.
- The relationship of trade and the environment and the debate on sustainable development is strongly bound to energy. The correlations between trade, energy and climate change and the role of biofuels are also bringing attention to the trade in energy under multilateral trade regulation.[6]

Energy has been discussed in the ongoing Doha negotiations. For the first time, Members have been discussing energy as a specific services sector.[7] Energy issues motivate discussions on export taxes and export restrictions on raw materials. Another aspect of the ongoing round of negotiations is a balance between promotion of environmental goods and services and fossil fuel subsidies. Finally, the energy related negotiations in the current round are focusing on biofuels. When dealing with biofuels there is a need for a balance between climate change and energy security concerns, and their impact on agriculture in order to avoid creating new environmental problems.

Thus, energy and trade is a volatile field. A number of relevant issues were taken up in doctoral research and in working papers within the overall project. They essentially relate to the dilemma whether energy is a good or a service and the issue of classification. They cover energy subsidies, the experience of emissions trading in EC law, the status of the Organization of the Petroleum Exporting Countries (OPEC) in WTO law and the climate

---

PhD thesis, University of Bern (2009); S. Matteotti, 'Oil Supply Management Practices of OPEC under the World Trade Organization Rules and the National Competition Laws' PhD thesis, University of Bern (2010).

[3] P. Lamy, speech at the 20th World Energy Congress on 15 November 2007 in Rome.

[4] For more on dual pricing see J. Selivanova, 'Energy Dual Pricing in WTO Law' (Cameron May, 2008).

[5] Saudi Arabia, Oman and Ukraine have recently become WTO Members, while Russia, several Central Asian countries, Algeria, Libya, Iran and Iraq are currently observers.

[6] For a comprehensive overview of the interlinkages between trade and climate change see T. Cottier *et al.* (eds.), *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, 2009).

[7] P. Lamy, speech at the 20th World Energy Congress on 15 November 2007 in Rome.

change mitigation potentials of energy efficient government procurement policies. We submit in conclusion that these issues would best be dealt within a future WTO Framework Agreement on Energy, which would enable greater coherence to be brought about.

B. The current status of energy in WTO Law (oil, gas, coal and electricity)

I. Oil, gas and coal

Traditionally, the energy industry has not distinguished between energy goods and energy-related services. This is because energy services were perceived as a value added to energy goods which could not be dealt with separately. Privatisation and liberalisation of the sector led to market reform which resulted in a conceptual separation of goods and services trade. Hence, the need for a clear legal framework to address this distinction emerged.

Oil and solid fuels such as coal clearly fall within the category of goods; they are easily stored and traded across borders. Crude oil is treated as a global commodity and has been traded internationally since the 1860s. Trade in crude oil represents the key link between the two poles of the industry: upstream and downstream, and crude oil prices give signals to both.[8]

The same applies to natural gas. It is traded across borders via pipelines and although it can be stored in its gaseous form, it is increasingly being liquefied for the purposes of transportation to remote regions and for storage.

It is commonly understood that under the WTO rules, production of energy goods comes within the scope of the General Agreement on Tariffs and Trade (GATT), while energy-related services, including transmission and distribution, fall under the scope of the General Agreement on Trade in Services (GATS). [9]

II. Electricity

Modern society and production methods are inconceivable without electricity. It is a secondary energy source which results from the conversion of primary sources of energy, such as coal, natural gas, oil, nuclear power, wind and solar energy. Unlike oil and gas it is not a physical substance that can be stored easily. Electricity is a physical process which takes place throughout the cables that carry it and it has to be generated more or less at the same time as it is being used.

The invention of the generator capable of producing alternating current is at the heart of the present structure of the power industry – a system which generates electricity in large power stations at remote sites and carries it over long distances to reach its final users.[10] Its value chain consists of four activities: *generation* which converts energy sources into electricity, *transmission* which occurs when electricity is transmitted over high voltage networks to major demand centres; *distribution* which is the process by which transmitted power flows to the final consumers such as factories and homes; and *supply* – the name given to the metering, billing and other services provided to the final consumers.[11]

---

[8] Energy Charter Secretariat, Putting a Price on Energy: International Pricing Mechanisms for Oil and Gas (2007) p. 67.

[9] WTO, Energy Services, Background Note by the Secretariat, S/C/W/52 (9 September 1998), para. 36.

[10] For more on the functioning of the power industry see W. Patterson, *Transforming Electricity* (Earthscan, London, 1999).

[11] For more see M.G. Pollitt, 'The impact of liberalisation on the performance of the electricity supply industry:

The WTO law does not contain any specific provisions on electricity. Given the lack of disciplines on services under GATT 1947, electricity was defined as a good irrespective of its peculiar physical properties, in the Harmonized System (HS) Nomenclature[12] on the codification of commodities. The definition is followed by the WTO tariff schedules. Electrical energy is classified under the code 2716. Accordingly, electrical energy qualifies as a good under WTO law and is, as such, subject to the rules of the GATT 1994. The same is true for the European Energy Charter and European Community law. Until the end of the 1980s, EC law hardly ever intervened in the organisation of electricity utilities. Although two of the three founding treaties of the EC were specifically directed at regulating energy,[13] electricity was not dealt with explicitly by any of the three Treaties. Thus, for a long time, it remained uncertain whether the provisions of the EC Treaty applied to electricity.[14] It was only in the 'Almelo' case in 1994[15] that the European Court of Justice (ECJ) explicitly recognised that the rules on the free circulation of goods of the EC Treaty also applied to electricity.

III. WTO and other instruments of international energy law

WTO law is only a minor fraction of international law addressing energy. A wide range of sources and instruments need to be taken into account. Also, it should be recalled that international trade in energy is mainly based upon contracts subject to international private law and commercial arbitration.[16]

Energy issues around the world today are dealt with in a fragmented manner and some of the energy-specific agreements and institutions are described below.

1. Organisation for Economic Co-operation and Development (OECD)/International Energy Agency (IEA)

OECD is an international organisation, established in 1961, with 30 member countries and a budget of 342.9 million euros (as of 2008). The OECD's affiliate organisation, the IEA is a forum for coordinating the energy policies of 28 industrialised countries. The IEA, which addresses all types of energy sources has the following objectives: "improvement of the world energy supply and demand structure, more efficient use of energy, development of alternative energy sources to reduce dependence on any one source, assistance in the integration of environmental and energy policies and the promotion of cooperative relations between oil-producing and oil-consuming countries".[17]

2. Energy Charter Treaty

The Energy Charter Treaty entered into force in 1998; however ratification by some Members is still pending.[18] Several of the WTO Members engage in energy cooperation under this

---

An international survey' *Journal of Energy Literature* 3 (2) (1997), 3–31.

[12] The HS Nomenclature is governed by the Convention on the Harmonized Commodity Description and Coding System, and was elaborated under the auspices of the World Customs Organization (WCO).

[13] On the role of EC law in energy regulation see below, section B.III.5.

[14] ECJ Case 6/64, *Costa v ENEL* [1964] ECR 1141.

[15] ECJ, Case C-393/92 *Almelo and Others* [1994] ECR I-1477, para. 28.

[16] T. Cottier, S. Matteotti and O. Nartova, 'Winterkrieg im Gasgeschäft: Ursachen und Auswirkungen' *UniPress* 140 (2009) 40.

[17] OECD, Energy: The International Energy Agency (available at http://www.oecd.org/document/45/0,3343,en_2649_37459_1921517_1_1_1_1,00.html).

[18] All members have ratified the Treaty except for five: Australia, Belarus, Iceland, Norway, and Russia. Belarus and Russia have accepted provisional application of the Treaty, which means that – pending ratification – they

treaty. The ECT covers various issues related to investments and investor relations. The main elements of the ECT include: 'investment protection[19] (e.g. by granting investors non-discriminatory treatment – national treatment and most-favoured nation treatment – compensation in case of expropriation and other losses, free transfer of capital); trade in energy, energy products and energy related equipment, based on the WTO rules; freedom of energy transit; international dispute settlement, including investor-state arbitration and inter-state arbitration; promotion of energy efficiency, and attempts to minimise the environmental impact of energy production and use'.[20]

3. Organization of the Petroleum Exporting Countries

OPEC is a permanent intergovernmental organisation, currently consisting of twelve oil producing and exporting countries, spread across three continents: America, Asia and Africa.[21] The main goal of OPEC is the coordination and unification of the petroleum policies of its Member Countries, working out ways and means of ensuring the stabilisation of prices in international oil markets with due regard being given to the interests of the producing nations and to the necessity of securing a steady income to the producing countries; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the petroleum industry. [22] When OPEC was founded on 14 September 1960, none of its five founding members[23] was a contracting party to the GATT. This picture has been changing recently.[24]

4. Multilateral environmental agreements

Energy is also addressed by a number of multilateral environmental agreements (MEAs), in particular those relating to climate change, including the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol. Anthropogenic climate change affects the energy sector and threatens the foundations of energy security systems.[25] At the same time, climate change mitigation measures catalyse energy efficiency and motivate energy sustainability policies. Recognising this fact, the climate regime avoided the approach adopted by a number of earlier MEAs which require parties to those agreements to use trade restrictive rules against non-parties to the agreements.[26]

Reduction of greenhouse gas (GHG) emissions is considered a precautionary measure which must be taken in order to avert what both the IPCC reports and the Stern Review Report of 2006[27] warned would be catastrophic to the future well-being of the ecosystem. While the

---

have agreed to apply the Treaty to the extent that it is consistent with their own constitutions, laws and regulations.

[19] For more on regulation of investment see Chapter 11 in this volume. Unless otherwise specified, investment rules apply to the energy sector.

[20] Energy Charter Secretariat, 'The Energy Charter Treaty and Related Documents' (Brussels, 2004).

[21] http://www.opec.org/aboutus/.

[22] Article 2 of OPEC Statute, 443 United Nations Treaty Series, 248.

[23] Kuwait, Iraq, Iran, Saudi Arabia, and Venezuela.

[24] Currently 8 out of the 12 current OPEC member countries – Angola, Ecuador, Kuwait, Nigeria, Qatar, Saudi Arabia, UAE, Venezuela – are WTO Members. Algeria, Iran, Iraq, Libya have observer status.

[25] OECD/IEA, 2007. *Energy Security and Climate Policy: Assessing Interactions* (OECD).

[26] See G. I. Malumfashi, '"Green" public procurement policies, climate change mitigation and international trade regulation: An assessment of the WTO Agreement on Government Procurement', PhD Thesis, Centre for Energy, Petroleum and Mineral Law and Policy, University of Dundee, United Kingdom (2009), Chapter 4.

[27] See IPCC, 2007: *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland; N. Stern, *The Economics of Climate Change The Stern Review*, Cambridge University Press, 2007.

IPCC reports gave the scientific analysis of the climate change situation, the Stern Review report highlighted the economic costs of inaction or delayed action. Thus, the precautionary principle[28] as an environmental protection strategy is well entrenched in the climate change regimes.[29]

The relationship of WTO law to these instruments shares the traits of a complex constellation under the Vienna Convention on the Law of Treaties, addressed in a number of cases in WTO dispute settlement. From the point of view of international law, all instruments find themselves on the same footing, with more specialised or more recent agreements enjoying preferred application vis-à-vis general rules. From the point of view of WTO law, other instruments may only apply to the extent that they influence the application and interpretation of WTO rules. There is even controversy as to whether an agreement to which not all the Members of the WTO are parties can be applied in WTO dispute settlement.

5. Regional Level: European Union (EU) and North American Free Trade Agreement (NAFTA)

The European Community (EC) has evolved since the European Coal and Steel Community (ECSC) Treaty of 1952 which covered an energy policy for coal. The ECSC did not address external relations. Indeed, the six initial member states were free to shape their relations with third countries. In 1957, two other fundamental treaties were signed: the Euratom and the European Economic Community. In 1967, the Merger Treaty allowed for the unification of the institutions of these Communities, covering all the main economic activities, including the rational use of natural resources. At an international level, the EC is active within the international organisations. Being a full member, alongside its Member States, of the WTO, the Energy Charter Treaty, and the Kyoto Protocol, the EC has attempted to establish the leadership in promoting international norms of energy trade.

Implementation of NAFTA began on 1 January 1994. The objective of the agreement was to remove trade barriers between the United States, Canada and Mexico. NAFTA covers various issues related to energy trade, including investment, cross-border services, measures related to trade in energy services, limitations and barriers and measures related to investments in the territories of the parties as well as cross-border trade.[30]

IV. Role of government procurement

Government procurement (GP) is the purchase by a government of the goods and services needed to perform its functions. It is an area of international trade that was previously carved out of the non-discrimination obligations. The Agreement on Government Procurement (GPA) imposes the national treatment and most-favoured nation (MFN) obligations, but it binds only those WTO Members that subscribe to it. Energy efficient GP was identified by the IPCC as a possible policy tool to address climate change. Accordingly, countries began implementing 'green' public procurement as a part of their policy package for climate change.

In terms of its size, government procurement represents up to 18% of the gross domestic product (GDP) in the OECD countries and, in the EU for instance, it amounts to 10–25% of

[28] The precautionary principle provides that activities threatenning to cause serious or irreversible damage should be restricted or even prohibited even before scientific certainty about their impact is established.
[29] See T. Cottier and S. Matteotti-Berkutova, 'International environmental law and the evolving concept of common concern of mankind' in T. Cottier *et al.* (eds.), *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, 2009).
[30] NAFTA Article 603.

GDP.[31] This percentage may well be higher in the case of developing countries. GP apparently plays a major role in promoting the use of environmentally friendly products and motivates the market for climate-friendly technology.

V. Unresolved and controversial issues

The interface of trade and climate change mitigation and adaptation is at the heart of contemporary legal developments in energy law. This was the subject of the World Trade Forum Conference in 2007 at which the different angles were extensively addressed. Yet, the challenges of climate change are merely the tip of the iceberg of unresolved and controversial issues relating to the status of energy in international law. The picture is one of fragmentation with multiple instruments involved. The bulk of regulation comes under domestic law and the role of regional and global law in addressing energy and secure production and supplies has remained unclear and unsettled. Doctrines of multilayered governance have hardly been applied to the sector.

The fundamental divide between goods and services does not offer an appropriate basis for addressing and regulating energy in an integrated manner in domestic and international law. Electricity is a case in point. It is traditionally treated as a good, but in fact, by its nature and its dependence upon grids, it is much more like a service, or perhaps a mixture of both. There is no clear perception of defining energy in terms of goods and services, and services relating to energy are not properly defined under GATS.

Different and competing forms of energy are therefore subject to strongly divergent international rules, depending on whether they qualify as a good or a service. The same applies to the operation of trade remedies, in particular because of the absence of disciplines on subsidies in services. Moreover, existing disciplines on subsidies in goods may not be suitable to address a distinction between renewable and non-renewable energy under GATT and the Agreement on Subsidies and Countervailing Measures (ASCM). The Agreement on Agriculture again offers different disciplines. It thus makes a fundamental difference whether a product is classified as an industrial or an agricultural product.

There are also unresolved and basic issues related to competition policy and thus about the relationship of WTO law and OPEC as a producer organisation. The crucial question is whether oil exporters, when they join the WTO, will still be able to support oil prices through the regulation of oil production, or whether they could face challenges on the basis of GATT/WTO rules and provisions.[32] This leads to the question of whether additional WTO rules on competition are required to properly address the relationship between trade and production in the energy sector.

Finally, the relationship of energy and government procurement remains unclear. WTO law disciplines on government procurement seek to facilitate market access and level the playing fields in purchases of goods and services by governments. The current rules on government procurement both within and outside the WTO do not systematically address the linkage to green procurement. There is therefore controversy as to what extent Members are entitled to condition government procurement in the light of goals set out in the Kyoto Protocol.

WTO law thus leaves a number of basic incoherencies and open questions. They were partly addressed in the papers and the doctoral projects of Individual Project No. 6 of the NCCR Trade Regulation and at the World Trade Forum 2007. The main findings are discussed within the following agenda for reform.

---

[31] OECD, *Greener Public Purchasing: Issues and Practical Solutions* (OECD, 2000).
[32] H.Abdallah, 'Oil exports under GATT and the WTO' *OPEC Review* 29(4) (2005), 267.

C. Agenda for Reform

I. Towards a WTO Framework Agreement on Energy

Energy requires an integrated approach and does not lend itself to sectoral negotiations, depending upon different forms of energy applied to competing energy sectors. The sector encompasses fossil and non-fossil fuels and energy including oil, gas, coal, wood, electricity, atomic energy[33] and renewable sources of electrical energy production (solar, wind, wave and tidal), as well as biofuels. All these forms of energy should be subject to the same rules and thus conditions of competition. The production and transmission of energy is a complex operation which often involves both goods and services. It also entails technology and thus is affected by intellectual property rights. The sector shows a high level of governmental involvement which calls for coherent rules on competition and government procurement.

In the effort to enhance coherence and overcome unnecessary fragmentation in regulating trade in energy, the problems and the shortcomings identified above can best be addressed by seeking comprehensive negotiations within the WTO. In much the same way as the Uruguay Round produced a special agreement on agriculture, we submit that future negotiations should turn towards work on a comprehensive sectoral agreement on energy. Negotiations would enable Members to address all the pertinent problems, ranging from issues of classification of goods and services, to disciplines on subsidies, to issues of competition and state trading, as well as intellectual property rights and government procurement. It allows defining authoritatively the relationship to other international agreements, in particular the UNFCCC and the Kyoto Protocol and future global systems of emissions trading. It would allow the relationship between trade and regulation of production, and thus of WTO and OPEC, to be defined.

A comprehensive sectoral agreement on energy, encompassing both goods and services, would not render the current structure of the WTO Agreements obsolete. Recourse to a framework convention implies that its provisions may refer to pertinent provisions of other agreements of the WTO, in particular GATT and its instruments, GATS, Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the GPA. This is not new and has been done before, for example in defining the relationship of the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and GATT, or the agreements on agriculture and on industrial subsidies. They may also incorporate provisions of agreements outside the scope of the WTO, as did the TRIPS Agreement for the Paris and Berne Conventions on industrial property and copyright. Or, they allow reference to other provisions without incorporating them, for example a future and revised UNFCCC or Kyoto Protocol. Both reference and incorporation allow the building of a comprehensive and coherent agreement on energy within the WTO. It is within such a framework that the following issues and proposals for reform should be dealt with.

II. The basic classification of energy and energy services

The basic structure of the proposed Framework Agreement on Energy is to be defined by appropriate classifications of energy and energy services.

Disciplines on goods imply an independent physical property which is distinct from the

[33] Trade in atomic energy is subject to a more stringent set of security regulations and safety standards at both the national and international levels. The experts at the International Atomic Energy Agency (IAEA) warn that the introduction of a nuclear power programme involves a commitment of at least 100 years. See IAEA Staff Report, 10 December 2008.

production process and channels of distribution. Fossil fuels, in particular oil, gas and coal are thus bound to remain goods to be dealt with in accordance with established principles and rules of GATT 1994. However, energy dependent upon networks and grids is, in our view, much closer to a service, albeit physical properties remain to some extent. This is true in particular for gas which can be stored to some extent, and thus detached from a pipeline system. It is, however, different for electricity.

With the advent of disciplines on services, including energy-related services, existing legal definitions of electricity should be reviewed. Electricity is a typical network industry the components of which can best be dealt with following the principles of progressive liberalisation and conditionalities available under the GATS Agreement. It is submitted that electricity should be defined as a service and should no longer be treated as a good. Electricity is not a physical substance, nor is it a fuel. It cannot be stored and must be consumed as it is produced. Accordingly, the use of electricity should not be subject to tariff protection, but to service-related fee structures responding to the need to maintain continuous power production and dissemination. In order to maintain existing levels of market access under definitions of goods, the agreement would secure existing obligations of national treatment under GATT and incorporate them in terms of commitments into the Framework Agreement.

1. Trade in energy services

Energy services are an essential ingredient of any energy market. As markets become more open and competitive, the role of energy services will increase. The major barrier to entry is associated with the significant investments in infrastructure that are necessary.[34] It is well recognised that private-sector participation is frequently necessary to channel the requisite capital and expertise to the sector, and developing countries are stimulated to create 'an attractive enabling environment' and facilitate investment by trans-national energy companies.[35]

2. Reform of classification of energy services

The international trading in energy resources and its associated services has always posed special problems, and classification of energy services has been one of the topics of debate among various interest groups. The energy sector has traditionally been dominated by state-owned companies or has been under the direct control of the national government. This situation has resulted in endless negotiations on the classification of energy services and neither the WTO's 'Services Sectoral Classification List' (W/120)[36] nor the United Nations Provisional Central Product Classification (UNCPC)[37] lists energy services as separate categories. Clarifying classification issues is an important precondition to successful negotiations on energy.

Currently, some of the energy-related products and services are listed under different headings. One is 'transportation of fuel' described in the CPC as 'transportation via pipeline of crude or refined petroleum and petroleum products and of natural gas'.[38] This comes under

---

[34] Energy is also considered to be one of the national security concerns. This reiterates the need in a coherent set of FDI rules to avoid protectionism. See Chapter 11, page XXX on investments by sovereign wealth funds and state-owned enterprises.

[35] O. Nartova, 'Trade in energy services under WTO law: The impact of competition policies', PhD thesis, University of Bern (2009).

[36] WTO, Services Sectoral Classification List MTN.GNS/W/120 (10 July 1991).

[37] Department of Economic and Social Affairs, Statistics Division Statistical Papers Series M No. 77, Ver.1.1, UN, New York.

[38] CPC subclass 71310.

the broad category of transport services, which is not strictly appropriate. Transportation of energy-related products and services requires very specific and technically complicated procedures. Concerns regarding safety and security are always associated with it. Classifying the energy services sector under a separate category would simplify the process for regulation of transmission and transportation of energy products and services.

The upstream activities for oil and gas fall under the category of 'Other Business Services'. It is 'services incidental to mining' described as 'services rendered on a fee or contract basis at oil and gas fields, e.g. drilling services, derrick building, repair and dismantling services, oil and gas well casings cementing services'[39]. At the same time, the services essential to the energy industry such as oil and gas field exploration and geological surveying services are not covered by this category, but are classified as 'Geological, geophysical and other scientific prospecting services',[40] under 'Engineering related scientific and technical consulting services'.[41] Such a classification does not provide a clear view or complete information in one place and may therefore lead to confusion in commitments.

The third energy-specific entry relates to: 'Services Incidental to Energy Distribution'[42], listed under 'Other Business Services' category. It refers to 'transmission and distribution services on a fee or contract basis of electricity, gaseous fuels and steam and hot water to household, industrial, commercial and other users'.

In practical terms the fragmentation of the various activities relating to the energy service sector, which results from placing them under different subheadings, unnecessarily complicates trade in energy. To understand the various aspects of classification of services under W/120[43], one has to look under several entirely different subheadings of the schedule. It should be borne in mind that the energy industry is a chain of interconnected activities and often one cannot function without another. Hence, in order to function adequately, an energy service provider requires a set of coherent market access rights in a list of sectors. And, in the current situation in which energy services are spread throughout the classification system, the actual market access conditions may not always be clear, jeopardising both energy security and competition.

With a view to tackling the present confusion in the energy services classification under the W/120, it is therefore advisable to identify the core energy services and confine the negotiations in those areas. One way of identifying core services is to agree that the core services are those which form an essential part of the chain of supply and without which it could not function. In addition, core services would include services that are mainly an input to the energy industry. Such services could be listed under two subcategories on the basis of whether they are upstream or downstream activities.[44]

III. Energy and the rules on subsidies

In relation to aspects of energy that are classifiable as goods,[45] the emphasis of research and

---

[39] Division 88.
[40] Subclass 86751.
[41] Class 8675.
[42] CPC 88700.
[43] WTO, Services Sectoral Classification List MTN.GNS/W/120 (10 July 1991).
[44] For more detailed proposal for classification reform see O. Nartova, 'Trade in energy services under WTO law: The impact of competition policies', PhD Thesis University of Bern (2009).
[45] For discussion on subsidies disciplines in GATS see P. Poretti, 'Waiting for Godot: Subsidy disciplines in services trade' in M. Panizzon *et al.* (eds.), *GATS and the Regulation of International Trade in Services* (Cambridge University Press, 2007) pp. 466–489.

its findings has been on addressing the relationship between fossil fuels and renewable energy. Both are treated alike under the existing regulation and environmental concerns are neglected. Moreover, a dual regime exists between fossil fuels and biofuels.[46]

1. Renewable energy and the WTO law of subsidies

Subsidies are extensively granted to the energy sector around the world for various reasons. Regardless of their effectiveness in achieving their goal, both the fossil fuel sector and the renewable and alternative energy sectors have benefited from these subsidies. However the share of fossil fuels in the allocation of energy subsidies worldwide has been disproportionately higher than that for other forms of energy. Moreover while environmental protection has been stated as a policy objective behind promoting renewables through subsidy programmes, these policies have occasionally produced perverse results, for instance in the biofuels sector in some countries.

The amount of subsidies available for the renewable energy (RE) sector worldwide is growing as a policy response to energy security concerns and climate change. The introduction of new incentive schemes to promote RE has become increasingly common especially in the US and EU. In this context, the question of the status of RE subsidies in WTO law is highly relevant.[47]

a) Areas of potential conflicts

Much of the support provided to the RE sector takes the forms which fit the definition of a subsidy according to Article 1 of the ASCM.[48] These RE subsidies are specific within the meaning of Article 2; if they are contingent upon export- or import-substitution or they cause adverse effects, RE subsidies are likely to result in trade disputes of different kinds and hence are vulnerable under the WTO system.

Yet, under a different scenario, the use of certain trade-distortive subsidies for environmental purposes may be justified. In this context, the absence of a GATT Article XX provision in the ASCM should be given serious consideration.[49] However, it is argued that any attempt to introduce particular environmental exceptions into the SCM Agreement should entail a necessity test similar to GATT Article XX (b) to ensure that such exemptions will not be hijacked by domestic interest groups to the detriment of both trade and the environment.

b) A case for mutual supportiveness

A top-down approach of simply imposing national targets as pursued in the Kyoto Protocol has not worked and will not work unless it is coupled with other reinforcement strategies such

[46] See S. Z.Bigdeli, 'Energy subsidies in international economic law: a trade and environment perspective', PhD thesis University of Bern (2009).

[47] Currently the US is being challenged by Canada's complaint regarding the US subsidies for corn and other agricultural products. (See the Request for Consultations by Canada, WT/DS357/1, January 2007.) Brazil has further challenged, inter alia, the gasoline and diesel tax exemptions for biofuels (WT/DS365/1, Request for Consultations by Brazil, July 2007). A single panel was established to deal with both cases in December 2007.

[48] For the following see also S. Z.Bigdeli , 'Incentive schemes to promote renewable energy and the WTO law of subsidies', in T. Cottier *et al.* (eds.), *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, 2009).

[49] The applicability of the general exceptions under Article XX of the GATT with respect to subsidies covered by the SCM is still an open question. Many trade lawyers share the view that under the status quo, GATT Article XX does not apply to the ASCM. At the same time, many others argue the opposite. For more on the discussion see L. Rubini, *The Definition of Subsidy and State Aid. WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009), p. 195.

as addressing harmful energy subsidies at the multilateral level. In this context there is a positive and effective role for the WTO to enter into the field of reform of these subsidies.

Dealing with subsidies that are environmentally harmful is not alien to the WTO. The current 'fisheries subsidies' negotiations serve as a good example of cooperation between environmental non-governmental organisations (NGOs), international organisations and the so-called 'Friends of Fish'; a group of WTO Members who took the initiative to raise concerns about the contributory effect of these subsidies to fish stock depletion.[50]

There seem to be prospects for following a similar approach for energy subsidies in light of the similarities between these two areas of environmentally harmful subsidies. The stakes are higher in the realm of energy due to the political, social (poverty implications) and energy security issues involved. On the practical level, the first challenge is to collect reliable data on current and future levels of support. The second is to define the criteria for 'harmfulness': as discussed above, not all fossil fuel subsidies, let alone energy subsidies, increase carbon dioxide (CO_2) levels (consider subsidies to promote fuel switching (e.g. from coal to gas)).

As a first step, the crucial need to fill the gap in the data on energy subsidies might be addressed by establishing a subsidy-watch committee as a subsidiary of the Committee on Subsidies and Countervailing Measures in accordance with Article 24.2 of the ASCM. This new committee's function, in contrast to that of the current Permanent Group of Experts whose duty is more focused on the nature and legality of subsidies, will be to examine whether each Member's energy subsidy notifications sufficiently represent the level of support in this sector. Later, these functions would be assigned to a committee servicing the Framework Agreement on Energy.

After collecting reliable data on all Members' energy subsidies, the second step would be to provide countries with deadlines by which they would have to prepare a national roadmap for subsidy reforms, adapted to their own priorities, intended to phase out 'environmentally harmful energy subsidies' with an appropriate timeline. The committee could have an advisory or compulsory role in identifying which subsidies are indeed 'harmful' and how and over what period of time they should be phased out.

Eventually all the roadmaps for subsidy reforms should be submitted to the committee and be approved by Members so that they could become an integral part of the Members' WTO commitments. This whole process from the very beginning should be conducted in full cooperation with the UNFCCC Secretariat and be linked to negotiations on the post-Kyoto Regime.

2. Emissions trading and subsidies: the experience of the European Union

With a view to linking subsidies reform in international trade regulation with climate change mitigation efforts under the UNFCCC, it is helpful to learn from the experience of the EU, by assessing the European Union emissions trading scheme (EU ETS) and its relationship to EC disciplines on subsidies.[51]

The EU ETS was launched in 2005 to cap CO_2 emissions from energy-intensive industry.[52]

---

[50] For more see S. Z.Bigdeli 'Will the 'friends of climate' emerge in the WTO? Applying the "fisheries subsidies" model to energy subsidies' (2008), in 2(1) *Carbon and Climate Law Review*, 78–89.

[51] See for a more thorough analysis of this question and references to case law J. de Sépibus, 'The European Emission Trading Scheme put to the Test of State Aid Rules', NCCR Working Paper No 2007/34; J. de Sépibus, *Die Umweltschutzsubvention im Gemeinschaftsrecht. Eine umweltrechtliche Kritik der europäischen Beihilfekontrolle*, PhD thesis (Peter Lang, 2003).

[52] See the Directive 2003/87/EC establishing a scheme for trading of GHG emission allowances within the Community and amending Council Directive 96/61/EC. Hereafter the 'Directive'.

The key feature is the allocation process, which determines the reduction target within each Member State ('cap') and the way allowances are distributed among the covered operators.[53] In the first two allocation phases – from 2005 to 2012 – Member States had to set up a national allocation plan (NAP), which had to be submitted to the Commission for approval.[54] Member States were granted considerable freedom in fixing the caps.[55] The main restriction was that at least 95% of the allowances had to be allocated for free in the first trading period and 90% in the second.[56]

Most Member States chose to distribute all their allowances for free. For existing installations the amount of allowances was usually calculated according to historical emissions or expected needs, whereas new entrants were granted allowances with regard to certain benchmarks, which may be fuel-, technology- or output-related. Special rules were also set for closures, early action or co-generation.

As a result, a wide variety of allocation rules existed, which led to considerable distortions of competition. These distortions were exacerbated by a phenomenon called 'windfall profits', which significantly increased the benefits of certain operators, especially CO_2-intensive installations in the power sector that had received the lion's share of the allowances. The reason for these extraordinary profits is that many of the firms concerned could largely pass on the price of the allowance to their customers, even though they had been granted the allowances for free.[57]

The question thus arose whether the large economic rents conferred on certain big players, in particular in the power industry, amounted to state aid prohibited by Article 87 EC Treaty. The relevance of this query is, however, not limited to European law. Many countries, such as the United States, Australia and Japan, which plan to implement emission trading schemes and also the Member States of the EU and the EU itself will have to deal with this issue under the law of the WTO, which establishes a regime having many similarities to the provisions of the EC Treaty. Hence the free grant of emission allowances may well not be immune from challenges under the WTO rules.

a) The prohibition of state aid (Article 87 para. 1 EC Treaty)

Article 87 EC Treaty ('EC') bans any state aid granted by Member States unless it complies with the derogations provided for it by the Treaty.[58] Generally it is incumbent on the Commission to verify whether the aid meets the conditions that might exceptionally justify its being granted. Member States are hence requested to notify any proposal to grant aid to the Commission and await its decision before implementing the proposal.

The following conditions must be fulfilled.

i) The financing by the state or through state resources

Aid must be imputable to the state and be granted directly or indirectly through state resources. When assessing the NAPs, the Commission consistently held that this condition

[53] The EU ETS was completed by the Linking Directive. See J. de Sépibus, 'Linking the EU Emissions Trading Scheme to JI, CDM and post-2012 International Offsets', NCCR Trade Working Paper No. 2008/18.
[54] Article 9 of the Directive.
[55] See J. de Sépibus, 'Scarcity and allocation in the European Emissions Trading Scheme – A legal analysis', NCCR Working Paper No. 2007/32.
[56] Article 10 of the Directive.
[57] For more see M. Grubb, K. Neuhoff, 'Allocation and competitiveness in the EU Emission Trading Scheme: Policy overview', *Climate Policy* 6 (2006), 14.
[58] See Articles 87 (2) and (3) and 88 and 89 EC Treaty.

was fulfilled if more than the mandatory amount of allowances was granted for free[59] and if banking[60] was allowed.[61] The notion of state resources includes not only the direct or indirect transfer of state resources to an undertaking, but also the waiving of revenue, which would otherwise have accrued to the general budget. This is not the case if the financial burden of a measure relies exclusively on private undertakings.

ii) The existence of a selective benefit for an undertaking

The transfer of state resources must confer an economic advantage on the recipient undertaking. The Commission takes the view that this condition is fulfilled if allowances are granted for free.[62] The revenues in many cases exceed the costs and the 'windfall profits' accrue to the operator without any economic counterpart from the recipient undertaking.

An economic benefit granted by a Member State constitutes state aid only if it displays a certain degree of selectivity. In the case law, this condition entails verifying whether the methods of allocation adopted by Member States favoured certain undertakings over others which are comparable in the light of the objective pursued.

Due to the considerable leeway left to Member States, the amount of allowances allocated to the covered installations varied significantly, not only between sectors, but also within comparable categories of undertakings. As a result, the allocation rules largely favoured certain undertakings at the expense of others, in particular existing operators with respect to new entrants and CO_2-intensive with respect to less emitting installations.[63] These effects were exacerbated in the power sector, where cost abatement differentials are important and operators could largely pass on the price of the allowances to their customers.[64]

iii) Distortion of competition and effects on trade between Member States

These two conditions are generally considered as fulfilled if the financial aid strengthens the position of an undertaking compared with other undertakings competing in intra-Community trade. Applied to the EU ETS, this means that any allocation methodology, which unduly favours some undertakings at the expense of others, is likely to distort competition and to affect trade. In its review of the NAPs the Commission generally considered both criteria as fulfilled.

b) The derogations of the prohibition of state aid (Art. 87 para. 3 EC)

The Commission enjoys a wide, but not unlimited, discretion when evaluating the compatibility of state aid with the common market. It has to examine whether the aid is appropriate to meet one of the objectives mentioned in Article 87 para. 3 EC Treaty and to weigh the beneficial effects of the aid against its adverse effects on trading conditions and the maintenance of undistorted competition.

When appraising the NAPs, the Commission did not conduct a formal state aid investigation,

---

[59] European Commission, Decision on the second Slovakian national allocation plan, 29.11.2006.
[60] 'Banking' means that allowances issued for one compliance period may be used by the recipient in a later compliance period.
[61] European Commission, Decision on the first Danish national allocation plan, 7.7.2004.
[62] See European Commission, Decision on the first French national allocation plan, 20.10.2004, par. 5.
[63] R. Betz, K. Rogge, J. Schleich, 'EU emissions trading: an early analysis of national allocation plans for 2008-2012', *Climate Policy* 6 (2006), 4.
[64] K. Neuhoff *et al*., 'Implications of announced phase II national allocation plans for the EU ETS' *Climate Policy* 6 (2006), 411.

but limited its assessment to provisional evaluations. Primarily, it verified whether the Member States had distributed more allowances than needed to their installations.[65] With respect to the second phase, it considered this condition as fulfilled if the caps set by Member States violated criteria 1–3 of Annex III of the Directive,[66] if individual installations were given more than they needed and if the information provided by Member States was purely subjective. Extending its analysis to specific allocation methodologies, it held a German[67] and a Polish[68] allocation rule to be incompatible with the common market as the former discriminated between comparable installations and the latter used a non-representative baseline with respect to average emissions of installations. The principles established by the Commission when appraising the NAP were by and large confirmed in the recently adopted 'Community guidelines on state aid for environmental protection',[69] which provide the basis for the Commission's assessment until the end of 2012.

c) Conclusions

Despite the accumulating evidence that the EU ETS has conferred large economic rents on CO_2-intensive operators, thereby reducing the economic efficiency of the scheme, the Commission has used its powers under the state aid provisions parsimoniously. So far, it has only taken provisional decisions, in which it addressed clearly discriminatory rules and the most patent cases of over-allocation. Somewhat surprisingly, it considers that the free allocation of allowances is compatible with the common market if the amount of allowances does not exceed expected needs, though this amounts to sanctioning business-as-usual practice.

The Commission's concern to ensure the smooth functioning of the scheme is also evident in its practice regarding the complaints of affected operators. As the case EnBW v Commission[70] shows, the attempt to challenge an allocation rule the Commission has evaluated positively in its NAP decision is fraught with difficulties. In casu, the Commission merely informed the plaintiff, an operator of a nuclear power station, in a so-called 'service-letter' that there were 'insufficient grounds' for opening a state aid procedure, thus depriving the plaintiff of the option of challenging its act.[71]

The fear that Pandora's box might be opened if operators were given the right to challenge an allocation rule that has been provisionally approved by the Commission, seems to be shared by the Court of First Instance. By considering that EnBW lacked an interest in the annulment of the Commission's decision on the German NAP, inasmuch as the latter had not rejected it, the court effectively forestalled any legal action aimed at challenging an allocation method that the Commission has *prima facie* considered compatible with the rules on state aid. As a result, the Commission remains the sole gatekeeper of the European state aid rules and its willingness and political clout will be the principle factors in stopping the massive 'windfall' profits of certain operators, which jeopardise the environmental effectiveness of the EU ETS.

Discontented competitors might, however, find a way out of the stalemate by availing themselves of the rules of the WTO. It is a fact that the revenue from the sale of the allowances in many cases exceeds the costs incurred in abating emissions. Accordingly it may

---

[65] European Commission, Decision on the first French national allocation plan, 20.10.2004, par. 5.
[66] See European Commission, COM (2006) 725 final.
[67] European Commission, Decision on the second German national allocation plan, 29.11.2006.
[68] European Commission, Decision on the second Polish national allocation plan, 26.3.2007, para. 23.
[69] Official Journal C 82 of 1.4.2008, p. 1.
[70] CFI Case T-387/04, *EnBW Energie Baden-Württemberg AG v Commission*, 30.4.2007, para. 41 ff.
[71] To be challengeable, the letter must come from the College of the Commissioners and be addressed to the Member States, which was not the case here. See Article 25 of Council Regulation No 659/1999.

well be argued that the free allocation of allowances amounts to a subsidy actionable under the ASCM.[72] The question hence arises whether a reform of the ASCM should be envisaged in the context of the Framework Agreement on Energy to take into account the specificities of the introduction and the implementation of emissions trading schemes.

Two aspects should be considered here. On the one hand, the presence of the massive windfall profits of the European electricity industry clearly indicates that to offset the financial burden imposed by the EU ETS only a small quantity of allowances would have to be given for free. On the other hand, the introduction of emissions trading schemes for industry sectors exposed to strong international competition may well be politically possible only if a part of the allowance is initially granted for free. As a result, we recommend that in a reform of the rules on subsidies, a temporary exemption similar to the former green-light category of the ASCM is foreseen, which would allow grandfathering up to 20% of the distributed allowances for industry sectors that are exposed to strong international competition from regions which are not subject to an equivalent regulation of their carbon emissions.

IV. Energy production controls and export restrictions (OPEC)

The Framework Agreement on Energy would also need to deal with the issue of production and export controls, thus clarifying what today is an unresolved and controversial issue in relation to OPEC Members who increasingly are also Members of the WTO.[73] The preamble to the Marrakesh Agreement Establishing the World Trade Organization recognises that expanding the production of and trade in goods and services should be encouraged, thus allowing the optimal use of the world's resources. Recognition of a nation's permanent sovereignty over its own natural resources is another fundamental principle of contemporary international law[74] which OPEC member countries can constantly invoke to explain their supply management practices.

There is a difference of opinion as to the legitimacy of OPEC. The United States government considers the organisation to be contrary to the spirit and objectives of the GATT. The developing countries, which are members of OPEC, rely on Article 5 of the (non-binding) Charter of Economic Rights and Duties of States for the legitimacy of producer organisations such as OPEC. According to most Western countries a producer organisation is not illegitimate as such, although its actions can be.[75] Moreover, there is controversy as to whether production controls violate disciplines of WTO law.

1. Production controls versus export restrictions

Article XI of the GATT 1994 includes a fundamental prohibition of quantitative restrictions: quotas, import and export licences ‘or other measures having equivalent effect’. Therefore, it is not the legal form of the measure but its effect on trade which is important.[76] In particular, the GATT Panel in *Canada – Measures Affecting Exports of Unprocessed Herring and Salmon* concluded that provisions of Article XI:1 apply to any measure taken by a contracting state in respect of export restrictions, ‘irrespective of the legal status of the measure’.

---

[72] Art. 5 ASCM.
[73] See S. Matteotti-Berkutova, ‘Oil supply management practices of OPEC under the World Trade Organization rules and the national competition laws’, PhD Thesis, University of Bern (2010).
[74] Permanent Sovereignty over Natural Resources, G.A. res. 1803 (XVII), 17 U.N. GAOR Supp (No 17) at 15, U.N. Doc A/5217 (1962).
[75] H. Van Houtte, *The Law of International Trade*, (Sweet and Maxwell, 1995), p. 117.
[76] H. Van Houtte, *The Law of International Trade*, 2nd ed. (Sweet and Maxwell, 2002), p. 91.

Therefore, the argument that OPEC decisions on production cuts are non-binding[77] will not be sufficient to support an arguement that they are outside the scope of Article XI. In *Argentina – Hides and Leather* the Panel discussed the relevance of the actual trade effect of the measure and found that although actual trade effects did not have to be proven in order to establish a violation of Article XI:1, trade effects carried weight, as evidence for establishing the existence of a *de facto* restriction.[78]

In order to evaluate whether production controls amount to export restrictions, which from the perspective of free trade constitute the most stringent and distortive trade policy instrument,[79] a multi-step test of OPEC's decisions should be performed. A panel would have first to determine whether OPEC practices constitute a 'measure' within the meaning of Article XI:1[80] and then consider if such measures impose a restriction on exportation.[81] OPEC's activities clearly effectuate a quantitative limit on the amount of oil available on world markets. In this regard, OPEC measures generally have the same motivation and effect as quantitative export restrictions. Furthermore, the language of Article XI, in particular the notion of 'other measures', provides broad scope and coverage[82] and allows to fit production restrictions into this category because they are measures that interfere with the free flow to the market of a given product.

Despite the broader reading of Article XI:1, it is submitted that there are limitations. An interpretation of the provision that implies that one WTO Member could have recourse to Article XI:1 in order to commit another member to producing more of its natural resources to satisfy world demand probably exceeds those limits.[83] This would, in our view, be at odds with the fundamental principle of national sovereignty over natural resources.

2. Restrictions made effective through state trading operations

Another unresolved issue relates to the nature of restrictions on production. It is well-established in GATT/WTO jurisprudence that only governmental measures fall within the ambit of Article XI:1. "Past GATT cases demonstrate that the fact that an action is taken by private parties does not rule out the possibility that the action may be deemed governmental if there is sufficient governmental involvement with it. It is difficult to establish well-defined rules in this regard, however. Thus, that possibility will need to be examined on a case-by-case basis."[84]

In order to identify the restrictive character of a measure in the context of OPEC, it is important to note that this restriction can be made effective through state-trading operations.[85]

The Panel on *India – Quantitative Restrictions* addressed the phrase 'restrictions made effective through state-trading operations'. In its analysis, which was not subsequently reviewed by the Appellate Body, the panel emphasised that the fact that imports were effected through state-trading operations did not *per se* mean that imports were being restricted: 'It

---

[77] According to Article 11C of the OPEC Statute, all decisions of the Conference, other than on procedural matters, require the unanimous agreement of all Full Members and should be made in the form of Resolutions.
[78] WTO Analytical Index: GATT 1994, para. 406.
[79] T. Cottier and M. Oesch, *International Trade Regulation. Law and Policy in the WTO, The European Union and Switzerland, Cases Materials and Comments*, (London, Cameron May, 2005), p. 660.
[80] See Panel Report *India – Autos*, paras. 7.318–7.322.
[81] See Panel Report *US – Shrimp*, para. 7.16.
[82] See Panel Report, *India – Quantatitive Restrictions*, referring to the panel in *Japan – Semiconductors*.
[83] S. Broome, 'A note on conflicting obligations for oil exporting nations?: Satisfying membership requirements of both OPEC and the WTO', *The George Washington International Law Review* 38 (2006), 435.
[84] Panel Report, *Argentina – Hides and Leather*, citing the Panel Report on *Japan – Film* in WTO Analytical Index: GATT 1994, para. 405.
[85] Note *Ad* Article XI of GATT.

should be noted, however, that the mere fact that imports are effected through state trading enterprises would not in itself constitute a restriction. Rather, for a restriction to be found to exist, it should be shown that the operation of this state trading entity is such as to result in a restriction.'[86]

3. Available exceptions

The GATT regulation on quantitative restrictions, however, has a limited effect because of the many exceptions. In addition to the ones set out in Article XI:2, further exceptions are contained in Article XII, XX and XXI of the GATT 1994; these exceptions are frequently utilised to pursue other legitimate policy goals.[87]

One exception occasionally cited as meeting the needs of OPEC members is the Article XX(g) exception for measures relating to the conservation of natural resources.[88] Indeed, assuming that a panel determines that production controls are contrary to the principles of GATT Article XI, then Article XX(g) is an exception that OPEC members could invoke.

4. Lack of competition rules in WTO

In contrast to the situation regarding fundamental WTO principles, there is no unified body of jurisprudence relating to the application of the fundamental principles of competition law and policy at the multilateral level. Rather, the jurisprudence that exists has been developed with reference to diverse national laws and policies.[89]

This is why all the efforts of the United States to challenge OPEC and its member countries to date have been focused on application of American antitrust law to the production restrictions. Civil proceedings against OPEC have been launched three times so far.[90] In the first two claims the discussion focused on the privileges OPEC might enjoy, whereas the last proceeding concentrated in detail on questions of US civil procedure rules.[91]

On 22 May 2007, the US House of Representatives passed the *No Oil Producing and Exporting Cartels Act of 2007* (NOPEC) and a similar bill was passed in the Senate on 19 June 2007. NOPEC is aimed at OPEC and its oil supply management practices and designed as a response to some unsuccessful legal actions brought against OPEC in the US. It restricts the sovereign rights of states to manage their natural resources and this is why the Bill will also be applicable to other oil exporting countries.

5. Conclusion

Returning to the idea of fragmentation of international trade regulation, it is hard to judge whether OPEC's supply management activities are illegal. To answer this question there should be a coherent set of rules on competition, which the WTO currently lacks. In this

---

[86] Panel Report *Korea – Various Measures on Beef*, para. 115.
[87] T. Cottier and M. Oesch, *International Trade Regulation. Law and Policy in the WTO, the European Union and Switzerland, Cases Materials and Comments* (London: Cameron May, 2005), p. 662.
[88] In *Shrimp – Turtle*, the WTO Appellate Body indirectly recognised petroleum as an exhaustible natural resource. See Appellate Body Report, *US – Shrimp*, para. 128.
[89] WTO, 'The fundamental principles of competition policy', Background Note by the Secretariat, WT/WGTCP/W/127, 7 June 1999, para. 4.
[90] See *International Association of Machinists & Aerospace Workers (IAM) v. OPEC* (C.D.Cal.1979), which was appealed *IAM v. OPEC* (9th Cir.1981), cert. denied, 454 U.S. 1163 (1982). The third case was *Prewitt Enterprises, Inc. v. OPEC* 2001 U.S.Dist. Lexis 414 (N.D. Ala. 2001), 2001-1 Trade Cas. (CCH) 73, 246 (N.D. Ala. 2001).
[91] J.P. Terhechte, '*OPEC und europäisches Wettbewerbsrecht : zugleich ein Beitrag zum Phänomen der Fragmentierung des internationalen Wirtschaftsrechts*' (Baden-Baden: Nomos, 2008), p. 119.

sensitive area and in view of the global concerns, which are now on the international agenda, a balance should be found between the right of states to exercise sovereignty over their natural resources, energy security, fair competition and climate change concerns.[92] This challenge can be left to regulatory competition.[93] Competition can be globalised so that the analyst takes a comprehensive world view rather than a nationalistic perspective.[94] We submit that these issues should be addressed in a future Framework Agreement on Energy.

V. Energy and government procurement as a climate change mitigation policy tool

1. Green public procurement (GPP) in the context of the Kyoto Protocol to the UNFCCC and the WTO Agreement on Government Procurement (GPA): the need for regulatory coherence

Finally, we turn to government procurement. GPP involves the consideration by public authorities of environmental and energy efficiency aspects in the specification of preferred goods and services purchased for governmental functions. An example of this approach is the EU green energy procurement policy.[95] As government procurement is regulated by the GPA,[96] it is pertinent to investigate the extent to which parties to the GPA could pursue their climate change goals using the GPP tool while also safeguarding their non-discrimination obligations under the GPA.[97]

2. GPP and the trade concerns

Trade effects in GPP arise where the description of the goods or services preferred by a procuring authority in a tender notice results in differential treatment between otherwise 'like products', or between local and foreign suppliers. GPP could constitute a non-tariff barrier[98] which may amount to discrimination contrary to the GPA Article VI. This Article permits the use of international standards, technical regulations and other specified sources to define the 'technical specifications' of the products and services, and the service suppliers. The cardinal rule in the GPA is that standards and/or technical regulations 'shall not be prepared, adopted or applied with a view to, or with the effect of, creating unnecessary obstacles to international trade.'[99] Similarly, any technical specifications inserted in the tender 'shall be in terms of

---

[92] See T. Cottier and S. Matteotti-Berkutova, 'International environmental law and the evolving concept of common concern of mankind' in T. Cottier *et al.* (eds.), *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, 2009).

[93] For the notion of regulatory competition and the need for competition rules under the WTO see Chapters 9 and 7 of this volume, respectively.

[94] E. M. Fox, 'Competition law', in Andreas F. Lowenfeld, *International Economic Law* (Oxford University Press, 2003), p. 383.

[95] For this see, G.I. Malumfashi, 'Procurement policies, Kyoto compliance and the WTO Agreement on Government Procurement: the case of the EU green electricity procurement and the PPMs debate', in T. Cottier et al. (eds.), *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, 2009).

[96] WTO, *Marrakesh Agreement Establishing the World Trade Organization, Annex 4: Plurilateral Trade Agreements: Agreement on Government Procurement*, done at Marrakesh on 15th April 1994 entered into force 1 January 1996.

[97] See Malumfashi G.I., *"Green" public procurement policies, climate change mitigation and international trade regulation: An assessment of the WTO Agreement on Government Procurement*, PhD Thesis, Centre for Energy, Petroleum and Mineral Law and Policy, University of Dundee, United Kingdom (2009).

[98] See WTO, *World Trade Report 2005: Trade Standards and WTO* (WTO, 2005), 46.

[99] GPA Article VI.

performance rather than design or descriptive characteristics.'[100]

The concern thus lies in the possibility that a procuring entity could insert non-product-related climate-friendly specifications in such a way as to discriminate between like products or services.[101] Similarly, by virtue of the provisions of GPA Article VIII, a condition for participation which requires suppliers to show evidence of compliance with a specific environmental management system may also constitute a barrier to the participation of that supplier in the procurement process. The GPA thus provides that any such requirement should relate only to the technical and/or financial ability of the supplier to perform the particular task in question.[102]

The PPMs and the 'like' products debates in the WTO jurisprudence are well documented.[103] GPP practices for climate change mitigation are essentially based on environmental and energy-efficiency related considerations, and are therefore essentially in the nature of non-product-related PPMs. Such PPMs are not accepted in the WTO as basis for discrimination between like products, services or service suppliers.

3. GPP and the environmental exceptions

Article XXIII of the GPA, however, provides for environmental exceptions similar to those found under GATT Article XX(b) and (g), to permit otherwise discriminatory measures taken by the parties to address non-trade concerns, including environmental protection. These exceptions can arguably be applied to permit climate-motivated GPP policies. This view is reinforced by the Preamble to the WTO treaty which recognises 'sustainable development' and 'protection of the environment', as being among the objectives of the WTO system.[104] The Preamble was cited by the WTO Appellate Body (AB) in the *US – Shrimp* case in 1998,[105] as a guide to interpreting the environmental exceptions.

However, in extending this interpretation (of the GATT XX (b) and (g)) to climate-friendly procurement under the GPA Article XXIII, this study raises two concerns: first, there are some textual variations between the wording of the GPA Article XXIII and that of GATT Article XX (b) and (g). One such variation is that the GPA Article XXIII does not contain the equivalent of the words '*relating to conservation of natural resources,*' namely, the (g) part of GATT Article XX. The question is whether this omission is material enough to make a substantial difference between the GATT and GPA exceptions. The second concern relates to the burden of proof for measures aimed at climate mitigation. Under the conventional WTO jurisprudence, the onus is on the party invoking the GATT Article XX exceptions to prove that the particular measure is not only covered by the exceptions, but is also 'necessary' in the given circumstances to achieve the legitimate objectives, and that it is not applied in a discriminatory manner. Thus, in event of a challenge, a party to the GPA maintaining climate-motivated procurement policy will have to shoulder this burden of proof.

The author of this study believes that in view of the urgent need to deal with the climate change problem, and the fact that climate change measures are based on precaution in the face of scientific uncertainty, the GPA should more explicitly recognise climate-motivated GPP

---

[100] Ibid.
[101] See Z. Zhang and Assunção, 'Domestic climate policies and the WTO', (UNCTAD Discussion Paper series, No. 164 November 2002) pp. 12–13.
[102] GPA Article VIII(b).
[103] See C. Conrad, 'The status of measures linked to non-physical aspects and processes and production methods (PPMs) in WTO law. A contribution to the debate on the impact of WTO law on national regulation pursuing social goals', PhD Thesis, University of Bern (2008).
[104] See Recital 1 to the WTO Agreement.
[105] Appellate Body Report, *US – Shrimp*, paras. 12, 18, 153 and 155.

and make it a positive norm, rather than an exception. This would mean that the burden of proof in matters related to climate change will shift to the complaining country which will then have to prove discrimination or that the measure is not targeted at tackling climate change.

The abovementioned approach is not entirely new in the WTO jurisprudence. It is recalled that the Appellate Body in the *EC – GSP*[106] took a view similar to that suggested above when considering that the development motive of the Enabling Clause for developing and least developed countries under the WTO system gave the Clause (which was an exception to GATT Article III) a 'special status'[107] akin to a positive norm. Thus, a developing country complaining against a measure taken by a developed country based on the Enabling Clause should bear the burden of proving discrimination.[108]

The Doha negotiations on liberalisation of environmental goods and services can help in this regard. A specific list should be generated for goods and services and technology, as well as projects and programmes targeted specifically at addressing climate change, out of the various lists currently being examined. This list should then be included as an appendix to the GPA so as to form a basis for all GPP measures.

The study notes that the Revised GPA 2007,[109] which is not yet in force explicitly permits the parties to consider environmental factors in their procurement processes.[110] This new provision ostensibly makes up for the GATT Article XX (g) missing in the GPA Article XXIII. To this extent, the new provision does not seem to fundamentally change the status quo, especially as it relates to the burden of proof question.

D. Overall conclusions

Existing WTO rules do not appropriately address all the needs of energy trade today. Ensuring security of supply and addressing climate change mitigation, creating an effective incentives mechanism to reduce CO_2 emissions are the first priorities. Therefore, we recommend a move towards a comprehensive sectoral agreement on energy, which would encompass subsidies reform, introducing a temporary exemption similar to the former green-light category of the ASCM; creation of a check-list of core and related energy services that would facilitate making additional commitments; and redrafting of Article X:6 of the revised GPA 2007 to include a more explicit recognition of climate-related measures.

The WTO, with its currently 153 Members,[111] can make an important contribution to the complex process of energy reform. More predictable and transparent trade rules could benefit both energy-importing and energy-exporting countries, and will contribute to preventing the eruption of energy conflicts.

Bibliography

Abdallah, Hussein, 'Oil exports under GATT and the WTO' (2005) 29 (4) *OPEC Review*, pp.

[106] Appellate Body Report, *EC – Tariff Preferences*, paras. 106–111.
[107] Ibid.
[108] See L. Bartels, 'The WTO enabling clause and positive conditionality in the EC's GSP programme' *JIEL* 6(2) (2003), 518.
[109] See WTO, Revised GPA 2007, document no. GPA/W/297, available at http://www.wto.org/english/tratop_e/gproc_e/negotiations_e.htm (last visited 25/05/09).
[110] *Ibid*. Article XI:6
[111] As of December 2008.

267–294.

Adelman, Morris Albert, 'World oil production & prices 1947-2000' (2002) 42(2) *The Quarterly Review of Economics and Finance*, pp. 169–191.

Bartels, Lorand., 'The WTO Enabling Clause and positive conditionality in the EC's GSP programme' (2003) 6(2) *Journal of International Economic Law*, pp. 507–532.

Betz, Regina, Rogge, Karoline and Schleich, Joachim, EU emissions trading: an early analysis of national allocation plans for 2008–2012 (2006) 6(4) *Climate Policy*, pp. 361–394.

Broome, Stephen, 'A Note On Conflicting Obligations For Oil Exporting Nations?: Satisfying Membership Requirements of Both OPEC and the WTO' (2006) 38 *The George Washington International Law Review*, pp. 409–436.

Conrad, Christiane, 'The status of measures linked to non-physical aspects and processes and production methods (PPMs) in WTO law -A contribution to the debate on the impact of WTO law on national regulation pursuing social goals', a PhD Thesis submitted to the Faculty of Law, University of Bern, 2008.

Cottier, Thomas, Nartova, Olga, Z.Bigdeli, Sadeq (eds.) *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, 2009).

Cottier, Thomas and Matteotti-Berkutova, Sofya 'International Environmental Law and the Evolving Concept of Common Concern of Mankind' in T. Cottier *et al.* (eds.), *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, 2009).

Cottier, Thomas and Oesch, Matthias, *International Trade Regulation. Law And Policy In The WTO, The European Union And Switzerland, Cases Materials And Comments*, (London: Cameron May, 2005).

Cottier, Thomas, Matteotti, Sofya and Nartova, Olga 'Winterkrieg im Gasgeschäft: Ursachen und Auswirkungen' (2009) 140 *UniPress*, p. 40.

de Sépibus Joëlle, 'Linking the EU Emissions Trading Scheme to JI, CDM and post-2012 International Offsets', NCCR Working Paper No 18/2008.

de Sépibus Joëlle, 'Scarcity and allocation in the European Emissions Trading Scheme – A legal analysis', NCCR Working Paper No 32/2007.

de Sépibus Joëlle, 'The European Emission Trading Scheme put to the Test of State Aid Rules', NCCR Working Paper No 34/2007.

de Sépibus Joëlle, *Die Umweltschutzsubvention im Gemeinschaftsrecht. Eine umweltrechtliche Kritik der europäischen Beihilfekontrolle*, PhD thesis (Bern: Peter Lang, 2003).

Directive 2003/87/EC establishing a scheme for GHG emission allowance trading within the Community and amending Council Directive 96/61/EC.

Energy Charter Secretariat, *Putting a Price on Energy: International Pricing Mechanisms for Oil and Gas* (Brussels, 2007)

Energy Charter Secretariat, The Energy Charter Treaty and Related Documents, (Brussels, 2004).

European Commission, *Communication to the Council and to the European Parliament on the assessment of national allocation plans for the allocation of greenhouse gas emission allowances in the second period of the EU Emissions Trading Scheme*,COM (2006) 725 final.

European Commission, Decision on the first Danish national allocation plan, 7.7.2004.

European Commission, Decision on the first French national allocation plan , 20.10.2004.

European Commission, Decision on the second German national allocation plan, 29.11.2006.

European Commission, Decision on the second Polish national allocation plan, 26.3.2007.

European Commission, Decision on the second Slovakian national allocation plan, 29.11.2006.

Fox, Eleanor M., 'Competition Law', in Andreas F. Lowenfeld, *International Economic Law* (Oxford University Press, 2003), pp. 340–390.

Grubb, Michael and Neuhoff, Karsten, 'Allocation and Competitiveness in the EU Emission Trading Scheme: Policy Overview' (2006) 6 *Climate Policy*, pp. 7–30.

Lamy P., speech delivered at the 20th World Energy Congress on 15 November 2007 in Rome.

Lowenfeld A., *International Economic Law*, (Oxford University Press, 2003).

Malumfashi, I. Garba, '"Green" public procurement policies, climate change mitigation and international trade regulation: An assessment of the WTO Agreement on Government Procurement' PhD Thesis, Centre for Energy, Petroleum and Mineral Law and Policy, University of Dundee, United Kingdom (2009).

Malumfashi, I. Garba, 'Procurement policies, Kyoto compliance and the WTO Agreement on Government Procurement: the case of the EU Green Electricity Procurement and the PPMs debate', in T. Cottier *et al* (eds), *International Trade Regulation and the Mitigation of Climate Change: World Trade Forum* (Cambridge University Press, 2009).

Matteotti-Berkutova, Sofya, 'Oil Supply Management Practices of OPEC under the World Trade Organisation Rules and the National Competition Laws', PhD Thesis University of Bern (2010).

Nartova, Olga, 'Trade in Energy Services under WTO Law: The Impact of Competition Policies', PhD thesis University of Bern (2009).

Neuhoff, Karsten, Ahman, Markus, Betz, Regina; Cludius, Johanna, Ferrario, Federico, Holmgren, Kristina, Pal, Gabriella, Grubb, Michael, Matthes, Felix, Rogge, Karoline, Sato, Misato, Schleich, Joachim, Tuerk, Andreas, Kettner, Claudia, Walker, Neil, 'Implications of announced phase II national allocation plans for the EU ETS' (2006) 6(5) *Climate Policy*, pp. 411–422.

OECD, *Greener Public Purchasing: Issues and Practical Solutions* (Paris, 2000).

OECD/IEA, *Energy Security and climate policy: assessing interactions* (Paris, 2007).

OPEC Statute, United Nations Trety Series 443, 248.

Patterson, Walt, *Transforming Electricity* (London: Earthscan, 1999)

Permanent Sovereignty over Natural Resources, G.A. res. 1803 (XVII), 17 U.N. GAOR Supp (No 17) at 15, U.N. Doc A/5217 (1962).

Pollitt, Michael G., *The Impact of Liberalisation on the Performance of the Electricity Supply Industry: an International Survey*, (Sidney Sussex University of Cambridge, 1997)

Poretti, Petro, 'Waiting for Godot: Subsidy Disciplines in Services Trade' in M. Panizzon, N. Pohl, P. Sauvé (eds) *GATS and the Regulation of International Trade in Services*, (Cambridge University Press, 2007).

Rubini, Luca, *The Definition of Subsidy and State Aid. WTO and EC Law in Comparative Perspective* (Oxford University Press, 2009).

Selivanova, Julia, *Energy Dual Pricing in WTO Law* (London: Cameron May 2008).

Terhechte, Jörg Philipp, 'OPEC und europäisches Wettbewerbsrecht : zugleich ein Beitrag

zum Phänomen der Fragmentierung des internationalen Wirtschaftsrechts', (Baden-Baden: Nomos, 2008).

UN Department of Economic and Social Affairs, Statistics Division Statistical Papers Series M No. 77, Ver.1.1, (New York, 2004).

van den Bossche, Peter, *The Law and Policy of the World Trade Organisation: Text, Cases and Materials* (Cambridge University Press, 2005).

Van Houtte, Hans, *The Law of International Trade*, (London: Sweet and Maxwell, 1995).

Van Houtte, Hans, *The Law of International Trade*, 2nd ed. (London: Sweet and Maxwell, 2002).

WTO Agreement on Government Procurement, *Marrakesh Agreement Establishing the World Trade Organisation, Annex 4: Plurilateral Trade Agreements: Agreement on Government Procurement*, done at Marrakesh on 15th April 1994 entered into force 1 January 1996.

WTO, *The Fundamental Principles of Competition Policy*, Background Note by the Secretariat, WT/WGTCP/W/127, 7 June 1999.

WTO, *Revised Government Procurement Agreement 2007*, document no. GPA/W/297, available at http://www.wto.org/english/tratop_e/gproc_e/negotiations_e.htm

WTO, *Services Sectoral Classification List*, document no. MTN.GNS/W/120, 10 July 1991.

WTO, *World Trade Report 2005: Trade Standards and WTO*, (WTO, 2005), 46.

Z.Bigdeli, S., 'Will the 'friends of climate' emerge in the WTO? Applying the 'fisheries subsidies' model to energy subsidies' (2008) 2(1) *Carbon and Climate Law Review*.

Z.Bigdeli, S., 'Energy Subsidies in International Economic Law: a Trade and Environment Perspective', PhD thesis University of Bern (2009).

Zhang, ZhongXiang and Assunção, Lucas, 'Domestic Climate Policies and the WTO' (UNCTAD Discussion Paper series, No. 164 November 2002)

List of full case titles mentioned in the Report

WTO Cases

Appellate Body Report, *European Communities – Conditions for the Granting of Tariff Preferences to Developing Countries* WT/DS246/AB/R 7 April 2004

Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, adopted 6 November 1998, DSR 1998:VII, 2755.

GATT Panel Report, *Canada – Measures Affecting Exports of Unprocessed Herring and Salmon*, L/6268, adopted 22 March 1988, BISD 35S/98.

GATT Panel Report, *Japan – Trade in Semi-Conductors*, L/6309, adopted 4 May 1988, BISD 35S/116.

Panel Report, *Argentina – Measures Affecting the Export of Bovine Hides and Import of Finished Leather*, WT/DS155/R and Corr.1, adopted 16 February 2001, DSR 2001:V, 1779.

Panel Report, *India – Measures Affecting the Automotive Sector*, WT/DS146/R, WT/DS175/R and Corr.1, adopted 5 April 2002, DSR 2002:V, 1827.

Panel Report, *India – Quantitative Restrictions on Imports of Agricultural, Textile and Industrial Products*, WT/DS90/R, adopted 22 September 1999, as upheld by Appellate Body Report WT/DS90/AB/R, DSR 1999:V, 1799.

Panel Report, *Japan – Measures Affecting Consumer Photographic Film and Paper*, WT/DS44/R, adopted 22 April 1998, DSR 1998:IV, 1179.

Panel Report, *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, WT/DS161/R, WT/DS169/R, adopted 10 January 2001, as modified by Appellate Body Report WT/DS161/AB/R, WT/DS169/AB/R, DSR 2001:I, 59.

Panel Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/R and Corr.1, adopted 6 November 1998, as modified by Appellate Body Report WT/DS58/AB/R, DSR 1998:VII, 2821.

Cases of the European Court of Justice

ECJ Case 6/64, *Costa v ENEL* [1964] ECR 1141.
ECJ Case C-393/92, *Almelo and Others* [1994] ECR I-1477.
CFI Case T-387/04, *EnBW Energie Baden-Württemberg AG v Commission*, 30.4. 2007.