

Chapter 2

Energy Security and the WTO Agreements

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Abstract There is a widely considered view that trade in energy and energy products is not adequately governed by the multilateral trade rules administered by the World Trade Organization (WTO). This view is reinforced by the fact the traditional market access restrictions are less of a problem in the energy sector as countries tend to focus on retaining control and sovereignty over energy resources. A mapping of linkages between the WTO rules and trade in the energy sector has highlighted the inadequacy of international trade rules in a number of areas such as export duties and export restrictions, energy transit, renewable energy sector, government support including dual pricing policies, classification of energy services, and lack of flexibility in differentiating goods based on carbon intensity or other such characteristics. Again, when the energy-related trade measures violate WTO rules, the various exceptions and exemptions under the WTO covered agreements also play a central role. Although the growing body of WTO jurisprudence has addressed the inherent inadequacies of the rules in meeting the challenges of energy security, there are several areas where significant improvements in existing provisions and separate or new disciplines may be necessary. This chapter while examining the interaction between WTO rules and energy security also seeks to identify the specific issues in the Chairman's texts in different areas of Doha Round negotiations, which have a direct bearing on trade in energy products.

Views expressed are personal.

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2.1 Introduction

Energy was not specifically addressed by international agreements for a long time, and was mostly treated in a political context as a special case. Specific disciplines on energy did not form part of the original GATT 1947 or even the WTO treaty. One possible reason is that most of energy abundant nations were not contracting parties of GATT or, for that matter, negotiating parties to the Uruguay Round. Moreover, the discussions on energy-related areas were highly politicized and various security considerations influenced the trade policy in the energy sector. For instance, in 1980 Mexico withdrew its application to the GATT because it faced political pressure from other Members over its crude oil export policies. Russia,

the world's largest gas exporter also opposed any liberalization of its natural gas market in its WTO accession negotiations (see Chap. 3 and Pogoretskyy 2011).

It is now commonly understood that existing World Trade Organization (WTO) rules apply equally to energy products and services. To the extent that energy goods or services may be traded, the GATT/WTO principles that govern international trade are fully applicable to trade in energy and energy products. These include the most favoured nation (MFN) and the national treatment principle. WTO rules do not generally apply to energy resources before they are traded (Yanovich 2011). During the Tokyo and Uruguay Rounds, GATT Contracting Parties discussed issues related to dual-pricing practices and resulting subsidies, export restrictions, and export taxes. These issues have gained importance in recent times especially during the WTO accession process of some of the energy abundant countries.

The role of WTO agreements on the energy sector has received increased attention especially in view of the rising role of energy security. Energy security depends on the existence and expansion of adequate energy resource base. WTO and other trade-related agreements regulate to an extent how sovereign nations can explore and exploit conventional forms of energy such as fossil fuels which are increasingly regulated on environmental and conservation grounds in several parts of the world. For example, several countries have been exploring the possibility of applying carbon taxes to energy-related products based on the carbon intensity of the production process. The possibility of trading unconventional forms of energy such as heavy oil, tar sands, and oil shale deposits face significant regulatory difficulties in a number of jurisdictions. Energy security objectives are also met in several countries by laying down energy efficiency standards in the nature of technical regulations. Renewable sources of energy such as hydropower, biomass, wind power, and geothermal energy are widely considered as essential to energy security, while the current international trade regulatory framework is still developing to provide a policy environment that could sustain and support such programs. In the above context, the WTO agreements and future negotiations will have a significant role in influencing government intervention in addressing energy security.

As stated earlier, the linkages with international trade rules and energy security are diffuse and, to an extent, incidental under the WTO Agreements. A number of Annex I WTO Agreements do not address matters relating to energy security. The WTO Agreements that are directly relevant to cross-border energy trade include the General Agreement on Tariffs and Trade (GATT) 1994, the General Agreement on Trade in Services (GATS), the Agreement on Technical Barriers to Trade (TBT), the Agreement on Trade Related Investment Measures (TRIMs), the Agreement on Subsidies and Countervailing Measures (SCM), the Agreement on the Implementation of Article VI of the GATT 1994 (Antidumping Agreement), and the Government Procurement Agreement (GPA). A number of negotiating proposals under the Doha Round also have some bearing on energy security. This chapter examines some of the key developments in the negotiations related to energy security under the Doha Round.

The organization of this chapter is as follows: Sect. 2.2 will provide an introductory mapping of linkages in international trade and energy security, and

identify the specific provisions in various WTO Agreements that might have inter-linkages. Section 2.3 examines the extent and role of exceptions and exemptions under the WTO Agreement that could apply to government measures relating to the energy sector; Sect. 2.4 seeks to identify specific issues in the Chairman's text under the Doha Round negotiations; and Sect. 2.5 concludes.

2.2 Energy Security: Linkage with WTO Agreements

2.2.1 Energy Security and Non-Discrimination Disciplines Under GATT 1994

Energy products are often the subject matter of trade preferences and special treatment among countries. The accession of several energy exporting countries to the WTO in the recent years has only underlined the importance of the MFN principle which is one of the cornerstone principles of the multilateral trading system.

The MFN provision prohibits a WTO Member from treating the products originating in or destined for another member less favorably than the "like" products originating in or destined for any other country (including non-WTO members). Article I of GATT 1994 is broad in scope and covers customs duties and charges of any kind imposed or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, the method of levying such duties or charges, and all duties and formalities in connection with importation or exportation, as well as internal taxes and domestic regulations.

How does the MFN provision apply for energy products? Although the MFN clause deals with border measures, it also applies to rules and formalities applied in connection with importation and exportation. In other words, when a WTO Member applies customs duties, charges or any export or import regulations, it cannot discriminate the products based on their origin or destination.

The other important pillar of non-discrimination is national treatment, which is the bedrock of the multilateral trading system. Article III of the GATT 1994 sets forth that with respect to internal taxation and domestic laws, regulations and requirements, imported products shall be accorded treatment "no less favourable" than that accorded to "like" domestic products.

National treatment provision occupies a center stage in the discussion on regulation of energy products. One of the important questions is whether it is possible to treat energy products differently depending on the source of energy used in the manufacturing process. To put it in other words, a regulator could ask whether renewable energy generated from wind, sun, and water could be treated differently from fossil fuel. Under the national treatment obligation, WTO Members must tax and regulate imported products no less favorably than "like" domestic products.

Over the years, the WTO dispute settlement panels and the Appellate Body have adopted a case-by-case approach in determining what is "like" under Articles

I and III of the GATT.¹ The GATT Working Party Report on Border Tax Adjustment, adopted by the Contracting Parties in 1970, expressly advocates a case-by-case approach. The Appellate Body report in *EC—Asbestos* case provides useful guidance on the interpretation of the term “like product”:

[T]he interpretation of the term should be examined on a case-by-case basis. This would allow a fair assessment in each case of the different elements that constitute a “similar product”. Some criteria were suggested for determining on a case-by-case basis, whether the product is “similar”; the products’ end-uses in a given market; consumers’ tastes and habits, which change from country to country; the product’s properties, nature and quality.²

At the core of this debate is the issue whether it is consistent with the principle of non-discrimination for WTO Members to treat products differently based on non-product-related process and production methods?³ The current focus of the debate on climate change and clean energy products seeks to incorporate concerns relating to negative externalities in the “like product” determination.⁴ For example, the carbon footprint of a product or a production process could be a decisive and often distinguishing factor in the energy policy discussion. In order to address this question it is important to examine the criteria outlined by the GATT Working Party Report (GATT 1970). Assume that different VAT rates are applied to biodiesel and petro-diesel products. Such a situation could possibly arise if a government seeks to extend some preferential tax rates to biodiesel or other environmental friendly products based on clean energy considerations. Economic theory posits that tax incentives may be warranted whenever the market fails to provide desirable public goods or to tackle externalities (Stern 2007). Based on this principle, there may be legitimate reasons for giving a preferential VAT rate for biodiesel.

The WTO panels and Appellate Body have not directly addressed the issue whether a differential tax system based on carbon footprint of a production process is permissible under GATT Article III, but a recent ruling in *US—Clove Cigarettes* addressed the question whether the regulatory purpose of the measure is determinative of likeness. The WTO panel in this dispute placed emphasis on the regulatory aim, but the Appellate Body played down the role of the regulatory

¹ Appellate Body Report on *European Communities—Measures affecting Asbestos*, WT/DS135/AB/R, at paragraph 102 (Hereinafter *EC—Asbestos*); Appellate Body Report on *Japan—Taxes on Alcoholic Beverages*, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R at paragraph 113 (Hereinafter *Japan—Alcoholic Beverages*).

² Appellate Body Report on *EC—Asbestos*, paragraph 18.

³ GATT jurisprudence has made it clear that distinguishing products based on their process and production methods are not valid. The panel in *US—Restrictions on Imports of Tuna* explicitly ruled that distinctions must be based on characteristics that affect tuna as a product. See also Appellate Body Report on *Japan—Alcoholic Beverages* at paragraph 29.

⁴ Appellate Body report *EC—Asbestos*, at paragraph 135–136. Although the Appellate Body rejected the ‘aim-and-effect’ test in *Japan—Alcoholic Beverages*, it noted in paragraph 29 as follows: “[w]e believe it is possible to examine objectively the underlying criteria used in a particular tax measure, its structure and its overall application to ascertain whether it is applied in a way that affords protection to domestic product.”

purpose of the measure. The Appellate Body noted that the regulatory concerns underlying a measure, such as health risks associated with a given product are relevant in determining whether the products are “like” only to the extent that these concerns affect the traditional criteria such as “physical characteristics” or “consumer preferences”.⁵ Despite the rejection of the “aim and effect” of a regulatory measure by the Appellate Body, it is plausible that environment and public policy considerations could affect the interaction of the product in the market place and may still be valid in non-discrimination claims under GATT.

Some previous WTO panels have concluded that products are “like” when they have similar physical characteristics such as molecular or chemical composition. In *Mexico—Taxes on Soft Drinks*, the Panel concluded that soft drinks sweetened with high fructose corn syrup (HFCS) and beet sugar are “like” soft drinks sweetened with cane sugar, because non-cane sugar and cane sugar have very similar chemical composition.⁶ The panel also noted that non-cane sugar and cane sugar are both forms of sucrose with identical molecular structure and that the only difference between them is their source. Based on this analogy, biodiesel and petrodiesel are identical in that they are fuels with the chemical properties necessary to be burned by an internal combustion engine.

Competitiveness criteria are also increasingly introduced in domestic legislation. For instance, several countries have considered the imposition of a carbon tax to internalize the social cost of carbon and to encourage producers and consumers to shift to carbon neutral or greener energy products.⁷ A climate change legislation or a ‘carbon equalization tax’ that imposes an internal tax based on carbon intensity of production process could raise claims of incompatibility with the GATT even if the taxes apply to domestic and imported products. There is an argument that such border tax adjustments (BTA) are permitted under Article II:2(a) of the GATT. However, it is still doubtful whether a carbon tax which is not strictly a tax on the product is border adjustable (Pauwelyn 2010). Furthermore, if the impact of such a tax is heavier on the imported products as compared to the competing domestic product, there could still be claims under Article III:2 of the GATT. In any case, it is beyond doubt that Article III, Border Tax Adjustment and the “like product” determination will continue to influence the debate on energy security.

2.2.2 Technical Barriers to Trade

This section briefly touches upon the scope of the WTO’s TBT Agreement in relation to energy products and how it could play a key role in the energy security

⁵ Appellate Body report on *United States—Measures affecting the Production and Sale of Clove Cigarettes*, WT/DS 406/AB/R, at paragraph 104 (Hereinafter *US—Clove Cigarettes*).

⁶ Panel Report on *Mexico—Tax Measures on Soft Drinks and Other Beverages*, WT/DS308/R, at paragraph 8.27–8.36 (Hereinafter *Mexico—Taxes on Soft Drinks*).

⁷ Australia enacted the Clean Energy Act of 2011, which incorporates a carbon tax.

debate. Technical regulations and standards are widely used for energy products and materials as well as energy consuming end-use services. It has also become a common practice to use labels in the energy sector to promote energy efficient products. Performance standards and sustainability standards have also become common. An example could be a minimum energy performance standard (MEPS) for biofuels or low-carbon fuels.

The TBT Agreement establishes disciplines relating to technical regulations and product standards. The Agreement defines technical regulation as a “document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method”.⁸

One of the key provisions within the TBT Agreement is Article 2.1 which says that Members “must ensure that in respect of technical regulations, products imported from the territory of any Member shall be accorded treatment no less favorable than that accorded to like products of national origin and to like products originating in any other country”. Furthermore, according to Article 2.2, technical regulations must not create “unnecessary obstacles to international trade” and must “not be more trade restrictive than necessary to fulfill a legitimate trade objective, taking into account of the risk, the non-fulfillment would create”. The legitimate objectives that may be pursued through a technical regulation include: national security requirements; the prevention of deceptive practices; and the protection of human health or safety, animal or plant life or health, or the environment. Article 2.4 of the TBT Agreement expresses a preference for use of international standards as a basis for technical regulations where those standards exist or their completion is imminent. Article 2.5 of the TBT Agreement further provides that when technical regulation is in accordance with relevant international standards it shall be presumed not to create an unnecessary obstacle to international trade.

There is a growing trend among WTO members to use eco-labels and product and non-product-related standards with a view to managing certain negative externalities. For instance, in 2009, the European Union issued a Renewable Energy Directive that seeks to promote national renewable energy targets that result in an overall binding target of a 20 % share of renewable energy sources in energy consumption and a binding 10 % minimum target for biofuels in transport to be achieved by each Member State by 2020.⁹ The EU Directive has established technical regulations which may have a trade restrictive effect on the products of

⁸ WTO Legal Texts: Annex 1(1) of the TBT Agreement.

⁹ See EC Press Release (2012) and Directive (2009/28/EC). As of October 2012, the Commission proposed that the use of food-based biofuels to meet the 10 % target be limited to 5 %.

other countries.¹⁰ Some WTO Members have already joined issue while others may issue similar technical regulations that would need to comply with the requirements of the TBT Agreement.

2.2.3 Customs Tariffs and Tariff Commitments

Article II of the GATT 1994 prohibits WTO Members from applying ordinary customs duties on the importation of a product that are higher than the rates specified (or “bound”) in the schedules of concessions and commitments (goods schedule). The goods schedule are an integral part of the GATT 1994.

WTO Members are also prohibited from applying any other duties or charges on the importation of the product, unless specified in the goods schedule.

However, an interesting issue is the extent to which export duties and tariff concessions are subject to WTO commitments since the focus during the previous trade rounds were predominantly on import duties. This is especially important in the light of measures taken by countries to increase export duties on natural resource commodities. Article II of the GATT 1994 which gives effect to the tariff concessions generally provides disciplines only with respect to import duties. The first sentences of Article II paragraphs 1(b) and 1(c) of the GATT 1994 which require WTO Members to exempt the products imported from other WTO Members from the imposition of ordinary customs duties in excess of those set forth in the schedule refer only to importation. However, other provisions of GATT 1994 including Article XXVIII *bis* and Note *Ad* Article XVII:3 indicate that reduction of export duties may become part of the schedule of concessions in the same manner as import duties are inscribed and bound. Importantly, Paragraph 1(a) of GATT Article II imposes a fairly broad obligation on WTO Members (Roessler 1975). Paragraph 1(a) of GATT Article II reads as follows:

Each contracting party shall accord to the commerce of the other contracting parties treatment no less favourable than that provided for in the appropriate Part of the Schedule annexed to the Agreement.

Stated differently, nothing in the negotiating history or practice of the GATT suggests that export duties are not amenable to bound tariff commitments under the GATT. The tariff schedules of some WTO Members such as Australia contain certain export duty commitments. Moreover, recently acceded countries have bound some of their export taxes. Specifically, the recent accession of Russia binds export duties on certain energy products (see Chap. 3). An obligation to reduce

¹⁰ Ibid. Argentina and Indonesia opposed this EC Directive. Argentina noted that the Directive was an unnecessary obstacle to trade due to its unjustified restrictions on imports of biofuels, by requiring, on one side, the compliance and certification of sustainability criteria and, on the other side, the fulfillment of emissions reduction requirements. See also Specific Trade Concerns Raised in WTO TBT Committee (2011).

export duties on certain products is tantamount to scheduling export duty bindings. In other words, it could be argued that an obligation not to impose export duties on certain natural resource products is equivalent to binding export duties at zero on such products (Crosby 2010).

2.2.4 Quantitative Restrictions

In addition to border measures as outlined above, countries can impose import or export measures in the nature of non-tariff measures to limit the quantity of imports and exports. The general approach of the GATT/WTO is to prohibit such quantitative restrictions. Article XI.1 of the GATT 1994 which prohibits quantitative restrictions provides as follows:

No prohibitions or restrictions other than duties, taxes, or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale of any product destined for the territory of any other contracting party.

In light of the above, any permissible restriction should be through tariff (price measures) and not through measures directly affecting the volumes (quotas, licenses, etc.). Article XI:1 of the GATT 1994 explicitly excludes from its scope imposition of ‘duties, taxes or other charges’. As the WTO panel in *India—Quantitative Restrictions* noted, “the text of Article XI:1 is very broad in scope, providing for a general ban on import or export restrictions or prohibitions ‘other than duties, taxes or other charges’”.¹¹

In *Colombia—Ports of Entry*, a WTO panel found that a measure that limited the number of ports through which certain goods entered the WTO Member (albeit the quantities that could enter through the authorized ports was not restricted) was inconsistent with GATT Article XI because the measure has a “limiting effect” on imports.¹²

The WTO panel in *India—Autos* also stated that ‘restriction’ need not be a blanket prohibition or a precise numerical effect.¹³ The WTO panel clarified the meaning of the term ‘restriction’ under Article XI:1 as follows:

¹¹ Panel Report on *India—Quantitative Restrictions on Imports of Agricultural, Textiles and Industrial Products*, WT/DS90/R (Hereinafter *India—Quantitative Restrictions*) at paragraph 5.128.

¹² Panel Report on *Colombia—Indicative Prices and Restrictions on Ports of Entry*, WT/DS366/R, at paragraph 7.240 (Hereinafter *Colombia—Ports of Entry*).

¹³ Panel Report on *India—Measures affecting the Automotive Sector*, WT/DS146/R, WT/DS175/R, at paragraph 7.270 (Hereinafter *India—Autos*).

Table 2.1 Categories of quantitative restrictions on energy products

Natural resource sector	WTO members	Measures (Number of entries)			
		Automatic licensing	Non-automatic licensing	Quota	Prohibition
Fuels	7	94	1,001	236	7
Minerals	10	94	1,385	746	60

Source WTO World Trade Report (2010)

[M]easures which create uncertainties and affect investment plans, restrict market access for imports or make importation prohibitively costly, all of which have implications on the competitive situation of an importer.

Based on this definition, measures creating uncertainties and affecting investment plans, limiting market access for exports making exportation more costly, would have implications on the competitive situation of exporters and could amount to a violation of Article XI:1 of the GATT 1994.

2.2.4.1 Import and Export Restrictions

There is a propensity among most energy deficit nations to secure energy products required at relative ease rather than to create import restrictions or other such barriers. Energy-rich countries, on the other hand, may for conservation, fiscal, or other reasons, apply export restrictions in the form of export prohibitions, quotas, or automatic and non-automatic licensing requirements on energy products. There is a trend to impose either export prohibitions or quotas on natural resources and minerals. The WTO World Trade Report 2010 provides an indication of such export restrictions maintained on energy intensive products such as fuels and mineral products (Table 2.1).

One of the issues is whether Article XI:1 of the GATT 1994 is symmetrical in the matter of treating import and export restrictions. As the legal test is the same for import and export prohibitions or restrictions, it is safe to assume that the disciplines of Article XI:1 of the GATT which may be applicable to any prohibition or restriction on imports will apply with equal force when applied to exports. However, in practice, the WTO has no formal mechanism for reporting export restrictions and there is no comprehensive database of such restrictions. An effort has been recently taken at the behest of G-20 to compile an inventory of restrictions.

2.2.4.2 Non-Automatic Export Licensing System

The approval of applications under such a system would not be granted in all cases, and the exportation of products would be restricted. In *Japan—Semiconductors*, a GATT panel noted that the export licensing system implemented by

Japan resulted in delays up to three months in the issuing of licenses for semi-conductors destined for contracting parties other than the United States and therefore constituted restrictions on the exportation of such products inconsistent with GATT Article XI.¹⁴ Specifically in the context of energy, licensing requirements governing access to oil and gas pipelines and other export distribution networks have the effect of restricting the volume of oil and gas exported and could come under the disciplines of Article XI:1 of GATT 1994.

2.2.4.3 Minimum Export Prices

Minimum export prices can also fall within the coverage of Article XI of the GATT 1994.

In *Japan—Semiconductors* case, a GATT panel noted that the complexity of measures which constituted a coherent system restricting the sale for export of monitored semiconductors at prices below company specific cost to markets other than the United States was inconsistent with GATT Article XI:1.¹⁵

The prohibition of export or import restrictions is valid also for prohibitions to the import or export of energy materials or products below a certain price. Requirements of minimum export or import price are generally used to maintain certain level of supply in the domestic market and would limit the quantity of imports or exports. In most cases such requirements would fall foul of the requirements of GATT Article XI.

2.2.4.4 Production Controls

An important issue in the context of energy trade is whether production controls such as the limits on the quantity of production during a particular period of time could be covered by Article XI:1 of GATT 1994. Exploitable natural resources are generally found in a few geographical regions and their mining or exploitation is concentrated in a few countries. Countries holding reserves of valuable natural resources may control production or exploration for strategic reasons. For example, decisions on production limits implemented by OPEC countries can affect the amount of crude oil available in the world market. In general terms, the OPEC measures may have the same effect as that of any other quantitative restriction on export (see Chap. 5 and Yanovich 2011). It has been commented by Cottier et al. (2009), that the language of Article XI:1 and, in particular, the notion of ‘other measures’ provides ample scope for coverage of such production restrictions. However, there is no precedent at least in the GATT or WTO practice to commit

¹⁴ Panel Report on *Japan—Trade in Semiconductors*, BISD 35S/116, at paragraph 118 (Hereinafter *Japan—Semiconductors*).

¹⁵ Panel Report on *Japan—Semiconductors*, at paragraph 117.

another member to produce more of its natural resources to satisfy world demand. Perhaps, this issue could be addressed through a coherent set of rules on competition law.

2.2.5 Trade-Related Investment Measures

The renewable energy sector has witnessed government intervention in recent times. The Feed-in-Tariff (FiT) program introduced by some countries encourages the development of local manufacturing capability for equipment and components for renewable generation facilities and associated employment opportunities. The FiT program implemented by the Canadian Province of Ontario was challenged by the European Union and Japan¹⁶ and raises issues with respect to consistency with Article III and XI of the GATT 1994 in addition to the concerned provisions of the TRIMs Agreement.

At first glance, it appears that domestic content requirements included in the FiT program are in a way related to trade and could be TRIMs. In *Canada—Renewable Energy*, the WTO panel also reached the same conclusion. The Ontario FiT program includes a provision that requires developers to have a certain percentage of their project costs come from Ontario goods and labor. This “Made-in-Ontario” provision mandates that most renewable energy suppliers use a minimum level of equipment produced in Ontario in order to qualify for price guarantees and grid access. For example, wind projects require a minimum of 25 % local content and solar projects require a minimum of 60 %. The WTO Appellate Body upheld the panel’s finding that local content requirements violated Article III:4 of the GATT 1994 which required that WTO members accord foreign products treatment no less favorable than that provided to domestic products. The local content requirements were also found to violate Article 2.1 of the TRIMs Agreement.

It will be pertinent to recall the finding of the WTO panel in *Indonesia—Autos* that domestic content requirements are necessarily ‘trade-related’ since such requirements, by definition, “always favour the use of domestic products over imported products, and therefore could affect trade.”¹⁷

An equally important provision is Article III:8(a) of GATT 1994 which reads as follows: “[t]he provisions of this Article [*GATT Article III on national treatment*] shall not apply to laws, regulations or requirements governing the procurement of governmental agencies of products purchased for governmental purposes and not with a view to commercial resale or with a use in the production of goods for commercial resale.” (emphasis added).

¹⁶ Panel Report on *Canada—Certain Measures Affecting Renewable Energy*, WT/DS412/R, WT/DS426/R (Hereinafter *Canada—Renewable Energy*).

¹⁷ Panel Report on *Indonesia—Certain Measures affecting the Automobile Industry*, WT/DS54/R, WT/DS55/R, WT/DS59/R, WT/DS64/R, at paragraph 14.82 (Hereinafter *Indonesia—Autos*).

This provision was raised in the *Canada—Renewable Energy* dispute where the panel and the Appellate Body ruled that Canada had not established that it was entitled to rely upon GATT Article III:8(a) and rejected the government procurement defense. Whereas the panel noted that Ontario’s procurement for electricity under the FiT Program was undertaken “with a view to commercial resale”, the Appellate Body found that the purchase of electricity under the FiT program was not government procurement and therefore was not subject to the Article III:8(a) exemption.

2.2.6 Freedom of Transit Under GATT

Energy transportation often takes place via pipelines or transmission networks (for gas or electricity). Sometimes transportation networks cross third countries in transit. For instance, if iron ore mined in Afghanistan has to be transported to India through Pakistan or a gas pipeline in a Central Asian country has to be transported through installations set up in multiple countries across India’s bordering countries, freedom of transit could be extremely important.

Article V of the GATT sets out rules that apply to goods, vessels, and other means of transport that are “traffic in transit”. Article V:2 of the GATT 1994 provides for:

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.

A plain reading of Article V indicates that energy products in transit through the territory of a WTO Member cannot be subject to customs duties or any other duties or charges. For instance, if the transit country happens to be a WTO Member it cannot impose customs duties it levies on imports or exports. It can, however, impose levy charges related to the cost of transportation, administrative expenses or other services.

The WTO panel in *Colombia—Ports of Entry*¹⁸ had an occasion to interpret the provisions of Article V of the GATT. While interpreting Article V:2, the panel noted as follows:

[T]he Panel concludes that the provisions of ‘freedom of transit’ pursuant to Article V:2, first sentence requires extending unrestricted access via the most convenient routes for the passage of goods in international transit whether or not the goods have been trans-shipped, ware-housed, break-bulked, or have changed modes of transport. Accordingly, goods in international transit from any Member must be allowed entry whenever destined for the territory of a third country. Reasonably, in the Panel’s view, a Member is not required to guarantee transport on necessarily any or all routes in its territory, but only on the ones ‘most convenient’ for transport through its territory.

¹⁸ Panel Report on *Colombia—Ports of Entry*, WT/DS366/R at paragraph 7.401.

Article V of the GATT also includes a non-discrimination provision. Article V:6 of GATT 1994 provides that WTO Members must treat products that have transited through the territory of any other WTO Member no less favorably than how the products would have been treated had they been transported from their place of origin to their destination without going through the country of transit. It means that there cannot be any discrimination in treatment based on the flags of the vessels, the place of origin, departure, entry, exit or destination, or any circumstances relating to the ownership of goods, vessels or other means of transport. In *Colombia—Ports of Entry*, the Panel had to determine whether the MFN obligation in Article V:6 has to be applied to the WTO Member which is the ultimate destination or whether it needs to be applied to the WTO Member through which the goods are transmitted. The Panel found that the obligation in Article V:6 does apply to the WTO Member which is the ultimate destination of the goods.¹⁹

Article V of the GATT 1994 is not free from ambiguities. There is a view that this provision applies to ‘moving’ modes of transport only and not with respect to permanent fixtures or infrastructure. One of the reasons for this view is that fixed infrastructures such as pipelines and power grids are not themselves in transit (Cossy 2010). On the other hand, it is clear from a plain reading of Article V, paragraph 7 that the only mode of transport excluded from the scope of the transit obligation is aircraft in transit. Furthermore, the goods that these fixtures carry are also in transit.

Transit issues have also been discussed in some of the recent accession negotiations (see also Chap. 3). Members have committed in their Accession Protocol that they “would apply [their] laws and regulations governing transit operations and would act in full conformity with the provisions of the WTO Agreement, in particular Article V of GATT 1994”. Ukraine’s Working Party Report includes a specific reference to energy: “Ukraine would apply all its laws, regulations and other measures governing transit of goods (including energy), such as those charges for transportation of goods in transit, in conformity with the provisions of the WTO Agreement.”²⁰

WTO Members have been discussing possible improvements and clarifications of the transit obligations contained in Article V of the GATT under the Trade Facilitation Agreement. The details of the proposals have been included in Sect. 2.3.

2.2.7 Energy Subsidies and SCM Agreement

The International Energy Agency (IEA) estimates that fossil fuel consumption subsidies—subsidies that benefit consumers of products—at US \$557 billion. Subsidy estimates from year to year may vary due to fluctuations in world prices, domestic pricing policy changes, and shifts in demand and changes in world prices.

¹⁹ Panel Report on *Colombia—Ports of Entry*, at paragraph 7.466.

²⁰ WTO Working Party Report on the Accession of Ukraine (2008), paragraph 367.

The Organization of Economic Cooperation and Development (OECD 2011) notes as follows:

Eradicating subsidies to fossil fuel would enhance energy security, reduce emissions of greenhouse gases and air pollution, and bring economic benefits. They result in an economically inefficient allocation of resources and market distortion, while often failing to meet their intended objectives. Subsidies that artificially lower energy prices encourage wasteful consumption, exacerbate energy-price volatility by blurring market signals, incentivize fuel adulteration and smuggling, and undermine the competitiveness of renewable and more efficient energy technologies. For importing countries, subsidies often impose significant fiscal burden on state budgets, while for producers they quicken the depletion of resources and can thereby reduce export earnings over long term.

The 2012 G-20 statement includes the following text:

To phase out and rationalize over the medium term inefficient fossil fuel subsidies while providing targeted support for the poorest. Inefficient fossil subsidies encourage wasteful consumption, reduce our energy sources and undermine efforts to deal with the threat of climate change.

With little traction to reform fossil fuel subsidies through diplomacy, environmentalists and other trade policy experts have looked to the WTO's SCM Agreement and dispute settlement as a possible mechanism for disciplining fuel subsidies.²¹ The SCM Agreement seeks to minimize market distortions caused by subsidies. It does so by prohibiting certain subsidies that are particularly trade distorting and allowing WTO Members to seek trade remedies for actionable subsidies, i.e., those subsidies that cause material injury to domestic industry of a member or a serious prejudice to the interests of the members.

The subsidies for renewable energy have also seen a spurt in recent times. The renewable energy subsidies were about US\$ 66 billion in 2010 alone. In the new policy scenario, subsidies to renewable energy are expected to reach US\$ 250 billion in 2035. Some of the common forms of renewable energy support schemes include mandatory quotas, price support (e.g., FiTs), tax incentives such as Production Tax Credits (PTC), Renewable Portfolio Standards (RPS), loans, grants, and various types of incentive schemes. Many of the renewable energy subsidies are provided by developing and emerging economies. Large renewable energy industries exist in several developing countries, for instance, Argentina, Botswana, Brazil, China, India, Malaysia, Nepal, South Africa, and Thailand (Martinot et al. 2002). In so far as these subsidies are linked to the use of local content, they run the risk of being challenged as prohibited subsidies under the SCM Agreement. Of late, some of these renewable energy subsidies are targeted both under the SCM and TRIMs Agreements.²²

²¹ In 2007, Canada challenged subsidies provided by the United States for corn and other agricultural products. See request for consultations by Canada, WT/DS 357/1 January 2007. Brazil had also challenged, inter alia, the gasoline and diesel tax exemptions for biofuels. See request for consultations by Brazil, WT/DS 365/1 July 2007.

²² See Appellate Body Report in *Canada—Renewable Energy*.

Energy subsidies—both fossil fuel and renewable energy—may also encompass consumption and production subsidies. Consumption subsidies are intended to benefit consumers, whereas production subsidies are designed to assist producers increase production. Production subsidies include subsidized insurance, below-market credit, guaranteed loans, and below market payments for access to publicly owned energy resources. The area of concern from the perspective of international trade rules will be production subsidies.

The SCM Agreement disciplines the use of subsidies by WTO Members to prevent distortions of international trade. However, the SCM Agreement does not prevent Members from using all subsidies. The SCM Agreement establishes a three prong test for establishing a subsidy. The first two parts define “subsidy” and the third part asks whether the “subsidy” is specific or not.

First, the policy must be a “financial contribution” or “any form of income of price support” provided by the government or public body”. The financial contribution must take forms, including the “direct transfer of funds, the provision of goods and services, and the foregoing of revenue that is otherwise due”.

Second, the financial contribution or income support must confer a “benefit”. The WTO Appellate Body has made it clear that the beneficiary must “in fact receive something” such as an advantage. In *Canada—Aircraft*, the Appellate Body stated that “benefit” is concerned with “benefit to the recipient” and not the “cost to the government.”²³

Third, while the first two elements describe the meaning of “benefit”, the subsidy does not fall within the meaning of the SCM Agreement unless it is “specific to an enterprise or industry or group of enterprises or industries”. In the absence of “specificity”, the SCM Agreement could affect government funding for public infrastructure such as roads, bridges, and other essential component of a country’s essential infrastructure. If such subsidies are generally available to the public at large, they are considered to be non-trade distorting and are not subject to the disciplines of SCM Agreement. Some of these aspects related to the determination of subsidy are examined in the following section on dual pricing.

2.2.7.1 Dual Pricing for Energy

Energy-endowed countries often control domestic prices for energy products with a view to keeping the domestic prices artificially low. Low priced energy products are typically used as inputs by domestic downstream companies. Dual pricing favors primarily the production of energy intensive products such as fertilizers, metals, chemicals, etc. (Pogoretsky 2009). The price control leads to significant differential between the prices paid by the domestic companies and the prices paid by foreign companies in their markets (World Trade Report 2010). Since domestic industrial producers do not pay full market price for the energy inputs, this situation

²³ Appellate Body Report on *Canada—Measures Affecting the Export of Civilian Aircraft*, WT/DS70/AB/R, at paragraph 157 (Hereinafter *Canada—Aircraft*).

has adverse implications for the ability of imported goods to compete with products that benefit from low energy prices. Dual pricing can also exist if a country controls the prices of energy inputs artificially low in order to encourage exports of energy based products, although this scenario is less common (Luthra and Luthra).²⁴

Dual pricing is widely considered as a ‘hidden subsidy’ (Pogoretsky 2009 and 2011). Dual pricing is practiced in various economic sectors including energy. Dual pricing was subject to scrutiny in the WTO negotiations of Saudi Arabia and Russia, two major energy-producing countries, the details of which are provided in Box 1.1 (see also Chap. 3).

The analysis of dual pricing is important for a few reasons: one it is directly linked to the discussion on the definition of subsidy under the SCM Agreement per se. In most cases, the price fixed by the government may be available to all industrial users and the producers of the upstream input would have recovered cost and made certain profit on the sales. All these factors make the characterization of dual pricing as a ‘subsidy’ inherently difficult. Secondly, the dual pricing practice of some important energy-producing countries had raised some interesting issues in negotiations on the accession of these countries to the WTO, that not only question the adequacy of the WTO rules to deal with the energy sector but also shows where the interests of consuming and energy-producing countries really lie.

Box 1.1: Dual Pricing in the Energy Sector: Illustrative Cases of Saudi Arabia and Russia

Saudi Arabia faced intense pressure at the time of its WTO accession negotiations to undertake specific commitments on dual pricing. It was alleged that Saudi Arabia offered preferential pricing policy for natural gas liquids (“NGLs” or “feedstock”) which were used in domestic production over those for export (WTO 2005; Milthorp and Christy 2011). It was alleged that NGLs such as ethane, propane and butane were sold at a preferential price to the domestic petrochemical industry of that country.

At the heart of the dual pricing allegation was Resolution No. 68 (now repealed) which granted “national industries in Saudi Arabia using liquid gases (butane-propane-natural gasoline) a 30 % discount of the lowest international price obtained by the exporting country in any quarterly period from any overseas consumer” (United States International Trade Commission 1999). A prototype of such preferential pricing is Methyl Tertiary-Butyl Ether (MTBE), which is manufactured from Methanol. In an anti-dumping petition filed by the US producers of ethanol (i.e. a product that competes with MTBE), it was claimed that the ‘dual pricing’ system subsidized MTBE through low-

²⁴ Draft Report: Luthra and Luthra, Study on Dual Pricing of Natural Resources.

cost provision of the raw material (i.e. natural gas and methanol) to refiners in Saudi Arabia and therefore, the US ethanol industry suffered material injury.

The European Union had raised concerns that this practice was indirectly affecting the EU petrochemical industry. For this reason, dual pricing was discussed in the EU-Saudi Arabia bilateral market access negotiations. The negotiations, however, failed in August 2005; the EU surprisingly abandoned its efforts, and Saudi Arabia's accession agreement was signed.

Likewise, dual pricing was a contentious issue during Russia's accession negotiations to join the WTO. The price of feedstock is determined by Russia at a level that could not be maintained if it was otherwise exposed to market forces. For example, in the case of Russia, the gas and electricity sectors are controlled by the state. Although these sectors are privatized, the majority of shares in energy companies such as Gazprom and RAO UES belong to the government. Prices for gas and electricity are set by Federal Tariff Service (FTS) and the Regional Energy Commission (REC). FTS is empowered to regulate the upper bounds for wholesale prices for electricity and gas. Several Members of WTO raised concerns of dual pricing since Russia charges lower prices for natural gas destined for domestic consumption than for export. According to reports differentiated wholesale prices are set by the Russian Federal Agency and this differentiation is controlled on the basis of numerous legislative and administrative acts. It is further reinforced with a special export tax on gas exports which is implemented alongside. During Russia's accession negotiations, EU maintained its position that the domestic energy prices in Russia were much lower than the world prices which prejudiced EU producers. EU also contended that the Russian government had a monopoly over the energy industries and that it imposed very high export taxes to support a domestic price of gas at a level below the market price. Russia on the other hand maintained that (i) this practice is not undertaken to support domestic markets and (ii) that it is impossible for Russia to move to world energy prices in a single day (Belyi 2012). Russia also stated that its energy pricing was not a subsidy as defined in the SCM Agreement or any other provisions of other covered WTO Agreements. Russia also relied upon a World Bank study that enlisted the merits of dual pricing of Russian natural gas. According to the World Bank study, Russia would lose an amount anywhere between \$5 and 7 billion per year if it were to eliminate this practice and unify the price of feedstock.

Source ICTSD (2004)

A legal analysis of the WTO compatibility of dual pricing would be complex. It is argued that dual pricing has some effects similar to a subsidy. However, establishing that the dual pricing as practiced in Saudi Arabia or Russia would be tantamount to a subsidy would be a daunting task in the context of the SCM Agreement. There is no express provision in the WTO that prohibits this type of a pricing policy (Marceau 2010). Although dual pricing is referred to in the Agreement, it is defined differently from what occurs in the pricing of feedstock in Saudi Arabia or Russia or any other nation implementing such a policy.

As explained in the preceding paragraphs, a subsidy that is prohibited is either conditional upon export performance or the use of domestic over imported goods, known in popular parlance as 'export subsidies' or 'import substitution' subsidies. Moreover, Annex I of the SCM Agreement provides a list of prohibited subsidies. As the provision of cheaper feedstock is not conditional upon the two conditions mentioned, one should look at Annex I to determine its compatibility with its rules. Paragraph (d) of this Annex elaborates on one type of prohibited subsidy as:

The provision by governments or their agencies either directly or indirectly through government-mandated schemes, of imported or domestic products or services for use in the production of exported goods, on terms or conditions more favorable than for provision of like or directly competitive products or services for use in the production of goods for domestic consumption, if (in the case of products) such terms or conditions are more favourable than those commercially available on world markets to their exporters.

This provision can be an illustration of dual pricing. As mentioned in this chapter, in order for this activity to constitute a prohibited subsidy under Annex I, several conditions should be met. In simple terms these conditions are: (i) the government or its agencies address domestic or imported products for use in the production of exported goods in more favorable terms; (ii) preference is given to these types of products only, and not to those like products or directly competitive products that are used for domestic consumption; (iii) in order to determine whether this discrimination exists, the terms and conditions based on which preference is given to goods for export should be more favorable than those commercially available on world markets to their exporters (Behn 2007).

The last condition means that there should be unrestricted access to both domestic and imported products, and the only way to prefer one product over another is based on commercial consideration. One commercial consideration can be the price of the product. For example, an exporter is attracted to export domestic products to a given country because that product is cheaper compared to similar products on world markets due to a preference given to that product. Here, the cheap price of the product makes it commercially available to the exporter. Hence, dual pricing has taken place because the government treats products for export more favorably than those destined for domestic consumption through cheaper prices. It should be highlighted here that this provision expressly deals with the favorable treatment of products that are destined for export and not those that are destined for domestic consumption (Behn 2007). The Saudi Arabian practice, for example, could fall within the ambit of this provision (Annex I (Item

d)) if the feedstock that is used in the production of petrochemicals for export is cheaper than the feedstock that is used for the production of petrochemicals for domestic consumption. As explained earlier, in the sale of feedstock in Saudi Arabia there is a difference in price between the feedstock itself, which is higher, and the feedstock that is domestically used in the Saudi petrochemical industry, which is lower (Goldar and Kumari 2009). It will be relevant to examine the extent to which the existing provisions of the SCM Agreement could be interpreted to outlaw such dual pricing practices. If this violation is found to exist, it should still be determined what exemptions are available to these countries to maintain this activity as an incentive to attract foreign investment.

Specifically in the context of energy inputs, specificity would exist if feedstock is only sold more cheaply to particular enterprises. Therefore, some kind of discrimination should exist between various enterprises in receiving this benefit. To determine whether a subsidy is specific, the limitation on the subsidy must be explicit.²⁵

Article 2(b) of the SCM Agreement provides that when a granting authority establishes objective criteria or conditions governing eligibility for a subsidy, 'specificity' does not exist if eligibility is 'automatic'. Automatic eligibility means that the criteria and conditions governing eligibility are neutral and do not favor certain enterprises over others (e.g., based on nationality or when locating a new petrochemical plant close to available sources of feedstock of a given country is restricted to some enterprises). If cheaper feedstock is available to both domestic and foreign producers on equal terms, then such a pricing policy will not make it 'specific subsidy'.

The third condition is more challenging. Article 2(c) of the SCM Agreement provides that there are cases where, although an activity may not fall within the first two parts of Article 2 on specificity, there are reasons to believe that the subsidy is in fact specific (*de facto* specificity). The factors to determine specificity are²⁶:

- Use of a subsidy program by a limited number of certain enterprises;
- Predominant use by certain enterprises;
- The granting of disproportionately large amounts of subsidy to certain enterprises;
- The manner in which discretion has been exercised by the granting authority in the decision to grant a subsidy.

In applying this subparagraph, account shall be taken of 'the extent of diversification of economic activities within the jurisdiction of the granting authority', as well as of the length of time during which the subsidy program has been in

²⁵ Appellate Body Report on *United States—Measures Affecting Trade in Large Civil Aircraft*, WT/DS353/AB/R, at paragraph 749 (Hereinafter *US—Civil Aircraft*).

²⁶ Appellate Body Report on *US—Civil Aircraft* at paragraph 796, 878. The Appellate Body noted at paragraph 796, "[i]f, notwithstanding any appearance of non-specificity resulting from the operation of the principles of laid down in sub paragraphs (a) and (b), there are reasons to believe that the subsidy may be specific, other factors may be considered."

operation.²⁷ It is not clear what exactly amounts to ‘certain enterprise’. Whatever be the interpretation, it should be different from Article 2(1)(a) where specificity exists where there is an ‘express limitation’ on the use of subsidy for certain enterprises. Therefore, it can be opined that there should be an indirect limitation on certain enterprises and an indirect specificity should thus exist. In this respect, the only possibility that comes up for consideration is whether the subsidy could only be used by some enterprises due to the ‘nature’ of that enterprise. For example, the subsidy can only be provided for those enterprises that use feedstock due to the nature of those enterprises, as opposed to other enterprises engaged in activities for which no feedstock is needed. The WTO panel in *US—Softwood Lumber* held that if the inherent characteristics of the good provided by the government limit the possible use of the subsidy to a certain industry, the subsidy is all the more likely to be specific.²⁸ However, one should also link this result to the second sub-paragraph of Article 2(c), which deals with the “predominant use by certain enterprises”. This could mean that since a subsidy can only be used by some enterprises, an indirect specificity is established. The *US—Softwood Lumber* panel made a passing remark that it did not consider that “any provision of a good in the form of a natural resource would be automatically be specific, precisely because in some cases, the goods provided (such as for example oil, gas, water, etc.) may be used by an indefinite number of industries”.²⁹

The SCM Agreement suggests that, in terming a subsidy specific, some factors should be taken into account, as mentioned above, and in applying them, the extent of economic diversification should be taken into consideration. This sentence would mean that the more diversified is the economy, the less likely would be the chances of a few industries or sectors receiving the benefit. To state differently, if the economic activities of a given country are not diversified, it would be impossible to favor one enterprise over another, since there will be only one or two major sectors in the country on which the economy is dependent. The energy producing countries are likely to argue that they have been attempting to diversify their economies from energy sector to other sectors.

As mentioned above, on the other hand, the rules on actionable subsidies (i.e., only when the requirements of specificity are satisfied) should also be analyzed to verify their applicability to the practice of dual pricing.³⁰ However, even if an activity falls outside the provisions of the WTO on prohibited subsidies, the affected state (whose enterprises have suffered “adverse effects”) can counter that practice through the adoption of countervailing measures, which are also subject to various conditions as prescribed in the SCM Agreement. For example, a number of WTO Members argued that the pricing system of feedstock in Saudi Arabia created a preferential treatment for those that buy the cheaper feedstock, which

²⁷ Appellate Body Report on *US—Civil Aircraft*, at paragraph 878, 879.

²⁸ Panel Report on *US—Softwood Lumber*, at paragraph 7.116, 7.119.

²⁹ Panel Report on *US—Softwood Lumber*, at paragraph 7.116.

³⁰ Appellate Body Report on *US—Civil Aircraft* at paragraph 10.

indirectly damaged the petrochemical industry of those countries that do not have access to such cheap feedstock (Seznec 2006). India could be one such WTO member whose petrochemical industry could be facing or potentially facing competition on account of low-priced imports subject to dual pricing policies entering the market.

The SCM Agreement does not provide adequate information on how and against what benchmark the difference in prices should be compared. One could argue that the mere fact that the government, or the state-trading enterprise, is selling feedstock at a lower price to selected companies is adequate to determine preferential treatment.³¹ However, for an actionable subsidy to be established, a “subsidy” should be identified and a resultant ‘injury’ should exist. Therefore, charging less should result in ‘charging less than adequate’, which in turn should lead to material injury to the industry of the importing WTO member.

As stated earlier, the existence of a market comparator is essential to identify the existence of a benefit. In *EC-DRAMS*, a WTO Panel noted, “...only in cases where the financial contribution provides the recipient with an advantage over and above what it could have obtained on the market will the government’s financial contribution be considered to have conferred a benefit and will a subsidy thus be deemed to exist.”³² The relevant benchmark for the purpose of determining the existence of a benefit is the market. It is pertinent to recall the observation of the Appellate Body in *EC- Large Civil Aircraft*.

The market place to which the Appellate Body referred to in *Canada—Aircraft* reflects the sphere in which goods and services are exchanged between willing buyers and sellers. A calculation of benefit in relation to prevailing market conditions thus demands an examination of behavior on both sides of a transaction, and in particular, in relation to the conditions of supply and demand as they apply to that market.³³

Under the SCM Agreement, the “adequacy of remuneration” is determined “in relation to prevailing market conditions” in the country of provision. To revert to the Saudi Arabian example, the government had issued by way of a decree that that dedicated a 30 % discount (based on the lowest export price) to the feedstock used for domestic production (Leighton 2001). The Saudi government later on changed this practice and substituted it with a mechanism which tied the prices of products, such as LPG and other NGLs, to the price in the Far Eastern LPG markets. In the *US—Softwood Lumber* case, the Appellate Body stated as follows:

Thus, while requiring investigating authorities to calculate benefit “in relation to” prevailing conditions in the market of the country of provision, Article 14(d) permits investigating authorities to use a benchmark other than private prices in that market. When private prices are distorted because the government’s participation in the market as a

³¹ Appellate Body Report on *US—Civil Aircraft*, at paragraph at 10.

³² Panel Report on *EC—Countervailing Measures on Dynamic Random Access Memory Chips from Korea*, WT/DS299/R, at paragraph 7.175 (Hereinafter *EC —DRAMS*).

³³ Appellate Body Report on *EC—Measures Affecting Trade in Large Civil Aircraft*, WT/DS 316/AB/R, at paragraph 981 (Hereinafter *EC—Large Civil Aircraft*).

provider of the same or similar goods is so predominant that private suppliers will align their prices with those of the government-provided goods, it will not be possible to calculate benefit having regard exclusively to such prices.

The determination of the undistorted hypothetical market will often be a difficult decision. It is more than clear that most energy markets have been heavily distorted with government intervention that the determination of the adequate benchmark may be elusive. The complexities of the issue of dual pricing in Saudi Arabia or Russia demonstrate that this practice can neither be easily targeted as a prohibited subsidy nor necessarily as an actionable subsidy creating an injury to the petrochemical industries of the concerned producers. The issue has to be decided on a case-by-case basis (Marceau 2010). In the above context, when Saudi Arabia agreed to ensure that the providers of NGLs would operate within the framework of normal commercial considerations and full cost recovery, other WTO Members found it difficult to commit Saudi Arabia to greater commitments. As dual pricing issues under accession negotiations have been dealt with in Chap. 3 it is not addressed further in this chapter.

It is pertinent to note that the determination of benefit, when the government was the sole purchaser or provider of goods, was included in the early draft of the SCM Agreement during the Uruguay Round negotiations. The provision included in a 2 November 1990 draft of Article 14 read as follows:

When the government is the sole provider or purchaser of the good or service in question, the provision or purchase of such good or service shall not be considered as conferring a benefit, unless the government discriminates among users or providers of goods or service. Discrimination shall not include differences in treatment between users. Discrimination shall not include differences in treatment between users or providers of such goods or services due to normal considerations.³⁴

However, this draft article was not incorporated into the SCM Agreement. More recently, the panel and the Appellate Body in *Canada—Renewable Energy* had to address the determination of a subsidy in a public procurement of electricity. For the determination of the benefit, the Appellate Body relied heavily on the rule established under Article 14.1(d) of the SCM Agreement. The Appellate Body concluded that, “[a] benchmark in the case of subsidies derives from the market”³⁵ and that “in the absence of a market benchmark, it will not be possible to establish if a subsidy exists at all”.³⁶ In other words, the unavailability of market benchmarks could only highlight the difficulties in targeting dual pricing of energy inputs as either prohibited or actionable subsidies under the SCM Agreement.

³⁴ Draft Text of the Chairman of the Negotiating Group on Subsidies and Countervailing Measures, MTN/GNG/NG10/W/38/Rev.2 (2 November 1990).

³⁵ Appellate Body Report on *Canada—Renewable Energy*, at paragraph 5.163.

³⁶ Ibid, paragraph 5.163, third sentence. In the context of facts of the case, the Appellate body noted that the ‘benefit should not be conducted within the competitive wholesale market as a whole, but within the competitive markets for wind and solar PV generated electricity.

2.2.7.2 Taxes Occultes (Occult Taxes)

The distinction between direct and indirect taxes could also be important in the context of energy trade or specifically in the context of measures such as a levy of carbon tax. The GATT permits border tax adjustments of indirect taxes at the border but does not permit such adjustments with respect to direct taxes. Direct taxes are imposed directly on the producers in the country of export, whereas indirect taxes are imposed on consumption which invariably happens in the country of import. Although the GATT does not provide for a language recommending one system over the other, there are various provisions in the GATT/WTO which distinguish a direct tax from an indirect tax. This implicit distinction between the direct and indirect tax specifically with respect to its border adjustability was carried over to the SCM Agreement as well. Footnote 1 of the SCM Agreement includes a language as follows, “the exemption of an exported product from duties or taxes borne by the like product when destined for consumption or the remission of such duties or taxes in amounts not in excess of those which have accrued shall not be deemed a subsidy”.

The language of SCM Agreement Footnote 1 appears to limit the tax classifications to direct and indirect taxes, but commentators have argued that WTO has recognized a third category called “occult taxes”. Although this term is defined nowhere in any of the WTO covered agreements, the Border Tax Adjustment Report of 1970³⁷ provides a reference to this. The OECD has provided a definition of “occult taxes” as follows:

Consumption taxes on (1) auxiliary materials used in the transportation or production of goods (e.g. energy, fuel, lubricants, packing, stationary); (2) durable capital equipment (e.g., machinery, buildings, vehicles); and (3) services (e.g., transportation, advertising, etc.).

The border tax adjustability of “occult taxes” remains central to the discussion on carbon taxes. For example, a tax can be imposed on high emission fuel or energy to discourage their use. It is still not very clear whether upstream carbon taxes (i.e., on inputs such as energy or fuel) can be rebated on exports whereas no such uncertainty exists with respect to downstream products.³⁸ To explain, whereas carbon taxes are attached to the raw materials used in the manufacture of the final products in the former, the carbon taxes are borne by the product per se in the latter. While the Working Party reached a consensus on the adjustability of taxes “directly levied on products” (i.e., indirect taxes), it could not reach a similar position with respect to “taxes occultes”, noting that there was divergence of views with regard to the eligibility of adjustment of certain categories of taxes, including “taxes occultes”.

³⁷ GATT Working Party Report on Border Tax Adjustment (1970).

³⁸ The SCM Agreement clearly permits indirect taxes on exports to be rebated provided the amount of the rebate does not exceed the amount of tax. A number of commentators also opine that a downstream carbon taxes constitute an indirect tax.

In the *US—Superfund* dispute, a GATT panel, inter alia, examined the consistency of a tax imposed on certain selected imported goods made from certain designated feedstock chemicals by virtue of the Superfund Amendments and Reauthorization Act (“Superfund Act”).³⁹ The intent of the legislation was to levy a tax that would be equivalent to what the foreign manufacturer would have paid had they been subject to the feedstock chemical tax. According to the United States, the substances of domestic origin bore a fiscal burden corresponding to the tax on chemicals used in their production. The GATT panel concluded that tax on certain chemicals being a tax directly imposed on the products was eligible for border tax adjustment. However, it is pertinent to note that the decision in *US—Superfund* was based on Article III:2 and not under the SCM Agreement or Article II:2(a) which was alluded to earlier in this chapter.

2.2.8 Agreement on the Implementation of Article VI of the GATT 1994 (Antidumping Agreement)

Dual pricing has been considered by some WTO Members as input dumping (Pogoretsky 2011). In the case of a country that implements dual pricing, there is a view that energy inputs which are bought at a preferential price may be disregarded. However, the importance of input dumping is limited to the consideration of “normal value” (the home market price or the comparison price) in the context of an antidumping investigation.

Article 2.7 of the Antidumping Agreement provides that the provisions of Article 2 are without prejudice to the first paragraph of the Ad Note to the GATT Article VI. Ad Article 2.7 provides that, in the case of imports from a country that has a complete or substantially complete monopoly of its trade and where all domestic prices are fixed by the State, the importing Members in the determination of dumping may deviate from a strict comparison with domestic prices.

In practice, Ad Note to GATT Article VI has been regarded by many WTO Members as a legal permission to deviate from the normal rules set forth in GATT Article VI:1 and the Antidumping Agreement. In such cases, the importing Member taking an antidumping action may disregard the normal value reflected from the books of accounts of an exporter and constructs the normal value based on the cost information gathered from a ‘surrogate’ country. This is popularly known as the non-market economy (NME) methodology in antidumping investigations and several WTO Members including European Union, India and the United States have made practical use of this methodology in the case of energy intensive products. In investigations where the NME methodology is used, most jurisdictions use energy costs such as gas and electricity costs from surrogate/

³⁹ Panel Report on *United States—Tax on Petroleum and Certain Imported Substances*, BISD, 34S/136 (Hereinafter *US—Superfund*).

analog countries. The current flexibility to gather such costs from diverse regions has essentially led to exaggerating the dumping margin involving products of enterprises from NME countries.

Although the use of NME methodology is to deal with products whose cost structures have been highly distorted on account of state interference, it is often considered as a tool to deal with low-cost imports. Furthermore, the tenability of NME methodology to target dual pricing is highly suspect, as a vast majority of state-controlled economies have become market economies or are expected to receive market economy status in the near future as in the case of China. Most of such economies are Members of the WTO, and with Russia, the last among the major state-controlled economies joining the WTO, the NME methodology may well be an anachronism in antidumping investigations, at least within a few years.

Another issue is whether in event of Ad Note to GATT Article VI becoming disabled, will Article 2 of the Antidumping Agreement have sufficient teeth to tackle distortions engendered by government interference in the energy sector. In the case of anti-subsidy investigations, this remains a possibility with the Appellate Body ruling in *US—Softwood Lumber-IV* that it is possible to use benchmarks other than domestic prices for the determination of ‘benefit’ determination. The overwhelming view in the case of Antidumping Agreement is that such a possibility may never exist (Pogoretskyy 2009).

The use of constructed cost methodology in the case of NMEs is well known. However, in the recent past certain WTO members such as the EU have come up with innovative strategies to deal with dual energy pricing in the context of antidumping investigations.

For example, even before Russia joined the WTO, it was granted market economy status by the EU. However, it carried out energy cost adjustments in antidumping proceedings involving Russia. More specifically, after the amendment to the EU regulations and the insertion of a new Article, namely Article 2(5), the EU authorities resorted to the amended provision to justify an upward adjustment of the cost of production of the Russian exporters. According to Article 2(5), adjustments should be made where the cost of production, energy costs included, “are not reasonably reflected in the records of the party concerned”.

A very good illustration is the antidumping investigation on potassium chloride.⁴⁰ In this case, the EU Commission maintained that the price of gas supplied by Gazprom, a state-owned enterprise in Russia, to the Russian producers were below recovery levels and decided to adjust upwards the cost of gas borne by the Russia exporter by relying on the price charged by the Russian gas provider Gazprom for its gas exports. This approach resulted in an upward revision of normal value which is the comparison price used for dumping margin calculations. No WTO Member has questioned the EU practice before the WTO dispute settlement body.

⁴⁰ Potassium chloride originating in Belarus, Russia and Ukraine.

Elimination of dual pricing will be of significant interest to India. According to a study by Goldar and Kumari (2009) in the field of petrochemicals, the elimination of natural gas subsidy in Oman, Qatar, Russia, Saudi Arabia, and United Arab Emirates (UAE) could lead to higher prices of petrochemical products imports into India and could result in an increase in the domestic production of petrochemicals in India by about 2.2 %.

2.2.9 State Trading Enterprises

The energy sector being a strategic sector for national security has traditionally been dominated by state owned companies, or has been under the control of the national governments or other quasi-governmental bodies.

Article XVII:1(a) of the GATT 1994 states:

Each contracting party undertakes that if it establishes or maintains a State enterprise, wherever located, or grants to any enterprise, formally or in effect, exclusive or special privileges, such enterprise, shall in its purchase or sales involving either imports or exports, act in a manner consistent with the general principles of non-discriminatory treatment prescribed in this Agreement for governmental measures affecting imports or exports by private traders.

The coverage of GATT Article XVII is not limited to state enterprises and state ownership is not the major criteria. Article XVII applies to any enterprise that possesses exclusive or special privileges granted by the state, “including statutory or constitutional powers, in the exercise of which they influence through their purchases or sales the level of direction of imports or exports”. Therefore, a private corporation or enterprise could be considered to be a state trading enterprise (STE) if it receives some special right or privilege from the state, as a result of which, it is in a position to influence the direction of trade.

An important issue is whether energy companies can be regarded as STEs. Additional guidance is provided in the GATT 1994 supplementary notes for Article XVII, paragraph 1(a) wherein⁴¹: “privileges granted for the exploitation of national natural resources but which do not empower the government to exercise control over trading activities of the enterprise in question, do not constitute exclusive or special privileges”. The access to energy resources alone would not make an energy company an STE.

STE are obliged through Article XVII to make their purchases or sales on the basis of commercial consideration, including price, quality, availability, marketability, transport and other conditions of purchase or sale. STEs are also obliged to afford the enterprises of the other WTO members adequate opportunity, in accordance with customary business practice, to compete for participation in such purchases or sales. The requirement to act in accordance with commercial

⁴¹ GATT 1994, Annex I, Notes and Supplementary Provisions, Ad Article XVII, paragraph 1(a).

consideration is not a separate obligation, but is, rather an express clarification of the obligation contained in GATT Article XVII paragraph 1(a) to “act in a manner consistent with the general principles of non-discriminatory treatment”.

2.2.10 GATS and Energy Services

The General Agreement on Trade in Services (GATS) is one area which may require a relook in any discussion on energy security. Energy trade requires investment in permanent infrastructure and may also involve natural monopolies.

Products such as natural gas are traded across borders via pipelines and can also be stored in gaseous form. While the extant approach is to treat some of the products such as electricity as industrial goods, some argue that it should be defined as a service since it forms part of a network industry (Lakatos 2004). Some believe that more than the energy product, it is the associated infrastructure and the enabling investment environment that require further liberalization (Cottier et al. 2009).

Under GATS, obligations of market access (Article XVI) and national treatment (Article XVII) apply through the inscription of specific commitments. Since many of the energy-related activities are covered by the disciplines of GATS, obligations are reflected in several sectors. Energy services encompass services related to all stages of the energy production chain: exploration, development, drilling, extraction, construction, engineering, production, processing, refining, generation, transportation, transmission, distribution, storage, marketing, etc.

Two classification documents are commonly used by WTO Members to establish their schedule of specific commitments: (i) the 1991 Services Sectoral Classification List which was developed during the Uruguay Round popularly known as “W/120”,⁴² and (ii) the 1991 United Nations Central Product Classification (CPC). W/120 which provides reference to CPC has been specifically incorporated in the 1993 and 2001 WTO Scheduling Guidelines and has been used in disputes as an interpretative tool. However, neither of these instruments contain a distinct chapter for energy services. A possible reason is that energy services were predominantly in public hands and private sector participation was limited.

In the above backdrop, reference to W/120 may be helpful to understand the scope of energy and related services. W/120 does not include a special section on energy services as such. However, the classification list under W/120 contains three sub-sectors, which are exclusively related to energy activities:

- *Services incidental to mining*, covers: (i) services rendered on a fee or contract basis at oil and gas fields, e.g. drillers services, derrick building, repair and dismantling services, oil and gas well casings cementing services (CPC 883), and (ii) site preparation work for mining (CPC 5115), covering tunneling,

⁴² GATT (1991), Services Sectoral Classification List, MTN.GNG/W/120.

overburden removal, and other development and preparation work of mineral properties and sites, except for mining of oil and gas.

- *Services incidental to energy distribution* (CPC 887) covers 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.
- *Transportation of fuels* (CPC 7131) is one of the two sub-sectors in the *Pipeline transport* category and is defined as transportation via pipeline of crude or refined petroleum and petroleum products and of natural gas.

In addition to the sub-sectors mentioned above, CPC definitions explicitly refer to energy-related services, such as: engineering design services for oil and gas recovery procedure; construction, installation and/or maintenance of drilling equipment, pumping stations, treating and storage facilities, and other oil field facilities; advisory and consultative engineering services, such as preparatory technical feasibility studies and project impact studies for the construction of a pipeline, to name a few. According to Cossy (2011) the WTO classification instruments cover the entire chain of energy services. Some energy services have emerged in recent times that appear not to have found an entry in W/120 or the CPC Provisional Classification of 1991. A few such examples include the wholesale trade in services of electricity and retailing services of electricity, town gas, steam, and hot water. However, it will be incorrect to assume that such services are outside the GATS, because the classification instruments do not determine the scope of the Agreement (Cossy 2011). As such, there is no obligation for a WTO member to follow either W/120 or the CPC definitions.

Carbon capture and storage (CCS) is a climate change mitigation option which is gaining interest. CCS is the process of capturing waste carbon dioxide from large point sources, such as fossil fuel power plants, transporting it to a storage site, and depositing it where it will not enter the atmosphere, normally an underground geological formation (IPCC 2005). Some of the services covered under CCS can arguably fall under existing CPC definitions, for instance, CPC 8675 (related scientific and technical consulting services), CPC 7139 (transportation of other goods), CPC 72122 (transportation by sea going vessels of bulk liquids or gases in special tanker, etc. These services do not fall outside the GATS as the Agreement applies to all services, except those provided “in the exercise of governmental authority”. However, in the absence of separate classification, GATS obligations with respect to some of the new energy services could be limited.

However, WTO judicial bodies (panels and the Appellate Body) have tended to give a broad interpretation of specific commitments. For example, in *China—Audiovisuals*,⁴³ one of the issues was whether China’s commitments on audiovisual services encompassed distribution of music by electronic means or whether it

⁴³ Appellate Body Report on *China—Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisuals*, WT/DS363/AB/R (Hereinafter *China—Audiovisuals*).

was confined to the distribution in the physical format. The Appellate Body made the following observations:

We note that in interpreting the terms of GATS specific commitments based on the ordinary meaning to be attributed to those terms can only be the meaning that they had at the time the schedule was concluded would mean that very similar or identically worded commitments could be given different meanings, content and coverage depending on the date of their adoption or the date of a Member's accession to the treaty. Such interpretation would undermine the predictability, security and clarity of GATS specific commitments.⁴⁴

Market access liberalization alone is not considered as sufficient. Trade in energy is often impeded by difficulties in getting access to transportation and distribution networks. Access on reasonable terms to storage, transport, and distribution networks is necessary for liberalization of cross-border energy trade (Cossy 2010). Again, non-transparency of regulation could be another barrier (Kutas 2010). Third party access to transportation is controlled by private companies, and not by governments. GATS contains very limited provisions that deal with the conduct of private entities such as monopolies and exclusive service suppliers.

In order to address these issues, the United States and Norway⁴⁵ proposed to devise a Reference Paper on Energy Services modeled on the Reference Paper on Basic Telecommunication Services under the GATS. The objective of the Reference Paper was to ensure transparency in the formulation and implementation of rules as well as non-discriminatory third party access to the interconnection with energy networks and grids, non-discriminatory objective and timely procedures for the transportation and transmission of energy, and requirements preventing certain anti-competitive practices for energy services in general (ICTSD 2007).

2.2.11 Government Procurement Agreement

The WTO Agreement on Government Procurement (GPA) applies only to the signatories of the Agreement. GPA applies the principles of national treatment and non-discrimination with respect to government purchases. GPA also contains disciplines on technical specifications, which aim at avoiding creating unnecessary obstacles to international trade and ensuring that, to the greatest extent possible, specifications are prescribed in performance terms and in keeping with international standards. The GPA also allows Members to impose justifiable conditions that can include energy-related criteria. Considering the limited participation in GPA (with only 28 members), it has attracted less attention.

⁴⁴ Appellate Body Report on *China—Audiovisuals*, paragraph 397.

⁴⁵ Communication by the US and by Norway to the Council for Trade in Services in Special Session (S/CSS/W/24 and S/CSS/W/59, respectively).

2.3 Exemptions and Exceptions

Section 2.3 of this chapter will examine some of the key exceptions and exemptions available under the WTO covered agreements relating to the discussion on energy security.

2.3.1 Exceptions Under Article XI of GATT 1994

Article XI:2 of the GATT 1994 provides a ‘safe harbour’ for WTO members that apply export prohibitions and restrictions for certain public policy purposes that would otherwise violate Article XI:1. The most relevant for the energy sector is the provision that allows members to temporarily invoke export prohibitions in order to relieve critical shortages of products essential to the exporting country. The question is whether a member country can impose an export ban or quota on exports of products on the ground that such energy product or materials are in critical short supply.

Article XI:2(a) provides an exception to the general prohibition under Article XI, and permits WTO Members to impose export prohibitions or restrictions temporarily “to prevent or relieve critical shortages of foodstuffs or other products” essential to the exporting Member. Article XI:2 refers to general obligation to eliminate quantitative restrictions set out in Article XI:1 and stipulates that the provisions of Article XI:1 “shall not extend” to the items listed in Article XI:2. The Appellate Body in *China—Raw Materials*, made the following observation:

[W]e note that the words “prohibition” and “restriction” in that subparagraph are both qualified by the word “export”. Thus, Article XI:2(a) covers any measure prohibiting or restricting the exportation of certain goods. Accordingly, we understand the words “prohibitions or restrictions” to refer to the same types of measures in both paragraph 1 and subparagraph 2(a), with the difference that subparagraph 2(a) is limited to prohibitions or restrictions on exportation, while paragraph 1 also covers measures relating to importation. We further note that “duties, taxes or other charges” are excluded from the scope of Article XI:1. Thus, by virtue of the link between Article XI:1 and Article XI:2, the term “restrictions” in Article XI:2(a) also excludes “duties, taxes, or other charges.”⁴⁶

Interestingly, the Appellate Body notes that Article XI:2(a) does not really function as an exception to Article XI obligations, because it in fact defines the scope of Article XI obligations in the first place. The Appellate Body agreed with the panel that a restriction or prohibition in the sense of Article XI:2(a) of the GATT must be of limited duration and not for indefinite period of time. According to the Appellate Body, which reads the expressions “critical” and “temporarily” in light of one another, Article XI:2 (a) has a quite narrow function, which is to

⁴⁶ Appellate Body Report on *China—Raw Materials*, WT/DS 394/AB/R, WT/DS 395/AB/R, WT/DS 398/AB/R.

respond “extraordinary conditions” or “bridging passing needs”.⁴⁷ Therefore, the safe harbor of Article XI:2(a) need not be available in the case of long-term regulatory or conservation measures of natural resources.

2.3.2 General Exceptions Under Article XX of GATT 1994

Article XX of the GATT 1994 provides exceptions for measures “necessary to protect human, animal or plant life or health” or “relating to the conservation of exhaustible natural resources”. The WTO Appellate Body in several cases have found that in order for such conduct to be protected by Article XX, a member must show first that the measure at issue is of the type that is covered by one of the sub-paragraphs of Article XX. Secondly, the measure must be applied in a manner that is consistent with the chapeau of Article XX. The chapeau of Article XX requires that the measures must not be applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.⁴⁸

In recent times, especially in the light of the panel and Appellate Body findings in *China—Raw Materials*, the interface between WTO rules and the permanent sovereignty of countries over natural resources is developing into an uneasy relationship. In *China—Raw Materials*, China argued that it had the right “freely to use and exploit its natural wealth and resources... for their own progress and economic development”.⁴⁹ In the dispute WTO rules trumped over the public international law norms of permanent sovereignty, but the dispute was resolved especially in the context of China’s WTO Accession Protocol. In future disputes involving trade restrictions on strategic inputs or natural resources, this tension is likely to come into sharper focus.

A two-tiered examination of any trade measure under the general exceptions will start with the sub-paragraphs of Article XX of the GATT. Within the context of energy security, more relevant sub-paragraphs are XX(b), (d), (g), and (j). Article XX(b) permits the adoption of measures that are necessary to protect human, animal or plant life or health. When invoking Article XX(b), a Member must first show that the policy underpinning the measure falls within the range of policies designed to protect human, animal or plant life or health. Next, it must prove that the inconsistent measure was necessary to fulfill the policy objective. If the parties to a dispute disagree as to whether the policy in question is designed to protect human, animal or plant life or health, a panel will undertake an assessment

⁴⁷ Ibid, paragraphs 327–328.

⁴⁸ Appellate Body Report on *United States—Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R at paragraph 20 (Hereinafter *US-Gasoline*).

⁴⁹ Panel Report on *China—Raw Materials*, paragraphs. 7.377–7.381.

of the purported risk, and determine whether the policy in question is designed to protect the aforesaid objectives.

In *Brazil—Retreaded Tyres*, the Appellate Body stated that a determination of whether a measure is “necessary” for the purposes of Article XX(b) involves an assessment of “all the relevant factors, particularly the extent of the contribution to the achievement of a measure’s objectives and its trade restrictiveness, in the light of the importance of the interests or values at stake.”⁵⁰ The Appellate Body further stated that a measure will be “necessary” if it is “apt to bring about a material contribution to the achievement of the objective.” If such an analysis yields a preliminary conclusion that the measure is necessary, the result must be confirmed by comparing the measure with its possible alternatives which may be less trade restrictive while providing an equivalent contribution to the achievement of the objective pursued.⁵¹ As the Appellate Body pointed out in *US—Gambling*, while the responding Member has the burden to establish that a measure is necessary, it does not have the obligation to show that there are no reasonably available alternatives.⁵² There is a view that the test applied by the Appellate Body in the aforementioned cases is less stringent in terms of what relationship it requires between the adopted and the policy objective it pursued—thus producing more policy space for, among others, environmental protection measures (Table 2.2).

Article XX(g) of the GATT 1994 permits the adoption of measures that are related to the conservation of exhaustible natural resources, provided that such measures are made effective in conjunction with restrictions on domestic production or consumption. In WTO dispute settlement, this provision was first invoked in *US—Gasoline*, where it was determined that a policy to reduce the depletion of an exhaustible natural resource was within the meaning of Article XX(g).⁵³ In *US—Shrimp*, the issue was whether the term “exhaustible natural resource” refers exclusively to mineral or non-living resources or could also encompass living and renewable sources.⁵⁴ In addition to showing that the natural resource at issue is “exhaustible”, a WTO member relying on Article XX(g) must also ensure that its measure relates to the conservation of this resource. In *China—Raw Materials*, one of the issues was whether measure can be considered to be “made effective in conjunction with restrictions on domestic production” only if it is primarily aimed at rendering effective these restrictions. In an important finding, the Appellate Body categorically held that there is no suggestion in Article XX(g) to the effect that a trade restriction must be aimed at ensuring the effectiveness of

⁵⁰ Appellate Body Report on *Brazil—Measures Affecting Imports of Retreaded Tyres*, WT/DS332/AB/R at paragraph 151 (Hereinafter *Brazil—Retreaded Tyres*).

⁵¹ Appellate Body Report on *Brazil—Retreaded Tyres*, at paragraph 156.

⁵² Appellate Body Report on *United States—Measures Affecting Cross Border Supply of Gambling and Betting Services*, WT/DS285/AB/R at paragraph 309 (Hereinafter *US—Gambling*).

⁵³ Appellate Body Report on *US—Gasoline*, at paragraph 14.

⁵⁴ Appellate Body Report on *United States—Shrimp*, WT/DS58/AB/R.

Table 2.2 Application of general exceptions in WTO disputes

WTO dispute	GATT Article XX/ GATS Article XIV provisions	Outcome of establishing “necessity”
US—Gasoline	Article XX(b) & (d)	Exception not allowed
Korea—Beef	Article XX(d)	Exception not allowed
EC—Asbestos	Article XX(b)	Justified at the panel stage (AB report did not examine Article XX)
US—Gambling	GATS Article XIV	Provisionally justified, but failed the chapeau test
Brazil—Retreaded Tyres	Article XX(b)	Provisionally justified, but failed the chapeau test
China—Audiovisual	Article XX(a)	Rejected; failed to rebut least trade alternative measure proposed by the US Article XX can be invoked even in respect of Protocol of Accession
China—Raw Materials	Article XX(b) & (g)	Express language having reference to GATT Article XX would be required to justify a violation under Protocol of Accession Exception not allowed (AB, however, reversed the finding of the panel that under Article XX(g) that the purpose of the export restriction should be to ensure the effectiveness of domestic production and consumption)
EC—Seal Products	Article XX(a)	Exception allowed EU Seal Regime could be justified under the “public morals” exception in GATT Article XX(a). However, IC and MRM exceptions to the EU ban did not meet the requirements of the chapeau

domestic restrictions.⁵⁵ Finally, the requirement that the measures be “made effective in conjunction with restrictions on domestic production or consumption” has been described as a requirement of even-handedness in the imposition of restrictions, in the name of conservation.⁵⁶ Therefore any conservation policy on energy resources will have to incorporate the element of ‘even-handedness’.

One of the issues is the possible overlapping or the mutually exclusive application of Article XX(g) of the GATT and Article XI:2(a). The Appellate Body clarified in *China—Raw Materials* that Articles XI:2(a) and XX(g) have different functions and different obligations. The Appellate Body noted:

⁵⁵ Appellate Body Report on *Panel Report on China—Raw Materials*, at paragraph 360.

⁵⁶ Appellate Body Report on *US—Gasoline*, at paragraphs 20–21.

Article XI:2(a) addresses measures taken to prevent or relieve “critical shortages” of foodstuffs or other essential products. Article XX(g), on the other hand, addresses measures relating to the conservation of exhaustible natural resources. ...Moreover, because the reach of Article XI:2(a) is different from that of Article XX(g), an Article XI:2(a) measure might operate simultaneously with a conservation measure complying with the requirements of Article XX(g).⁵⁷

Article XX(j) allows WTO Members to take measures that are essential to the acquisition or distribution of products in general or local short supply. However, any such measures must be consistent with the principle that all members are entitled to an equitable share of the international supply of such products. This provision, in its original form, was adopted for a limited period of time to “take care of temporary situations arising out of the war”, before being accepted as a permanent provision in 1970. The phrase “general or local short supply” provided WTO members with some flexibility to take trade-restrictive action when a particular resource becomes temporarily scarce. This flexibility is constrained by the requirement imposed by sub-paragraph (j) to respect the principle of equitable shares for members and the requirements of the chapeau of Article XX.

One interesting issue is the applicability of GATT Article XX exception with respect to various violations of Accession Protocols and possibly violation with respect to the so-called green subsidies discussed under Article 8 of the SCM Agreement. The WTO Appellate Body in *China—Audiovisuals* ruled that the applicability of Article XX beyond the GATT framework could not be excluded altogether. This particular reasoning was rejected by the Appellate Body in *China—Raw Material* case. In any case this will be an issue which has to be examined case-by-case, agreement-by-agreement or accession protocol-by-accession protocol especially in the context of the newly acceded energy abundant members of the WTO.

2.3.3 National Security Exceptions

National security exceptions are incorporated in Article XXI of the GATT 1994 and Article XIV *bis* of GATS.

GATT Article XXI reads as follows:

Nothing in this Agreement shall be construed

- (a) to require any contracting party to furnish any information the disclosure of which it considers contrary to its essential security interests; or
- (b) to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests
 - (i) relating to fissionable materials or the materials from which they are derived;

⁵⁷ Panel Report on *China—Raw Materials*, at paragraph 337.

- (ii) relating to the traffic in arms, ammunition and implements of war and to such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment;
- (iii) taken in time of war or other emergency in international relations; or
- (c) To prevent any contracting party from taking any action in pursuance of such obligations under United Nations Charter for the maintenance of international peace and security.

GATS XIV *bis* has similar language. Although the national security exceptions are of significant importance, there is very little jurisprudence on this provision. The only WTO case in recent times was the EU challenge to the US Helms Burton Act of 1996, the parties resolved the dispute through a memorandum of understanding before the panel process was completed. However, past jurisprudence suggests that a measure could be justified under Article XIV *bis* of the GATS if it contributes to securing essential security interests. The WTO panels are likely to apply the balancing test.⁵⁸ The more essential a security interest is and the greater such a measure is likely to contribute to its achievement, the probability of successfully invoking such an exception is higher.

In the Doha Development Agenda (DDA) services negotiations, several Members have expressed the view that nuclear energy should not be associated with energy trade in general. It is not clear, however, whether this implies that nuclear trade should be subject to specific provisions or whether Members consider that GATS Articles XIV and especially XIV *bis* provide sufficient scope for action. Article XIV *bis* of the GATS includes, among the security exceptions, actions that Members consider necessary to protect essential security interests “relating to fissionable and fusible materials or the materials from which they are derived.” One question here is whether “essential” security interests could be at stake in the international trade of nuclear energy services for peaceful purposes, also considering the potential spillover in the military field.

2.3.4 Exceptions Under WTO Annex 1(A) Agreements

One of the WTO Agreements that has gained significance in recent times is the TBT Agreement. While the TBT Agreement establishes non-discrimination as an obligation, it does not have an exception for health, environment, natural resources, etc. Instead, it establishes a separate obligation related to measures used for these purposes. In this regard, TBT provisions are different from the GATT framework. The TBT Agreement seems to set out two separate rules: one rule requiring MFN/national treatment obligation and the other requiring that the measures be no more trade restrictive than necessary. While the GATT permits a

⁵⁸ Appellate Body Report on *US—Gasoline*, at paragraph 13.

violation to be defended under Article XX, no such defense exists under the TBT. However, it may be worth noting the preambular language in the TBT Agreement:

Recognizing that no country could be prevented from taking measures necessary to ensure the quality of its exports, or for the protection of human, animal or plant life or health, of the environment, or for the prevention of deceptive practices, at the levels it considers appropriate, subject to the requirement that they are not applied in a manner which would be a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail or a disguised restriction on international trade, and are otherwise in accordance with the provisions of this Agreement

In *US—Clove Cigarettes*, the Appellate Body acknowledged that Article 2.1 of the TBT like Article III:4 of the GATT prohibits both *de jure* and *de facto* discrimination against imported products, while at the same time exempts a measure from a possible WTO violation if the detrimental impact on competitive opportunities for imports stems exclusively from legitimate regulatory distinctions.⁵⁹ Furthermore, the design, architecture, revealing structure, operation, and application of the measure is examined to find out whether the detrimental impact on competitive opportunities for imported products reflects discrimination. Stated differently, the new approach of the Appellate Body reflected in the cases such as *US—Tuna (II)*⁶⁰ and *US—COOL*⁶¹ highlights the role of creative interpretation when the original Agreement has omitted a general exception clause.

2.3.5 Green Subsidies

Green subsidies, i.e., government measures that deemed certain governmental assistance non-actionable under the SCM Agreement expired at the end of 1999 in the absence of consensus among Members to extend them.⁶² Similarly, the Agreement on Agriculture (AoA) had a “due restraint” clause (commonly referred to as the “Peace Clause”) in Article 13, which exempted green box measures from countervailing duties and multilateral challenge under the SCM Agreement, as also other domestic support measures and export subsidies in conformity with the AOA from multilateral challenge. The peace clause under the AoA has expired. Although there is a clamour for reinstating such a safe haven for the purpose of

⁵⁹ Appellate Body Report on Report on *US—Clove Cigarettes*.

⁶⁰ Appellate Body Report on *United States—Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products*, WT/DS381/AB/R (Hereinafter *US—Tuna II (Mexico)*).

⁶¹ Appellate Body Report on *United States—Certain Country of Origin Labeling (COOL) Requirements*, WT/DS384/AB/R / WT/DS386/AB/R (Hereinafter *US—COOL*).

⁶² Article 31, SCM Agreement. The SCM Agreement as it originally entered into force contained a third category—non-actionable subsidies. This category applied provisionally for five years ending 31 December 1999, and pursuant to Article 31 of the Agreement, could be extended by consensus of the SCM Committee. As of 31 December 1999, no such consensus had been reached.

promoting renewable energy or for climate change mitigation or adaptation, for all practical purposes, no subsidy is immune from challenge for the time being. Even if such a safe haven is not reinstated, an interesting issue is whether such green subsidies could be justified under Article XX of the GATT. This issue has been examined under the discussions on GATT general exceptions in Sect. 2.3.2.

2.3.6 GATS

Article XIV(b) of the GATS allows Members to take measures necessary to protect human, animal, or plant life and health. Article XIV *bis* encompasses actions that a Member considers necessary to protect its essential security interests. These two categories of exceptions mirror closely the provisions of Article XX and XXI of the GATT 1994 discussed in the previous Sections and are not addressed again.

2.4 Energy Security and Key Negotiating Proposals Under Doha: Reference to Chairman's Text

The chairpersons of the various negotiating groups under the Doha Round negotiations have submitted several negotiating texts and reports which provide an update on the progress made in the negotiations. The Chairman's texts and other reports reflect the state of play in the negotiations. Although the negotiating texts of the chair are drafts and not decisions, they demonstrate the progress achieved so far and could form the basis for any renewed negotiations.

This part of the chapter will provide a short analysis of the Chairman's texts and other reports with specific reference to energy security.

2.4.1 Antidumping Agreement

Energy costs, such as electricity and gas, represent a major proportion of the manufacturing cost and a significant proportion of the total cost of production for most products. While carrying out the ordinary course of trade test in the antidumping investigations, antidumping agencies examine whether the costs associated with the production and sale of the product under consideration are reasonably reflected in the records of the parties concerned. In relation to the category of production costs, which includes energy and utility costs, Article 2.2.1.1 of the Antidumping Agreement provides that costs shall normally be calculated on the basis of records kept by the exporter or producer under investigation. However, if these costs are not reasonably reflected in the exporter's records, they must be adjusted.

The existing WTO Antidumping Agreement provides in Article 2.2.1.1 that: "[a]uthorities shall consider all available evidence on the proper allocation of

costs, including that which is made available by the exporter or producer in the course of the investigation *provided that such allocations have been* historically utilized by the exporter or producer, in particular in relation to establishing appropriate amortization and depreciation periods and allowances for capital expenditures and other development costs.” (emphasis added).

A proposal amending the highlighted italics part of Article 2.2.1.1 has been included in the 2011 Communication from the Chairman (WTO Negotiating Group on Rules 2011) as follows: “...provided that such allocations do not differ from any allocations that have been... ”.

In terms of the suggested change, there is a view that the investigating agencies have no obligation as such to take into account the historically utilized allocation of costs. Especially in the context of energy costs, if the costs associated with the production of a product is not reasonably reflected in the books of the company due to certain market distortion, the investigating agencies have arguably the freedom to depart from the records of the producer/exporter.

2.4.2 Agreement on Subsidies and Countervailing Measures

Natural resource pricing has been a significant topic under the SCM Agreement. At the early stages of the Doha negotiations, the United States in 2003, made a proposal which had a bearing on the energy sector (see WTO Negotiating Group on Rules 2003). The proposal stated the following:

While the principle that trade flows should be determined by comparative advantage is broadly accepted, it must also be accepted that preferential natural resource pricing has been and, if not addressed, will continue to be the source of considerable trade distortion and friction. Simply put, there is no difference between the government provision of a natural resource at less than fair market value and the government provision of a cash grant allowing the purchase of a natural resource at less than fair market value. The advantage provided to domestic producers in this situation unfairly magnifies the comparative that would otherwise be determined by market forces and production facilities.

The Chairman of the Negotiating Group on Rules circulated a draft consolidated text for the Antidumping and SCM Agreement in 2008 (WTO Negotiating Group on Rules 2008). The Chairman’s text included some key changes in the SCM Agreement which may have an impact on natural resource pricing.

2.4.2.1 Chairman’s Text in the SCM Agreement

The following sections from the 2008 Chairman’s text⁶³ reflect proposed changes in three areas, i.e. “specificity”, “determination of benefit” and “input dumping”:

⁶³ WTO Negotiating Group on Rules (2008), Draft Consolidated Chair Texts of the Anti Dumping and SCM Agreement, TN/RL/W/236.

Specificity of Subsidy

The 2008 Chairman's text included a specific amendment with respect to the term "specificity". The text proposed an insertion to Article 2.1(c) as follows:

In the case of subsidies conferred through the provision of goods or services at regulated prices, factors that may be considered include the exclusion of firms within the country in provision from access to the goods or services at the regulated prices.

A number of natural resources are sold at regulated prices and are in principle, "generally available"—a standard used by agencies for determining countervailing duties. However, if some firms are excluded in obtaining such products at regulated prices, such criterion or factual situation could also be determinative in deciding the specificity of such subsidies.

Determination of Benefit

WTO Members have sought to provide a benchmark for the calculation of 'benefit' under Article 14.1(d). The Chairman's 2008 text suggested that Article 14.1(d) of the SCM Agreement contain the following amendment:

Where the price level of goods or services provided by a government is regulated, the adequacy of remuneration shall be determined in relation to prevailing market conditions for the goods or services in the country of provision when sold at unregulated prices, adjusting for quality, availability, marketability, transportation and other conditions of sale; provided that, when there is no unregulated price, or such unregulated price is distorted because of the predominant role of the government in the market as a provider of the same or similar goods or services, the adequacy of remuneration may be determined by reference to the export price for these goods or services, or to a market determined price outside the country of provision, adjusting for quality, availability, marketability, transportation, and other conditions of sale.

One of the underlying objectives of the proposed amendment is to address dual pricing and to extend the WTO subsidies disciplines to trade in natural resources and energy. However, as the Chairman of the Negotiating Group on Rules has reported (WTO Negotiating Group on Rules 2011), disciplines with respect to these issues have been controversial and no further progress has been reported since the submission of the 2008 Chairman's text.

Input Dumping

With respect to input dumping, the following amendment was suggested in the 2008 Chairman's text:

14.2. For the purpose of Part V, where a subsidy granted in respect of an input used to produce the product under consideration, and the producer of the product under consideration is unrelated to the producer of the input, no benefit from the subsidy in respect of the subsidy shall be attributed to the product under consideration unless a determination has been made that the producer of the product under consideration obtained the input on terms more favorable than otherwise would have been available to the producer in the market.

On Article 14.2 of the Chairman's text, there is a near convergence among WTO members that the inclusion pass-through in the Agreement could be useful. Incorporation of new disciplines on input dumping under Part V of the SCM Agreement will infer that input subsidies can be addressed in countervailing duty investigations as opposed to the currently prevailing approach of tackling such issues under the Antidumping Agreement.

2.4.3 Agreement on Agriculture

The Report by the Chairman of the Committee on Agriculture in Special Session in 2011⁶⁴ provides an in-depth assessment of the issues that are bracketed or otherwise and to be settled in the 2008 Revised Draft Modalities Text.⁶⁵

The 2008 modalities text, in Part V(C) provides for Members to undertake obligations with respect to export prohibitions and export restrictions. These provisions mostly seek strengthening of the notification and transparency obligations. The text is reproduced below:

2.4.3.1 Revised Draft Modalities for Agriculture (2008)

Export Prohibitions and Restrictions

171. In order to strengthen the existing disciplines on export prohibitions and restrictions of Article XI.2(a) of GATT 1994 Article 12 of the Agreement on Agriculture shall be modified to include the following elements.

172. Prohibitions or restrictions under Article XI.2(a) of GATT 1994 in Members' shall be notified to the Committee on Agriculture within 90 days of the coming into force of these provisions.

173. A Member instituting export prohibitions and restrictions under that provision shall give notice of the reasons for introducing and maintaining such measures.

174. A Member which intends to institute export prohibitions and restrictions shall consult upon request, with any other Member having a substantial interest as an importer with respect to any matter related to the proposed measure. The Member instituting such export prohibitions and restrictions shall provide, upon request, the interested importing Member with necessary information, including relevant economic indicators.

175. The Member instituting the measure shall report the progress made in the consultations to the Committee on Agriculture.

176. The Committee on Agriculture shall provide for annual notification update and surveillance of these obligations.

⁶⁴ WTO Committee on Agriculture, Special Session (2011), Report by the Chairman to the Trade Negotiations Committee, TN/AG/26.

⁶⁵ WTO Committee on Agriculture, Special Session (2008), Revised Draft Modalities for Agriculture, TN/AG/W/4/Rev.4.

177. As provided in paragraph 7 of Article 18 of the Agreement on Agriculture any Member may bring to the attention of the Committee on Agriculture such measures under that provision which it considers ought to have been notified by another Member.

178. Existing export prohibitions and restrictions in foodstuffs and feeds under Article XI.2(a) of GATT 1994 shall be eliminated by the end of the first year of implementation.

179. Any new export prohibitions or restrictions under Article XI.2(a) of GATT 1994 should not normally be longer than 12 months, and shall only be longer than 18 months with the agreement of the affected importing Members.

180. The above provisions apply consistently with Article 12.2 of the Agreement on Agriculture. To the extent that the above provisions on consultations apply any obligations additional to Article 12 of the Agreement on Agriculture, they shall not apply to least-developed and net food-importing developing countries.

The provisions in the 2008 draft modalities text on export prohibitions and export restrictions are likely to be of some significance for energy-related agricultural products.

2.4.4 Non-Agricultural Market Access

As discussed in other sections and sections of this chapter, export restrictions and duties are considered by several countries to have a bearing on energy security. In this context, any new disciplines and commitments on export restrictions and duties on industrial goods could also have implications for energy security.

In 2011, the Chairman of the Negotiating Group on Market Access submitted a report on the state-of-play of the non-agricultural market access (NAMA) negotiations.⁶⁶ The state-of-play provided an overview of the negotiations based on the 2008 Revised Draft Modalities Text.⁶⁷

As the Chairman of the Negotiating Group on Market Access indicates, there are very few proposals for the regulation of export taxes, export prohibitions and export restrictions.

Concerning proposals on export restrictions in the NAMA negotiations, the *Revised Submission on Export Taxes* from the European Communities (EC) is of relevance. This EC proposal has been included as an annex to the 2008 draft modalities text.⁶⁸ The 2008 modalities text and the state-of-play report made clear that inclusion of the EC proposal did not denote that there is consensus on the proposal.

⁶⁶ WTO Negotiating Group on Market Access (2011), Report by the Chairman on the State of Play of the NAMA Negotiations, TN/MA/W/103/Rev.3/Add.1.

⁶⁷ WTO Negotiating Group on Market Access (2008), Revised Draft Modalities for Non-Agricultural Market Access, TN/MA/W/103/Rev.3.

⁶⁸ Annex 5 of the 2008 Revised Draft Modalities for NAMA (TN/MA/W/103/Rev.3), includes the EC submission on export taxes.

2.4.4.1 Proposals on Export Restrictions Under the Doha Negotiations

The European Communities has made three submissions on regulating export duties. The European Communities made the first submission in 2003 and later submitted a legal draft entitled *WTO Agreement on Export Taxes* in 2007, and a revised submission in 2008 which has been included as an annex to the 2008 draft modalities text.

The revised EC proposal (WTO Negotiating Group on Market Access 2008, TN/MA/W/101) has three main characteristics:

- Basic GATT disciplines on tariff liberalization to apply to export taxes.
- Additional flexibility for small developing country Members and least-developed country Members to maintain or introduce export taxes in other situations.
- Exclusion of agricultural products from GATT disciplines on export taxes (in keeping with the NAMA mandate).

The EC proposal suggested export taxes should be first reduced and subsequently eliminated. This proposal has not yet received critical support from WTO members so far.

2.4.5 *Environmental Goods and Services*

Paragraph 31(iii) of the Doha Ministerial Declaration called for negotiations regarding “the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services”. The negotiations have given rise to a number of proposals on the definition of environmental goods and services (EGS). The proposals suggest that wind turbines, solar panels, geothermal energy sensors and fuel cells can be included within the coverage of EGS.

Some WTO Members have identified certain key goods as a starting point for discussion in the Committee on Trade and Environment, Special Session on a core list of environmental goods, without prejudice to the final outcome (see also the annexed Table A.1 for an indicative core list of EGS).

In an effort to combine various elements of proposals under negotiation, a *hybrid* approach which includes the following components has been suggested: (i) an agreed core list⁶⁹; (ii) a complementary self-selected list: developed countries would individually select a number of environmental products for tariff elimination and developing countries are encouraged to participate; (iii) as a complement to the common core list and complementary lists, products would be identified

⁶⁹ The core list drawn from JOB/TE/3/Rev.1 is listed in the annexed Table A.1. A group of Members identified, on an illustrative and starting-point basis, 26 tariff lines in the core list. Preliminary discussions showed that some of the goods included in this set could be considered by the membership as environmental goods, as long as they can be specifically identified in the HS classification by an ex-out or otherwise.

through a request/offer process, the outcome of which would be multilateralized on the basis of the MFN principle; and (iv) environmental projects that could be used to identify lines for inclusion in the EGS lists mentioned above.

2.4.6 Trade in Services

As noted in Sect. 2.2.10, the United States and Norway⁷⁰ proposed a Reference Paper on Energy Services modeled on the Reference Paper on Basic Telecommunication Services under the GATS.

In 2011, the Chairman of the Council on Trade in Services in Special Session (CTS-SS) submitted his report to the Trade Negotiations Committee on the state-of-play in the services negotiations. Based on the statements submitted by coordinators of the plurilateral request/offer groups at the CTS-SS, paragraphs 26 and 27 of the Chairman's report covered Energy Services and noted as follows:

Energy Services

26. The co-sponsors considered that the overall response to the plurilateral request had thus far been disappointing. Although some indications of new commitments and important improvements in some areas covered by the request had been provided, major gaps still existed. Few Members other than co-sponsors currently came close to satisfying the entire request. All modes of supply were important for this sector, but the co-sponsors were in particular seeking improvements with regard to the removal of restrictions on mode 3, notably foreign equity limitations.

27. In general, while the positive indications received from recipients were appreciated, this limited progress still needed to be translated into firm commitments. Much work therefore remained to be done in order to meet the request.⁷¹

2.4.7 Trade Facilitation

Trade facilitation assumes significance in light of the need for providing security for transit energy infrastructure. Proposals that pertain or which are of relevance to the energy sector were made by WTO members in 2009 and in 2012.

In 2009, the former Yugoslav Republic of Macedonia, Mongolia, Switzerland and Swaziland, together proposed concrete obligations with respect to transit in goods (including energy goods). The obligation of national treatment, MFN treatment, disciplines on STEs and document review were covered in the proposal (WTO Negotiating Group on Trade Facilitation 2009).

⁷⁰ Communication by the US and by Norway to the Council for Trade in Services in Special Session (S/CSS/W/24 and S/CSS/W/59, respectively).

⁷¹ WTO CTS-SS (2011), Report by the Chairman of the CTS-SS, TN/S/26, paragraphs 26 and 27.

In early 2012, the Negotiating Group received a communiqué jointly issued by Egypt and Turkey (WTO Negotiating Group on Trade Facilitation 2012). This communication opposed the idea of GATT Article V disciplines being read so as to govern the transit of energy products via fixed infrastructure. Instead, they proposed that the issue be dealt with under a separate provision altogether. This proposal was based on the peculiarities of energy and trade in energy products with respect to GATT and trade in goods and was against the inclusion of goods moved via fixed infrastructure in the definition of “traffic in transit” in the draft negotiating text on trade facilitation.

In the 2012 consolidated draft negotiating text,⁷² there was inclusion of bracketed text and some of the provisions therein directly concern transit of energy goods. For instance, Article 11 of the negotiating text reads as follows:

Article 11: Freedom of Transit (December 2012 Text)

1. [Goods subject to the provisions on Freedom of Transit of GATT 1994 and of this Agreement include those *moved [via fixed infrastructure], [, inter alia pipelines and electricity grids].*]

[Ibis For greater certainty, nothing in Article V of the GATT 1994 or this Agreement shall be construed to require a Member:

(a) to build infrastructure of any kind in its territory, or to permit the building of infrastructure by others, in order to facilitate the transit of goods;

(b) [to provide access to any infrastructure for transit unless such infrastructure is open to general use by third parties. For the purpose of this Agreement, the term “general use by third parties” does not include access to infrastructure granted on a contractual basis.]]

2. [Each Member undertakes that if it establishes or maintains a State enterprise or if an enterprise has, formally or in effect, exclusive or special privileges, such enterprise shall, in its regulations, formalities [fees] and charges—including transportation charges—, on or in connection with traffic in transit, comply with the provisions on traffic in transit of this Agreement [and otherwise act solely in accordance with commercial considerations.]]” (emphasis added)

The WTO Agreement on Trade Facilitation (TF)⁷³ which was adopted at the Ninth WTO Ministerial Conference in Bali dropped the bracketed text and did not expressly include energy transit infrastructure. Under the TF Agreement reached in Bali the only reference to transit infrastructure is provided in paragraph 5 of Article 11 which provides as follows:

*Article 11: Freedom of Transit (Trade Facilitation Agreement, December 2013)
Paragraph 5*

Members are encouraged to make available, where practicable, separate physical infrastructure (such as lanes, berths, and similar) for traffic in transit.

⁷² WTO Negotiating Group on Trade Facilitation (2012), Draft Consolidated Negotiating Text: Revision, TN/TF/W/165/Rev.14.

⁷³ WTO Agreement on Trade Facilitation (2013), WT/MIN(13)/36 and WT/L/911 (available online at <https://docs.wto.org/>).

It is evident, especially in the light of negotiating history, that energy transit issues and energy infrastructure such as pipelines and electricity grids were discussed but not explicitly included in the new TF Agreement. Energy transit would be covered under GATT Article V and the TF Agreement just as other goods in transit are covered.

2.5 Conclusion

All categories of Members in the WTO—developed or developing, industrial, or agricultural—have different conceptions and understanding of the meaning of energy security. At the heart of this topic is the need to ensure security of energy supply and mitigate the consequences of climate change. In the above context, this chapter sought to map the legal framework currently available at the WTO in regulating energy trade as well as the initiatives taken under the Doha Development Agenda in creating additional or improved framework and rules to tackle some of the persisting and emerging issues relating to the energy sector. A review of current WTO provisions establishes that the existing regime do not appropriately address all the needs and challenges of energy trade. The existing WTO disciplines on energy products or services are scattered across several agreements and the inter-linkages are remote, at best. Lack of appropriate disciplines in the WTO in areas such as renewable energy constrain the development of this sector and impair energy security. Furthermore, the GATT disciplines on national treatment are not well developed to accommodate the challenges of climate change and global warming. Again, the sectoral coverage for energy-related services under the GATS is inadequate and it remains doubtful whether GATS can be an appropriate framework. The problems related to dual pricing and input subsidies remain unaddressed under the rules framework. The Doha negotiations provide only a partial solution to some of the challenges for energy security as identified in this chapter.

Annex

Table A.1 Core list of environmental goods and services

	HS 2002 Code	HS code description	Category (IES)
	4601	Plaits and similar products of plaiting materials, whether or not assembled into strips; plaiting materials, plaits, and similar products of plaiting materials, bound together in parallel strands or woven, in sheet form, whether or not being finished attic	
1	460120	Mats, matting, and screens of vegetable materials	Waste Management and Water Treatment, Waste Management, Recycling and Remediation
	7308	Structures (excluding prefabricated buildings of heading 94.06) and parts of structures (for example, bridges and bridge sections, lock gates, towers, lattice masts, roofs, roofing frameworks, doors and windows and their frames and thresholds for doors, shutters, balustrades, pillars and columns), of iron or steel; plates, rods, angles, shapes, sections, tubes and the like, prepared for use in structures, of iron or steel	
2	730820	-Towers & lattice masts	Renewable energy Renewable Products and Energy Source
	7321	Stoves, ranges, grates, cookers (including those with subsidiary boilers for central heating), barbecues, braziers, gas-rings, plate warmers and similar non-electric domestic appliances, and parts thereof, of iron or steel	
3	732111	-Cooking appliances and plate warmers: For gas fuel or for both gas and other fuels	Environmental Technologies, Cleaner or More Resource Efficient Technologies and Products
	7324	Sanitary ware and parts thereof, of iron or steel	

(continued)

Table A.1 (continued)

	HS 2002 Code	HS code description	Category (IES)
4	732490	-Other, including parts	Waste Management and Water Treatment , Waste Water Management and Potable Water Treatment Environmental Technologies, Carbon Capture and Storage , Efficient Consumption of Energy Technologies
	8402	Steam or other vapor generating boilers (other than central heating hot water boilers capable also of producing low pressure steam); super-heated water boilers	
5	840290	-Parts	Environmental Technologies, Carbon Capture and Storage , Efficient Consumption of Energy Technologies Waste Management and Water Treatment , Management of Solid and Hazardous Waste and Recycling Systems Waste Management and Water Treatment , Waste Management, Recycling and Remediation
	8404	Auxiliary plant for use with boilers of heading 84.02 or 84.03 (for example, economisers, super-heaters, soot removers, gas recoverers); condensers for steam, or other vapor power units	
6	840410	-Auxiliary plant for use with boilers of 84.02 or 84.03	Waste Management and Water Treatment , Waste Management, Recycling and Remediation Waste Management and Water Treatment , Management of Solid and Hazardous Waste and Recycling Systems Environmental Technologies, Carbon Capture and Storage , Efficient Consumption of Energy Technologies

(continued)

Table A.1 (continued)

	HS 2002 Code	HS code description	Category (IES)
	8405	Producer gas or water gas generators, with or without their purifiers; acetylene gas generators and similar water process gas generators, with or without their purifiers	
7	840510	-Producer gas or water gas generators, with or without their purifiers; acetylene gas generators and similar water process gas generators, with or without their purifiers	Air Pollution Control Renewable Energy Waste Management and Water Treatment, Waste Water Management and Potable Water Treatment Environmental Technologies, Carbon Capture and Storage, Efficient Consumption of Energy Technologies
	8406	Steam turbines and other vapor turbines	
8	840681	-Turbines for marine propulsion: Of an output exceeding 40 MW	Renewable Energy
	8409	Parts suitable for use solely or principally with the engines of heading 84.07 or 84.08	
9	840999	-Other: other	Air Pollution Control Environmental Technologies, Carbon Capture and Storage, Efficient Consumption of Energy Technologies Environmental Technologies, Carbon Capture and Storage, Noise and Vibration Abatement
	8410	Hydraulic turbines, water wheels, and regulators therefor	
10	841011	-Hydraulic turbines and water wheels of a power not exceeding 1,000 kW .	Renewable Energy Environmental Technologies, Carbon Capture and Storage, Efficient Consumption of Energy Technologies
11	841012	-Hydraulic Turbines and Water Wheels, Power 1, 000–10, 000 kw	Environmental Technologies, Carbon Capture and Storage, Efficient Consumption of Energy Technologies

(continued)

Table A.1 (continued)

HS 2002 Code	HS code description	Category (IES)
12 841090	-Hydraulic turbines, water wheels, and regulators; parts, including regulators	RenewableEnergy Environmental Technologies, Carbon Capture and Storage, Efficient Consumption of Energy Technologies
8411	Turbo-jets, turbo-propellers and other gas turbines	
13 841181	-Other gas turbines of a power not exceeding 5,000 kW	Renewable Energy Environmental Technologies, Carbon Capture and Storage, Efficient Consumption of Energy Technologies Others, Environmentally Preferable Products based on End-Use or Disposal Characteristics
14 841182	-Other gas turbines of a power exceeding 5,000 kW	Renewable Energy Environmental Technologies, Carbon Capture and Storage, Efficient Consumption of Energy Technologies Others, Environmentally Preferable Products based on End-Use or Disposal Characteristics
8418	Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps other than air conditioning machines of heading 84.15	
15 841861	-Other refrigerating or freezing equipment; heat pumps: Compression-type units whose condensers are heat exchangers	Renewable Energy
8419	Machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 85.14), for the treatment of materials by a process involving a change of temperature such as heating, cooking, roasting	

(continued)

Table A.1 (continued)

HS 2002 Code	HS code description	Category (IES)
16 841919	-Instantaneous or storage water heaters, non-electric: Other	Renewable Energy
17 841950	-Heat exchange units	Renewable Energy Environmental Technologies, Carbon Capture and Storage, Gas Flaring Emission Reduction, Efficient Consumption of Energy Technologies <i>Environmental Technologies,</i> Heat and Energy Management
8479	Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter	
18 847989	-Other machines and mechanical appliances: Other	Air Pollution Control Waste Management and Water Treatment, Management of Solid and Hazardous Waste and Recycling Systems Renewable Energy, Renewable Products and Energy Source
8502	Electric generating sets and rotary converters	
19 850231	-Other generating sets: Wind-powered	Renewable Energy Renewable Products and Energy Source
8504	Electrical transformers, static converters (for example, rectifiers) and inductors	
20 850410	-Ballasts for discharge lamps or tubes	Environmental Technologies, Carbon Capture and Storage, Efficient Consumption of Energy Technologies
8537	Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17	

(continued)

Table A.1 (continued)

	HS 2002 Code	HS code description	Category (IES)
21	853710 8541	-For a voltage not exceeding 1,000 V Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes; mounted piezo-electric crystals	Renewable Energy
22	854140 9001	-Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes. Optical fibers and optical fiber bundles; optical fiber cables other than those of heading 85.44; sheets and plates of polarizing material; lenses (including contact lenses), prisms, mirrors and other optical elements, of any material, unmounted, other than such elements of glass not optically worked	Renewable Energy Renewable Products and Energy Source
23	900190 9002	-Other Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked	Renewable Energy
24	900290 9027	-Other Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes	Renewable Energy

(continued)

Table A.1 (continued)

HS 2002 Code	HS code description	Category (IES)
25 902730	-Spectrometers, spectrophotometers and spectrographs using optical radiations (UV, visible, IR)	Environmental Technologies, Environmental Monitoring, Analysis and Assessment Equipment
9032	Automatic regulating or controlling instruments and apparatus	
26 903210	-Thermostats	Environmental Technologies, Environmental Monitoring, Analysis and Assessment Equipment Environmental Technologies, Carbon Capture and Storage, Gas Flaring Emission Reduction, Efficient Consumption of Energy Technologies

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