

Renewable Energy Support in the Light of the World Trade System. The Role of the WTO Agreements in Allowing the Development of Renewable Energy Projects¹

El apoyo a las energías renovables a la luz del Sistema Mundial de Comercio. El rol de los Acuerdos de la Organización Mundial de Comercio en permitir el desarrollo de proyectos de energías renovables

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Abstract: The development of renewable energy projects is crucial to address many issues, from climate change to social and environmental demands. However, policies encouraging these project may face resistance among WTO members, being contested under WTO panels. Different WTO member's policies have been impugned regarding the so-called local requirements. Recent developments in the Appellate Body reports have shown that green policies or the support of renewable energy is compatible with the WTO law, directly or even under the general exceptions of the Article XX of the GATT. Nonetheless, the inclusion of national content requirements to access subsidies or benefits for renewable energy project are not allowed. Indeed, such measures violate the national treatment principle, one of the core principles of the world trading system.

Key words: Renewable energy, energy projects, WTO, WTO Agreements, GATT, energy.

Resumen: *El desarrollo de proyectos de energías renovables es crucial para abordar diversos problemas, desde el cambio climático a demandas sociales y ambientales. Sin embargo, las políticas que favorecen estos proyectos pueden enfrentar resistencia entre los países miembros de la Organización Mundial del Comercio, siendo examinados frente a paneles de la OMC. Recientes desarrollos en los reportes del Cuerpo de Apelación han demostrado que las políticas verdes o el apoyo a las energías renovables son compatibles con el derecho de la OMC, ya sea directamente o incluso bajo las excepciones generales del artículo XX del Acuerdo General sobre Aranceles Aduaneros y Comercio (GATT, por sus siglas en inglés). No obstante, la inclusión de requerimientos de contenido nacional para acceder a subsidios o beneficios para los proyectos de energías renovables no está permitido. Ciertamente, estas medidas violan el principio de trato nacional, uno de los principios clave en el sistema de comercio mundial.*

Palabras clave: *Energías renovables, proyectos de energía, OMC, Acuerdos de la OMC, GATT, energía.*

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1. Introduction

The encouragement of renewable energies is mainly related to environmental concerns and energy security.² According to the 2015 World Energy Outlook, the energy sector represents approximately two-thirds of greenhouse and CO₂ emission with an anthropogenic origin.³ Different countries have been designing renewable energy promotion policies looking either for climate change mitigation or energy security.⁴

The World Trade Organization (WTO) does not have energy or environmentally oriented agreements.⁵ The adoption of environmental and renewable energy support policies can be in conflict with trade principles. The main rules are given by the Agreement on Subsidies and Countervailing Measures (SCM Agreement)⁶ and the Trade-Related Investment Measures Agreement (TRIMs Agreement).⁷ Some authors have argued in favor of modifying the SCM Agreement to allow subsidies 'promoting a public good.'⁸ Others have proposed the modernisation of the WTO rules to provide more 'policy space for environmental and clean energy subsidies.'⁹

This paper argues that the promotion of renewable energies is different from protectionist subsidies or measures. The backing of renewables should consider the international trade obligations under the WTO agreements. The support of renewable energy should not contemplate subsidies or measures that distort international trade and investment.

In developing these ideas, the argument unfolds in four sections. Section II discusses the two most used available policy instruments to support renewable energies. This includes the Feed-in Tariffs programs (FITs) and the Renewable Portfolio Standards (RPS). Section III analyses the compatibility between the renewable energy support policies with the international trade framework, especially the GATT, SCM and TRIMs agreements. Section IV discusses recent cases related to renewable energy policies in the WTO Dispute Settlement Body, including recent cases such as the India-Solar Cells, the Canada-Renewable Energy/Feed-in Tariff case¹⁰ and the Chinese request for consultations related to certain European Feed-in Tariff programs.¹¹ Section V develops the idea of a complementary approach between environmental concerns and WTO rules.

The article concludes that it is necessary to distinguish between renewable energy support and protectionism. The support of this kind of energy and other environmental policies should consider

² Kati Kulovesi, 'International Trade Disputes on Renewable Energy: Testing Ground for the Mutual Supportiveness of WTO Law and Climate Change Law' (2014) *Review of European Community & International Environmental Law* 342, 343.

³ International Energy Agency, *World Energy Outlook* (International Energy Agency, 2015) 20.

⁴ Kulovesi, 'International Trade Disputes...', 343.

⁵ Paolo D Farah and Elena Cima, 'Energy Trade and the WTO: Implications for Renewable Energy and the OPEC Cartel' (2013) 16 *Journal of International Economic Law* 707, 707.

⁶ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('Agreement on Subsidies and Countervailing Measures') ('SCM Agreement').

⁷ *Agreement on Trade-Related Investment Measures*, opened for signature 15 April 1994, 1869 UNTS 299, 33 ILM 1197, art 6 (entered into force 1 January 1995) ('TRIMs').

⁸ Aaron Cosbey and Petros C Mavroidis, 'A Turquoise Mess: Green Subsidies, Blue Industrial Policy and Renewable Energy: The Case for Redrafting the Subsidies Agreement of the WTO' (2014) 17 *Journal of International Economic Law* 11, 12.

⁹ Steve Charnovitz, *Green Subsidies and the WTO* (The World Bank, 2014) 3.

¹⁰ Appellate Body Report, *Canada—Certain Measures Affecting the Renewable Energy Generation Sector/Canada—Measures Relating to the Feed-In Tariff Program*, WTO Doc WT/DS412/AB/R/WT/DS426/AB/R (24 May 2013).

¹¹ *European Union and certain Member States - Certain Measures Affecting the Renewable Energy Generation Sector*, WTO Doc WT/DS452/1 (07 November 2012) (Request for Consultations by China).

the international trade framework. The liberalization of energy markets and investment protection can promote renewable energies effectively.

2. Renewable Energy Support Policies

The commitment to renewable energy has different reasons. The most important is related to environmental concerns. The Greenhouse-gas emissions from the energy sector represent approximately two-thirds of all anthropogenic greenhouse-gas emissions. Also, CO₂ emissions from the energy sector have increased over the past century to ever higher levels.¹²

The challenge of shifting towards low-carbon sustainable development requires the design and implementation of effective policies across different countries.¹³ Renewable energy sources play a role in providing sustainable energy services and especially mitigating climate change.¹⁴ Governments play a fundamental role in the development of renewable energy providing a stable regulatory regime. This allows private investors to make long-term investment decisions.¹⁵ However, the challenge is to determine up to what extent national climate change policies can be limited by multilateral trade obligations. This section analyses two of the most used renewable energy support policies, namely the Feed-in Tariffs programs and the Renewable Portfolio Standards, and considerate the main benefits and problems of each policy.

2.1. Feed-in Tariffs (FITs)

A Feed-in Tariffs (FITs) is a policy mechanism designed to promote renewable energies and to accelerate the incorporation of these sources to the grid.¹⁶ The FITs programs look to accelerate investment in renewable energy technologies through the payment of a guaranteed tariff to renewable energy producers, either big or small ones.¹⁷ FITs usually includes three key provisions. The first is guaranteed access to the grid. The second, the availability of long-term contracts for the electricity produced. The third, that purchase prices methodologically based on the cost of renewable energy generation, considering the grid parity.¹⁸

There are two methods for determining the energy price. The first is a fixed tariff that provides a generator with an overall price per unit of energy output, regardless the electricity market price. This system is the most used by European FITs schemes. The second is a premium tariff that is paid to a generator additionally to the electricity market price. This last system has been applied by countries

¹² 'Energy and Climate Change' (Special Report, International Energy Agency, 2015) 20.

¹³ Karstan Neuhoff, *International Support for Domestic Climate Policies in Developing Countries*. (Taylor and Francis, 2015) 451.

¹⁴ W Moomaw et al, 'Introduction', in: Ottmar Edenhofer et al (eds) *Renewable energy sources and climate change mitigation: special report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2012) 164.

¹⁵ Nicolas Sinden and Siobhan Smyth, 'Issues for Financiers', in: Matt Bonass and Michael Rudd (eds) *Renewables: a practical handbook* (Globe Law and Business, 2010).

¹⁶ Shanon Mccord, *Renewable Energy Policy Handbook* (World Technologies, 2012) 6.

¹⁷ Andreas Goldthau, *The Handbook of Global Energy Policy* (Wiley, 1st ed, 2013) 314–315.

¹⁸ Mccord, 'Issues for Financiers', 6.

like the Czech Republic, the Netherlands, and Spain.¹⁹ Also, the implementation of FITs usually offers a guaranteed purchase long-term contract for the produced electricity that comes from renewable sources.²⁰

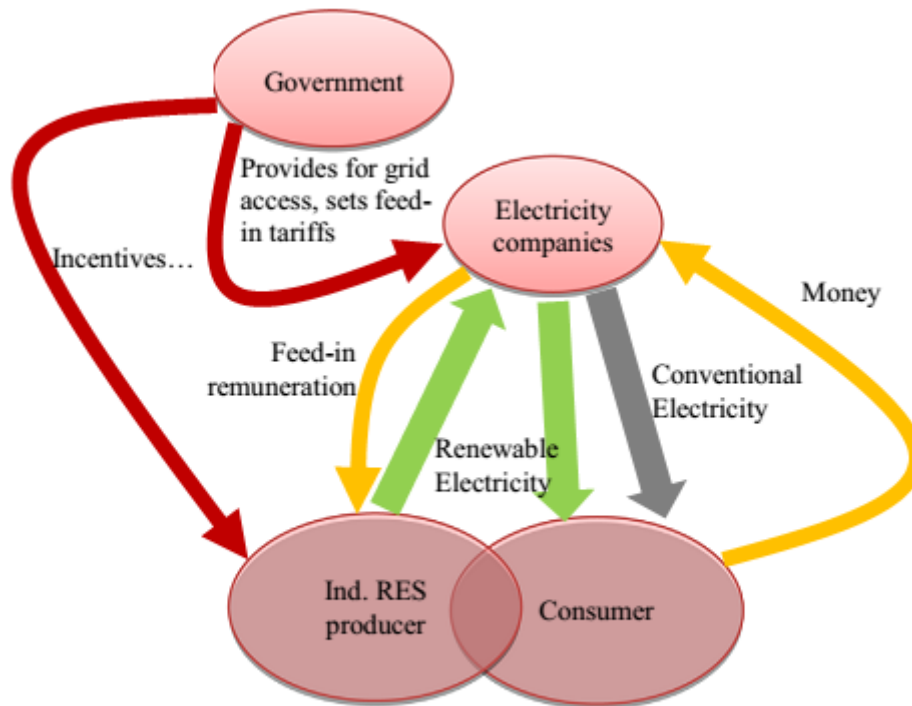


Fig. 1. Scheme of typical Feed-In-Tariff system [4].

Source: Zeineb Abdmouleh, Rashid AM Alammari and Adel Gastli, 'Review of Policies Encouraging Renewable Energy Integration & Best Practices' (2015) 45 *Renewable and Sustainable Energy Reviews* 249, 252.

The previous figure shows a simplified typical Feed-In Tariff system. The FIT's program becomes a Net-Metering program when is mainly oriented to households, farms or business rather than an Independent Power Producer business. A Net-Metering program allows individual electricity consumers to generate electricity from small renewable energy sources, like solar panels and feed into the grid to offset their electricity consumption.²¹

FIT's programs are seen as effective policies for several reasons. First, because FITs allow a quick development of significant capacity through the removal of barriers to renewable energy projects. Second, due the impact of FITs in technology development, where without government intervention

¹⁹ Katy Hogg and Ronan O'Regan, 'Renewable Energy Support Mechanisms: An Overview', in: Matt Bonass and Michael Rudd (eds) *Renewables: a practical handbook* (Globe Law and Business, 2010).

²⁰ Mccord, 'Issues for Financiers', 7.

²¹ Zeineb Abdmouleh, Rashid AM Alammari and Adel Gastli, 'Review of Policies Encouraging Renewable Energy Integration & Best Practices' (2015) 45 *Renewable and Sustainable Energy Reviews* 249, 252.

would not be possible to deploy new renewable energy technology. Third, FITs provide stability and certainty to investors, reducing the risk premium and the uncertainty in energy prices. Fourth, FITs allow the participation of individuals and small community-based projects, since individual prices and contracts do not need to be negotiated.²²

2.2. Renewable Portfolio Standards (RPS)

Other of the most common support policies for renewable energies is the use of renewable energy mandates, usually in the form of Renewable Portfolio Standards (RPS).²³ The objective of RPS legislation is to reduce emissions of greenhouse gasses, providing a guaranteed market for renewable energy producers.²⁴

RPS determines standards requiring utilities to provide a minimum quantity of generation sold by renewable energy sources. Under RPS policies usually utilities prove compliance is adopting a market-based mechanism of tradable renewable energy credits.²⁵ A RPS requires electricity suppliers either to provide a determined percentage of their electricity from renewable energy sources or the purchase of Renewable Energy Credits (RECs) from different producers to meet the legal standard. This kind of policies usually set a mid to long-range goal, with increasing percentages of use of renewable energy over time.²⁶

The implementation of RPS policies relies mainly on the private market because it is a market mandate. Unlike FIT programs that provide guaranteed prices for producers, the RPS programs tend to allow more price competition between different kinds of renewable energy.²⁷ This is why RPSs are perceived as 'more compatible with open markets.'²⁸ However, competition can be limited in RPS programs depending on the eligibility requirements.²⁹

In the United States, RPS have been the most successful mechanism promoting new renewable energy capacity, where they were implemented jointly with federal Production Tax Credits (PTC).³⁰ RPS would allow mass renewable energy production if they were to be widely adopted. At the 2002 World Summit on Sustainable Development, an international RPS was debated but not adopted. Instead, an obligation for a 'substantial increase' in the use of renewable energy was adopted.³¹

²² Leah C Stokes, 'The Politics of Renewable Energy Policies: The Case of Feed-in Tariffs in Ontario, Canada' (2013) 56 *Energy Policy* 490, 491.

²³ Joshua P Fershee, 'Renewables Mandates and Goals', in: Michael B. Gerrard (ed), *The law of clean energy: efficiency and renewables* (American Bar Association, Section of Environment, Energy, and Resources, 2011) 77.

²⁴ Christian Hunold and Steven Leitner, "'Hasta La Vista, Baby!'" The Solar Grand Plan, Environmentalism, and Social Constructions of the Mojave Desert', in: Steve Vanderheiden (ed), *The Politics of Energy, Challenges for a Sustainable Future* (Taylor and Francis, 2013) 83.

²⁵ Johanna Thibault, 'Implementing an Effective Renewable Energy Policy in the United States: Can Feed-in Tariff Policies Be Successful for Advancing Renewable Energy Development?' (2014) *European Energy and Environmental Law Review* 233, 244.

²⁶ Fershee, 'Renewables Mandates and Goals', 77.

²⁷ Mccord, 'Issues for Financiers', 59.

²⁸ Thibault, 'Implementing an Effective Renewable...', 244.

²⁹ Mccord, 'Issues for Financiers', 59.

³⁰ Mccord, 'Issues for Financiers', 59.

³¹ Adrian J Bradbrook et al, *The Law of Energy for Sustainable Development* (Cambridge University Press, 2005) 110.

2.2.1. Renewable Energy Credits and Certificates (RECs)

Most of the RPS systems requires the obliged electricity retailers to hold a specified proportion of Renewable Energy Certificates (RECs). The percentage of RECs is determined according to the amount of retail electricity that they sell. The RECs can be self-generated from qualified renewable sources, or they can be purchased from other eligible renewable generators.³² A REC or credit is granted for each unit of renewable energy generated by an eligible producer. These certificates can be sold either separately or in conjunction with the underlying power by energy supply companies.³³

In a similar manner as the efficiency gains in emissions trading systems, the benefits from trade in RPS system come from the production of electricity where is cheaper. This allows to covered entities to comply with the RPS obligations through the generation of lower cost renewable energy, the purchase of RECs, or some mix of both. Because the electricity produced from renewable sources is sold to the grid, while the RECs are sold independently from the electricity to a different buyer, distant covered entities can comply with the RPS obligation, overcoming geographical barriers to renewable energy.³⁴

The purpose of REC is to promote investment in renewables through providing an extra stream of revenue to renewable energy producers. The additional revenues will allow to a project become stronger financially and will allow to renewable energy producers to bid more competitively on the electricity price provided under a power purchase agreement.³⁵

3. Renewable Energy Support Policies under the WTO Obligations

The General Agreement on Tariff and Trade (GATT) 1994,³⁶ the World Trade Agreement on Subsidies and Countervailing Measures³⁷ and the Trade-Related Investment Measures Agreement, in their actual form, may impede the adoption of some policies designed to mitigate the climate change effects.³⁸ The fact that current international trade law does not have a specific treatment of renewable energy creates difficulties when countries look for policy options supporting these technologies.³⁹ This section discusses whether the GATT 1994, and the SCM and TRIMs Agreements allow the adoption of renewable energy support subsidies or measures, and which difficulties present these agreements.

³² Fershee, 'Renewables Mandates and Goals', 79.

³³ Mccord, 'Issues for Financiers', 61.

³⁴ Craig A Hart and Dominic Marcellino, 'Subsidies or Free Markets to Promote Renewables' (2012) *Renewable Energy Law and Policy Review* 196, 200.

³⁵ Hart and Marcellino, 'Subsidies or Free Markets...', 200.

³⁶ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('General Agreement on Tariffs and Trade').

³⁷ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('Agreement on Subsidies and Countervailing Measures') ('SCM Agreement').

³⁸ Gary N Horlick, 'Chapter 9 - The WTO and Climate Change "incentives"', in: Thomas Cottier, et al (eds), *International trade regulation and the mitigation of climate change: World Trade Forum* (Cambridge University Press, 2009) 193.

³⁹ Virginia R Hildreth, 'Renewable Energy Subsidies and the GATT' (2014) 14 *Chicago Journal of International Law* 702, 704.

3.1. GATT

The major objective of the World Trade Organization (WTO) is to achieve open trade between nations.⁴⁰ The core of the WTO law is the General Agreement on Tariff and Trade (GATT) 1994.⁴¹ One of the recent trends is the government's adoption of policies oriented to subsidize green energy while promoting economic growth within their country. Some of these programs have required the use of a certain amount of domestic goods and services by renewable energy producers to be eligible for subsidies or other benefits.⁴² This trend has been called as 'Green Protectionism.'⁴³ These policies have caused several disputes in the Dispute Settlement System.⁴⁴ The main issue in these disputes has been the adoption of programs and subsidies with local content requirements.⁴⁵

The GATT is important for renewable energy support policies, especially in the matters of national treatment and general exceptions provisions. Renewable energy support policies with local content requirement have been found as inconsistent with the national treatment obligation in cases like Canada-Renewable Energy/Feed-in Tariff.⁴⁶ The general exceptions contained in Article XX of GATT may have the potential for finding a particular treatment for renewable energy support.⁴⁷

3.1.1. National Treatment Obligation

The notion of national treatment is fundamental in the law of international trade, and it is not only contained in the WTO Agreements but also in all the main regional trade agreements. National treatment implies that a party to a trade treaty shall not discriminate against imports once they have entered into its territory, by treating them in a less favorable manner than competitive domestic goods. Therefore, national treatment has been characterized as a 'discipline on internal policies of the members of a trade liberalization regime.'⁴⁸ The national treatment obligation is contained in Article III of GATT 1994 and is the most important provisions affecting local content measures. By its very nature, local content requirements often are incompatible with at least one of the paragraphs of Article III. This, because they require the use of domestic goods to obtain a benefit, discriminating products according to their origin.⁴⁹

⁴⁰ Hildreth, 'Renewable Energy Subsidies...', 709.

⁴¹ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('General Agreement on Tariffs and Trade').

⁴² Samuel Griffin, 'The World Trade Organization: A Barrier to Green Energy' (2013) *Transnational Law & Contemporary Problems* 205, 205.

⁴³ Ronald Steenblik, 'Green Growth, Protectionism, and the Crisis', in: Simon J Evenett, et al (eds), *Effective crisis response and openness: implications for the trading system* (2010) 249, 250–251.

⁴⁴ For instance: DS419 *China — Measures concerning wind power equipment* (Complainant: United States) 22 December 2010; DS452 *European Union and Certain Member States — Certain Measures Affecting the Renewable Energy Generation Sector* (Complainant: China) 5 November 2012; Appellate Body Report, *Canada—Certain Measures Affecting the Renewable Energy Generation Sector/Canada—Measures Relating to the Feed-In Tariff Program*, WT/DS412/AB/R/WT/DS426/AB/R, adopted 24 May 2013; Panel Report, *India—Certain measures relating to solar cells and solar modules*, WTO Doc WT/DS456/R (24 April 2016).

⁴⁵ Griffin, 'The World Trade Organization...', 205.

⁴⁶ Appellate Body Report, *Canada—Certain Measures Affecting the Renewable Energy Generation Sector/Canada—Measures Relating to the Feed-In Tariff Program*, WTO Doc WT/DS412/AB/R/WT/DS426/AB/R (24 May 2013).

⁴⁷ Hildreth, 'Renewable Energy Subsidies...', 715.

⁴⁸ Michael Trebilcock, Robert Howse and Antonia Eliason, *The Regulation of International Trade* (Taylor and Francis, 2012) 136.

⁴⁹ Holger P Hestermeyer and Laura Nielsen, 'The Legality of Local Content Measures under WTO Law' (2014) *Journal of World Trade (Law-Economics-Public Policy)* 553, 566.

Regarding local content requirement in renewable energy support policies, paragraphs 1, 4 and 5 are relevant. Paragraph 2 will apply if the benefit granted to domestic products consists in a tax advantage.⁵⁰ The Article III:1 of GATT established the fundamental principle of national treatment. This principle provides that internal measures ‘should not be applied to imported or domestic products so as to afford protection to domestic production.’⁵¹ This provision has not been implemented independently, and the core analysis of whether a local content measure is inconsistent with GATT has to be addressed according the other paragraphs.⁵²

3.1.1.1. Article III:4 of GATT 1994

Paragraph 4 of Article III of GATT provides that products of a member shall receive a ‘treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use.’⁵³

According to the jurisprudence of the Appellate Body, for a violation of Article III:4 three elements must be satisfied.⁵⁴ The first element is the likeness between the domestic and the imported product. However, that is not the case regarding local content requirements, since this kind of measure by its nature discriminates in favor of domestic goods.⁵⁵

The second element is whether the advantage comes from ‘law, regulation or requirements affecting their internal sale, purchase, transportation, distribution or use.’⁵⁶ Local content requirements precisely apply certain conditions to obtain an advantage.⁵⁷ These requirements can be based on either mandatory (as a command and control regulation) or voluntary schemes with which private companies have to comply to obtain or receive a benefit.⁵⁸

The third element concerns whether the imported products are treated less favorably than domestic products. Regarding local content requirements, the discrimination is always *de jure* because they explicitly subject the grant of a benefit on the use of local content.⁵⁹ Therefore, treating the imported product less favorably than the domestic ones.

⁵⁰ Hestermeyer and Nielsen, ‘The Legality of Local...’, 566.

⁵¹ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A (‘General Agreement on Tariffs and Trade’) article III:1.

⁵² Hestermeyer and Nielsen, ‘The Legality of Local...’, 566.

⁵³ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A (‘General Agreement on Tariffs and Trade’) article III:4.

⁵⁴ Appellate Body Report, *Korea – Various Measures on Beef*, WTO Doc WT/DS161/AB/R, WT/DS169/AB/R (11 December 2000) [133].

⁵⁵ Hestermeyer and Nielsen, ‘The Legality of Local...’, 569.

⁵⁶ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A (‘General Agreement on Tariffs and Trade’) article III:4.

⁵⁷ Hestermeyer and Nielsen, ‘The Legality of Local...’, 569.

⁵⁸ Hestermeyer and Nielsen, ‘The Legality of Local...’, 569. See also: Panel Report, *Japan – Measures Affecting Agricultural Products*, WTO Doc WT/DS76/R (27 October 1998) [346]; Panel Report, *Canada – Certain Measures Affecting the Automotive Industry*, WTO Doc WT/DS139/R, WT/DS142/R (11 February 2000) [10.73].

⁵⁹ Hestermeyer and Nielsen, ‘The Legality of Local...’, 572.

3.1.1.2. *Article III:5 of GATT 1994*

Paragraph 5 of Article III of GATT 1994 provides that:

No contracting party shall establish or maintain any internal quantitative regulation relating to the mixture, processing or use of products in specified amounts or proportions which requires, directly or indirectly, that any specified amount or proportion of any product which is the subject of the regulation must be supplied from domestic sources. Moreover, no contracting party shall otherwise apply internal quantitative regulations in a manner contrary to the principles set forth in paragraph 1.⁶⁰

This paragraph implies two different tests for internal quantitative restrictions. The first is the Article III:5, sentence one, that forbids internal quantitative regulations relating to the mixture, processing or use of products requiring the use of certain amounts must come from domestic sources. The second is the Article III:5, sentence two, which forbids the protective application of quantitative regulations in others matters. This rule is subsidiary to the sentence one and applicable only where there is no violation to sentence one.⁶¹

However, even when Article III:5 is more specific than Article III:4, it has not been applied in disputes under the DSB.⁶² Despite the lack of jurisprudence in this provision, it has been suggested that majority of local content requirement measures will violate paragraph 5 sentence one. This because most of this kind of measures will have a particular local content objective, fulfilling essentially the elements of the test imposed by Article III:5, first sentence.⁶³

3.1.2. *General Exceptions, Article XX of GATT 1994*

Article XX of GATT 1994 provided to the WTO members the exceptional option to take national protective measures in certain cases, thus exempting them, from WTO rules regarding promotion and protection of free trade. This provision recognizes that members may decide to use those policies over the objective of free trade.⁶⁴

The WTO can accept the adoption of climate change policies as an exception under Article XX of GATT 1994.⁶⁵ Renewable energy support policies can be justified under this Article if they fulfill the ‘two-tier analysis.’⁶⁶ The first step is to determinate whether the measure satisfies the terms of at least one of the eight exceptions of Article XX.⁶⁷ The second step is to determinate if the measure satisfies the so-called chapeau of the article XX. The chapeau requires that the application of the measure shall

⁶⁰ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A (‘General Agreement on Tariffs and Trade’) article III:5.

⁶¹ Holger Hestermeyer, ‘Article III GATT’, in: Rüdiger Wolfrum, et al (eds) *WTO, technical barriers and SPS measures* (Martinus Nijhoff Publishers, 2007) 36–37.

⁶² Hestermeyer, ‘Article III GATT’, 37.

⁶³ Hestermeyer and Nielsen, ‘The Legality of Local...’, 574.

⁶⁴ Rüdiger Wolfrum, ‘Article XX GATT 1994 General Exceptions [Introduction]’, in: Rüdiger Wolfrum, et al (eds) *WTO, technical barriers and SPS measures* (Martinus Nijhoff Publishers, 2007), 62–63.

⁶⁵ Griffin, ‘The World Trade Organization...’, 221.

⁶⁶ Christopher Tran, ‘Using GATT, Art XX to Justify Climate Change Measures in Claims under the WTO Agreements’ (2010) *Environmental and Planning Law Journal* 349.

⁶⁷ Griffin, ‘The World Trade Organization...’, 221.

not result in ‘arbitrary or unjustifiable discrimination between countries where the same conditions prevail’ or a ‘disguised restriction on international trade.’⁶⁸

It is important to note that when a Panel determinates whether a measure is consistent with Article XX, it examines the entire regulatory scheme and not only the discriminatory aspects.⁶⁹ This implies that renewable energy support policies based on different objectives rather than environmental, health or grounds covered by Article XX, will not be exempt from GATT obligations.

3.2. SCM Agreement

The Agreement on Subsidies and Countervailing Measures (‘SCM Agreement’)⁷⁰ regulates the use of subsidies as well as procedures leading to the use of countervailing measures by all WTO members.⁷¹ The SCM Agreement is especially important regarding renewable energy support policies because these policies can be regarded as subsidies within the scope of the Agreement.

The main restrictions on subsidies supporting renewable energy are found in the SCM Agreement. Under the SCM Agreement, a subsidy is defined as a ‘financial contribution by a government or any public body within a territory of a member that confers a benefit.’⁷² Once a measure is qualified as a subsidy the SCM Agreement covers three broad types of subsidies: prohibited, actionable and non-actionable subsidies.⁷³

Prohibited subsidies are those ‘*specifically designed to distort trade*’ like imposing domestic requirements over imported ones. If it is found that a country has a prohibited subsidy, the consequence is its removal.⁷⁴

Two kinds of subsidy fall into the prohibited subsidies category, namely exports subsidies, and the local content requirement.⁷⁵ Exports subsidies are defined as ‘subsidies contingent, in law or fact, whether solely or as one of several other conditions, upon export performance.’⁷⁶ A subsidy is contingent when they are granted conditionally or when its existence is subject to the recipient’s exports. Local content subsidies are that contingent to the use of domestic over imported goods, directed to reduce imports from other countries, in favor of domestic producers.⁷⁷

⁶⁸ Tran, ‘Using GATT...’, 349; Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A (‘General Agreement on Tariffs and Trade’) Art. XX.

⁶⁹ Kohei Saito, *Yardsticks for ‘Trade and Environment’: Economic Analysis of the WTO Panel and the Appellate Body Reports Regarding Environment-Oriented Trade Measures* (Harvard Law School, 2002) 14–15.

⁷⁰ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A (‘Agreement on Subsidies and Countervailing Measures’) (‘SCM Agreement’).

⁷¹ Debra P Steger, ‘Subsidies and Countervailing Measures Agreement: Ahead of Its Time or Time for Reform (2010) *Journal of World Trade* 779, 780.

⁷² Tracey Epps and Andrew Green, *Reconciling Trade and Climate. How the WTO Can Help Address Climate Change* (Edward Elgar Publishing Limited, 2011) 109. Appellate Body Report, *US – Final Countervailing Duty Determination Softwood Lumber with Respect to Certain Softwood Lumber from Canada*, WTO Doc WT/DS257/AB/R (19 January 2004).

⁷³ Epps and Green, *Reconciling Trade and Climate...*, 112.

⁷⁴ Hildreth, ‘Renewable Energy Subsidies...’, 711.

⁷⁵ Paolo R Vergano and Eugenia C Laurenza, ‘Subsidies to Renewable Energy Sources and International Trade: Issues and Tools to Reconcile Trade Rules and Environmental Policies’ (2010) 5 *Global Trade & Customs Journal* 223, 228.

⁷⁶ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A (‘Agreement on Subsidies and Countervailing Measures’) (‘SCM Agreement’) art. 3.1 (a).

⁷⁷ Vergano and Laurenza, ‘Subsidies to Renewable Energy...’, 228-229.

Actionable subsidies do not have the intent element. These subsidies just require provoking an adverse effect on another member state. The effect should mean to another country an injury to its domestic industry, nullification of benefits or severe prejudice to its interests.⁷⁸

WTO members can challenge prohibited and actionable subsidies through the Dispute Settlement Mechanism. They can get their elimination in case of prohibited subsidies, and also compensation regarding actionable subsidies. Apart from these measures, WTO member may also decide to countervail the subsidies, according to Part V of the SCM Agreement.⁷⁹

3.3. TRIMs Agreement

Within the WTO framework, there are two agreements containing provisions related to investment.⁸⁰ The first is the General Agreement on Trade in Services ('GATS').⁸¹ The second, the Agreement on Trade-Related Investment Measures ('TRIMs Agreement').⁸² However, these agreements cover investment only in a fragmented way.⁸³ As Professor Jürgen Kurtz pointed out 'there has never been a comprehensive, multilateral agreement on foreign investment.'⁸⁴

According to the preamble of the TRIMs Agreement, it was designed to prevent 'trade-restrictive and distorting effects of investment measures.'⁸⁵ The TRIMs Agreement provides clarification in some aspect of the GATT's Agreement crucial provisions, such as national treatment (Article III) and the prohibition on quantitative restrictions (Article XI). The agreement does not agree any further obligation to the existent GATT provisions, but it provides clarification through the illustrative list of inconsistent measures.⁸⁶

In this sense, the composition of the TRIMs Agreement clarifies that the performance requirements imposed on investors to allow them to invest or operate in the host country are into the scope of GATT provisions.⁸⁷ Additionally, the TRIMs Agreement provides an illustrative list in the Annex of the Agreement, contributing to clarify whether a trade or investment-related measure is inconsistent with GATT obligations.⁸⁸ If a measure falls into the illustrative list, it is considered as a violation of the pertinent GATT provision.⁸⁹

⁷⁸ Hildreth, 'Renewable Energy Subsidies...', 712.

⁷⁹ Vergano and Laurenza, 'Subsidies to Renewable Energy...', 229.

⁸⁰ Stefan D Amarasinha and Juliane Kokott, 'Multilateral Investment Rules Revisited', in: Peter Muchlinski, et al (eds), *The Oxford handbook of international investment law* (Oxford University Press, 2008) 123.

⁸¹ *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1869 UNTS 183 (entered into force 1 January 1995) annex 1B ('General Agreement on Trade in Services') ('GATS').

⁸² *Agreement on Trade-Related Investment Measures*, opened for signature 15 April 1994, 1869 UNTS 299, 33 ILM 1197, art 6 (entered into force 1 January 1995) ('TRIMs').

⁸³ Amarasinha and Kokott, 'Multilateral Investment Rules...', 123.

⁸⁴ Jürgen Kurtz, 'A General Investment Agreement in the WTO - Lessons from Chapter 11 of NAFTA and the OECD Multilateral Agreement on Investment' (2002) *University of Pennsylvania Journal of International Economic Law* 713, 713.

⁸⁵ *Agreement on Trade-Related Investment Measures*, opened for signature 15 April 1994, 1869 UNTS 299, 33 ILM 1197, art 6 (entered into force 1 January 1995) ('TRIMs') Preamble.

⁸⁶ Amarasinha and Kokott, 'Multilateral Investment Rules', 124.

⁸⁷ Hestermeyer and Nielsen, 'The Legality of Local...', 575.

⁸⁸ *Agreement on Trade-Related Investment Measures*, opened for signature 15 April 1994, 1869 UNTS 299, 33 ILM 1197, art 6 (entered into force 1 January 1995) ('TRIMs') Annex: Illustrative list.

⁸⁹ Hestermeyer and Nielsen, 'The Legality of Local...', 575.

The panel of Canada-Renewable Energy/Feed-in Tariff case confirmed this reasoning, and pointed out that:

Article 2.2 of the TRIMs Agreement does not impose any obligations on Members, but rather informs the interpretation of the prohibition set out in Article 2.1. In particular, Article 2.2 explains that the TRIMs described in the Illustrative List of the Annex to the

TRIMs Agreement are to be considered inconsistent with Members' specific obligations under Articles III:4 and XI:1 of the GATT 1994.⁹⁰

For the purposes of this paper, the TRIMs agreement is relevant regarding national treatment obligations. The specification of national treatment obligation by the TRIMs agreement is important to renewable energy support policies concerning the prevention of domestic content requirements.

4. Controversial Renewable Energy Support Measures and Protectionism

Due to climate change and environmental concerns the world needs more renewable energy and innovation in renewable energy technologies. However, renewable energies require costly government support through different policy options as was studied above. To approve these measures, some countries have tried to localize as many benefits as possible. Despite the protectionism and legal impermissibility under the WTO rules, some countries have used local content requirements based on political and industrial objectives, rather than environmental ones.⁹¹

This section discusses two cases of questioned renewable energy support measures with local content requirements. The first is the Canada-Renewable Energy/Feed-in Tariff case.⁹² The second is the case of certain European Feed-in Tariff programs⁹³, especially the Italian and the Greek ones. However, just the first one has finished with a WTO panel and Appellate Body report. The second one is just in the consultations stage, and no panel has been established.

4.1. Canada-Renewable Energy case

The Canada-Renewable Energy/Feed-in Tariff case⁹⁴, solved by the Dispute Settlement Body in 2013, is of particular importance for the adoption of policies in renewable energy, including those with local content requirements. The case decided about whether a renewable energy support policy is

⁹⁰ Panel Report, *Canada – Measures Affecting the Renewable Energy Generation Sector*, WTO Doc WT/DS412/R, WT/DS426/R (19 December 2012) [7.119].

⁹¹ Jan-Christoph Kuntze and Tom Moerenhout, *Local Content Requirements and the Renewable Energy Industry - A Good Match?* (International Centre for Trade and Sustainable Development (ICTSD), 2013) 36.

⁹² Appellate Body Report, *Canada–Certain Measures Affecting the Renewable Energy Generation Sector/Canada–Measures Relating to the Feed-In Tariff Program*, WTO Doc WT/DS412/AB/R/WT/DS426/AB/R (24 May 2013).

⁹³ *European Union and certain Member States - Certain Measures Affecting the Renewable Energy Generation Sector*, WTO Doc WT/DS452/1 (07 November 2012) (Request for Consultations by China).

⁹⁴ Appellate Body Report, *Canada–Certain Measures Affecting the Renewable Energy Generation Sector/Canada–Measures Relating to the Feed-In Tariff Program*, WTO Doc WT/DS412/AB/R/WT/DS426/AB/R (24 May 2013).

compatible with the World Trade Organizations rules and obligations.⁹⁵ On 13 September 2010, Japan requested consultations with Canada according the article 4 of the Dispute Settlement Understanding (the 'DSU')⁹⁶, Article XXII:1 of the General Agreement on Tariff and Trade 1994 (the 'GATT' 1994)⁹⁷, Article 8 of the Agreement on Trade-Related Investment Measures (the 'TRIMS agreement')⁹⁸, and articles 4.1 and 30 of the Agreement on Subsidies and Countervailing Measures (the 'SCM Agreement').⁹⁹ On 11 August 2011, the European Union requested consultations with Canada by the same reasons and articles mentioned above.¹⁰⁰

As both the Japanese and the European Union consultations failed, both countries requested the establishment of a panel. The panels were established by the DSB on 20 July 2011 and 20 January 2012. Both complaints involved claims against the Ontario's Feed-in Tariff program (FIT). In specific, the measures related to the domestic content requirement of the FIT program established by the Canadian province of Ontario.¹⁰¹ The government of Ontario enacted the Green Energy and Green Economy Act in 2009¹⁰² to promote the production of electricity from renewable sources, like the wind and solar generators. The law included a scheme to source a minimum level of parts and services from Ontario's producers.¹⁰³

The objective of the new act was to replace the lost coal capacity with cleaner alternatives, as to promote greater production of the wind and solar energy.¹⁰⁴ The main measure of the Green Energy Act was the inclusion of a widely used policy instrument, the Feed-in Tariff program. The Green Energy Act 2009 replaced the previous Renewable Energy Standard Offer Program (RESOP), which was a kind of feed-in tariff program that began in 2006 for small-scale sources. The new feed-in tariff program was wider in scope, and it required made-in-Ontario components. Also, it provided renewable energy producers with more attractive contract prices, adding to the 20-year contract terms approximately \$4.4 billion in cost over the previous terms.¹⁰⁵

The challenged 'Minimum Required Domestic Content Levels' was prescribed under the FIT program and the pertinent FIT and micro-FIT contracts.¹⁰⁶ The local content requirement was defined in terms of the total project cost, and diverse activities range from the manufacture of particular components in Ontario to use labor and consulting services provided by locals.¹⁰⁷ This minimum required domestic

⁹⁵ Steve Charnovitz and Carolyn Fischer, 'Canada-Renewable Energy: Implications for WTO Law on Green and Not-So-Green Subsidies' (2015) 14 *World Trade Review* 177, 177.

⁹⁶ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 2 ('WTO Dispute Settlement Understanding') article 4.

⁹⁷ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('General Agreement on Tariffs and Trade') article XXII.

⁹⁸ *Agreement on Trade-Related Investment Measures*, opened for signature 15 April 1994, 1869 UNTS 299, 33 ILM 1197, art 6 (entered into force 1 January 1995) ('TRIMS') article 8.

⁹⁹ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('Agreement on Subsidies and Countervailing Measures') ('SCM Agreement') articles 4.1, 30.

¹⁰⁰ Panel Report, *Canada – Measures Affecting the Renewable Energy Generation Sector*, WTO Doc WT/DS412/R, WT/DS426/R (19 December 2012) [1.1].

¹⁰¹ Panel Report, *Canada – Measures Affecting...*

¹⁰² *Green Energy Act*, SO 2009.

¹⁰³ Charnovitz and Fischer, 'Canada-Renewable Energy...', 179.

¹⁰⁴ Panel Report, *Canada – Measures Affecting the Renewable Energy Generation Sector*, WTO Doc WT/DS412/R, WT/DS426/R (19 December 2012) [IX.4].

¹⁰⁵ Charnovitz and Fischer, 'Canada-Renewable Energy...', 179-180.

¹⁰⁶ Lijuan Xing, 'A Denouement with Suspense: The Epilogue of Canada - Renewable Energy' (2014) *Asper Review of International Business and Trade Law* 21, 22.

¹⁰⁷ Charnovitz and Fischer, 'Canada-Renewable Energy...', 180.

content levels were found by the Panel and the Appellate Body as inconsistent with the Article 2.1 of the TRIMs Agreement and Article III:4 of the GATT 1994.¹⁰⁸

The Panel also noted that these measures constituted ‘*investment measures*’ insofar they were oriented to encourage investment in the local production of equipment used for the generation in renewable energy sources.¹⁰⁹ Also, the Panel found that the measures were ‘*trade-related*’ insofar the local content requirement contained in the FIT program required a ‘*Minimum Required Domestic Content Level*’. To be eligible for the FIT program, the wind and solar electricity generators were obligated to purchase and use certain kind of renewable energy generation equipment produced in Ontario.¹¹⁰ The panel findings were upheld by the Appellate Body and, therefore, Canada was found to be acting inconsistently with the TRIMs Agreement and Article III:4 of the GATT.

Neither the Panel nor the Appellate Body found that the FIT program consisted of a prohibited subsidy under the article 3.1 (b) and 3.2 of the SCM Agreement.¹¹¹ The Panel and the Appellate Body found that the FIT program constituted a financial contribution in the form of government purchases of goods according to Article 1.1(a)(1)(iii) of the SCM Agreement. Once this element was found, both the Panel and the Appellate Body addressed the next component, whether this financial contribution constituted the conferral of a benefit.¹¹²

Both the Panel and the Appellate Body could not find that the FIT program constituted a benefit, however, for different reasons. The Appellate Body found that as long the cost differences between conventional and renewable electricity are too significant, the market for renewable energies can exist only as a matter of governmental decision. According to the Appellate Body, ‘the definition of a certain supply mix by the government cannot in and of itself be considered as conferring a benefit.’¹¹³

4.2. European Feed-in Tariff programs

On 5 November of 2012, China requested consultations with the European Union, Greece, and Italy respect certain measures, including domestic content requirements.¹¹⁴ These measures affected the renewable energy generation sector about the Feed-in Tariff programs of some EU states.¹¹⁵ In specific, the dispute concerns the restrictions on access to the guaranteed pricing structures of the FIT programs enacted by Greece and Italy, which are dependent on local content requirements.¹¹⁶

¹⁰⁸ Eugenia Constanza Laurenza and Bruno G Simoes, ‘How Canada - Renewable Energy Supports the Use of the Alternative Commercial Reasonableness Standard in Future Feed-in Tariff Disputes’ (2014) *Global Trade and Customs Journal* 104, 106.

¹⁰⁹ Laurenza and Simoes, ‘How Canada - Renewable Energy...’, 106; Panel Report, *Canada – Measures Affecting the Renewable Energy Generation Sector*, WTO Doc WT/DS412/R, WT/DS426/R (19 December 2012) [7.109].

¹¹⁰ Laurenza and Simoes, ‘How Canada - Renewable Energy...’, 107.

¹¹¹ Xing, ‘A Denouement with Suspense...’, 27.

¹¹² Laurenza and Simoes, ‘How Canada - Renewable Energy...’, 107.

¹¹³ Appellate Body Report, *Canada – Certain Measures Affecting the Renewable Energy Generation Sector/Canada – Measures Relating to the Feed-In Tariff Program*, WTO Doc WT/DS412/AB/R/WT/DS426/AB/R (24 May 2013) [5.175].

¹¹⁴ *European Union and certain Member States - Certain Measures Affecting the Renewable Energy Generation Sector*, WTO Doc WT/DS452/1 (07 November 2012) (Request for Consultations by China).

¹¹⁵ Rafael Leal-Arcas, Andrew Filis and Ehab S Abu Gosh, *International Energy Governance, Selected Legal Issues* (Edward Elgar Pub. Ltd., 2014) 417.

¹¹⁶ Kate Miles, ‘Climate Change. Trading, Investing and the Interaction of Law, Science and Technology’, in: Bryan Mercurio (ed), *Science and Technology in International Economic Law: Balancing Competing Interests* (Taylor and Francis, 2013) 172.

In the case of Italy in 2011, they enacted local content requirement in their solar energy subsidies, through the *Quinto Conto Energia* program. This program offered an additional 5% to 10% incentive for producers that used source components within the European Union. Due to the internal market commitments of the European Union, it was not possible for Italy to discriminate against other European members.¹¹⁷ The effect of this measure was to beneficiate mainly Spanish and German solar panel producers.¹¹⁸ However, the Italian government decided to slow down solar energy incentives due to the relatively little gains for Italian manufacturers, and the high cost of subsidies. Due to the openness of the European energy market, the benefits were taken by other European producers rather than the Italian Industry.¹¹⁹

Regarding to Greece, they enacted in 27 March 2012 the Law 4062/2012 on the "Development of the Athens former international airport Hellinikon - Project HELIOS - Promotion of the use of energy from renewable sources (Integration of Directive 2009/28/EC) Sustainability criteria of biofuel and bioliquids (integration of Directive 2009/30/EC)."¹²⁰ The law provided, like Italy, a Feed-in Tariff bonus when a determined local content requirement is reached.¹²¹

The Chinese claim is based on violations to articles I, III:1, III:4 and III:5 of the GATT 1994¹²²; Articles 3.1(b) and 3.2 of the SCM Agreement¹²³; and Articles 2.1 and 2.2 of the TRIMs Agreement.¹²⁴ The impugned measures were enacted by Greece and Italy under the European Renewable Energy Directive.¹²⁵ The directive provides specific targets for renewable energy according to energy use.¹²⁶ According to Article 3 of the Renewable Energy Directive, Members States are obliged to undertake measures effectively designed to assure that the energy share from renewable energy sources equals or exceeds the quantities established by the directive.¹²⁷

Currently, this dispute is only in the consultations stage, and no panel has been established.¹²⁸ However, considering the resolution taken by the Canada-Renewable Energy/Feed-in Tariff panel

¹¹⁷ Kuntze and Moerenhout, *Local Content Requirements...*, 19; Decreto of 5 Luglio 2012, Ministero dello Sviluppo Economico, Attuazione dell'art. 25 del decreto legislativo 3 marzo 2011, n. 28, recante incentivazione della produzione di energia elettrica da impianti solari fotovoltaici (c.d. Quinto Conto Energia) [Decree of the Ministry of Economic Development of Italy of 5 July 2012, Implementation of Article 25 of the Legislative Decree of 3 March 2011, n. 28, for incentivizing of the production of electrical energy from photovoltaic solar installations] (Italy) [author's trans].

¹¹⁸ 'Solar Energy Protectionism – Italy Joins India, Canada in Formulating Domestic Content Requirements | Green World Investor' <<http://www.greenworldinvestor.com/2011/05/10/solar-energy-protectionism-italy-joins-indiacanada-in-formulating-domestic-content-requirements/>>.

¹¹⁹ Kuntze and Moerenhout, *Local Content Requirements...*, 19.

¹²⁰ Law 4062/2012 of 30 March 2012 on the Development of the Athens former international airport Hellinikon - Project HELIOS - Promotion of the use of energy from renewable sources (Integration of Directive 2009/28/EC) Sustainability criteria of biofuel and bioliquids (integration of Directive 2009/30/EC) (Greece) [Hellenic Republic Asset Development Fund trans].

¹²¹ Kuntze and Moerenhout, *Local Content Requirements...*, 19.

¹²² Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('General Agreement on Tariffs and Trade') articles I, III.

¹²³ Marrakesh Agreement Establishing the World Trade Organization, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('Agreement on Subsidies and Countervailing Measures') ('SCM Agreement') article 3.

¹²⁴ Leal-Arcas, Filis and Abu Gosh, *International Energy Governance...*, 417; Agreement on Trade-Related Investment Measures, opened for signature 15 April 1994, 1869 UNTS 299, 33 ILM 1197, art 6 (entered into force 1 January 1995) ('TRIMS') article 2.

¹²⁵ Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the Promotion of the Use of Energy from Renewable Sources and Amending and subsequently Repealing Directives 2001/77/EC and 2003/30/EC [2009] OJ L 140/16.

¹²⁶ Simon Marr, 'Climate and Energy Policy in the EU and Germany at a Crossroads', in: Hans Joachim Koch (ed), *Legal Regimes for Environmental Protection. Governance for Climate Change and Ocean Resources* (Brill Nijhoff, 2015) 53.

¹²⁷ Thomas Deruytter and Wouter Geldhof, 'Legal Issues Concerning the Decentralised Energy Production Investment Climate', in: Bram Delvaux, et al (eds), *EU energy law and policy issues* (Intersentia, 2014) 170.

¹²⁸ *European Union and certain Member States - Certain Measures Affecting the Renewable Energy Generation Sector*, WTO Doc WT/DS452/1 (07 November 2012) (Request for Consultations by China).

report and the Appellate Body report, the inclusion of local content requirements in FIT programs is likely to fall within the TRIMs illustrative list of inconsistent measures and thus inconsistent with national treatment obligations under GATT.¹²⁹

5. WTO and Environmental Concerns, A Complementary Approach

The adoption of environmental-oriented domestic policy is significantly influenced by international trade rules. WTO members have agreed rules over different disciplines, which can overlap with domestic, regional and global policies.¹³⁰ Environmental measures and policies are subject to international trade rules while there is no special agreement on the matter. There is no consent on an Environmental Agreement covering the promotion of renewable energy, while trade rules are in place including increasing regional agreements and the multilateral WTO framework.¹³¹

Despite the apparent conflict between renewable energy support policies and the WTO rules, the reality is that *bona fide* non-discriminatory measures related to environmental protection are not discouraged nor blocked within the WTO system.¹³²

There are two main aspects where renewable energy support measures have been questioned within the WTO cases. The first is related to measures of some local content requirement aspect that have been harmful to foreign industries and unjustified under WTO rules.¹³³ The second has been about whether the adoption of countermeasures taken to address dumping concerns has been justified, and whether some technical barriers exist, that leads to a less favorable treatment for imported goods.¹³⁴

Measures supporting renewable energies with local content requirements are likely to be prohibited or inconsistent under WTO rules.¹³⁵ The case law of the WTO panel and Appellate Body has found that local content requirement fall into the Illustrative list of the TRIMs Agreement and thus inconsistent with national treatment obligations under GATT.¹³⁶ It is important to note that all the subsidies and renewable energy support measures that have been subject to consultations, or impugned under dispute settlement panels, have had an explicit discriminatory or protectionist character. In fact, due to the legislative character of these measures they discriminate *de jure* between domestic and foreign goods, which is clearly prohibited under WTO rules.¹³⁷

¹²⁹ Panel Report, *Canada – Measures Affecting the Renewable Energy Generation Sector*, WTO Doc WT/DS412/R, WT/DS426/R (19 December 2012) [7.119].

¹³⁰ Nathalie Bernasconi-Osterwalder et al, *Environment and Trade: A Guide to WTO Jurisprudence* (Taylor and Francis, 2012) 1.

¹³¹ Thomas Cottier and Nashina Shariff, 'International Trade and Climate Change', in: Geert Van Calster and Denise Prévost (eds), *Research handbook on environment, health and the WTO* (Edward Elgar Publishing, 2013) 415.

¹³² Leal-Arcas, Filis and Abu Gosh, *International Energy Governance...*, 417.

¹³³ Leal-Arcas, Filis and Abu Gosh, *International Energy Governance...*, 417.

¹³⁴ Leal-Arcas, Filis and Abu Gosh, *International Energy Governance...*, 117.

¹³⁵ Kuntze and Moerenhout, *Local Content Requirements...*, 35.

¹³⁶ Appellate Body Report, *Canada—Certain Measures Affecting the Renewable Energy Generation Sector/Canada—Measures Relating to the Feed-In Tariff Program*, WTO Doc WT/DS412/AB/R/WT/DS426/AB/R (24 May 2013).

¹³⁷ Daniel Peat, 'Perfect FIT: Lessons for Renewable Energy Subsidies in the World Trade Organization' (2012) *LSU Journal of Energy Law and Resources* 43, 58-59.

The promotion of renewable energies based on environmental concerns is different from protectionist measures. The requirements to source a certain amount of components or services locally is openly protectionist, and it is not possible to justify on environmental grounds. Any benefit obtained from domestic industry support would be impaired due to a detrimental impact on the others competing industries in different countries.¹³⁸

The pursuit of a better renewable energy policy is a continuous challenge. The effectiveness of renewable energy measures will depend on several factors, and on the synergy between other applicable policies.¹³⁹

6. Conclusions

The development of renewable energies is one of the key solutions to increased levels of CO2 emissions. The energy sector is the major responsible for greenhouse gas emissions, and a commitment to low-carbon sustainable development requires effective policies in changing energy production patterns.

The governmental support for renewable energies is crucial and without it is not possible for renewables to compete against non-renewable methods of energy production. The most used policies to support renewable energies are the Feed-in Tariff and the Renewable Portfolio Standards. Both policies have proved to be beneficial for the development of renewables. However, either FITs or RPS can have local content requirements, and in consequence they can be deemed as inconsistent with the national treatment obligations under GATT and TRIMs agreements.

Cases like Canada-Renewable Energy/Feed-in Tariff or the Chinese complaint against the European Union and Certain Member States, have shown how policies supporting renewable energies can become inconsistent with the WTO rules. Nonetheless, the conflict between renewable energy support policies and the WTO rules is only apparent. All the measures impugned in the DSB have had an explicit discriminatory or protectionist character. Policies supporting renewable energies based on local content requirements are likely to be inconsistent with the WTO rules. The GATT is relevant to renewable energy support policies with local content requirements regarding national treatment and their possible justification under the general exceptions of Article XX of GATT. On one side, local content requirements by their nature are incompatible with at least one paragraph of Article III, especially paragraphs four and five. Also, local content requirements are likely to fall into the illustrative list of the TRIMs Agreement, therefore inconsistent with GATT obligations. On the other side, the general exceptions of Article XX of GATT may uphold non-arbitrary nor unjustified renewable energy support policies necessary to protect human health, animal or plant life or health and to the conservation of exhaustible natural resources. However, the general exceptions of Article XX of GATT do not justify discriminatory or protectionist measures.

¹³⁸ Luca Rubini, 'Ain't Wastin' Time No More: Subsidies for Renewable Energy, the SCM Agreement, Policy Space, and Law Reform' (2012) 15 *Journal of International Economic Law* 525, 530.

¹³⁹ Rubini, 'Ain't Wastin', 530.

The SCM Agreement is also relevant if the renewable energy support measures are deemed as a subsidy. This agreement contains the main restrictions on subsidies for renewable energy producers. Subsidies with local content requirements are likely to fall either into the prohibited or actionable subsidies, depending if they are specifically designed to distort trade or not.

The WTO rules are not incompatible with environmental-oriented policies. Protectionist or discriminatory rules are different from legitimate environmental or health-based measures. A non-arbitrary or discriminatory measure necessary to protect human health or to save exhaustible natural resources can be upheld under WTO Agreements.