

#### 저작자표시-비영리-변경금지 2.0 대한민국

#### 이용자는 아래의 조건을 따르는 경우에 한하여 자유롭게

• 이 저작물을 복제, 배포, 전송, 전시, 공연 및 방송할 수 있습니다.

#### 다음과 같은 조건을 따라야 합니다:



저작자표시. 귀하는 원저작자를 표시하여야 합니다.



비영리. 귀하는 이 저작물을 영리 목적으로 이용할 수 없습니다.



변경금지. 귀하는 이 저작물을 개작, 변형 또는 가공할 수 없습니다.

- 귀하는, 이 저작물의 재이용이나 배포의 경우, 이 저작물에 적용된 이용허락조건 을 명확하게 나타내어야 합니다.
- 저작권자로부터 별도의 허가를 받으면 이러한 조건들은 적용되지 않습니다.

저작권법에 따른 이용자의 권리는 위의 내용에 의하여 영향을 받지 않습니다.

이것은 이용허락규약(Legal Code)을 이해하기 쉽게 요약한 것입니다.





## 국제학석사학위논문

# **Energy Trade in the World Trading System**

국제무역 체제와 에너지 교역의 관계

2017년 8월

서울대학교 국제대학원 국제학과 국제통상학 전공 이 영 민

# **Energy Trade in the World Trading System**

by

### **Young Min Lee**

to

A thesis submitted in conformity with the requirements for the degree of Master of International Studies (M.I.S) in the subject of International Commerce

Graduate School of International Studies
Seoul National University
Seoul, Republic of Korea

August 2017

# **Energy Trade in the World Trading System**

# 국제무역 체제와 에너지 교역의 관계

지도교수 안 덕 근

이 논문을 국제학석사학위논문으로 제출함

2017년 8월

서울대학교 국제대학원 국제학과 국제통상학 전공 이영민

이영민의 국제학석사학위논문을 인준함 2017년 8월

> 위 원 장 <u>박태호</u> 부 위 원 장 <u>이영섭</u> 위 원 <u>안덕근</u>

## THESIS ACCEPTANCE CERTIFICATE

The undersigned, appointed by

## The Graduate School of International Studies Seoul National University

Have examined a thesis entitled

# **Energy Trade in the World Trading System**

Presented by Young Min Lee

Candidate for the degree of Master of International Studies and hereby certify that it is worthy of acceptance

Signature

Committee Chair

Signature

Committee Vice Chair

Signature

Committee Member

Bark, Tae-Ho

Rhee, Yeongseop

Ahn, Dukgeun

# © Copyrights 2017 by Young Min Lee All Rights Reserved

**Energy Trade in the World Trading System** 

**Abstract** 

The gravity of energy trade has been increasing with a growing need of energy

in every economic activities and every industries. International energy trade has

become our norm. Growth and development of international energy trade intensified

the need for a regulatory framework and led to inclusion of energy trade into the

disciplines and rules of the world trading system. This paper examines energy trade in

the multilateral regulatory frameworks within the world trading system and identifies

how major multilateral trade agreements such as World Trade Organization agreements,

North America Free Trade Agreement, and Energy Charter Treaty addressed energy

trade. The three agreements are analyzed to compare what extent have each agreement

integrated energy trade into their disciplines and how each organization treat energy

trade depending on their organization's agenda, political dynamic, and social and

economic factors.

Keywords: energy trade, world trading system, international energy trade regulation,

WTO, NAFTA, Energy Charter

**Student Number**: 2014-24211

i

## **TABLE OF CONTENTS**

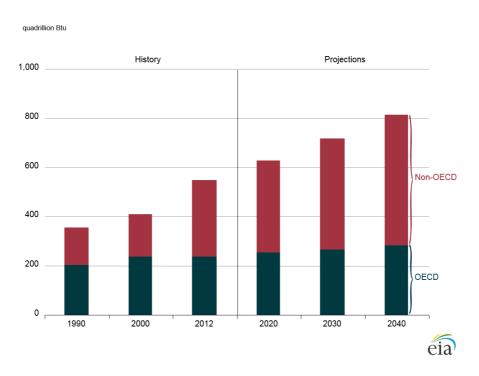
I.	Int	Introduction				
	1.	History of Energy Trade Regulations3				
		1-1.	Shift in Energy Trade			
		1-2.	Development of the World Trading System and Emergen International Energy Regulations	ce of		
	2.	Dimer	nsion of Energy Trade	7		
	3.	Purpo	se of the Research	8		
		1-1.	Defining Energy Trade	8		
		1-2.	WTO vs NAFTA vs EC	9		
II.	Mı	Multilateral Trade Agreements and Energy Trade 1				
	1.	WTO Agreements and Energy Trade				
		1-1.	OPEC Member Countries' WTO Accession	11		
		1-2.	Architecture of WTO Agreements	12		
		1-3.	WTO Rules Relevant to Energy Trade	13		
		1-4.	Dispute Settlement at the WTO	22		
		1-5.	Regulations of General Application and Related Issues	25		
	2.	'A and Energy Trade	25			
		1-1.	NAFTA as 'WTO-plus'	27		
		1-2.	Architecture of NAFTA	29		
		1-3.	NAFTA Rules Relevant to Energy Trade	29		
	3.	Energy Charter and Energy Trade				
		1-1.	Architecture of ECT	35		

	1-2. ECT Rules Relevant to Energy Trade 37
III.	Discussion41
IV.	Conclusion43

#### I. Introduction

Energy is the core of our lives. It plays a vital role not only in our mundane activities but also in our groundbreaking innovations. The modern world is heavily dependent upon energy resources and concerned with energy security. Need to have sufficient energy to facilitate development and fuel manufacturing, economic activities, and growth became our foremost concern. Finite nature of energy explains its limited natural endowment constraint. Only a handful of countries are blessed with sufficient endowment of natural resources and the others face the struggle of energy security. Energy trade does not only hold an economic value but also a political significance. Energy is often used as an effective political leverage for many countries with abundant energy resources. At an international level, countries with abundant energy resources use energy resources as a political tool to negotiate and bargain favourably to their terms over other countries. At a domestic level, for countries with scarce energy resources, ensuring sufficient supply of energy became one of their main political agendas and campaigns especially at times of energy crisis. For countries with abundant energy resources, generating most benefit from their energy resources both economically and politically is the key agenda. Consequently, energy trade was placed as one of the most important trade sectors in the world trading system. Along with economic liberalization and rapid development which require increased economic activities and energy consumptions, the demand for energy grew and as a result,

unforeseen increase in energy trade.<sup>1</sup> Between 1995 and 2014, world export of fuels increased more in value terms than any other product group with an average annual growth rate of 12 percent. Of the world exports, share of fuels grew from 7 percent in 1995 to 17 percent in 2014.<sup>2</sup>



**Figure 1.**World Energy Consumption, 1990-2040<sup>3</sup>

According to International Energy Outlook 2016, world energy consumption

<sup>&</sup>lt;sup>1</sup> Within the scope of the WTO, energy trade is one of the most significant trade sectors due to having the largest primary commodity of global trade in terms of volume and value. See Leal-Arcas, Rafael, and Ehab Abu Gosh. "Energy Trade as Special Sector in the WTO: Unique Features, Unprecedented Challenges and Unresolved Issues." *Indian Journal of International Economic Law* 6 (2014), 2.

<sup>&</sup>lt;sup>2</sup> "International Trade Statistics 2015." World Trade Organization.

<sup>&</sup>lt;a href="https://www.wto.org/english/res\_e/statis\_e/its2015\_e/its15\_toc\_e.htm">https://www.wto.org/english/res\_e/statis\_e/its2015\_e/its15\_toc\_e.htm</a>.

<sup>&</sup>lt;sup>3</sup> IEA 2016 projects energy demand growth over the 28-year period from 2014 to 2040. See "International Energy Outlook 2016." IEA. <a href="https://www.eia.gov/outlooks/ieo/world.cfm">https://www.eia.gov/outlooks/ieo/world.cfm</a>>.

grows from 549 quadrillion British thermal units (Btu) in 2012 to 629 quadrillion Btu in 2020 and to 815 quadrillion Btu in 2040, resulting in a 48% increase from 2012 to 2040. Energy demand and consumption will continue to grow in the future. Although, energy industry is formed towards production and trade of energy products, trade in energy services market is expanding as well.

#### 1. History of Energy Trade Regulations

#### 1-1. Shift in Energy Trade

It has been only in recent years that the trade in energy is perceived as an issue of trade not only as an issue of economy. The significance of energy trade has been underestimated. Energy trade was not dealt in the world trading system. Energy trade had been managed through interstate relations, which were heavily influenced by state level politics and diplomacy especially for petroleum trade. Initially, the international trade of energy was considered to be synonymous with trade of petroleum. At the time, petroleum trade was the most prevalent form of energy trade. Accordingly, it was mainly dealt within the Organization of the Petroleum Exporting Countries (OPEC). In 1960, OPEC was created by five oil producing developing countries, Islamic Republic of Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela, to unify petroleum policies among the member countries, to regulate fair and stable prices for petroleum producers and

consumers and to assure a fair return of capital to investors of the industry.<sup>4</sup> None of its founding members was a contracting party to the General Agreement on Tariffs and Trade (GATT) at the time of the OPEC creation. In the Declaratory Statement of Petroleum Policy in Member Countries, created in 1968, the OPEC members delineated that all countries may exercise their sovereignty over their natural resources for the purposes of their national development and interest.<sup>5</sup> Its focus was not placed on trade but on economic value of effective petroleum trade regulation and securing their national interests: "these five Founding Members representing their oil-producing nations joined together around the premise of cooperation, with a commitment to safeguard their legitimate national interests and to ensure order and stability in the international oil market. There was no fanfare, just five developing nations setting about the business of defending their legitimate national interests." OPEC was later joined by many other oil producing countries such as Qatar, Indonesia, Libya, United Arab Emirates, Algeria, Nigeria, Ecuador, Angola, and Gabon. All these countries are developing countries that are heavily dependent on earnings of a single finite primary

\_

<sup>&</sup>lt;sup>4</sup> Additional information about the history and member countries of OPEC is available at <www.opec.org>.

<sup>&</sup>lt;sup>5</sup> Rahman, Maizar. "OPEC: Vision, Mission and Development." Speech, World Energy Council, Jakarta. July 29, 2004.

<sup>&</sup>lt;sup>6</sup> Barkindo, Mohammad Sanusi. "Speech by OPEC Secretary General." Speech, 3rd Iraq Energy Forum, Al-Rasheed hotel, Baghdad, April 2, 2017.

<sup>&</sup>lt;sup>7</sup> Ecuador and Indonesia suspended their membership in December 1992 and January 2009 respectively. Ecuador and Indonesia rejoined OPEC in October 2007 and January 2016 respectively. However, Indonesia finally suspended its membership in November 2016. Gabon terminated its membership in January 1995, but rejoined OPEC in July 2016. In conclusion, only Indonesia terminated its membership. Currently, 13 member countries remain as part of OPEC.

commodity, petroleum. <sup>8</sup> Economic facilitation and development along with maximizing members' interest were the foremost goal for the member countries.

However, development of technologies, creation of innovative methods of energy utilization and increasing demand for various forms of energy trade such as renewable energy and electricity caused a departure from energy trade being a synonym for petroleum trade. The paradigm for energy trade has shifted from petroleum trade to trade in various forms of energy resources.

# 1-2. Development of the World Trading System and Emergence of International Energy Regulations

In 1948, the introduction of General Agreement on Tariffs and Trade (GATT) provided general rules for much of the world trading system. After several rounds of negotiation concluded with the Uruguay Round (1986-1994), the World Trade Organization (WTO) was created as a developed international organization, replacing GATT, under the Marrakesh Agreement. The WTO is the first to establish a set of comprehensive rules for international trade. In the Marrakesh Agreement, the foundation of the WTO such as scope, function, and structure are defined and most of WTO agreements such as General Agreement on Trade in Services (GATS), Sanitary and Phytosanitary Measures (SPS Agreement), Subsidies and Countervailing Measures (SCM Agreement), Trade-Related Aspects of Intellectual Property Rights (TRIPS),

5

.

<sup>&</sup>lt;sup>8</sup> Abdallah, Hussein. 'Oil Exports under GATT and the WTO' *OPEC Review* 29, no.4 (2005), 270.

Trade-Related Investment Measures (TRIMs) and Agreement on Technical Barriers to Trade (TBT Agreement) were formed. With formation of GATS, the WTO disciplines now cover a broader range of tradable matters from goods to services, inventions, creations, designs, intellectual property, and technology.

Although it was not specifically addressed in the GATT or GATS, energy trade is covered in general trading terms. Energy trade has not been directly included in any of the GATT provisions unless contracting parties presented and discussed energy-related issues during their GATT negotiations. The GATS only includes a limited range of energy services that the overall trade in energy services is not addressed. In the same year with the creation of WTO, other multilateral agreements such as North American Free Trade Agreement (NAFTA) and Energy Charter Treaty (ECT) came into light. Unlike the WTO agreements, these two agreements explicitly address energy trade. NAFTA has a chapter dedicated to energy trade—Part Two: Trade in Goods-Chapter Six: Energy and Basic Petrochemicals. ECT is a treaty designed to only address energy trade, more specifically energy cooperation and promotion of energy security in open and competitive energy markets. Creation of the WTO agreements, NAFTA, and ECT and integration of energy trade into the international trade regulatory frameworks indicate the shift in the perception of energy trade as an economic issue to a trade issue.

-

<sup>&</sup>lt;sup>9</sup> Leal-Arcas, Rafael, and Ehab Abu Gosh. "Energy Trade as Special Sector in the WTO: Unique Features, Unprecedented Challenges and Unresolved Issues." *Indian Journal of International Economic Law* 6 (2014), 3.

<sup>&</sup>lt;sup>10</sup> See ECT mission at

<sup>&</sup>lt;a href="http://www.energycharter.org/process/energy-charter-treaty-1994/energy-charter-treaty/">http://www.energycharter.org/process/energy-charter-treaty-1994/energy-charter-treaty/>

#### 2. Dimension of Energy Trade

Many of the existing research and studies are done to identify why and how energy trade is treated differently from other trade sectors in terms of applying regulations and disciplines prevalent in the world trading system. As many of the existing researches intended to explain, the main reason why energy trade is distinguished from other trade sectors is due to its unique nature. Energy trade's uniqueness derives from its difficulty of classification. Generally, energy trade consists of both energy goods and energy services, often entailing a crossover of the two. Energy includes not only traditional nonrenewable energy resources such as oil, gas, coal, petroleum, natural gas, and fissionable matters, and renewable energy resources including biofuels, hydroelectricity, wind, solar, but also a wide range of products and services which are traded as part of energy. 11 The variety of energy resources requires different forms of trade. For example, electricity is traded through grid and oil is transported through pipeline. Likewise, energy trade often requires a network of transportation and fixed infrastructures such as pipelines and a network of transmission grids. This variation of energy products raises the issue of likeliness—can same regulation be applied to all of the energy products? Also, energy trade contains multifaceted issues arise from difficulty in defining range of energy trade because it consists of not only trade in goods but also trade in services. Trade in

-

<sup>&</sup>lt;sup>11</sup> Richards, Timothy J., and Lawrence Herman. "Relationship between International Trade and Energy." *World Trade Organization*.

<sup>&</sup>lt;a href="https://www.wto.org/english/res\_e/publications\_e/wtr10\_richards\_herman\_e.htm">https://www.wto.org/english/res\_e/publications\_e/wtr10\_richards\_herman\_e.htm</a>.

services has different levels of services such as generation, production, distribution, transmission, conversion, storage, and consumption of energy. Applying same regulation to all of the different energy products and services seems hardly appropriate. This raises a question of whether there is a suitable agreement or regulatory framework designed to reflect the uniqueness of energy trade.

#### 3. Purpose of the Research

In this paper, energy trade will be examined in the multilateral regulatory frameworks within the world trading system. The goal is to examine the regulatory development of energy trade through analyzing the major multilateral trade agreements such as WTO, NAFTA, and ECT. The agreements of the three organizations are compared to see what extent has each agreements integrated energy trade into their disciplines and how each organizations treat energy trade depending on their organization's agenda, political, social and economic factors.

#### 1-1. Defining Energy Trade

Trade in energy is intertwined with various means and issues of trade. Energy trade not only covers the most traditional dimensions of trade, but also incorporates trade in both goods and services that are associated with different dimensions and means of energy. Trade in goods and services, investment issues, intellectual property, and technology are weaved together as energy trade. Acknowledging the difficulty of

defining energy trade due to its uniqueness, energy trade is defined as following in this paper: energy trade is trade of energy products including traditional nonrenewable energy such as oil, coal, petroleum, natural gas and fissionable matters, and renewable energy including biofuels, hydroelectricity, wind, solar, geothermal, and tidal, but also a wide range of products and energy services which are traded as part of energy such as generation, production, distribution, transmission, conversion, storage, and consumption. Electricity is a usable consumer good which can be traded. Thus, electricity is included in the discussion. Energy trade entails energy efficiency, energy utilization, energy security, and environmental protection agenda and initiatives such as climate change and reduction of greenhouse gasses, but for the purposes of examining the regulatory frameworks and development for energy trade in the multilateral trading system, these issues are excluded from the discussion.

#### 1-2. WTO vs NAFTA vs EC

The WTO agreements, NAFTA, and ECT are all multilateral agreements defining regulations for international trade, but a major difference among these agreements is their agenda and purpose. Different international instruments have their own treatment of energy trade. The WTO agreements and NAFTA are created to provide a set of comprehensive provisions for trade in general. Energy trade has not been explicitly included in the WTO agreements. The NAFTA included provisions for

\_

<sup>&</sup>lt;sup>12</sup> Electricity is a primary energy resource converted into a secondary energy resource as a consumer good, using both nonrenewable energy and renewable energy.

specific products in Part Two: Trade in Goods. A chapter of the NAFTA, Chapter Six: Energy and Basic Petrochemicals, is dedicated solely to address energy trade. The ECT is formed exclusively to provide rules for energy trade.

An agreement's impact can be measured by its number of participants or aggregated power of participants, economic value, and political significance. Often the size or coverage of an agreement depends on the number, status or prominence of the participants. The WTO has 164 members; NAFTA has three signatories; and ECT has 54 signatories. Although the number of participants is only three, NAFTA is one of the most influential FTAs in the world. The economic value and political significance also determine the effectiveness of an agreement. Not only trade among the participating countries will be facilitated, but also international trade as whole will prosper as more participants join and more economic value and political significance an agreement creates. Known for their impact in the world trading system, the WTO agreements, NAFTA, and ECT are studied frequently for its legal consistency, economic feasibility and value, and political dynamic among the participating members.

## II. Multilateral Trade Agreements and Energy Trade

#### 1. WTO Agreements and Energy Trade

International trade at the multilateral level is mostly governed by the WTO and by its agreements. Generally, the WTO agreements serve as the foundation for Free Trade Agreements (FTAs), other regional or multilateral level trade agreements. The WTO agreements aim to create a credible and reliable system for international trade, ensure fair and equitable treatment of all members through principle of non-discrimination, stimulate economic activities of all members through providing binding policy, and lastly promote trade and development through progressive trade liberalization.<sup>13</sup> The WTO provisions are devised to be applicable to all trade sectors including energy trade.

#### 1-1. OPEC Member Countries' WTO Accession

Currently, the WTO has 164 members. <sup>14</sup> The members have made commitments to varying degrees. Many energy producing countries such as Russian Federation (22 Aug 2012<sup>15</sup>), Kazakhstan (30 Nov 2015), and one of the largest energy consuming country, China (11 Dec 2001), made accession to the WTO. Today, most

<sup>&</sup>lt;sup>13</sup> "What we stand for." World Trade Organization.

<sup>&</sup>lt;a href="https://www.wto.org/english/thewto">https://www.wto.org/english/thewto</a> e/what stand for e.htm>.

WTO has 164 members since 29 July 2016.

<sup>&</sup>lt;sup>15</sup> Dates indicate a country's date of complete accession to the WTO membership.

of the OPEC member countries entered the WTO membership. The following countries were member of the WTO from the early years: Angola (23 Nov 1996), Gabon (1 Jan 1995), the State of Kuwait (1 Jan 1995), Nigeria (1 Jan 1995), Qatar (13 Jan 1996), United Arab Emirates (10 April 1996), and Bolivarian Republic of Venezuela (1 Jan 1995). Ecuador (21 Jan 1996), and Kingdom of Saudi Arabia (11 Dec 2005) completed their accessions. Algeria, Iran, Iraq, and Libya are in the process of accession. This integration of oil producing countries into the WTO system indicates how energy trade is gradually incorporated further into the international multilateral trading system and a larger portion of energy trade is under the roof of the WTO. The major driving force for creation of the GATT was to liberalize the international trade and build fair and transparent trading environment. The same principles were adopted by the WTO as its fundamental principles: to ensure non-discrimination, predictable and transparent trade by lowering trade barriers and to encourage fair, competitive practices to create more beneficial circumstance for less developed countries and protected environment.

#### 1-2. Architecture of WTO Agreements

The WTO has a general legal framework of rules related to trade in energy products and services despite the fact that it does not possess a particular provision or independent agreement directly dealing with trade in energy products and services.

-

<sup>&</sup>lt;sup>16</sup> "WTO accessions", World Trade Organization,

<sup>&</sup>lt;a href="https://www.wto.org/english/thewto\_e/acc\_e/acc\_e.htm">https://www.wto.org/english/thewto\_e/acc\_e/acc\_e.htm</a>.

<sup>&</sup>lt;sup>17</sup> "What we stand for." World Trade Organization.

<sup>&</sup>lt;a href="https://www.wto.org/english/thewto">https://www.wto.org/english/thewto</a> e/what stand for e.htm>.

All members are obliged to accept Annex I: goods (GATT), service, intellectual property rights, Annex II: Understanding on Rules and Procedures Governing the Settlement of Disputes, and Annex III: Trade Policy Review Mechanism. <sup>18</sup> Specifically, all tradable energy products including extracted oil, gas, coal, petroleum, natural gas, and fissionable matters are addressed in the GATT and all energy services are covered in the GATS. In GATT, all tradable energy products including extracted coal, oil and natural gas fall under scope of coverage. Electricity has been traded as a good and covered under a code 2716 of the Harmonized Commodity Description and Coding System, also known as Harmonized System, and regarded a good by several members' tariff commitments such as the EU and the United States. <sup>19</sup> Issues with sovereignty of natural resources are not discussed in the WTO rules. This implies that the WTO rule will not protect or interfere with any country's sovereignty over ownership of its natural resources.

#### 1-3. WTO Rules Relevant to Energy Trade

WTO agreements are designed to cover all tradable products and services.

All WTO members are committed to comply with GATT rules on tariffs and other border measures affecting imports and exports, non-tariffs measures, and non-discrimination in the efforts to promote market access and reduce trade barriers.

<sup>&</sup>lt;sup>18</sup> Only Annex 4 requires optional obligation.

<sup>&</sup>lt;sup>19</sup> The Harmonized Commodity Description and Coding System is a multipurpose international product nomenclature developed by the World Customs Organization. It has been used by many WTO members when developing their own schedules and commitment for their WTO negotiations.

The WTO provisions including measures affecting imports and exports, internal taxation and regulation, technical regulation and product standards, subsidies, transit, state trading, government procurement, services, environmental protection, intellectual properties, and investment and competition only provide general rules which are universally applicable. All of these measures are related to energy trade by providing a general guidance in trade.

#### **Measures Affecting Imports**

Article II of the GATT outlines rules regarding tariffs and other border measures affecting imports of goods such as import tariff, import restrictions, and charges equivalent to an internal tax.<sup>20</sup> More specifically, Article II:1 prohibits WTO members from applying tariffs on imports which are higher than those specified in their schedules. Also, Article XI prohibits Quantitative Restrictions (QRs).<sup>21</sup> Under Article XIX, safeguard measures can be taken by a member to protect its domestic industry.<sup>22</sup> Safeguard measure are governmental actions in response to imports that are harming the economy of the importing country or domestic competitors. Safeguard measures are often included as provisions in trade regulations under "escape clauses".

#### **Measures Affecting Exports**

Article XI covers import restrictions and also export restrictions. Export bans and QRs except export duties, taxes or other charges are addressed. With continuous

-

<sup>&</sup>lt;sup>20</sup> The GATT Article II and Article I.

<sup>&</sup>lt;sup>21</sup> The GATT Article XI.

<sup>&</sup>lt;sup>22</sup> The GATT Article XIX.

accession of the OPEC members, the issues of production quotas are raised under Article XI. 23 The OPEC members often used production quotas to regulate petroleum market.

#### **Internal Taxation and Regulation**

Issues of internal taxation and regulation are subject to Article III. Article III prohibits discriminatory treatment between imported products and like domestic products.<sup>24</sup>

#### **Technical Regulation and Product Standards**

For the case of energy products, issue of likeness of products arises—can physically identical products which went under different process or production methods be considered as like products? This issue is related to TBT Agreement. The TBT Agreement specifies technical regulations and product standards. It is designed to set out specific characteristics including related processes and production methods of a product.<sup>25</sup>

#### **Subsidies**

Subsidies are subject to SCM Agreement specifically Article 1 and Article 2. Under Article 1 of the SCM Agreement, a subsidy is defined as "a financial contribution by a government or any public body in a form of a direct transfer of

<sup>&</sup>lt;sup>23</sup> Before inclusion into WTO, oil producing countries practiced preferential treatment of domestic coal, other forms of discriminatory act to secure national products and "Gentlemen's Agreement", but they were not challenged because these oil issues were not considered as GATT conflicts. See Abdallah, Hussein. 'Oil Exports under GATT and the WTO' OPEC Review 29, no.4 (2005), 273.

The GATT Article III.

<sup>&</sup>lt;sup>25</sup> The TBT Agreement Annex 1(2).

funds such as grants loans, and equity infusion; government revenue; goods or services provided by a government; or payments to a funding mechanism, or entrusts or directs a private body made by a government". 26 Energy trade requires tremendous capital when it comes to expanding or creating a fixed infrastructure for trading and transit. The financial backing in forms of subsidies or investment of a public institution or government is necessary to start any project related to energy trade.

#### **Transit**

Article V of the GATT provides WTO regulations regarding transit. This article is particularly important in the energy trade and even more so for energy resources which require a fixed network of transportation such as pipelines, transmission lines or grids. Article V:1 defines transit of "goods, and also vessels and other means of transport as when there is passage through the territory of a WTO member and such passage is only a portion of a complete journey beginning and terminating beyond the frontier of that WTO member". 27 This is termed as traffic in transit. Also, transit occurs without limitation of "trans-shipment, warehousing, breaking bulk, or change in the mode of transport". 28 No discrimination shall be made and freedom of transit shall be protected under Article V:2. Article V:3 states that traffic in transit of WTO member "shall not be subject to any unnecessary delays or restrictions and shall be exempt from customs duties and from all transit duties or

The SCM Agreement Art.1.1.
 The GATT Article V.

<sup>&</sup>lt;sup>28</sup> The GATT Article V.

other charges imposed in respect of transit, except charges for transportation of those commensurate with administrative expenses entailed by transit or with the cost of services rendered".<sup>29</sup> All charges and regulations shall be "reasonable, having regard to the conditions of the traffic" under Article V:4. Article V:5 reinforces Most-Favoured-Nation (MFN) protection and Article V:6 extends the MFN treatment. Article V:5 also requires all WTO members to accord to MFN with all charges, regulations and formalities of transit "no less favourable than the treatment accorded to traffic in transit to or from any third country". 30 Article V:6 requires WTO members to treat "products which have been in transit through the territory of any other WTO members no less favourably than that how the products would have been treated without going through the country of transit". 31 Some WTO members made specific commitments on transit as part of their accession negotiations. Article V outlines fundamental transit provisions which can be apply to energy trade. However, it neglected to address some of the critical issues arise from energy transit. No provisions are set forth to guard transit flow, protect transit infrastructure, or resolve any delays or blockage of energy transit immediately. Time is of the essence in energy transit. Resolving delays or blockage by WTO's dispute settlement system takes time. Additional provision or a system should be devised to address energy transit in the WTO agreements.

\_

<sup>&</sup>lt;sup>29</sup> The GATT Article V:3.

<sup>&</sup>lt;sup>30</sup> The GATT Article V:5

<sup>31</sup> The GATT Article V:6

#### **State Trading**

Article XVII states provisions for state trading enterprises and provides that the "general principles of nondiscriminatory treatment prescribed in this Agreement for governmental measures affecting imports and exports by private traders". 32 Under Article XVII:1(b), these state trading enterprises shall "make any such purchases or sales solely in accordance with commercial considerations and shall afford the enterprises of the other contracting parties adequate opportunity, in accordance with customary business practice, to compete for participation in such purchases or sales". 33 Traditional structure of energy industry was state-owned energy companies and vertically integrated suppliers. Although transition from this traditional structure to privatization of energy sector is taking place worldwide, state-owned enterprises in the energy sector still exist in many WTO member countries. Article XVII is designed to prevent any discriminatory activities of the state trading enterprises. The member countries that still have state trading enterprises are required to notify their state trading enterprises to the WTO Council on Trade in Goods under the Understanding on the Interpretation of Article XVII.

#### **Government Procurement**

Energy projects such as building and expanding a new infrastructure require certain amount of capital that only a governmental body can supply or endorse. Thus, many energy related projects are under a jurisdiction of a government or a public

-

<sup>&</sup>lt;sup>32</sup> The GATT Article XVII.

<sup>&</sup>lt;sup>33</sup> The GATT Article XVII:1(b).

institution. Regulations related to government procurement are closely related to trade in energy. Regulations specifically designed for government procurement of goods and services are under Article III of GATT and Article XIII of GATS. Article III:8(a) of GATT delineates national treatment exception, stating that national treatment provisions shall not apply to regulations, laws, or requirements subject to government procurement. <sup>34</sup> Article XIII: Government Procurement of GATS prohibits imposition of restrictions on the import or export of any contracting party's product unless the like product is similarly prohibited or restricted by all third countries:

- Articles II, XVI and XVII shall not apply to laws, regulations or requirements governing the procurement by governmental agencies of services purchased for governmental purposes and not with a view to commercial resale or with a view to use in the supply of services for commercial sale.
- There shall be multilateral negotiations on government procurement in services under this Agreement within two years from the date of entry into force of the WTO Agreement.<sup>35</sup>

The Agreement on Government Procurement (GPA) is a multilateral agreement that not all WTO members are requirement to become parties to. The GPA has 19 parties, and comprises of 47 WTO members and another 29 WTO members

-

<sup>&</sup>lt;sup>34</sup> The GATT Article III:8(a).

<sup>35</sup> The GATS Article XIII

participating in the GPA Committee as observers. Of the observers, 9 members are in the process of accession to the GPA.<sup>36</sup> The composition of the GPA is divided into two: the text of the Agreement and the contracting parties' market access schedules and commitments. The GPA prohibits contracting parties from discriminating in their purchases for government procurement between their domestic supplier and other members' suppliers under Article IV:1. Also, it emphasizes transparency especially procedures for providing transparency of laws, regulations, procedures, and practices for government procurement.<sup>37</sup>

#### **Services**

In the WTO agreements, services are defined as: (b) any services in any sector except services supplied in the exercise of governmental authority under Article I:3 of the GATS; and (2) air traffic rights and services directly related to the exercise of such rights defined under GATS Annex on Air Transport Services. The GATS disciplines are created to account market access (Article XVI), non-discrimination (Article XVII: National Treatment and MFN), and transparency. Trade in energy services is difficult to classify as a certain type of energy service because often energy service is intertwined with all services which are part of chain of supply—whether it is a production service or activities related to production is hardly distinguishable.

<sup>&</sup>lt;sup>36</sup> See general description about the GPA at

<sup>&</sup>lt;a href="https://www.wto.org/english/tratop\_e/gproc\_e/gp\_gpa\_e.htm">https://www.wto.org/english/tratop\_e/gproc\_e/gp\_gpa\_e.htm</a>.

<sup>&</sup>lt;sup>37</sup> The GPA IV·1

#### **Environmental Protection**

Energy trade is closely related to issues of environmental protection and conservation. However, the environmental protection provisions of the WTO exclude environmental protection of energy resources and are not concerned with energy efficiency and energy protection. Article XX of the GATT: General Exceptions provides grounds for environmental protection. Article XX provides exceptions from (b) to (g) to protect human, animal or plant life or health. Article XIV of the GATS: General Exceptions also provides an exception to protect human, animal or plant life or health under subparagraph (b). However, the Article XIV of the GATS does not include an exception relating to the conservation of exhaustible natural resources, which is included in Article XX of the GATT under subparagraph (g).

#### **Intellectual Property**

TRIPS Agreement includes all intellectual property rights: copyrights, trademarks, geographical indications, industrial designs, patents, layout-designs (topographies) or integrated circuits, protection of undisclosed information, and control of anti-competitive practices in contractual licences. Yet, none of trade in intellectual property related to energy has been under the rules of the WTO. However, development of new technologies and increase in transfer of technology in energy sector are growing in number.

#### **Investment and Competition**

Several energy disputes related to investment and competition are already reported to the Dispute Settlement Body (DSB) of the WTO. Also, energy topics

emerged in the negotiation agendas and discussions. However, no specific provisions address issues of investment and competition policy in the areas of energy trade.

#### 1-4. Dispute Settlement at the WTO

The WTO is the first regulatory framework to back its rules with an effective dispute settlement mechanism. It has its own jurisdiction to settle any trade disputes that occur among WTO members in compliance with Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU). More than 500 dispute cases have been filed to the DSB. Among the DSB cases, energy related cases are relatively new in comparison with the cases of different sectors. Figure 2 shows all DSB cases related to energy trade. Out of all DSB cases, the WTO only classified five cases as under the subject of energy: DS473, 449, 426, 419, and 412. The rest are classified as under the subjects of individual goods such as biodiesels, feed-in tariff program, gasoline, import restrictions, petrochemicals, renewable energy, solar energy, and solar panels; and also as subjects of services such as distribution. Energy trade composed not entirely of natural resources. Related products and services are also part of energy trade.

Matsushita, Mitsuo. "A View on Future Roles of The WTO: Should There be More Soft Law in The WTO: Should There be More Soft Law in The WTO." *J Int Economic Law* 17, no.3 (September04, 2014), 703.

The list of dispute issues subject to the WTO disputes are available at <a href="https://www.wto.org/english/tratop\_e/dispu\_e/dispu\_subjects\_index\_e.htm">https://www.wto.org/english/tratop\_e/dispu\_e/dispu\_subjects\_index\_e.htm</a>.

**Figure 2.** Chronological list of DSB cases related to energy trade

DS no.	Case Title	Complainant	Consultation	Agreements Cited
			Requested	(as cited in request for
D0510	II. G. C. L. M.	T 1'	00/00/0016	consultations)
DS510	U.SCertain Measures	India	09/09/2016	GATT 1994: Art. III:4, XVI:1 SCM Measures:
	Relating to the Renewable			
	Energy Sector			Art. 3.1(b), 3.2, 5(a), 5(c), 6.3(a
				), 25 TRIMs:
				Art. 2.1
				Agreement Establishing the
				WTO: Art. XVI:4
DS494	EU-Cost Adjustment	Russian	05/07/2015	AD (Article VI of GATT
DOTA	Methodologies and Certain	Federation	03/07/2013	1994):
	Anti-Dumping Measures			Art. 1, 2.1, 2.2, 2.2.1, 2.2.1.1, 2.
	on Imports from			2.2, 2.3, 2.4, 3.1, 3.2, 3.4, 3.5, 5
	Russia(Second complaint)			.8, 6.8, 9.2, 9.3, 11.1, 11.2, 11.3
				, 11.4, 17.6, 18.1, 18.4, Annex
				II
				SCM Measures: Art. 10, 32.1
				GATT 1994:
				Art. I, VI:1, VI:2, VI:6, X:3(a)
				Agreement Establishing the
				WTO: Art. XVI:4
DS480	EU-Anti-Dumping	Indonesia	06/10/2014	AD (Article VI of GATT
	Measures on Biodiesel			1994):
	from Indonesia			Art. 1, 2, 2.1, 2.2, 2.2.1.1, 2.2.2,
				2.3, 2.4, 3.1, 3.2, 3.4, 3.5, 6.5,
				6.5.1, 7.1, 7.2, 9.2, 9.3, 15, 18.4
				Agreement Establishing the WTO: Art. XVI:4
				GATT 1994:
				Art. VI, VI:1, VI:2
DS476	EU-Certain Measures	Russian	04/30/2014	GATS: Art. II, VI, XVI, XVII
DST/0	Relating to the Energy	Federation	04/30/2014	GATT 1994: Art. I, III, X, XI
	Sector	reactation		SCM Measures: Art. 3
				TRIMs: Art. 2
				Agreement Establishing the
				WTO: Art. XVI:4
DS474	EU-Cost Adjustment	Russian	12/23/2013	AD (Article VI of GATT
	Methodologies and Certain	Federation		1994):
	Anti-Dumping Measures			Art. 2.1, 2.2, 2.2.1, 2.2.1.1, 2.2.
	on Imports from Russia			2, 2.4, 3.1, 3.2, 3.4, 3.5, 5.8, 6.8
				, 9.2, 9.3, 11.1, 11.2, 11.3, 18.1,
				18.4, Annex II
				SCM Measures: Art. 10, 32.1
				GATT 1994: Art. I, VI
				Agreement Establishing the
DC472	EII Anti Dunania	Amantin	12/10/2012	WTO: Art. XVI:4
DS473	EU-Anti-Dumping Measures on Biodiesel	Argentina	12/19/2013	AD (Article VI of GATT 1994):
l	ivicasures on Diodieser	l	L	1//4].

	from Argentina			Art. 2.1, 2.2, 2.2.1.1, 2.2.2, 2.4,
	110m / 11gontina			3.1, 3.2, 3.4, 3.5, 6.2, 6.4, 6.5, 6
				5.1, 9.3, 18.4
				GATT 1994: Art. VI:2
				Agreement Establishing the
				WTO: Art. XVI:4
DS459	EU-Certain Measures on	Argentina	05/13/2013	GATT 1994:
	the Importation and			Art. I:1, III, III:1, III:2, III:4, III
	Marketing of Biodiesel and			:5
	Measures Supporting the			TBT: Art. 2.1, 2.2, 5.1, 5.2
	Biodiesel Industry			Agreement Establishing the
				WTO: Art. XVI:4
				TRIMs: Art. 2.1, 2.2
				SCM Measures:
				Art. 3.1(b), 3.2, 5(b), 5(c), 2.3,
				1.1, 6.3(a)
DS456	India-Certain Measures	U.S.	02/06/2013	GATT 1994: Art. III:4
	Relating to Solar Cells and			TRIMs: Art. 2.1
	Solar Modules			SCM Measures:
				Art. 3.1(b), 3.2, 5(c), 6.3(a), 6.3
D0472	FIL 10	CI.	11/07/2012	(c), 25
DS452	EU and Certain Member	China	11/05/2012	GATT 1994:
	States-Certain Measures			Art. I, III:1, III:4, III:5
	Affecting the Renewable			SCM Measures:
	Energy Generation Sector			Art. 1.1, 3.1(b), 3.2 TRIMs: Art. 2.1, 2.2
DS449	U.SCountervailing and	China	09/17/2012	GATT 1994: Art. X. VI
20	Anti-dumping Measures on	Ciliiu	03/11/2012	SCM Measures:
	Certain Products from			Art. 10, 15, 19, 21, 32
	China			AD (Article VI of GATT
				1994): Art. 9, 11
DS443	EU and a Member	Argentina	08/17/2012	GATT 1994:
	State-Certain Measures			Art. III:1, III:4, III:5, XI:1
	Concerning the Importation			TRIMs: Art. 2.1, 2.2
	of Biodiesels			Agreement Establishing the
				WTO: Art. XVI:4
DS437	U.SCountervailing Duty	China	05/25/2012	SCM Measures:
	Measures on Certain			Art. 1.1, 1.1(a)(1), 1.1(b), 2, 10,
	Products from China			11, 11.1, 11.2, 11.3, 12.7, 14(d
				), 30, 32.1
				GATT 1994: Art. VI, XXIII
20:2:			00/11/55::	Protocol of Accession: Art. 15
DS426	Canada-Measures Relating	EU	08/11/2011	GATT 1994: Art. III:4
	to the Feed-in-Tariff			SCM Measures:
	Program			Art. 1.1, 3.1(b), 3.2
DS419	China-Measures	US	12/22/2010	TRIMs: Art. 2.1 GATT 1994: Art. XVI:1
D3419	Concerning Wind Power	US	12/22/2010	SCM Measures:
	Equipment			Art. 3, 25.1, 25.2, 25.3, 25.4
	Equipment			Protocol of Accession: Part I,
				para. 1.2
DS412	Canada-Certain Measures	Japan	09/13/2010	GATT 1994:
D3412	Canada-Certain Measures	Japan	09/13/2010	UATT 1994:

	Affecting the Renewable			Art. III:4, III:5, XXIII:1
	Energy Generation Sector			SCM Measures:
				Art. 1.1, 3.1(b), 3.2
				TRIMs: Art. 2.1
DS4	U.SStandards for	Brazil	04/10/1995	GATT 1994: Art. I, III
	Reformulated and			TBT: Art. 2
	Conventional Gasoline			
DS2	U.SStandards for	Venezuela	01/24/1995	GATT 1994: Art. I, III, XXII:1
	Reformulated and			TBT: Art. 2, 14.1
	Conventional Gasoline			

#### 1-5. Regulations of General Application and Related Issues

WTO agreements contain rules of general application in energy trade, but have a limitation in tackling specific issues related to energy trade. This lack of definitive application creates a challenge of applicability or inapplicability of the WTO disciplines. The intrinsic nature of energy trade as a trade of combined goods and services faces WTO's distinct division of trade in goods and services. This distinct dichotomy complicates treatment of energy trade in the WTO system.

#### 2. NAFTA and Energy Trade

Negotiated by the U.S., Canada, and Mexico, NAFTA came into effect in 1994. In parallel with the NAFTA enforcement, the WTO agreements came into effect after the conclusion of Uruguay Round. The NAFTA is considered as an extension of the Canada-United States Free Trade Agreement (CUSFTA) by replicating and deriving many provisions and terms from the CUSFTA. The NAFTA aims to eliminate trade barriers, promote fair and equitable trade, increase foreign investment, and establish a dispute settlement mechanism. The foremost concern for

all three countries for entering into the NAFTA was to expand economic integration by creating binding policy. The NAFTA is also the first FTA to include energy trade related provisions in one of its chapters. The NAFTA's Chapter 6 sets out rules for trade in energy and basic petrochemical goods. Additionally, investment and transborder trade in services of energy and basic petrochemical goods are included.

Each signatory's endowment, production, and consumption of energy resources vary greatly. The energy interconnections are more established and convoluted between the U.S. and Canada compared to those with Mexico. To the U.S., Canada is the largest crude supplier and also one of the biggest net exporters of electricity along the border connections. 40 Also, Canada exports and imports natural gas to and from the U.S. The size and number of interconnections to Mexico are also increasing after Mexico's economic reforms in different industries including energy industry. The NAFTA itself is an evidence of Mexico's economic reform and transition from protectionism. 41

Energy played an important role in negotiating the NAFTA principles. All three countries' energy policies differed greatly. The U.S. and Canada were focused on free market oriented energy policies. At the time, Mexico's energy market remained closed to foreign participation. The U.S.'s drive was to secure its import of Mexico's oil. Having a secured access to Mexico's oil provides energy security and

<sup>&</sup>lt;sup>40</sup> Domm, Patti. "North American trade is powerful in energy despite uncertainty of NAFTA." CNBC, March 06, 2017.

<sup>&</sup>lt;a href="http://www.cnbc.com/2017/03/06/north-american-trade-powerful-in-energy-despite-uncertaint">http://www.cnbc.com/2017/03/06/north-american-trade-powerful-in-energy-despite-uncertaint</a>

y-of-nafta.html>.

Cameron, Maxwell A., and Brian W. Tomlin. *The Making of NAFTA: How The Deal Was* Done. Ithaca: Cornell University Press, 2002.

independence from Middle East and South American countries. Canada was determined to create NAFTA as an improved version of the CUSFTA in efforts to change some unsatisfying aspects of the CUSFTA, in particular the regulation on exports of natural gas to the U.S. and trade remedies of the U.S. In the beginning of the negotiation, Mexico dismissed the demand of the U.S. and Canada to replicate the CUSFTA's energy provisions in the NAFTA by presenting the 'Five No's': "(1) no foreign investment in the petroleum sector; (2) no risk-sharing contracts with payment in kind with foreign companies; (3) no energy supply commitments; (4) no liberalization of gas imports and exports; and (5) no foreign retail gasoline outlets". 42 Eventually, Mexico defended its stance and its 'Five No's' by only making a small number of commercially meaningful commitments in exchange with other areas of negotiations such as government procurement, trade in services, financial services, and intellectual property rights. The primary objectives of Mexico's engagement to the NAFTA were to obtain tariff-free access to two markets of great importance for their size and purchasing power, increase its attractiveness as destination of much needed foreign direct investment, and establish a venue for effective settlement of disputes, in particular of those arising from unfair trade practices.<sup>43</sup>

#### 1-1. NAFTA as 'WTO-plus'

FTAs provide obligations and rules which the WTO lacks or incompletely

<sup>&</sup>lt;sup>42</sup> Breglia, Lisa. *Living with Oil: Promises, Peaks, and Declines on Mexico's Gulf Coast.*Austin: University of Texas Press, 2013, 273.

<sup>&</sup>lt;sup>43</sup> Selivanova, Yulia. *Regulation of energy in international trade law: WTO, NAFTA and Energy Charter.* The Netherlands: Kluwer Law International BV, 2011, 341

provides. Especially for trade in energy, the WTO fails to provide obligations and rules for competition policy, environment conservation, and energy security. Many WTO Members joined other regional and multilateral trade agreements to expand export and import opportunities, encourage investment and promote transfer of technology. 44 Most FTAs are formed to be 'WTO-plus' arrangements so that FTAs can cover more than already existing multilateral arrangements do. The GATT approaches and mechanisms are incorporated in the NAFTA. Article 101 of the NAFTA establishes a free trade area pursuant to GATT Article XXIV. The NAFTA is considered as 'WTO-plus' because it incorporates additional obligations besides all three members of the NAFTA had to commit as part of their membership into the WTO. Article 103 sets out the relationship to other agreements particularly the GATT: "the Parties affirm their existing rights and obligations with respect to each other under the General Agreement on Tariffs and Trade and other agreements to which such parties are party". 45 Otherwise provided in the NAFTA, in the case of inconsistency between the NAFTA and other agreement, NAFTA prevails. 46 Furthermore, Article 603(1) incorporates the provisions of the GATT into the NAFTA with respect to prohibition or restrictions on trade in energy and basic petrochemical goods.

<sup>44</sup> Matsushita, Mitsuo, (2014), 705.

<sup>&</sup>lt;sup>45</sup> The NAFTA Article 103(1).

<sup>&</sup>lt;sup>46</sup> The NAFTA Article 103(2).

#### 1-2. Architecture of NAFTA

The NAFTA consists of eight parts, 22 chapters and seven annexes. The eight parts are General Part, Trade in Goods, Technical Barriers to Trade, Government Procurement, Investment, Services and Related Matters, Intellectual Property, Administrative and Institutional Provisions, and Other Provisions. Part two sets the rules for trade in goods which includes not only rules for specific goods such as textile, apparel goods, energy and basic petrochemicals and specific sectors such as automotive sector and agriculture but also rules for general application to all goods and sectors. The NAFTA's most important provisions are market access for goods, protection for foreign investment, protection for intellectual property, easier access for business travelers, access to government procurement, rules of origin, commitment to the environment protection, and commitment to labor cooperation.<sup>47</sup> The NAFTA emphasizes trade liberalization among the three countries by lifting trade barriers, creating easier market access and protecting investment.

### 1-3. NAFTA Rules Relevant to Energy Trade

### Chapter 6

Chapter 6 of the NAFTA sets out principle rules and roles of each country for trade in energy and basic petrochemical goods, investment, and cross-border trade in services of energy and basic petrochemical goods. It aims to secure stable supply of energy resources by prohibiting all Parties to restrict exports or imports of these

<sup>47</sup> See <a href="http://www.naftanow.org">http://www.naftanow.org</a> for more information.

resources. The NAFTA's Chapter 6 is drawn from Chapter 9 of the CUSFTA. 48 Chapter 6 consists of nine articles, Article 601: Principles, Article 602: Scope and Coverage, Article 603: Import and Export Restrictions, Article 604: Export Taxes, Article 605: Other Export Measures, Article 606: Energy Regulatory Measures, Article 607: National Security Measures, Article 608: Miscellaneous Provisions, Article 609: Definitions, and five annexes, Annex 602.3: Reservations and Special Provisions, Annex 603.6: Exceptions to Article 603, Annex 605: Exception to Article 605, Annex 607: National security, and Annex 608.2: Other Agreements.

Article 601 underscores the importance of all Parties to confirm their full respect for their Constitutions and enhance their role that trade in energy and basic petrochemical goods plays in the free trade area through sustained and gradual liberalization. Furthermore, Article 601.3 highlights the recognition of all parties to have viable and internationally competitive energy and petrochemical sectors in order to further each Party's interest. Article 602.1 defines the scope and coverage of the Chapter: "this Chapter applies to measures relating to energy and basic petrochemical goods originating in the territories of the Parties and to measures relating to investment and to the cross-border trade in services associated with such goods, as set forth in this Chapter". <sup>49</sup> Article 602.2 defines what energy and basic petrochemical goods are according to the goods classification of Harmonized System.

<sup>&</sup>lt;sup>48</sup> CUSFTA's Chapter 9: Energy consists of nine articles including scope, import and export restrictions, export taxes, other export measures, regulatory and other measures, government incentives for energy resources development, national security measures, international obligations, and definitions.

<sup>&</sup>lt;sup>49</sup> The NAFTA Article 602.1.

Basically all forms of energy from fossil fuels to electricity are included with several exceptions such as cover products made of petroleum. However, the NAFTA excludes energy related goods such as solar panel and energy products related equipments in its energy specific provisions. Article 603 prohibits import and export restrictions, by reinforcing the provisions of the GATT, including any forms of quantitative restriction, minimum or maximum export-price requirements, and minimum or maximum import-price requirements. This article ultimately bans dual pricing practice. Article 603.5 allows Parties to administer a system of import and export licensing for energy or basic petrochemical goods when operated in consistent with the provisions of the NAFTA's Article 603.1 and Article 1502 (Monopolies and State Enterprises). Article 604 limits export taxes: "no party may adopt or maintain any duty, tax or other charge on the export of any energy or basic petrochemical good to the territory of another Party, unless such duty, tax or charge is adopted or maintained on (1) exports of such good to all other Parties, and (2) they are applied to any such good when they are destined for domestic consumption".<sup>50</sup> Article 605 and 607 limits Parties' to implement trade restrictive measures under exceptional circumstances which were permitted under provisions of the GATT. Article 605 creates a room for Parties to maintain or adopt a restriction in exceptions under the GATT. In addition to exceptional circumstances outlined by the GATT, Article 605 sets out three additional circumstances:

<sup>&</sup>lt;sup>50</sup> The NAFTA Article 604.

"a) the restriction does not reduce the proportion of the total export shipments of the specific energy or basic petrochemical good made available to that other Party relative to the total supply of that good of the Party maintaining the restriction as compared to the proportion prevailing in the most recent 36 month period for which data are available prior to the imposition of the measure, or in such other representative period on which the Parties may agree;

b) the Party does not impose a higher price for exports of an energy or basic petrochemical good to that other Party than the price charged for such good when consumed domestically, by means of any measure such as licenses, fees, taxation and minimum price requirements. The foregoing provision does not apply to a higher price that may result from a measure taken pursuant to subparagraph (a) that only restricts the volume of exports;

c) the restriction does not require the disruption of normal channels of supply to that other Party or normal proportions among specific energy or basic petrochemical goods supplied to that other Party, such as, for example, between crude oil and refined products and among different categories of crude oil and of refined products".<sup>51</sup>

Under Article 607, all Parties are restricted to adopt or maintain import or export measures under Article XXI of the GATT or under Article 2102 (National Security) except when national security exposed to a critical offense, armed conflict, implementation of national policies related to non-proliferation of nuclear weapons, and direct threats of disruption in the supply of nuclear materials for defense

<sup>&</sup>lt;sup>51</sup> The NAFTA Article 605.

purposes. Article 606 requires energy regulatory measures of all Parties to be under the subject of national treatment, as provided in Article 301; import and export restrictions, as provided in Article 603; and export taxes, as provided in Article 604.

## **Other Chapters**

Although it has a specific chapter dedicated to energy and basic petrochemicals, the NAFTA's provisions that apply to treatment of trade in energy is not limited to Chapter 6, but scattered across several different chapters. These provisions include environmental considerations, government procurement, intellectual property, competition policy and state enterprises, trade remedies, technical standards and dispute settlement.

Similar to the WTO agreements, the general provisions also provide comprehensive guidance for energy trade. NAFTA's general principles for trade in energy cover all trade and investment in goods and services. The general principles highlight national treatment and tariff elimination under Article 102, Article 301, and Article 302 of the NAFTA. Article 102 lists objectives of the NAFTA as to elaborate more specifically through its principles and rules, including national treatment, MFN treatment and transparency like the WTO accentuates. Article 301 states that similar goods or like products should be treated similarly whether they are being traded domestically or internationally according to Article III of the GATT. Article 302 prohibits an increase in any existing customs duty or adoption of any new customs duty and a progressive elimination of customs duties following the schedule specified in Annex 302.2.

The NAFTA does not specifically address the issue of access to infrastructure in particular those of natural gas and electricity which the ECT provides. Issues of construction and expansion of infrastructure are dismissed. Transit fees and third party access to infrastructure are excluded in the conversation. The NAFTA sticks to the basic provisions in Article V of the GATT regarding transit.

Investment and trade in services are dealt in Chapter 11 and 12. The NAFTA takes a stance closer to the ECT in relation to foreign investment—the NAFTA's obligations in Chapters 11, 12 and reservations in its Annexes are designed to protect foreign investment. Provisions related to energy services particularly market access and non-discrimination demonstrate improvement from the GATS.

Chapter 10 sets out provisions for government procurement in terms of goods and services. In detail, tendering procedures and bid challenge rules are included to assure fair, transparent, and non-discriminatory government procurement process. The NAFTA's rule on government procurement is more inclusive than that of the WTO's because Mexico had not been part of the WTO's GPA. Although the NAFTA has the WTO obligations as its foundation, its terms such as trade and investment in energy cover more than the terms of the WTO do.

### 3. Energy Charter and Energy Trade

The ECT was signed in December 1994 and came into force on April 16,

1998 and signed by 52 states, the European Union and European Atomic Energy Community (Euratom). The signatories to the ECT include several Central and Eastern European countries, Russia, independent states of the former Soviet Union, Australia, and Japan.<sup>52</sup> It is the only international regulatory agreement dedicated specific to energy trade. The main goal of the ECT was to establish an international legal instrument which can secure supplies of energy resources from the territory of the former Soviet Union to Europe. The treaty is designed to create a predictable, transparent, and non-discriminatory legal foundation for cross-border energy trade and investment, with having its own dispute settlement mechanism.<sup>53</sup>

#### 1-1. Architecture of ECT

Preceded by the European Charter adopted in the Hague in 1991, the ECT lays out provisions specific to trade in energy. The ECT consists of eight parts. Part I describes definitions and purpose of the treaty. In Part I, energy is defined as a wide range of energy material and products including coal, natural gas, oil, petroleum and petroleum products, electrical energy, charcoal and nuclear energy but does not include renewable energies based on the Harmonized System specified in Annexes

-

All the signatories and contracting Parties to the Energy Charter Treaty are Afghanistan, Albania, Armenia, Australia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, European Union and Euratom, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Japan, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Mongolia, Montenegro, The Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, United Kingdom, and Uzbekistan.
Selivanova, Yulia, (2011), 81-82.

EM I or EM II.<sup>54</sup> Energy related equipment specified in Annexes EO I or EO II are also dealt in the ECT. 55 More specifically, the ECT defines economic activity in the energy sector as "an economic activity concerning the exploration, extraction, refining, production, storage, land transport, transmission, distribution, trade, marketing, or sale of energy materials, or concerning the distribution of heat to multiple premises". 56 The ECT provides extensive definitions from energy to activities related to energy, addressing the whole process of energy trade. In comparison to the WTO and NAFTA, the ECT is more inclusive in defining what energy is and energy related services and activities are.

Part II: Commerce sets forth provisions for international markets, non-derogation from the WTO Agreement, trade-related investment measures, competition, transit, transfer of technology, and access to capital. In Part III, investment promotion and protection rules are set forth in detail. Part IV: Provisions delineates sovereignty over Miscellaneous energy resources, environmental aspects, transparency, taxation, state and privileged enterprises, observance by sub-national authorities, exceptions, and economic integration agreements. The ECT's own dispute settlement mechanism is defined in Part V. Transitional provisions are outlined in Part VI. Parts VII and VIII deals with technical and administrative matters such as structure, institutions and final provisions of the ECT.

The ECT Article 1(4).
 The ECT Article 1(4<sup>bis</sup>).

The ECT obligations are perceived to be divided into hard law and soft law. On one hand, the ECT enforces its obligations either by legally binding arbitration or by its own dispute settlement mechanism. The obligations of hard law include investment protection, trade, transit provisions. On the other hand, obligations such as energy efficiency and related environmental aspects, competition, transfer of technology and access to capital are contained as soft law.<sup>57</sup>

#### 1-2. ECT Rules Relevant to Energy Trade

In Article 4, the ECT framework puts its foundation on the WTO Agreement by stating that "nothing in this Treaty shall derogate, as between particular Contracting Parties which are members of the WTO, from the provisions of the WTO Agreement as they are applied between those Contracting Parties". <sup>58</sup> The ECT incorporates the provisions of the WTO Agreement. Same treatment will be received whether or not a contracting party is a WTO member.

The four main focuses of the Treaty are: "(1) protection of foreign investments, based on the extension of national treatment, or most-favoured nation treatment (whichever is more favourable) and protection against key non-commercial risks; (2) non-discriminatory treatment of trade in energy materials, products and energy-related equipment based on the WTO rules and provisions to ensure reliable cross-border energy transit flows; (3) resolution of disputes between contracting parties,

<sup>57</sup> Selivanova, Yulia, (2011), 375.

The ECT was created at the time of the WTO creation. The original treaty only referred to the GATT, but after the Uruguay Round, the amendments were made to refer to the WTO Agreement. See Article 4 of the ECT.

and between investors and host states; (4) promotion of energy efficiency, and environmental protection".<sup>59</sup>

#### **Transit**

Unlike the WTO and NAFTA, the ECT focused largely on issues of transit due to an increase in the need for energy supply in Western Europe and determination of Soviet Union to export its energy resources. The creators of the ECT believed that Article V of GATT only had limited regulation regarding transit of energy. They implemented more transit provisions that are absent from the general transit provisions provided by the GATT. Article 7 is implemented in order to facilitate transit of energy materials and products by ensuring freedom of transit. The article is devised to prohibit endangering energy security or efficiency of energy systems. The article also aims to resolve any unreasonable delays, restrictions or congestion of transit or construction of new infrastructure. Article 7(7) provides dispute mediation specific for transit because the regular dispute settlement mechanism is lengthy and complex to efficiently address transit issues which require a prompt resolution. The provisions to enhance freedom of transit are not addressed by rules of any other multilateral frameworks.

### **Protection of Investment**

In order to liberalize energy trade, just eliminating import or export barriers was not sufficient due to the physical restraint of network and infrastructure. Solution

38

<sup>&</sup>lt;sup>59</sup> More information is available at <www.energycharter.org>.

<sup>&</sup>lt;sup>60</sup> The ECT Article 7(5).

to lift the restraint was to build a new infrastructure such as pipelines and transmission grid networks by attracting investment particularly foreign investment. The creators of the ECT came up with more provisions that can assist expansion and creation of Europe's network of cross-border pipeline infrastructure. The ECT has laid grounds for the effective protection of investments by encouraging flow of capital, especially for countries with economies in transition, access to public loans, grants, guarantees or insurance for facilitating trade or investment abroad.<sup>61</sup> Under Article 1(6), investment is defined as "every kind of asset, owned or controlled directly or indirectly by an investor, including tangible and intangible, moveable and immovable property; business enterprise, shares, stocks, other forms of equity participation, bonds, and other debt of a company; claims to money and performance pursuant to contract having an economic value and associated with an investment; intellectual property; returns; any rights conferred by law, contract or licences". Article 10 sets forth rules for promotion, protection and treatment of investments in order to attract investment by creating stable, equitable, favourable and transparent conditions to make investment. Such investments are protected and secured from unreasonable or discriminatory measures under Article 10(1).63

### **Sovereignty**

The ECT recognizes each party's sovereignty over their energy resources, but

-

<sup>&</sup>lt;sup>61</sup> The ECT Article 9.

<sup>&</sup>lt;sup>62</sup> The ECT Article 1(6).

<sup>&</sup>lt;sup>63</sup> The ECT Article 10(1)

to be exercised in accordance with the rules of international law under Article 18.64 Ultimately, it does not interfere with the governance of domestic energy sector, ownership of energy resources or energy companies, and urge parties to open up to foreign investments.

## **Dispute Settlement**

The dispute settlement mechanism of the ECT is based on the WTO's DSB. Dispute settlement cases are categorized into two: settlement of disputes between an investor and a host country and settlement of disputes between contracting parties. Article 26 lays out a provision for disputes between a contracting party and an investor of another contracting party relating to an investment of the latter in the area of the former.<sup>65</sup> Disputes between contracting parties are settled under Article 27. Separate composition of dispute settlement mechanism for investor and host country reveals the significance put on investment issues in the ECT.

The ECT Article 18(1).
 The ECT Article 26(1).

## **III. Discussion**

The WTO successfully accomplished a rule-oriented international trading order instead of power-oriented international trading order and established a first legal architecture for services, intellectual property rights, sanitary and phytosanitary measures, technical barriers to trade. The WTO framework is applicable to all trade sectors because it is designed to establish a transparent, non-discriminating, and equitable trade environment with an effective dispute settlement mechanism at the multilateral level. Specificity is lacked in the WTO framework when addressing energy trade—the general provisions of the WTO agreements only tackle certain issues of energy trade. Besides the WTO agreements, many WTO members developed other regional or multilateral trade agreements to meet the changing need of export, import, investment, and development or transfer of technology in the energy sector.

The NAFTA included topic of energy trade in its provisions which the WTO has failed to do so. Adopting the basic provisions of the WTO, the NAFTA added separate provisions for investment, competition policy, environmental considerations, and government procurement for energy trade expansively. Transit is one of the major issues which needs to be dealt in energy trade. However, the NAFTA does not go beyond the WTO's basic framework on transit. Issues related to transit flow, transit congestion, and infrastructure overlooked in its legal framework by the NAFTA and

-

<sup>&</sup>lt;sup>66</sup> Matsushita, Mitsuo, (2014), 703.

<sup>&</sup>lt;sup>67</sup> Ibid 705

WTO. NAFTA is fragmentary and short of comprehensiveness in comparison with the WTO because it is a FTA.<sup>68</sup> Due to its nature of being a FTA, NAFTA's scope of coverage is limited to a geographical area, North America. FTA rules are only applied to participating members and are not suitable to provide general principles which can be applied universally at a multilateral level.

The ECT is designed to maximize energy trade especially in the areas of transit, investment, sovereignty of energy trade. When the amendments were made to the ECT, the scope of energy expanded to include energy-related equipments. The ECT is evolving to reflect new changes and innovations emerging in the energy sector. The ECT is the first agreement to set forth detailed principles of energy transit. It also provides a balance between execution of authority through its dispute settlement mechanism and protection of state sovereignty over energy resources. Both NAFTA and ECT provide rules inclined towards protecting foreign investment. The ECT contributed to development of the economies in transition through encouraging foreign investment. Unlike the WTO agreements and NAFTA, the ECT underscores promotion of energy efficiency and attempts to minimize the environmental impact of energy production and use.<sup>69</sup> The ECT has its deficiencies. The tensions have grown among members of the treaty regarding energy security, inconsistent enforcement proceedings, and political commitment.

<sup>&</sup>lt;sup>68</sup> Ibid 706

<sup>&</sup>lt;sup>69</sup> The Energy Charter Treaty and Related Documents: a Legal Framework for International Energy Cooperation. Brussels, Belgium: Energy Charter Secretariat, 2004.

## **IV.** Conclusion

International energy trade requires a multilateral legal framework that can effectively regulate multiple dimensions of energy trade. However, existing patchwork of legal frameworks incompletely covers and addresses all the needs of energy trade today. Although the WTO agreements provide a comprehensive set of rules for trade in general, they do not address specific provisions for energy trade. The NAFTA and ECT contain specialized provisions for energy trade, but are not sufficient to cover every aspect of energy trade. A question still remains, can existing agreements regulate energy trade or a more specialized regulatory framework is necessary to adequately regulate energy trade? In order for the existing agreements to regulate energy trade, the agreements need to be refurbished and make appropriate ratifications and amendments in order to completely address energy trade. Developing a new specialized regulatory framework for energy trade is challenging due to various factors. First, energy resources are under sovereignty of a handful of energy producing countries. The countries use energy trade as a political tool to gain an economic interest or diplomatic leverage. They have different agenda and are not likely to concur unanimously. Many times, dogmatism of the energy producing countries causes political discord. Second, unique nature of energy creates a difficulty of classification when devising a legal framework targeting energy trade. A combination of trade in goods, service,

<sup>&</sup>lt;sup>70</sup> Cottier, Thomas, Garba Malumfashi, Sofya Matteotti-Berkutova, Olga Nartova, Joelle De Sepibus, and Sadeq Z. Bigdeli, *Energy in WTO law and policy*. World Trade Organization, 21.

investment, intellectual property and technologies and divergent levels of energy sector constitutes energy trade.<sup>71</sup> Due to this perplexing nature of energy, energy trade cannot be defined easily. Lastly, energy sector is constantly evolving. With vigorous efforts in a search for new energy resources and energy utilization, new innovation and technology are continuously developing. Also, an exploration for energy efficiency and environmental protection adds momentum to the development. A new specialized regulatory framework should account all these factors. Because of these complexities, creation of unified multilateral legal framework for energy trade to thoroughly cover every aspect of energy trade is much needed, but hard to be achieved.

<sup>&</sup>lt;sup>71</sup> Ibid., 8.

# REFERENCES

### Articles, Books, Theses, Working Papers, and Websites

- Abdallah, Hussein. "Oil exports under GATT and the WTO." *OPEC Review* 29, no. 4 (2005): 267-94. doi:10.1111/j.1468-0076.2005.00155.x.
- Barkindo, Mohammad Sanusi. "Speech by OPEC Secretary General." Speech, 3rd Iraq
  Energy Forum, Al-Rasheed hotel, Baghdad, April 2, 2017.

  http://www.opec.org/opec\_web/en/press\_room/4207.htm.
- Breglia, Lisa. *Living with Oil: Promises, Peaks, and Declines on Mexico's Gulf Coast.*Austin: University of Texas Press, 2013.
- Cameron, Maxwell A., and Brian W. Tomlin. *The Making of NAFTA: How the Deal was Done*. Ithaca: Cornell University Press, 2002.
- Cottier, Thomas, Garba Malumfashi, Sofya Matteotti-Berkutova, Olga Nartova, Joelle De Sepibus, and Sadeq Z. Bigdeli, *Energy in WTO law and policy*. World Trade Organization.
- Domm, Patti. "North American trade is powerful in energy despite uncertainty of NAFTA." *CNBC*, March 06, 2017.

  http://www.cnbc.com/2017/03/06/north-american-trade-powerful-in-energy-d
- "International Energy Outlook 2016." IEA.

espite-uncertainty-of-nafta.html.

https://www.eia.gov/outlooks/ieo/world.cfm

- "International Trade Statistics 2015." World Trade Organization.

  https://www.wto.org/english/res\_e/statis\_e/its2015\_e/its15\_toc\_e.htm.
- Leal-Arcas, Rafael, and Ehab Abu Gosh. "Energy Trade as Special Sector in the WTO:

  Unique Features, Unprecedented Challenges and Unresolved Issues." *Indian*Journal of International Economic Law 6 (2014): 1-53.
- Matsushita, Mitsuo. "A View on Future Roles of The WTO: Should There be More Soft Law in The WTO." *Journal of International Economic Law* 17, no. 3 (September 04, 2014): 701-15. doi:10.1093/jiel/jgu035.
- "Member Countries." Organization of the Petroleum Exporting Countries. 2017.

  Accessed July 06, 2017. http://www.opec.org/.
- Rahman, Maizar. "OPEC: Vision, Mission and Development." Speech, World Energy Council, Jakarta, July 29, 2004.
- Richards, Timothy J., and Lawrence Herman. "Relationship between International

  Trade and Energy." World Trade

  Organization. https://www.wto.org/english/res\_e/publications\_e/wtr10\_richa
  rds\_herman\_e.htm.
- Selivanova, Yulia. *Regulation of energy in international trade law: WTO, NAFTA and Energy Charter.* The Netherlands: Kluwer Law International BV, 2011.
- "The Energy Charter Treaty." Energy Charter Treaty. April 09, 2015.

  http://www.energycharter.org/process/energy-charter-treaty-1994/energy-charter-treaty/.

The Energy Charter Treaty and Related Documents: a Legal Framework for

International Energy Cooperation. Brussels, Belgium: Energy Charter

Secretariat, 2004.

"U.S. Energy Information Administration - EIA - Independent Statistics and Analysis."

International Energy Outlook 2016-World energy demand and economc outlook - Energy Information Administration. May 11, 2016.

https://www.eia.gov/outlooks/ieo/world.cfm.

"What we stand for." World Trade Organization.

https://www.wto.org/english/thewto\_e/whatis\_e/what\_stand\_for\_e.

"WTO accessions." World Trade Organization.

https://www.wto.org/english/thewto\_e/acc\_e/acc\_e.htm.

## **WTO Agreements**

General Agreement on Tariffs and Trade

General Agreement on Trade in Services

Agreement on Technical Barriers to Trade Agreement

Agreement on Subsidies and Countervailing Measures

Agreement on Government Procurement

### **Other Agreements**

North American Free Trade Agreement

**Energy Charter Treaty**