## Indonesian Journal of International Law

Volume 21 | Number 3

Article 2

April 2024

## **Current Energy and Energy-Related Services Negotiations Viewed** from Developing Countries Legal Protection

Jonson Hutajulu Universitas Indonesia, jonson.hutajulu81@ui.ac.id

Follow this and additional works at: https://scholarhub.ui.ac.id/ijil



Part of the International Law Commons

### **Recommended Citation**

Hutajulu, Jonson (2024) "Current Energy and Energy-Related Services Negotiations Viewed from Developing Countries Legal Protection," Indonesian Journal of International Law. Vol. 21: No. 3, Article 2. DOI: 10.17304/ijil.vol21.3.4

Available at: https://scholarhub.ui.ac.id/ijil/vol21/iss3/2

This Article is brought to you for free and open access by the Faculty of Law at UI Scholars Hub. It has been accepted for inclusion in Indonesian Journal of International Law by an authorized editor of UI Scholars Hub.

## DEVELOPING COUNTRIES' LEGAL PROTECTION ON ENERGY AND ENERGY-RELATED SERVICES UNDER GENERAL AGREEMENT ON TRADE IN SERVICES NEGOTIATIONS

## Jonson Hutajulu

Faculty of Law, Universitas Indonesia Correspondence: jonson.hutajulu81@ui.ac.id

#### Abstract

This article aims to critically analyze current issues on energy services and energy-related services negotiation, viewed from developing countries legal protection on areas of energy production, transformation, transportation, distribution and sale of energy under the General Agreement on Trade in Services (GATS). Unfortunately, energy as an object of negotiation has been firmly agreed as goods, while markets on the aforementioned aspects reveal capacity gaps between developed and developing countries in order to reach efficient and fair energy services trade. Series of negotiations have been conducted creating scheduled of commitments among state parties interpreting GATS' rules on affirmation enjoyed by developing countries to be more open and capable. The analysis in this paper is mainly construed using the economic analysis of international law stipulated by Thomas, Trachtman, Posner, and Djiwandono. It provides a framework of analysis on how negotiation under the WTO GATS generate a distinctive legal feature on international trade, and why developing countries need to be affirmed for entering their market access and exemption for the most favour nation clauses. This article reveals that current negotiation is still slow to omit inefficiency and monopoly, due to unclear definition and classification of these sectors. Factually, scheduled of commitments have pointed to test in terms of increasing developing countries' understanding, allocation of all available resources and reducing potential risks when they give their commitments gradually and step by step approach. At the same time, developed countries also take measures on underlying necessity of legitimate reasons, authority, as well as their advanced resources to be shared to reduce capacity gaps for better market access to developing countries. As a result, proportionality, factuality, and nondiscrimination underline issues to reach efficient and accountable energy and energy-related negotiation.

Keywords: energy and energy-related services, negotiation, and schedule of commitments.

Submitted: 14 February 2023 | Revised: 6 September 2023 | Accepted: 28 March 2024

#### I. INTRODUCTION

Energy and energy-related services have been included in the WTO General Agreement on Trade in Services (GATS) negotiation since 2000. However, compared to other sectors such as finance, tourism, and telecommunication, energy and energy-related services have yet to achieve similar results in

market access and liberalization.<sup>1</sup> At the beginning, different interpretations to national interests as well as capacities between developed and developing countries hindered constructive engagement to ongoing negotiation under GATS.<sup>2</sup> Unclear area, scope, and institutionalisation also contributed to the narrow acceptance, causing internal public discourses whether energy and energy-related services are public or private sectors.<sup>3</sup> Legal protection schemes enjoyed by developing countries is the most important issue exchanged among member states through give and take mechanisms. In this regard, forms on schedule of specific commitments (SoC) highlighting constitutional rules, rules to facilitate additional transaction and institutionalisation on trade of energy and energy-related services are systematically institutionalized.<sup>4</sup> As a result, they are still general in their area, scope, and institutionalization, since they are also related to other areas of energy-related services. <sup>5</sup> Complexity and unclear modes of supply, governance, and added values on energy services and anergy-related services have been debated through negotiations and exchanges of the SoC between developed and developing countries.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> "Energy Services," World Trade Organizations, accessed 6 December 2022, https://www. wto.org/english/tratop\_e/serv\_e/energy\_e/energy\_e.htm. Paraadz Taapano, "The General Agreement on Trade and Services (GATS) and Energy Services Liberalization in the South African Development Community (SADC): Issues and Prospects," (master's thesis, University of the Western Cape, 2011), 4.

<sup>&</sup>lt;sup>2</sup> Joost Pawelyn, *Conflict of Norms in International Law: How WTO Law Relates to Other Rules of International Law* (Cambridge University Press, 2006), 35-40; Ernst-Ulrich Petersmann, "The WTO Constitution and Human Rights," *Journal of International Economic Law* 3, no. 5 (2000): 19-25, United Nations High Commissioner for Human Rights, Resolution 2002/28, *Globalization and Its Impacts on the Enjoyment of Human Rights*, UN Doc E/CN.4/RES/2002/28 (22 April 2002).

<sup>&</sup>lt;sup>3</sup> Adel Strydom, Josephine Keviti Musango, and Paul K Currie, "Connecting Energy Services, Carrier and Flow: Rethinking Energy Metabolism in Cape Town, South Africa," *Journal of Energy Research and Social Science* 60 (2020): 1-2, https://doi.org/10.1016/j.erss.2019.101313.

<sup>&</sup>lt;sup>4</sup> Jeffey L. Dunoff and Joel P. Trachtman, "Economic Analysis of International Law," *The Yale Journal of International Law* 24, no. 1 (1999): 14; Rafael Leal-Arcas and Ehad Abu-Grosh, "Energy Services as Special Sector in the WTO: Uniue Features, Unprecedented Challenges, and Unresolved Issues," *The Indian Journal of Economic International Law* 6, No. 1 (2014): 11 and 31, Hikmahanto Juwana, "Hukum Internasional dalam Konflik Kepentingan Ekonomi Negara Berkemang dan Negara Maju," inaugural speech, Universitas Indonesia, 10 November 2001, Depok, Indonesia, 3-4.

<sup>&</sup>lt;sup>5</sup> Michael James Fell, "Energy Services: A Conceptual Review," *Energy Research and Social Science* 27 (2017): 129-130, Mitsuo Matsushita and Thomas Schumbaum, eds., *Emerging Issues in Sustainable Development, International Trade Law and Policy Relating to Natural Resources, Energy and Environment* (Japan: Springer, 2016), 259.

<sup>&</sup>lt;sup>6</sup> WTO, Communication from Canada, Initial Negotiating Proposal on Oil and Gas Services, S/CSS/W/58 (14 March 2001), WTO, Communication from Norway, The Negotiation on Trade in Services, S/CSS/W/59 (21 March 2001), WTO, Communication from Venezuela, Negotiating Proposal on Energy Services, S/CSS/W/69 (29 March 2001), WTO, Communication from Chile, The Negotiation on Trade in Services, S/CSS/W/88 (14 May 2001).

On this issue, the United Nations on Trade and Development (UNCTAD) has given attention to capacity gaps emerging between developed and developing countries on how to increase access on clean and affordable energy, to upgrade competence in all levels of production and distribution, and to push continuous negotiations. <sup>7</sup> In this regard. Thomas, Trachtman, and Dijwandono argue that GATS rules and regulations should be mainstreamed by developing countries in creation and implementation of their national laws, policies, programs, and actions to be compatible with developed countries, especially on how to efficiently afford and equip with reliable energy and energy-related services infrastructure and modalities.8 However, state sovereignty is also commonly used to shield or forge national implementations of legislatitons and procedures as domestic barriers by developing countries for market access and national treatment. Due to the aforementioned factors, developed countries react by stipulating that inefficiency and monopoly are intentionally managed to slow down market access in developing countries' domestic market. 10 As a result, energy and energy-related services have characteristics of consensualbased agreement, consultative, affirmative, and more than screening, rather than constraining in order to reach efficient governance.<sup>11</sup> Factually, SoC becomes the alternative in overcoming the aforementioned differences. 12 The SoC has become a tool to reach international governance and agreement on energy and energy-related services containing offers from each member states on specific objects, area, and institutionalization, based upon the principles of reciprocity, consent, and fairness of the economic transaction among member

<sup>&</sup>lt;sup>7</sup> Chantal Thomas and Joel Trachtman, *Developing Countries and the WTO Legal System* (Oxford: Oxford University Press, 2009), 5-6, Anne Orford, "The Subject of Globalization: Economics, Identity and Human Rights," (proceedings of the 94<sup>th</sup> Annual Meeting of the American Society of International Law, 2000), 146-148.

<sup>&</sup>lt;sup>8</sup> J. Sudradjad Djiwandono, "Melembagakan Analisis Ekonomi Hukum," Kompas, accessed 5 November 2022, http://uiupdate.ui.ac.id/article/j-soedradjad-djiwandono-melembagakan-analisis-ekonomi-hukum.

<sup>&</sup>lt;sup>9</sup> John H. Jackson, *et.al.*, *Legal Problem of International Economic Relation* (St. Paul: West Publishing Co, 1995), 921-922.

<sup>&</sup>lt;sup>10</sup> Kenneth W. Abbott and Duncan Snidal, "Why States Act Through Formal International Organizations" in *The Politics of Global Governance*, Brian Frederking and Paul F Diehl, eds. (London: Lynne-Reiner Publisher, 2005), 25-26.

<sup>&</sup>lt;sup>11</sup> Nicholas Diebold, *Non-Discrimination in International Trade in Services: "Likeness" in WTO/GATS* (Cambridge: Cambridge University Press, 2010), 23-24, Krysti Justine Guest, "Exploitation under Erasure: Economic, Social and Cultural Rights Engage Economic Globalization," *Adelaide Law Review* 19, no. 73 (1997): 78-79.

Rudolf Adlung, "Service Negotiations in the Doha Round: Lost in Flexibility," *Journal of International Economic Law* 9, No. 4 (2006): 867, Jurgen Bass, "Annex on Movement of Natural Persons, Supplying Services Under the Agreement" in *Max Planck Commentary on World Trade Law: WTO and Services*, Rudiger Wolfrum, Peter Tobias-Stoll, and Clement Faunagle, eds. (Martinus Nijhoff Publisher, 2008), 573.

states.<sup>13</sup> Consultation and negotiation in a multilateral trade system clarify area, scope, institutionalization and governance.<sup>14</sup>

For the purpose of this article, energy and energy-related services are conceptually defined as "any efforts directed to increase added values of energy in terms of management and uses of energy conducted by person, legal entity and state efficiently subject to multilateral agreement under WTO GATS". Any efforts, in reality, directed towards activities are carried out by sellers and buyers, entitling certain rights and obligations. From those factors, this article aims to answer three concerns faced by member states of WTO GATS about energy and energy-related trade services. The first analysis shall discuss how activities are regulated multilaterally to achieve efficiency. The second analysis shall identify principles protecting developing countries. For this particular analysis, a critical examination shall be conducted to assess market access and the implementation of MFN exemptions. The third analysis shall observe the best practices of SoC negotiation and exchange for developing countries' future trade.

# II. CLASSIFICATION OF ENERGY AND ENERGY-RELATED SERVICES

There has been no acceptable definition of what energy and energy-related services are. <sup>15</sup> They are intangible objects of trade and their characteristic as "services" are also different claimed by developing countries. <sup>16</sup> Different

<sup>&</sup>lt;sup>13</sup> Julia Nelson and Daria Taglioni, "A Quick Guide to The GATS and Mode 4," (paper presented in OECD-World Bank-IOM Seminar on Trade and Migration, Geneva, 12-14 November 2003).

<sup>&</sup>lt;sup>14</sup> J.F. Denin, ed., *Law and Practice of the World Trade Organization, Treaties Booklet 1, Release 95-1* (Oxford: Oxford University Press, 1995), 161, Fuchs, "General Agreement of Trade in Services: GATS Negotiating History" in *Max Planck Commentary on World Trade Law: WTO and Services*, Rudiger Wolfrum, Peter Tobias-Stoll, and Clement Faunagle, eds. (Martinus Nijhoff Publisher, 2008), 1-3.

<sup>&</sup>lt;sup>15</sup> United Nations Conference on Trade and Development, *Managing Request Offers Under the GATS: The Case of Energy Services*, Document UNCTAD/DITC/TNCD/2003/5.

<sup>&</sup>lt;sup>16</sup> UNCTAD, *The Least Developed Countries Report 2019 - The Present and Future of External Development Finance – Old Dependence, New Challenges* (New York: United Nations Publications, 2019), xi. "Developed Countries" are included: Andorra, Australia, Austria, Belgium, Bermuda, Bulgaria, Canada, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Greenland, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States of America, Holy See, Faroe Islands, Gibraltar, Saint Pierre and Miquelon. Further, LDCs include: Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Lesotho, Liberia, Madagascar, Malawi, Mali,

capabilities of resources and domestic institutionalizations are also acceptable rationales for unclear definitions and deliberation of special treatments received by developing countries to clarify their objects of trade in the GATS. <sup>17</sup> In general, the different nature of services also makes complexity for effective market access, especially on special treatments to classify energy and energy-related services. <sup>18</sup> Furthermore, methods of supply also increase awareness of dynamics negotiations on strategic, operational, and tactical levels of implementation. <sup>19</sup> In line with this concern, Article II GATS guarantees the aforementioned affirmation by stipulating that:

"...each Member shall accord immediately and unconditionally to services and service suppliers of any other Member treatment no less favourable than that it accords to like services and service suppliers of any other country."

In essence, the classification of energy and energy-related services are in line with those principles in order to increase economic growth and to achieve efficient governance for all member states through efficient market access.<sup>20</sup> In this regard, Gabriella Marceau argues that:

Mauritania, Mozambique, Niger, Rwanda, Senegal, Sierra Leone, Somalia, South Sudan, Sudan, Togo, Uganda, United Republic of Tanzania, Zambia, Afghanistan, Bangladesh, Bhutan, Cambodia, Lao People's Democratic Republic, Myanmar, Nepal, Yemen, Comoros, Kiribati, Sao Tome and Principe, Solomon Islands, Timor-Leste, Tuvalu, Vanuatu.

<sup>&</sup>lt;sup>17</sup> Juan A. Marchetti and Petros C. Mavroidis, "What Are the Main Challenges for the GATS Framework? Don't Talk About Revolution," *European Business Organization Law Review* 5 (2014): 512, Sebastián Saez, "The Strategic Development Role of Trade in Services" in *Trade in Services Negotiations - A Guide for Developing Countries* (Washington, DC: The World Bank, 2010), 14.

<sup>&</sup>lt;sup>18</sup> Sumanta Chauduri and Suparna Karmakar, "The Liberalization of Cross-Border Trade in Services: A Developing Country Perspective" in *Opening Market for Trade in Services: Countries and Sectors in Bilateral and WTO Negotiations*, Juan A. Marchetti and Martin Roy (Cambridge: Cambridge University Press, 2008), 184-185.

<sup>&</sup>lt;sup>19</sup> WTO, Trade in Services in the WTO (Geneva: WTO E-Learning, 2014), 89-91.

<sup>&</sup>lt;sup>20</sup> Holger Hestermeyer, "Preamble – General Agreement on Trade in Services" in *WTO – Trade in Services*, Rüdiger Wolfrum, Peter-Tobias Stoll & Clemens Feinaügle, eds. (Leiden: Martinus Nijhoff Publishers, 2008), 28, M. Sornarajah, *The International Law of Foreign Investment*, 4<sup>th</sup> ed (Cambridge: Cambridge University Press, 2017), 311, Simpson Gary P. and W. Bradnee Chambers, *Developing countries and the WTO: Policy Approaches* (Tokyo: United Nations University Press, 2008), 6, WTO Secretariat, ed., *Guide to the GATS–An Overview of Issues for Further Liberalization of Trade in Services* (London: Kluwer Law International, 2001), 259.

"The WTO has also rules applicable to trade in services contained in the GATS: all rules of GATS are potentially applicable to the operations of energy-related services. Under the GATS, all Members are bound by a number of general obligations and disciplines, among which the MFN principle (Article II) is the most important discipline for energy-related services. The GATS however does not impose on any Member the obligation to accept foreign services and services suppliers in its market (e.g., to give access to its national oil service market). The GATS contains other disciplines (like on monopolies) and flexibilities (RTAs, general exceptions etc) that are also relevant to trade in energy services.".<sup>21</sup>

Energy and energy-related services have become legal notions under WTO GATS. It aims to create trusted and credible economic trade, to push economic certainty in domestic markets, and to promote progressive liberation of economic trade and development.<sup>22</sup> Factually, WTO document MTN. GNS/W/120 determines 12 service sectors, i.e., (1). Business services; (2). Communication services; (3). Construction and related engineering services; (4). Distribution services; (5). Educational services; (6). Environmental services; (7). Financial services; (8). Health-related and social services; (9). Tourism and travel-related services (10). Recreational, cultural and sporting services; (11). Transport services; and (12). Other.<sup>23</sup> In this document, energy and energy-related services are included in business services in terms of services incidental to mining and services incidental to energy distribution.<sup>24</sup> This inclusion is in line with the GATS objective which determines broad definitions of services.<sup>25</sup> Legally, the GATS' preamble determines that "wishing to establish a multilateral framework of principles and rules for trade in services with a view to the expansion of such trade under conditions of transparency and progressive liberalization, and as a means of promoting the economic growth of all trading partners and the development of developing countries".26

<sup>&</sup>lt;sup>21</sup> Gabrielle Marceau, "The WTO in the Emerging Energy Governance Debate," World Trade Organization, accessed 13 December 2022, https://www.wto.org/english/res\_e/publications\_e/wtr10 forum e/wtr10 marceau e.htm.

<sup>&</sup>lt;sup>22</sup> Jandhyala B.G. Tilak, *Trade in Higher Education: The Role of The Agreement on Trade in Services (GATS)* (Paris: UNESCO, International Institute for Educational Planning, 2011), 32, WTO, *The General Agreement on Trade in Services an Introduction, Trade in Services Division* (Geneva: WTO, 2013), 1.

<sup>&</sup>lt;sup>23</sup> Sajitha Bashir, *Trend in International Trade in Higher Education: Implications and Options for Developing Countries* (Washington, D.C.: The World Bank, 2007), 4.

<sup>&</sup>lt;sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Francisco D. Prieto, "Service at WTO: A Bumpy Road," *Estudios Internacionale, Anno* 38, no. 150 (2005): 11.

<sup>&</sup>lt;sup>26</sup> Olivier Cattaneo, et al., *International Trade in Services, New Trend and Opportunities for Developing Countries* (Washington DC: The World Bank, 2010), 67-70.

The aforementioned definition and classification have been referred to by WTO member states to conduct negotiations. However, such negotiations do not give a clear reference as to whether energy and energy-related services should be included as autonomous sectors, or if they should be included in sectors relevant to transportation, distribution, and production of energy as goods.<sup>27</sup> Consequently, they are still an ongoing negotiation to seek clearer definition and classification. This ongoing negotiation is offered for examples by Cuba, Venezuela, Indonesia, Japan, and United States, and they are still consulting their offers in accordance to document MTN.GNS/W/120 and United Nations Central Products Classification (UNCPC).<sup>28</sup> On 12 January 2010, the WTO Council for Trade in Services listed three main energy and energy-related services in document S/C/W/311 as follows: services relevant to mining, services relevant to energy distribution, and transportation services based on ownership concept. It refers to activities carried out by third parties in energy production and energy distribution accepted as energy services and energy-related services differentiated from activities conducted by the owner of energy production and distribution as goods.<sup>29</sup> This ownership concept has also clarified the area and scope of energy-related services into well-accepted forms of services, such as pipeline works for oil and natural, as well as manmade power plants; liquid, solid trades of oil and their derivatives products; selling of oils, wood, gas tanks, gas and coal; liquid and gas storage services; services on geology, geophysical calculation and other; services on engineer technic and its products; construction, maintenance of energy equipment; management consultation services; and services related to management consultation on energy management.

The aforementioned approaches, definitions, and classification help member States increase confidence and building trust through mutual transactions with a step-by-step approach in order to reach elements of understanding, national harmonization, and reducing potential risks in

<sup>&</sup>lt;sup>27</sup> Joy Abrenica and Adora Navvaro, "An Assessment of Trade and Investment Barriers in Energy Services in ASEAN," (working paper, ASEAN Energy Market Integration, Chulalongkorn University, 2014), 3-5, WTO Council for Trade in Services, *Energy Services*, S/C/W/311, 10-12.

WTO Council for Trade in Services Special Session, Communication from Cuba, S/CSS/W/144

<sup>&</sup>lt;sup>29</sup> Fuchs, "General Agreement of Trade in Services: GATS Negotiating History," in *Max Planck Commentary on World Trade Law: WTO and Services*, Rudiger Wolfrum, Peter Tobias-Stoll, and Clement Faunagle, eds. (Leiden: Martinus Nijhoff Publisher, 2008), 1-3, Joachim Monkelbaan, *Trade in Sustainable Energy Services* (Geneva: International Center for Trade and Sustainable Development, 2013), 7, Bruno, Evalia and Dmitry A. Ruban, *Energy Production and Geo conservation* (Berlin: Springer Verlag, 2014), 2.

competitive markets.<sup>30</sup> Consequently, GATS' rules and principles are carefully drafted and implemented through non-discrimination principles, legitimate aims, maximum transparency, and proportion to increase meaningful participation from all member States.<sup>31</sup> Prompt, reliable, affordable, and sustainable energy and energy-related services made their definition. The classification reiterates a holistic approach taken by all WTO member States directed in accordance to global issues influence such as climate changes and sustainable development goals.<sup>32</sup> A stabilized market in these sectors is aimed at enhancing economic growth and guaranteeing sustainable development for public utilities, national environmental-friendly programs and actions, and contextualizing country-owned rights to regulate.<sup>33</sup> Unclear and unfixed definitions and classifications construct positive rooms of flexible engagement in these sectors since Member States have their own historical backgrounds in the production, management, and distribution of energy.<sup>34</sup> On the other hand, it has also reflected slow movement and less achievement of binding rules and regulations on the area and scope of energy and energy-related services.<sup>35</sup> The development of a new classification of lists for energy and energy-related services needs to be enriching in order to maximize sectoral energy lists under GATS in their area, scope, and institutionalization.<sup>36</sup>

<sup>30</sup> Robert Curley, ed., Energy, Past, Present and Future: Renewable and Alternative Energy (New York: Britanica, 2012), viii, Phillip Parker, Energy Production and Services in Finland, A Strategic Reference (Las Vegas: Icon Group International, 2007), 5.

<sup>&</sup>lt;sup>31</sup> United Nations Economic and Social Commission for Asia and Pacific, "Energy Services for Sustainable Development in Rural Areas in Asia and the Pacific: Policy and Practice," Energy Resources Development Series, no. 40 (2010): 1-2.

<sup>32</sup> Kim Talus, EU Energy Law and Policy (Oxford: Oxford University Press, 2013), 93, N. Gorodnova, et al., "Energy Service Sector, Problem of Government Regulation," (proceedings of the Second International Conference on Energy Production and Management, Ancona, 2016), 45-46.

Rosemary Lyster and Adrian Bradbrook, Energy Law and Environment (Cambridge: Cambridge University Press, 2006), 26 and 30.

<sup>&</sup>lt;sup>34</sup> Robert Staubaugh, "Energy Future and International Trade," Journal of International Business Study 12, no. 1 (1981): 23-30, Molinuevo Martin and Sebastian Saez, Regulatory Assessment Toolkit, A Practical Methodology for Assessing Regulation in Services (Washington DC: The World Bank, 2014), 16.

<sup>35</sup> Ben Garside and Sarah Wykes, Planning Pro Poor Energy Services for Maximum Impact (London: International Institute for Environment and Development, 2017), 12, Thomas M. Franck, The Power of Legitimacy Among Nations (Oxford: Oxford University Press, 1990), 64-67.

<sup>&</sup>lt;sup>36</sup> Thomas Cottier, et al., "Energy in WTO and Policy," (Working Paper Number 25, Cambridge University Press, 2009), 5-6, Obiodun E. Onile, et al., "Uses of Digital Twins Concept for Energy Services, Intelligent Recommendation System and Demand Side Management: A Review," Energy Report 7, no. 1 (2021): 999.

This chapter reveals imminent problems, challenges, and opportunities as there has been an unclear definition and classification of energy and energy-related services under GATS as follows. Firstly, WTO document W/120 has been used as authoritative guidance to conduct negotiations with broad and unclear definitions of energy and energy-related services between developed and developing countries without having binding legal character. On a accumulative level, the negotiation process has many legal issues, concerning legal gaps between what is written and what is currently happening, ambiguity in their area and scope, overlapping institutions at international and national levels of implementation, and possible conflict norms between GATS rules and principles with national laws, regulations, and institutions. Secondly, balancing interests between developed and developing countries emerge as the leading motivation, rationales, and original intents rather than a reference to GATS principles directly such as market access, national treatment, and MFN principles.

As a result, different interpretations have been a legitimate reason to offer and/or to receive lists of activities on production, mining, management, and distribution of energy that is acceptable as energy services and energy-related services relevant to modes of supply under GATS rules. Thirdly, in the future, reducing capacity gaps and modalities will contribute to a successful reach for more meaningful participation from developing countries, while at the same time, legitimacy, as well as dominancy of technology and resources possessed by developed countries, pave the way for upcoming negotiation. Labeling in terms of writing, branding, and imaging vs. blacking, negative stereotyping, and shaming will determine the interaction between developed countries (providers) and developing countries (consumers) when they meet and negotiate to reach an agreement on energy and energy-related services. This is the biggest challenge and if participants do not take into account the level of negotiation will be stagnant.

#### III. DEVELOPING COUNTRIES' LEGAL PROTECTION

GATS is still being debated and negotiated in terms of its application,<sup>37</sup> ambiguous stipulations, 38 legal protection, unclear term of service itself. 39 and its unfinished negotiations in energy and energy-related services. As multilateral and enforceable normative rules of international trade in services. GATS covers general principles, main texts (obligations), annexes dealing with rules of specific sectors, and individual country-specific commitments to provide access to their markets which bind all Member States.<sup>40</sup> Legal protection for developing countries is fairly construed by the GATS rules and principles, especially Article IV.<sup>41</sup> This Article stipulates that developing countries' participation shall be facilitated through negotiations on specific commitments on how to strengthen their domestic capacity, effectiveness, and competitiveness through access to technology on a commercial basis. to improve access to distribution channels and information networks, and to liberalize their market access.<sup>42</sup> Difficulties in terms of lack of capacity, resources, technology, and ability are also firmly recognized as basic rationales for giving these specific affirmations.<sup>43</sup> In line with this article, Article II and XVII provide principles of equality between developed and developing countries by adopting the MFN and national treatment clauses to reduce discrimination and capacity gaps among member states. 44 Finally, Article XVI

<sup>&</sup>lt;sup>37</sup> WTO, *GATS: Fact and Fiction* (Geneva: World Trade Organization, 1998), 13-14, available at http://www.wto.org/english/tratop\_e/serv\_e/gats\_fact\_e.htm; http://www.wto.org/english/tratop\_e/serv\_e/gats\_fact\_e.htm;

<sup>&</sup>lt;sup>38</sup> For example, the meaning of Article I 3 (b and c) by Markus Krajewski, "Public Services and the Scope of the General Agreement on Trade in Services," (research paper, written for Center for International Environmental Law (CIEL), Geneva, May 2001), accessed 10 December 2002, http://www.gatswatch.org/docs/markus.html, United Nations Conference on Trade and Development, *Energy Services Toolkit* (New York: United Nations, 2017), 22.

<sup>&</sup>lt;sup>39</sup> House of Commons, Parliament of Canada, "What Canadians are Saying," *Report Number* 9 (1999): 4, http://www.parl.gc.ca/InfoComDoc/36/1-/FAIT/Studies/Reports/faitrp09/19. htm, "Antidumping, Subsidies, Safeguards,: Contingencies, etc," World Trade Organization, accessed 11 March 2022, https://www.wto.org/english/thewto e/whatis e/tif e/agrm8 e.htm.

<sup>&</sup>lt;sup>40</sup> "Understanding the WTO: The Agreements," World Trade Organization, accessed 15 November 2005, http://www.wto.org/English/thewto e/whatis e/agrm6 e.htm.

<sup>&</sup>lt;sup>41</sup> Constantine Michalopoulos, *Emerging Powers in the WTO – Developing Countries and Trade in the 21st Century* (Hampshire: Palgrave Macmillan, 2014), 253-254.

<sup>&</sup>lt;sup>42</sup> Rüdiger Wolfrum, Peter-Tobias Stoll, and Clemens Feinaügle, eds., *WTO – Trade in Services* (Leiden: Martinus Nijhoff Publishers, 2008), 2.

<sup>&</sup>lt;sup>43</sup> Agnessa O. Ishakova and Alexander I. Gonchorov, "Innovation as Integral Condition for the Development of Modern Foreign Trade Turnover of Energy Resources and Its Legal Regulation" in *Energy Sector: A Systemic Analysis of Economy, Foreign Trade and Legal Regulations*, Oleg V. Ishakov and Anessa O. Ishikova, eds. (Switzerland: Springer, 2019), 67-68.

<sup>&</sup>lt;sup>44</sup> Bernard Hoekman, "Developing Countries and the WTO Doha Round: Market Access, Rules and Different Treatment," *Journal of Economic Integration* 19, no. 2 (2004): 206.

also guarantees market access in developing countries domestic markets listed in specific sectors offered in their specific commitments.<sup>45</sup>

In fact, when Article IV GATS operates, it also has two negative impacts directly on the domestic markets of the developing countries, such as reducing access to public services like water, education, and health, and imminent takeover of the assets and services sectors by private and/or foreign entities, as expressly stated by Canada in its commitment.<sup>46</sup> Consequently, low foreign investment, inefficiency, and a lack of competitiveness in domestic markets of the developing countries level off and tend to be stagnant.<sup>47</sup> In fact, comparative advantage for market liberalization introduced by developed countries has transformed the aforementioned legal protection, since their comparative excellencies have been referred to conduct negotiations in these sectors.<sup>48</sup> In this regard, Hikmahanto Juwana argues that dominancy in international law, especially in international economic law's norm setting based on their historical point of view and factual capacities, has led developed countries through their private executing agents and companies to create and implement those norms in favor of their national interests.<sup>49</sup> Apart from this dominancy, international awareness, and care championed by issues of the right to regulate and the right to development have paved the way to equality based on the equity in international law applicable in international economic law and international human rights law in an era of new political capitalism.<sup>50</sup>

Affirming to developing countries' legal protection reveals that GATS respects and protects human rights standards for making accountable market access based on the right to development and the right to regulate.<sup>51</sup> They

<sup>&</sup>lt;sup>45</sup> The annex of the Establishment of the World Trade Organization, General Agreement on Trade in Services, compared with Francois Vellas and Lionel Becherel, *International Tourism* (London: Red Globe Press, 1995), 253, Daniel Yergin, *The New Map, Energy, Climate and the Clash of the Nations* (New York: Penguin Press, 2020), 423, Bill Gates, *How to Avoid Climate Disaster* (New York: Penguin Book, 2021), 227, Deiter Helm, *Net Zero: How We Stop Causing Climate Change* (United Kingdom: HarperCollins, 2022), 231.

<sup>&</sup>lt;sup>46</sup> WTO, Communication from Canada, 2.

<sup>&</sup>lt;sup>47</sup> George Lwanda, "Prioritising Energy Services in Southern Africa," *South African Journal of International Affairs 8*, no. 1 (2009): 3-4, WTO Council for Trade in Services, *Energy Services Background Notes*, Document S/C/W311 (2010).

<sup>&</sup>lt;sup>48</sup> Onile, et al., "Uses of Digital Twins," 999, UNCTAD, "National Treatment" in *UNCTAD Series on Issues of International Investment Agreement* (New York and Geneva: United Nations, 1999), 1-94, Susan D. Frank, "Development and Outcomes of Investment Treaty Arbitration," *Harvard International Law Journal* 50, no. 2 (2009): 435-489.

<sup>&</sup>lt;sup>49</sup> Juwana, "Hukum Internasional dalam Konflik," 3-4.

<sup>&</sup>lt;sup>50</sup> Franck, *The Power of Legitimacy*: 64-67, Joe Zammit-Lucia, *The New Political Capitalism: How Business and Societies Can Thrive in A Deeply Politicized World* (London: Bloomsbury Business, 2022), 67-70.

<sup>&</sup>lt;sup>51</sup> Allan Rosas, "The Right to Development" in Economic, Social and Cultural Right, A

are unalienable human rights since they are based on participation from both individual and group rights, in the context of basic needs and social justice by acknowledging the equality of opportunity principle and balancing the emphasis on national policies and international cooperation.<sup>52</sup> Trade liberalization in services explicitly refers to human rights, especially the right to development and right to regulate, even though human rights law has a long tradition of neglecting economic liberties in the market.<sup>53</sup> Consequently, the corpus on the right to development, such as participation and equality principles, should be taken into account in integrating human rights to trade liberalization in services by WTO member States in reaching multilateral agreement on energy and energy-related services.<sup>54</sup> Thus, the rule of law is manifested as frameworks of give and take mechanisms when they conduct energy and energy-related services negotiations and implementation.<sup>55</sup>

Textbook, Asbjorn Eide, Catarina Krause, and Allan Rosas, eds., (Leiden: Martinus Nijhoff Publishers, 1995), 247, Ernst-Ulrich Petersmann, "Human Rights and International Economic Law in the 21st Century: The Need to Clarify Their Interrelationship," Journal of International Economic Law 4, no. 1 (2001): 3, Ernst-Ulrich Petersmann, "Constitutionalism and International Organization", Northwestern Journal of International Business 17 (1996): 398, Ernst-Ulrich Petersmann, "How to Constitutionalize International Law and Foreign Policy for the Benefit of Civil Society?" Michigan Journal of International Law 20, no. 1 (1998): 1, Ernst-Ulrich Petersmann, "Legal, Economic and Political Objectives of National and International Competition Policies: Constitutional Functions of WTO "Linking Principles" for Trade and Competition," New England Law Review 34 (1999): 145.

- <sup>52</sup> Christopher Arup, *The New World Trade Organization Agreements: Globalizing Law Through Services and Intellectual Property* (Cambridge: Cambridge University Press, 2000), 128-129, Peter Van den Bosche, *The Law and Policy of the World Trade Organization* (United Kingdom: Cambridge University Press, 2005), 308.
- <sup>53</sup> Anne Orford, "The Subject of Globalization," 146-148, Krysti Justine Guest, "Exploitation under Erasure: Economic, Social and Cultural Rights Engage Economic Globalization," *Adelaide Law Review* 19, no. 73 (1997): 78-79, Robert Howse, "Democracy, Science, and Free Trade: Risk Regulation on Trial at the World Trade Organization," *Michigan Law Review* 98, no. 7 (2000): 2329, United Nations, *The World Conference on Human Rights: Vienna Declaration and Programme of Action*, UN Doc. A/CONF.157/23 (1993), Part I, para 5, Anne Orford, "Globalization and The Right to Development" in *People's Rights*, Phillip Alston, ed. (2001), 127, 158-170.
- Petersmann, "Human Rights and International Economic Law," 3, Petersmann, "Constitutionalism and International Organization," 398, Petersmann, "How to Constitutionalize," 1, Petersmann, "Legal, Economic and Political," 145.
- <sup>55</sup> United Nations Conference on Trade and Development, *Energy and Environmental Services: Negotiating Objectives and Development Priorities*, (New York: United Nations, 2003), 80-81, United Nations High Commissioner for Human Rights, Sub-Commission on Human Rights, Resolution 2001/21, *Intellectual Property and Human Rights*, UN Doc E/CN.4/SUB.2/RES/2001/21 (16 August 2001), United Nations High Commissioner for Human Rights, *Report of the High Commissioner for Human Rights on the Impact of the TRIPS Agreement on Human Rights*, UN Doc. E/CN.4/Sub.2/2001/13 (27 June 2001), World Trade Organization Ministerial Conference, "Declaration on the TRIPS Agreement and Public Health," WT/MIN (01)/DEC/2

The application of the aforementioned principles, rules, and approaches creates a root of unresolved debate in terms of substances of GATS obligations, especially on how to make sure that legal protection for developing countries is successfully delivered. Those debates are marked by applications of the MFN and national treatment principles.<sup>56</sup> Although the MFN and national treatment principles apply unconditionally and automatically, there are certain exemptions that are fairly determined pursuant to Article XIV GATS. In this regard, developed countries often create an unfair application of the MFN and national treatment exemptions, excluding the application of Article XIV GATS. They are reluctant to give other members (developing countries) a "free ride" to enter their markets by applying non-trade-related barriers and provisional anti-dumping duties.<sup>57</sup> These measures contradict to the MFN and national treatment principles because they apply the reciprocity principle. However, viewed from the decision-making process in the GATS' market access when the creation of GATS rules applies the "built-in agenda" principle under Articles VI, X, XIII, XV and XIX, rules in energy and energy-related services are expanded considerably redefining legal protection enjoyed by developing countries.<sup>58</sup> This expansion, rather than a reduction of the rules, creates an imbalance between rich (developed countries) and poor (developing countries) and creates inequality as the root of discrimination.<sup>59</sup> Furthermore,

(World Trade Organization Ministerial Conference, Doha, 14 November 2001), The United Nations High Commissioner for Human Rights, Resolution 2002/28, *Globalization and Its Impacts*.

James Nadumpara, "Energy Security and the WTO Agreements" in *Trade, the WTO and Energy Security*, Sajal Mathur (New Delhi: IIFT, 2014), 15.

<sup>&</sup>lt;sup>57</sup> Christopher T. Curtis, "Book Review, Developing Countries in the GATT Legal System by Robert E.Hudec," *North Carolina Journal of International Law* 13, no. 2 (1988): 399, UNCTAD, *Energy Related Issues from the Trade and Development Perspective*, TD/B/C.I/2 (8 March 2009).

<sup>&</sup>lt;sup>58</sup> Andrey A. Konoplyanik, "Russia and the Third EU Energy Package: Regulatory Changes for Internal EU Energy Markets in Gas and Possible Consequences for Suppliers (Including Non-EU Suppliers) and Consumers," *International Energy Law Review*, no. 8 (2011): 327-338, Jessica C. Lawrence, "The EU in the Mirror of NPE: Normative Power Europe in the EU's New Generation Trade and Investment Agreements" in Csongor István Nagy, ed., *World Trade and Local Public Interest: Trade Liberalization and National Regulatory Sovereignty* (Berlin: Springer Nature, 2002), 35.

<sup>&</sup>lt;sup>59</sup> The reluctance of developed countries in balancing the opportunity of economic development has a very long history in decision making process at international level. For example, in 1974 the UN General Assembly adopted by consensus on 1 May the *Declaration on the Establishment of a New International Economic Order*, UNGA Res. 3201 (S-VI) and *Declaration on Programme of Action on the Establishment of a New International Economic Order*, UNGA Res. 3202 (S-VI), which give more proportion in the development between developed and developing countries, but Industrialized countries (developed countries) showed their discontent by registering reservations, see ILM 13 (1974), at 744. Furthermore, the creation of the Charter of Economic Rights and Duties of States on 12 December 1974, UNGA Res. 3281 (XXIX),

the expansion of rules increases capacity gaps between governments and their citizens in regards to where governments must meet their citizen needs and must continue sustainable and equitable development of energy and energy-related services utilities in the domestic sphere. This condition breaches human rights standards applicable to right development, although the legal frameworks in GATS highlight equality between developed and developing countries, such as the existence of technical assistance, respect for national policy objectives, and flexibility to open specific sectors in the national decision-making process by developing countries.

Recognizing the rights of member states to regulate and to introduce new regulations on the supply of services within their territories are the best legal frameworks construed by the GATS's preamble, in order to meet national policy objectives and given asymmetries existing with respect to the degree of development of services regulation in different countries in particular need of developing countries to exercise this right.<sup>62</sup> The rationale derived from

Report A/9946, originally intended to be binding, revealed the fundamental differences between North and South but sixteen states representing fifteen major OECD countries did not vote in favor of the Charter. R.L. Lawrence, "A Special Session of the General Assembly Rethinks the Economic Rights and Duties of States," *American Journal Of International Law* 85 (1991): 192-200, Maciej M. Sokolowski, "Regulation in the European Electricity Sector," *International Energy Law Review*, no. 2 (2017): 3, Koen Byttebier, *The Unfree Market and the Law: On the Immorality of Making Capitalism Unbridled Again* (Switzerland: Springer Nature, 2018), 64. 60 World Development Movement, *The GATS Debate: A Response to Common Arguments Used against the Critics of the General Agreement on Trade in Services* (2001), 1.

- Rafael Leal-Arcas, Solutions for Sustainability: How the International Trade, Energy and Climate Change Regimes Can Help (Switzerland: Springer Nature, 2019), 284, World Trade Organization, European Union and its Member States—Certain Measures Relating to The Energy Sector: Report of The Panel, WT/DS476/R (10 August 2018), 10-15 & 30, World Trade Organization, European Union and its Member States—Certain Measures Relating to The Energy Sector: Request for The Establishment of a Panel by The Russian Federation, WT/DS476/2 (28 May 2015), 1.
- and Article IV of the GATS. Paragraph 2: "Wishing to establish a multilateral framework of principles and rules for trade in services with the view to the expansion of such trade under conditions of transparency and progressive liberalization and as a means of promoting the economic growth of all trading partners and the development of the developing countries; Paragraph 3: "Desiring the early achievement of progressively higher levels of liberalization of trade in services through successive rounds of multilateral negotiations aimed at promoting the interests of all participants on a mutually advantageous basis and at securing an overall balance of rights and obligations, while giving due respect to national policy objectives; Paragraph 4: "Recognizing the right of Member to regulate, and to introduce new regulations, on the supply of services within their territories in order to meet national policy objectives and, given asymmetries existing with respect to the degree of development of services regulations in different countries, the particular need of developing countries to exercise the right; and Paragraph 5: "Desiring to facilitate the increasing participation of developing countries in

economic choices are the best breakthroughs in assessing GATS' special legal protection for developing countries by balancing elements of legitimate aims, authority, and available resources to conduct negotiations led by developed countries, while at the same time, elements of understanding, resources, and risks faced by developing countries shall be opened for lobbies and talks. <sup>63</sup> As a result, proportionality, factuality, and non-discrimination emerge as directing indicators to conduct negotiation on these services aiming at achieving meaningful participation and legitimacy. <sup>64</sup> Thus, developing countries, such as Indonesia, Venezuela, and Cuba have been able to use this legal standing to uphold their national development policies by giving more precautionary measures from those that have advanced technology and modalities. <sup>65</sup> Inequality in terms of technology and capitals and inappropriate participation from local energy and energy-related service providers can be used as real original intents to conduct ongoing negotiations by enriching available SoC lists for future negotiation. <sup>66</sup>

GATS' rules and principles are aimed to empower predictability and accessibility of energy and energy-related services provided by developing countries since they have different capacity and modalities.<sup>67</sup> Lack of transparency in their national rules and regulations on the availability and accessibility of modes of supply for energy and energy-related services is

trade in services and the expansion of their service export including, *inter alia*, through the strengthening of their domestic service capacity and its efficiency and competitiveness.

<sup>&</sup>lt;sup>63</sup> Frederico Ortino, *Basic Legal Instruments for the Liberalization of Trade: A Comparative Analysis of EC and WTO Law* (Portland: Hart Publishing, 2005), 121 – 371, Joost Pauwelyn, "The Role of Public International Law in the WTO: How Far Can We Go?" *The American Journal of International Law* 95, no. 3 (2001): 137, Michael Hahn and Kateryna Holzer, "Special Agreements and Energy: Filling the Gaps" in *Emerging Issues in Sustainable Development: International Trade Law and Policy Relating to Natural Resources, Energy, and the Environment*, Mitsuo Matshushita and Thomas J. Schoenbaum, eds. (Japan: Springer, 2006), 264.

<sup>&</sup>lt;sup>64</sup> Van den Bosche, *The Law and Policy*, 39, World Trade Organization, *European Union and its Member States—Certain Measures Relating to The Energy Sector: Communication from The Chairperson of The Panel*, WT/DS476/4 (22 August 2016), 1.

<sup>&</sup>lt;sup>65</sup> Michael J. Trebilcock and Joel Trachtman, *International Trade Law* (Cheltenham: Edward Elgar Publishing, 2020), 131, Richard Posner, *Economic Analysis of Law* (Groningen: Wolters Kluwer, 1986), 12.

<sup>&</sup>lt;sup>66</sup> Patrick Low, Patrick Mamdough and Evan Rogerson, *Balancing Rights and Obligation in the WTO, A Shared Responsibility* (Sweden: Government Office of Sweden, 2018), 21-23, Klaus Mathis and Bruce R Huber, *Energy Law and Economics* (Lucerne: Springer, 2017), 211.

<sup>&</sup>lt;sup>67</sup> UNCTAD, Energy Services in International Trade: Development Implication, TD/B/COM/.01/EM.16/2 (18 June 2001), 18-19; Delia Evalia Bruno and Dmitry A Ruban, Energy Production and Geo-conservation (Berlin: Encyclopedia of Mineral and Energy Policy, Springer Verlag, 2014), 2.

always complained by developed countries and their private companies.<sup>68</sup> Barriers to market access and discrimination are two legal arguments hindering progressive liberalization in these sectors claimed by developed countries.<sup>69</sup> Potential risks for loss investment are imminent statements and have become common concerns, directing negotiation to be more open and liberalized.<sup>70</sup> Factually, suppliers and producers need market access and guarantee for national treatments when operating their services in the domestic market of developing countries. Therefore, predictability, efficiency, and simplification of procedures have been placed as legitimated aims authoritative driving forces for negotiations, in order to achieve multilateral competency based on competence for energy and energy-related services' governance.<sup>71</sup>

Indicators of need and situation determine the strength and weakness of legal protection frameworks. They are derived from national interests, resilience and positions of ideology, politics, social, cultural, and economics of member states. This is particularly evident in Southeast Asian countries, especially in areas where the scope of energy and energy-related services activities are presented in their lists. To example, Singapore also welcomed to harmonize its domestic service regulations in order to reduce administrative costs and to improve its domestic market environment. Balance and proportion are placed as ideas of justice and purposiveness for energy and energy-related services construed in the GATS rules for developing countries legal protection creating symmetrical market access and national treatments with developed countries. This would be in line with Trachtman, Posner, Djiwandono and Juwana's stipulations that international market economy is built by give and take transaction of interests creating agreed norms and mechanisms as law.

<sup>68</sup> Pierre Sauve, "Been There Not Yet Done That, Lessons and Challenges in Service Trade" in *GATS and the Regulations of International Trade in Services*, Marion Pannizon and P. Sauve, eds. (Cambridge: Cambridge University Press, 2008), 599.

<sup>&</sup>lt;sup>69</sup> L.D. Danny Harvey, *Energy Efficiency and the Demand for Energy Services* (London: Earthscan, 2010), 331.

<sup>&</sup>lt;sup>70</sup> Csongor Istvan Nagy, ed., World Trade and Local Public Interests, Trade Liberalization and National Regulatory Sovereignty (Switzerland: Springer International, 2020), 2-3.

<sup>&</sup>lt;sup>71</sup> Shirley Hansen, *Manual for Intelligent Energy Services* (Georgia: Fairmont Press, 2002), 1 and 25, N. Gorodnova, *et al.*, "Energy Service Sector, Problem of Government Regulation," (proceedings of the Second International Conference on Energy Production and Management, 2016), 45-46.

<sup>&</sup>lt;sup>72</sup> Abrenica and Navvaro, "An Assessment of Trade," 3-5.

<sup>&</sup>lt;sup>73</sup> "World Trade Organization, Singapore Welcomes WTO Deal on Services Domestic Regulation," Singapore Business, accessed 23 December 2022, https://sbr.com.sg/economy/news/singapore-welcomes-wto-deal-services-domestic-regulation.

<sup>&</sup>lt;sup>74</sup> Jeffrey L. Dunoff and Joel P. Trachtman, *Ruling the World, Constitutionalism, International Law, and Global Governance* (Cambridge: Cambridge University Press, 2009), 178, Machiel Mulder, *Regulation of Energy Market, Economic Mechanism and Policy Evaluation* (New

Increasing capacity rom developing countries in terms of commercial access to technology, distribution, and liberalized market access for effective modes of supplies is the key to a successful implementation of Article IV GATS. This intention has created practical guidelines for developing countries when they offer their commitments within GATS frameworks, such as being subject to the supremacy of law, guaranteeing equality before the law, fairness in the application of the law, separation of power, participation in the decision-making process, legal certainty, avoidance of arbitrariness, and transparency. On the other hand, developed countries tend to apply their comparative advantages in order to synchronize GATS rules and principles. In line with this vis-a-vis position, Indonesia, Venezuela, and Cuba have engaged with these principles, where they offered commitments in their special lists and placed them as good examples of legal protection enjoyed by developing countries.

Indonesia gave its specific lists of commitment on 25 March 2004. It consists of wide ranges of energy and energy-related services in five specific sectors, such as renewable and unrenewable primary energy sectors; secondary and tertiary energy and energy-related services for their transformation, distribution and transportation services; commercial energy services for

York: Springer, 2021), 315, Massimiliano Cali, Karen Ellis and Dirk Willem te Velde, "The Contribution of Services to Development and the Role of Trade Liberalization and Regulation," (Working Paper 298, London: Overseas Development Institute, 2008), 2, Joel P Trachtman, *The Future of International Law, Global Government* (Cambridge: Cambridge University Press, 2014), 193, Michael J. Trebilcock and Joel Trachtman, *International Trade Law* (Cheltenham: Edward Elgar Publishing, 2020), 131, Richard Posner, *Economic Analysis of Law* (Groningen: Wolters Kluwer, 1986), 12.

<sup>&</sup>lt;sup>75</sup> UNCTAD, *Negotiating Liberalization of Trade in Services for Development* (Geneva: United Nations, 2020), 11.

Tham Siew Yean, "ASEAN Trade in Services Agreement (ATISA): Advancing Services Liberalization for ASEAN?' Perspective 54, no. 3, accessed 28 April 2020, available at https://www.iseas.edu.sg/wp-content/uploads/pdfs/ISEAS\_Perspective\_2019\_54.pdf., "ASEAN Single Aviation Market: One Sky, One Region," Association of Southeast Asian Nations, accessed 16 April 2020, https://www.asean.org/storage/images/2015/October/outreach-document/Multilateralagreement/Edited%20ASAM-2.pdf., Alan Khee-Jin Tan, "ASEAN's Single Aviation Market: Many Miles to Go," Centre for Asia Pacific Aviation, published 13 March 2013, https://centreforaviation.com/analysis/reports/aseans-single-aviation-market-many-miles-to-go-100831., "Factsheet on ASEAN Economic Community (AEC)," ASEAN, accessed 17 October 2020, http://asean.org/storage/2012/05/7c.-May-2017-Factsheet-on-AEC. pdf., Rodolfo Severino, Southeast Asia in Search of an ASEAN Community: Insight from the Former ASEAN Secretary-General (Institute of Southeast Asian Studies, 2006).

<sup>&</sup>lt;sup>77</sup> Christopher F. Thornberg, *et.al.*, "Failure of Trade Liberalization: A Study of the GATS Negotiation," *Journal of International Business and Law* 10, no. 2 (2011): 344, C. Ozden and E. Reinhardt, "Unilateral Preference Programs: The Evidence" in *Economic Development and Multilateral Trade Corporation*, SJ Evenett and BM Hoekmann, eds. (London: Palgrave Macmillan, 2006), 190.

energy grocery, energy supply and commission for agents; professional services of expertise, human resources and research and development; and other activities which haven't included in the previous categories. <sup>78</sup> Indonesia takes a position that is in line with Article IV GATS: that the enjoyment of energy and energy-related services through the market shall be conducted in an equal manner to the extent of achieving common prosperity, especially in secondary and tertiary services based upon national sovereignty and national development of its respective development policy. Here, Indonesia commits to negotiate all areas of services on the implementation and tactical levels of transformation, transformation, and distribution of energy, while Indonesia increases its knowledge-based competency by continuously restructuring, reorganizing, and institutionalizing efficiency and simplification of procedures between central and local governments in order to sustain the global energy system and energy transition.<sup>79</sup>

Venezuela also took a similar approach from Indonesia, where governments play important actors by deliberating six specific lists of commitments as follows: negotiation shall be guided by intention that energy services shall be enjoyed by community and shall be directed to achieve national welfare and national economic growth; market access resulted from the negotiation shall increase energy supply from all members; commitments on energy services sectors shall improve knowledge-based competency from developing countries; negotiation shall be directed to empower developing countries in their capacity to improve their understanding and reducing their potential risks and vulnerability in liberalized market; negotiation shall also be guided by flexibility in terms of national precondition and existing policies on energy production, transformation and transportation; and negotiation shall also give space for national existence of supply chains of micro and small national enterprises.80 Specific and flexibility principles are introduced in order to clarify primary (core), secondary, tertiary energy, and energy-related services. Most importantly, they are placed as leading sectors to whom all WTO member states may schedule, receive, and offer negotiations with Venezuela.81

<sup>&</sup>lt;sup>78</sup> WTO, Communication from Indonesia, *Proposal on Classification of Energy Services*, S/CSC/W/42/Rev.1/Corr.1 (25 March 2004).

<sup>&</sup>lt;sup>79</sup> "Indonesia Calls for Energy Transition in G 20", Ministry of Energy and Mineral Resources, accessed 5 January 2023, https://www.esdm.go.id/en/media-center/news-archives/-luncurkan-transisi-energi-g20-indonesia- ajak-capai-kesepakatan-global-percepatan-transisi-energi.

<sup>&</sup>lt;sup>80</sup> UNCTAD, Negotiating Liberalization of Trade in Services for Development (Geneva: United Nations, 2020), 7, WTO, General Agreement on Trade in Services: An Introduction (Geneva: WTO Trade in Services Division, 2013), 27.

<sup>&</sup>lt;sup>81</sup> UNCTAD, Energy Services in International Trade: Development Implications, TD/B/COM.1/EM.16/2 (18 June 2001), 15.

Cuba also implemented a similar procedure by upholding issues of uncertainty for energy and energy-related services on existing WTO and GATS laws. So Government-central roles are highlighted in order to mirror energy as basic needs and national sovereignty would be translated into domestic laws, rules, policies, programs, and actions aiming at increasing domestic capacity to manage, produce, and distribute energy. Cuba urged that negotiations shall be directed to open market access, to sustain energy supply, and to affirm developing countries special treatments compatible with Article IV GATS. Furthermore, it also emphasizes that negotiations shall also be directed to open rooms for capacity-building on technology of energy production, distribution, and transportation facilitated by e-commerce. Finally, Cuba gives a very strong position, questioning what benefits can be obtained from the ongoing negotiations enjoyed by developing countries. In its view, modern and reliable energy supplies have to reach all stakeholders that are provided by national or foreign energy and energy-related companies.

#### IV. CURRENT NEGOTIATION

After discussing the issue of legal protection, another important topic that needs to be addressed is the current negotiations performed by developing countries. Generally, there are three positions performed by developing countries in current negotiations. Firstly, there have not been as many values attained from trade in services on energy and energy-related services, especially in the third and fourth modes of service supplies. Developed countries have used advanced technology to facilitate their activities based on their advanced knowledge-based services, rather than traditional activities carried out by developing countries. 84 Secondly, transfer of technology and technical assistance are required before expanding and deliberating area and scope of market access on energy and energy-related services that is needed by developing countries. 85 Thirdly, massive efforts on limitation to access

<sup>82</sup> WTO, Communication from Cuba, Negotiating Proposal on Energy Services, S/CSS/W/144 (22 March 2002).

<sup>&</sup>lt;sup>83</sup> D. Perez and Y. Gomez, *Cuba: A Country Profile on Sustainable Energy Development* (Vienna: International Atomic Energy Agency Publication, 2008), 153.

<sup>&</sup>lt;sup>84</sup> H. Chang, *Why Developing Countries Need Tariffs: How WTO NAMA Negotiations Could Deny Developing Countries' Right to A Future* (Geneva: South Center, 2005), xii-xiii, Adel Strydom, Josephine Keviti Musango, and Paul K Currie, "Connecting Energy Services, Carrier and Flow: Rethinking Energy Metabolism in Cape Town, South Africa," *Journal of Energy Research and Science* 60 (2020): 6-7, Organization for Economic Co-operation and Development, "Special and Differential Treatment Under the GATS," (OECD Trade Policy Papers, no. 26, January 2006).

<sup>85</sup> Chantal Thomas and Joel Trachtman, Developing Countries and the WTO Legal System

of technology diffusion and knowledge sharing on energy production and distribution from developed countries to developing countries have directed developing countries to focus on increasing their capacities on this matter, while simultaneously ignoring other determinant factors for better capacity building on energy and energy-related services. <sup>86</sup> The aforementioned positions have caused defensive vs. offensive approaches for market access, process-based vs. result-based negotiations, and product-based orientation vs. infrastructure-based development between developed and developing countries. <sup>87</sup>

Derived from the aforementioned patterns, energy and energy-related services have become international concerns on how to ensure access to affordable, reliable, sustainable and clean energy for all under the sustainable development goals of the United Nations. This commitment is in line with the global concern of climate change and international efforts to reduce carbon dioxide in trade liberalization, such as what Japan and Scandinavian countries like Finland have been actively involved. Even though energy and energy-related services contributes to economic development, there have been no specific institutions, whose function to administer offers or commitments from member states, that contribute to low commitment as binding legal instruments. Monopolies and subsidies have been practiced with an assumption that they can hardly be negotiated since these services are assumed as public services provided by authorities. The WTO admits this slow negotiation by stipulating facts that "business interests in trade

(Oxford: Oxford University Press, 2009), 5-6, Rudolf Adlung, et al., Fog in GATS Commitments-Boon or Bane? (Economic Research and Statistics World Trade Organization, 2011), 3.

Resource Rich Country," *The Journal of International Trade and Economic Development* 16, no. 2 (2007): 272, Office of Technology Assessment, *Energy in Developing Countries*, OTA-E-486 (Washington, DC: U.S. Government Printing Office, 1991), 30.

Nelson and Taglioni, "A Quick Guide," 6-7, UNCTAD, Energy Services in International Trade: Development Implications, TD/B/COM.1/EM.16/2 (18 June 2001), 15.

<sup>&</sup>lt;sup>88</sup> "Ensure access to affordable, reliable, sustainable and modern energy for all," United Nations, accessed 10 December 2022, https://sdgs.un.org/goals/goal7.

<sup>&</sup>lt;sup>89</sup> Delia Evalia Bruno and Dmitry A Ruban, *Energy Production and Geoconservation* (Berlin: Encyclopedia of Mineral and Energy Policy, Springer Verlag, 2014), 2, Monkelbaan, *Trade in Sustainable*, 7, Muhammad Ijaz Latif, "Japan and the WTO's Agreement on TRIMs and GATS," *Pakistan Journal of Social Sciences (PJSS)* 31, no. 2 (2011): 267, Parker, *Energy Production and Services*, 5.

<sup>&</sup>lt;sup>90</sup> Maude Barlow, "The Last Frontier: GATS," *Review of African Economy* 28, no. 87 (2001): 115, Stephen W. Schill, "Multilateralizing Investment Treaties Through Most Favoured Nation Clause," *Berkeley Journal of International Law* 27, no. 2 (2009): 496-501.

<sup>&</sup>lt;sup>91</sup> Schill, "Multilateralizing Investment Treaties," 496-501, Harvey, *Energy Efficiency and the Demand*, 247-331, Thomas Cottier, *et al.*, "Energy in WTO and Policy," (Working Paper Number 25, 2009), 5-6.

liberalization was strong, and consumer benefits were apparent, and so paid little attention to the energy services sector". <sup>92</sup> As a result, diversification on secondary and tertiary energy and energy-related services are less developed since the SoC and current negotiations have been mainly focused on primary energy and energy-related services. <sup>93</sup>

There are two reasons for defects to reach an international agreement on energy and energy-related services. He first reason relies on conflicts over the best means to achieve the most appropriate values of efficiency among Member States. Here, conflicts are, *vis-a-vis*, on how to achieve efficiency by cumulatively facilitating cooperation and rationalization of general services applicable to transportation of fuels by pipelines, technical and services analysis, incidental mining, scientific and consultation services, and maintenance and utilities cares in highly competitive market. The second reason is difficulty on choosing long-term market efficiency, but by sacrificing the pursuit of short-term economic goals, especially from developing countries. Therefore, as a continuous process to reach a multilateral agreement, choices based upon the level of national development should be prudently taken into consideration in that energy and energy related services negotiation by developing countries.

- <sup>92</sup> World Trade Organization Council for Trade in Services, *Communication from the United States*, S/CSS/W/24 (2000), 2, WTO, *The General Agreement on Trade in Services an Introduction, Trade in Services Division* (2013), 1.
- <sup>93</sup> WTO, World Trade Statistical Review 2018 (Geneva: WTO, 2019), 42, UN Department of Economic and Social Affairs, 2018 International Trade Statistics Yearbook Volume II Trade by Product (New York: United Nations, 2019), 129, Werner Antweiler, "Cross-border Trade in Electricity," Journal of International Economics 101 (2016): 42.
- <sup>94</sup> Deepak Nayyar, *Catch Up Developing Countries in the World Economy* (Oxford: Oxford University Press, 2013), 98, Council for Trade in Services, *Modalities for the Special Treatment for Least-Developed Country Members in the Negotiations on Trade in Services*, TN/S/13 (5 September 2003).
- <sup>95</sup> WTO, Energy Services Background Note by the Secretariat, Council for Trade in Services, S/C/W/52 (9 September 1998), 10, Chamber of Commerce, Negotiations on Maritime Transport in the WTO General Agreement on Trade in Services (GATS) (Paris: International Chamber of Commerce, 2001), 2, Rafael Leal-Arcas and Ehab S. Abu Gosh, "Energy Trade as a Special Sector in the WTO: Unique Features, Unprecedented Challenges and Unresolved Issues," Indian Journal of International Economic Law 6, no. 1 (2014): 13.
- <sup>96</sup> WTO, World Trade Report 2019 The Future of Services Trade (Geneva: WTO, 2019), 22, WTO, Energy Services Background Note by the Secretariat, Council for Trade in Services, S/C/W/52 (9 September 1998), para. 72, WTO, Energy Services Background Note by the Secretariat, Council for Trade in Services, S/C/W/52 (9 September 1998), para. 3, Ervin Lazlo, et al., The Objectives of the New International Economic Order (New York: Pergamon Press, 1981), xvii.
- <sup>97</sup> The geographical pattern of trade carried by ships has not changed significantly between 1997 and 1999. Developing countries account for over 50% of the goods loaded, and developed countries for around 43%, see World Trade Organization, TN/S/W/11, 3 March 2003 (03-1228), downloaded on 14 November 2005, http://www.docsonline.wto.org/GEN\_highLightBottom.

Because there is no multilateral agreement on these sectors, the basic legal framework for the application of energy and energy-related services is the application market access commitments pursuant to Article XVI of the GATS, which have been listed in the country scheduled by Member States. Because of this wide range of commitments, the forthcoming negotiations for the application of the 'built-in agenda' principle must be emphasized on the depths of the given commitments, the scope of activities, and the involvement of countries aiming to abandon remaining measures that are restrictive of trade, while ensuring interests of markets with affirmation to legal protection enjoyed by developing countries.<sup>98</sup>

After observing the pattern of negotiations currently performed by countries, one of the main problems identified in the current negotiation is the unequal power between developed and developing countries. Due to the different capacities between countries, developed countries are unwilling to conduct trades on energy and energy-related services with developing countries. Although the principle of equality and legal protection governs the WTO and GATS, it is far from ideal in practice. The current legal regime of WTO and GATS does not have any legal binding instrument to force developed countries. Therefore, an enforcing negotiation mechanism is needed and should be proposed.

Why would an enforcing negotiation mechanism be beneficial for developing countries? In the current status quo, negotiation between developed and developing countries are conducted bilaterally without an institution supervising them. This means that during such negotiations, the country with more power shall overpower and suppress their needs over the weaker country. From this premise, the proposal to redesign the negotiation process of the WTO has been discussed, 99 specifically concerning on trade of energy and energy-related services. This article, however, shall propose to adopt the "less than unanimity" procedure.

\_

asp?qu=+%28+%40meta%5FSSymbol+S%FCC.htm. Another aspects of consideration should be on reviewing given commitments to the specific schedule. In particular, aspects of transfer of technology, obligation to appoint local agents and the stipulation of tax between foreign and national fleet companies must be reviewed by Government in future negotiation. See General Agreement GATS/SC/43 at http://www.wto.org/english/tratop\_e/serve\_e/serve\_commitments\_e.htm.

<sup>&</sup>lt;sup>98</sup> Charlotte Sieber-Gasser, *Developing Countries and Preferential Service Trade* (Cambridge: Cambridge University Press, 2016), 1, Sonia E. Rolland, *Development at the World Trade Organization* (Oxford: Oxford University Press, 2012), 78.

<sup>&</sup>lt;sup>99</sup> Sonia E. Rolland, "Redesigning the Negotiation Process at the WTO," *Journal of International Economic Law* 13, no. 1 (2010): 65.

According to this procedure, a single undertaking approach shall be used in which individual Members may opt out from the negotiation. The objective of the "less than unanimity" approach is to give member states, particularly developing countries, the opportunity to participate in negotiations, even if they opt out of the commitment. In this scenario, they commit to the agreement but are unable to implement further, due to capacity constraint, and an evaluation shall be conducted for the end of the negotiation process. The result of this mechanism is to provide an opportunity to developing countries that do not have a strong negotiation capacity without facing commitment issues, due to their economic background.

In addition to the above proposal, past energy and energy-related negotiations should be used as a lesson going forward. During the Energy Charter Treaty (ECT) negotiation, one of the concerns among debating states was the unawareness of the charter and their provision implications. During the negotiation, CIS members faced challenges on the technicalities of the agreement despite being provided with energy and energy-related workshops. 100 From this occasion, it was to be proposed that the WTO should provide member states that are interested in energy and energy-related negotiation, particularly developing countries, technical guidance prior to the negotiation.

#### V. CONCLUSION

Trade liberalization in services is determined by dominant actors: producers, consumers and governments, as well as market mechanisms: markets and regulations, capitals and/or modalities. As specific area of services, energy and energy-related services also work in line with these determinant actors and factors. They are aimed to achieve efficient markets for energy production, transportation, and distribution globally. Identification of actors, problems and their roles are significant to justify whether energy and energy-related services liberalization promote, threaten, or facilitate capacity building for those who have vulnerable governance, unsustainable programs and actions in their domestic rules, regulations and institutionalizations, especially in developing countries. Furthermore, by identifying those components with their specific roles upholding corpus of services liberalization enshrined in the GATS rules and principles, energy and energy-related services negotiation can facilitate to make decisions in favour to national and international demands in

<sup>&</sup>lt;sup>100</sup> Thomas W. Walde, "European Energy Charter Conference: Final Act, Energy Charter Treaty, Decisions and Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects," *International Legal Materials* 34, no. 2 (1995): 362.

trade in services. This also includes the development process, such as active, free and meaningful participation in development, fair distribution of benefits, accountability, non-discrimination, equality, and interdependence, self-determination over natural resources and natural wealth (collective rights).

Consequently, governments have played as a central actor in the process of trade liberalization of energy and energy-related services and development by bridging the interests among their citizens, the market, and international demands. In the developing countries' contexts and perspectives who have a chokehold relationship between governments and their citizens (associations and legal energy and energy-related services entities), as well as the improper regulations resulting from this, strong pressure from the liberalization of trade in these services need to be communicated in order to increase elements of understanding. This helps minimize potential risks and properly map all available resources, such as basic modalities to conduct negotiations and to offer their specific commitments. If the developing countries' governments are more open, those threats can be minimized while meaningful participation will be increased especially on their policies to energy sectors.

Internal consolidation is the only way out to remedy capacity gaps between developed and developing countries. They have to be aware that they cannot erase this gap, but they can minimize its threats and limitations. This approach is a step towards liberalized trade in services under GATS, particularly in energy and energy-related services because it cannot be avoided. In this situation, governments from developing countries In this situation, governments from developing countries can take another look and strategize on how to move forward more efficiently. Do all developing countries government realize and reflect this willingness when they entered their SoC? As a result, Trachtman, Posner, and Djiwandono's arguments are relevant in these matters in order to reduce capacity gaps owned by developing countries in conducting multilateral economic transaction on energy and energy-related services.

#### **BIBLIOGRAPHY**

#### **Journal Articles and Periodicals**

- Adlung, Rudolf. "Service Negotiations in the Doha Round: Lost in Flexibility." *Journal of International Economic Law* 9, No. 4 (2006): 865-893.
- Antweiler, Werner. "Cross-border Trade in Electricity." *Journal of International Economics* 101 (2016): 42-51.
- Barlow, Maude. "The Last Frontier: GATS." *Review of African Economy* 28, no. 87 (2001): 112-119.
- Curtis, Christopher T. "Book Review, Developing Countries in the GATT Legal System by Robert E. Hudec." *North Carolina Journal of International Law* 13, no. 2 (1988): 399-407.
- Dunoff, Jeffrey L. and Joel P. Trachtman. "Economic Analysis of International Law." *The Yale Journal of International Law* 24, no. 1 (1999): 1-56.
- Fell, Michael James. "Energy Services: A Conceptual Review." *Energy Research and Social Science* 27 (2017): 129-140.
- Frank, Susan D. "Development and Outcomes of Investment Treaty Arbitration." Harvard International Law Journal 50, no. 2 (2009): 435-489.
- Guest, Krysti Justine. "Exploitation under Erasure: Economic, Social and Cultural Rights Engage Economic Globalization." *Adelaide Law Review* 19, no. 73 (1997): 73-93.
- Hoekman, Bernard. "Developing Countries and the WTO Doha Round: Market Access, Rules and Different Treatment." *Journal of Economic Integration* 19, no. 2 (2004): 205-229.
- Howse, Robert. "Democracy, Science, and Free Trade: Risk Regulation on Trial at the World Trade Organization." *Michigan Law Review* 98, no. 7 (2000): 2329-2357.
- Konoplyanik, Andrey A. "Russia and the Third EU Energy Package: Regulatory Changes for Internal EU Energy Markets in Gas and Possible Consequences for Suppliers (Including Non-EU Suppliers) and Consumers." *International Energy Law Review*, no. 8 (2011): 327-338.
- Latif, Muhammad Ijaz. "Japan and the WTO's Agreement on TRIMs and GATS." *Pakistan Journal of Social Sciences (PJSS)* 31, no. 2 (2011): 261-271.
- Lawrence, Charter. R.L. "A Special Session of the General Assembly Rethinks the Economic Rights and Duties of States." *American Journal Of International Law* 85 (1991): 192-200.
- Leal-Arcas, Rafael and Ehab S. Abu Gosh. "Energy Trade as a Special Sector in the WTO: Unique Features, Unprecedented Challenges and Unresolved Issues." *Indian Journal of International Economic Law* 6, no. 1 (2014): 1-53.
- Leal-Arcas, Rafael and Ehad Abu-Grosh. "Energy Services as Special Sector in the WTO: Uniue Features, Unprecedented Challenges, and Unresolved Issues." *The Indian Journal of Economic International Law* 6, No. 1 (2014): 1-53.
- Lwanda, George. "Prioritising Energy Services in Southern Africa." *South African Journal of International Affairs* 8, no. 1 (2009).
- Marchetti, Juan A. and Petros C. Mavroidis. "What Are the Main Challenges for the GATS Framework? Don't Talk About Revolution." *European Business*

- *Organization Law Review* 5 (2004): 546-547.
- Onile, Obiodun E., et al. "Uses of Digital Twins Concept for Energy Services, Intelligent Recommendation System and Demand Side Management: A Review." *Energy Report* 7, no. 1 (2021): 997-1015.
- Pauwelyn, Joost. "The Role of Public International Law in the WTO: How Far Can We Go?" *The American Journal of International Law* 95, no. 3 (2001): 535-578.
- Petersmann, Ernst-Ulrich. "Constitutionalism and International Organization." Northwestern Journal of International Business 17 (1996).
- Petersmann, Ernst-Ulrich. "How to Constitutionalize International Law and Foreign Policy for the Benefit of Civil Society?" *Michigan Journal of International Law* 20, no. 1 (1998).
- Petersmann, Ernst-Ulrich. "Human Rights and International Economic Law in the 21st Century: The Need to Clarify Their Interrelationship." *Journal of International Economic Law* 4, no. 1 (2001).
- Petersmann, Ernst-Ulrich. "Legal, Economic and Political Objectives of National and International Competition Policies: Constitutional Functions of WTO "Linking Principles" for Trade and Competition." *New England Law Review* 34 (1999): 145-162.
- Petersmann, Ernst-Ulrich. "The WTO Constitution and Human Rights." *Journal of International Economic Law* 3, no. 5 (2000): 19-25.
- Prieto, Francisco D. "Service at WTO: A Bumpy Road." *Estudios Internacionale*, Anno 38, no. 150 (2005).
- Rolland, Sonia E. "Redesigning the Negotiation Process at the WTO." *Journal of International Economic Law* 13, no. 1 (2010): 65-110.
- Samman, Hatem and Sheikh Shahnawaz. "The GATS And Liberalization in a Natural Resource Rich Country." *The Journal of International Trade and Economic Development* 16, no. 2 (2007): 271-292.
- Schill, Stephan W. "Multilateralizing Investment Treaties Through Most Favoured Nation Clause." Barkeley Journal of International Law 27, no. 2 (2009): 496-501.
- Sokolowski, Maciej M. "Regulation in the European Electricity Sector." *International Energy Law Review*, no. 2 (2017).
- Staubaugh, Robert. "Energy Future and International Trade." *Journal of International Business Study* 12, no. 1 (1981): 23-30.
- Strydom, Adel, Josephine Keviti Musango, and Paul K Currie. "Connecting Energy Services, Carrier and Flow: Rethinking Energy Metabolism in Cape Town, South Africa." *Journal of Energy Research and Social Science* 60 (2020): 1-19. DOI: https://doi.org/10.1016/j.erss.2019.101313.
- Thornberg, Christopher F., et.al. "Failure of Trade Liberalization: A Study of the GATS Negotiation," *Journal of International Business and Law* 10, no. 2 (2011): 325-348.
- United Nations Economic and Social Commission for Asia and Pacific. "Energy Services for Sustainable Development in Rural Areas in Asia and the Pacific: Policy and Practice." *Energy Resources Development Series*, no. 40 (2010).
- Walde, Thomas W. "European Energy Charter Conference: Final Act, Energy Charter Treaty, Decisions and Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects." *International Legal Materials* 34, no. 2 (1995): 360-

454.

Yean, Tham Siew. "ASEAN Trade in Services Agreement (ATISA): Advancing Services Liberalization for ASEAN?' *Perspective* 54, no. 3: 1-8. Accessed 28 April 2020, available at https://www.iseas.edu.sg/wp-content/uploads/pdfs/ ISEAS\_Perspective\_2019\_54.pdf.

#### **Books and Book Chapters**

- Abbott, Kenneth W. and Duncan Snidal. "Why States Act Through Formal International Organizations" in *The Politics of Global Governance*, Brian Frederking and Paul F Diehl, eds. London: Lynne-Reiner Publisher, 2005.
- Adlung, Rudolf. et al. *Fog in GATS Commitments-Boon or Bane?* Economic Research and Statistics World Trade Organization, 2011.
- Arup, Christopher. *The New World Trade Organization Agreements: Globalizing Law Through Services and Intellectual Property*. Cambridge: Cambridge University Press, 2000.
- Bashir, Sajitha. Trend in International Trade in Higher Education: Implications and Options for Developing Countries, Washington, D.C.: The World Bank, 2007.
- Bass, Jurgen. "Annex on Movement of Natural Persons, Supplying Services Under the Agreement" in *Max Planck Commentary on World Trade Law: WTO and Services*, Rudiger Wolfrum, Peter Tobias-Stoll, and Clement Faunagle, eds. Martinus Nijhoff Publisher, 2008.
- Bruno, Evalia and Dmitry A. Ruban. *Energy Production and Geo Conservation*. Berlin: Springer Verlag, 2014.
- Byttebier, Koen. The Unfree Market and the Law: On the Immorality of Making Capitalism Unbridled Again. Switzerland: Springer Nature, 2018.
- Cattaneo, Olivier, et al. *International Trade in Services, New Trend and Opportunities for Developing Countries*. Washington DC: The World Bank, 2010.
- Chamber of Commerce. Negotiations on Maritime Transport in the WTO General Agreement on Trade in Services (GATS). Paris: International Chamber of Commerce, 2001.
- Chang, H. Why Developing Countries Need Tariffs: How WTO NAMA Negotiations Could Deny Developing Countries' Right to A Future. Geneva: South Center, 2005.
- Chauduri, Sumanta and Suparna Karmakar. "The Liberalization of Cross-Border Trade in Services: A Developing Country Perspective" in *Opening Market for Trade in Services: Countries and Sectors in Bilateral and WTO Negotiations*, Juan A. Marchetti and Martin Roy. Cambridge: Cambridge University Press, 2008.
- Curley, Robert, ed. *Energy, Past, Present and Future: Renewable and Alternative Energy.* New York: Britanica, 2012.
- Denin, J.F., ed. *Law and Practice of the World Trade Organization, Treaties Booklet* 1, Release 95-1. Oxford: Oxford University Press, 1995).
- Diebold, Nicholas. *Non-Discrimination in International Trade in Services: "Likeness" in WTO/GATS*. Cambridge: Cambridge University Press, 2010).
- Dunoff, Jeffrey L. and Joel P. Trachtman. Ruling the World, Constitutionalism, International Law, and Global Governance. Cambridge: Cambridge University

- Press, 2009.
- Franck, Thomas M. *The Power of Legitimacy Among Nations*. Oxford: Oxford University Press, 1990.
- Fuchs. "General Agreement of Trade in Services: GATS Negotiating History" in *Max Planck Commentary on World Trade Law: WTO and Services*, Rudiger Wolfrum, Peter Tobias-Stoll, and Clement Faunagle, eds. Martinus Nijhoff Publisher, 2008.
- Garside, Ben and Sarah Wykes. *Planning Pro Poor Energy Services for Maximum Impact*. London: International Institute for Environment and Development, 2017.
- Gates, Bill. How to Avoid Climate Disaster. New York: Penguin Book, 2021.
- Hahn, Michael and Kateryna Holzer. "Special Agreements and Energy: Filling the Gaps" in *Emerging Issues in Sustainable Development: International Trade Law and Policy Relating to Natural Resources, Energy, and the Environment*, Mitsuo Matshushita and Thomas J. Schoenbaum, eds. Japan: Springer, 2006.
- Hansen, Shirley. *Manual for Intelligent Energy Services*. Georgia: Fairmont Press, 2002.
- Harvey, L.D. Danny. *Energy Efficiency and the Demand for Energy Services*. London: Earthscan, 2010.
- Helm, Deiter. *Net Zero: How We Stop Causing Climate Change*. United Kingdom: HarperCollins, 2022.
- Hestermeyer, Holger. "Preamble General Agreement on Trade in Services" in *WTO Trade in Services*, Rüdiger Wolfrum, Peter-Tobias Stoll & Clemens Feinaügle, eds. Leiden: Martinus Nijhoff Publishers, 2008.
- Ishakova, Agnessa O. and Alexander I. Gonchorov. "Innovation as Integral Condition for the Development of Modern Foreign Trade Turnover of Energy Resources and Its Legal Regulation" in *Energy Sector: A Systemic Analysis of Economy, Foreign Trade and Legal Regulations*, Oleg V. Ishakov and Anessa O. Ishikova, eds. Switzerland: Springer, 2019.
- Jackson, John H., et al. *Legal Problem of International Economic Relation*. St. Paul: West Publishing Co, 1995.
- Lawrence, Jessica C. "The EU in the Mirror of NPE: Normative Power Europe in the EU's New Generation Trade and Investment Agreements" in *Csongor István Nagy, ed. World Trade and Local Public Interest: Trade Liberalization and National Regulatory Sovereignty.* Berlin: Springer Nature, 2002.
- Lazlo, Ervin, et al. *The Objectives of the New International Economic Order*. New York: Pergamon Press, 1981.
- Leal-Arcas, Rafael. Solutions for Sustainability: How the International Trade, Energy and Climate Change Regimes Can Help. Switzerland: Springer Nature, 2019.
- Low, Patrick, Patrick Mamdough and Evan Rogerson. *Balancing Rights and Obligation in the WTO, A Shared Responsibility*. Sweden: Government Office of Sweden, 2018.
- Lyster, Rosemary and Adrian Bradbrook. *Energy Law and Environment*. Cambridge: Cambridge University Press, 2006.
- Martin, Molinuevo and Sebastian Saez. Regulatory Assessment Toolkit, A Practical Methodology for Assessing Regulation in Services. Washington DC: The World Bank, 2014.
- Mathis, Klaus and Bruce R Huber. Energy Law and Economics. Lucerne: Springer,

- 2017.
- Matsushita, Mitsuo and Thomas Schumbaum, eds. *Emerging Issues in Sustainable Development, International Trade Law and Policy Relating to Natural Resources, Energy and Environment.* Japan: Springer, 2016.
- Michalopoulos, Constantine. *Emerging Powers in the WTO Developing Countries and Trade in the 21st Century.* Hampshire: Palgrave Macmillan, 2014.
- Monkelbaan, Joachim. *Trade in Sustainable Energy Services*. Geneva: International Center for Trade and Sustainable Development, 2013.
- Mulder, Machiel. Regulation of Energy Market, Economic Mechanism and Policy Evaluation. New York: Springer, 2021.
- Nadumpara, James. "Energy Security and the WTO Agreements" in *Trade, The WTO and Energy Security*, Sajal Mathur. New Delhi: IIFT, 2014.
- Nagy, Csongor Istvan, ed. World Trade and Local Public Interests, Trade Liberalization and National Regulatory Sovereignty. Switzerland: Springer International, 2020.
- Nayyar, Deepak. *Catch Up Developing Countries in the World Economy*. Oxford: Oxford University Press, 2013.
- Orford, Anne. "Globalization and The Right to Development" in *People's Rights*, Phillip Alston, ed. (2001).
- Ortino, Frederico. Basic Legal Instruments for the Liberalization of Trade: A Comparative Analysis of EC and WTO Law. Portland: Hart Publishing, 2005.
- Ozden, C. and E. Reinhardt. "Unilateral Preference Programs: The Evidence" in *Economic Development and Multilateral Trade Corporation*, SJ Evenett and BM Hoekmann, eds. London: Palgrave Macmillan, 2006.
- Parker, Phillip. *Energy Production and Services in Finland, A Strategic Reference*. Las Vegas: Icon Group International.
- Pawelyn, Joost. Conflict of Norms in International Law: How WTO Law Relates to Other Rules of International Law. Cambridge University Press, 2006.
- Perez, D. and Y. Gomez. *Cuba: A Country Profile on Sustainable Energy Development*. Vienna: International Atomic Energy Agency Publication, 2008.
- Posner, Richard. Economic Analysis of Law. Groningen: Wolters Kluwer, 1986.
- Rolland, Sonia E. *Development at the World Trade Organization*. Oxford: Oxford University Press, 2012.
- Rosas, Allan. "The Right to Development" in *Economic, Social and Cultural Right, A Textbook*, Asbjorn Eide, Catarina Krause, and Allan Rosas, eds. Leiden: Martinus Nijhoff Publishers, 1995.
- Saez, Sebastián. "The Strategic Development Role of Trade in Services" in *Trade in Services Negotiations A Guide for Developing Countries*. Washington, DC: The World Bank, 2010.
- Sauve, Pierre. "Been There Not Yet Done That, Lessons and Challenges in Service Trade" in *GATS and the Regulations of International Trade in Services*, Marion Pannizon and P. Sauve, eds. Cambridge: Cambridge University Press, 2008.
- Severino, Rodolfo. Southeast Asia in Search of an ASEAN Community: Insight from the Former ASEAN Secretary-General. Institute of Southeast Asian Studies, 2006.
- Sieber-Gasser, Charlotte. *Developing Countries and Preferential Service Trade*. Cambridge: Cambridge University Press, 2016.
- Simpson, Gary P. and W. Bradnee Chambers. Developing Countries and the WTO:

- Policy Approaches, Tokyo: United Nations University Press, 2008.
- Sornarajah, M. *The International Law of Foreign Investment*, 4th ed. Cambridge: Cambridge University Press, 2017.
- Talus, Kim. EU Energy Law and Policy. Oxford: Oxford University Press, 2013.
- Thomas, Chantal and Joel Trachtman. Developing Countries and the WTO Legal System. Oxford: Oxford University Press, 2009.
- Tilak, Jandhyala B.G. Trade in *Higher Education: The Role of The Agreement on Trade in Services (GATS)*. Paris: UNESCO, International Institute for Educational Planning, 2011.
- Trachtman, Joel P. *The Future of International Law, Global Government.* Cambridge: Cambridge University Press, 2014.
- Trebilcock, Michael J. and Joel Trachtman. *International Trade Law*. Cheltenham: Edward Elgar Publishing, 2020.
- UNCTAD. "National Treatment" in *UNCTAD Series on Issues of International Investment Agreement*. New York and Geneva: United Nations, 1999.
- UNCTAD. *Negotiating Liberalization of Trade in Services for Development*. Geneva: United Nations, 2020.
- UNCTAD. The Least Developed Countries Report 2019 The Present and Future of External Development Finance Old Dependence, New Challenges. New York: United Nations Publications, 2019.
- United Nations Conference on Trade and Development. *Energy Services Toolkit*. New York: United Nations, 2017.
- UN Department of Economic and Social Affairs. 2018 *International Trade Statistics Yearbook Volume II Trade by Product*. New York: United Nations, 2019.
- Van den Bosche, Peter. *The Law and Policy of the World Trade Organization*. United Kingdom: Cambridge University Press, 2005.
- Vellas, Francois and Lionel Becherel. *International Tourism*. London: Red Globe Press, 1995.
- Wolfrum, Rüdiger, Peter-Tobias Stoll, and Clemens Feinaügle, eds. WTO Trade in Services. Leiden: Martinus Nijhoff Publishers, 2008.
- WTO. *GATS: Fact and Fiction*. Geneva: World Trade Organization, 1998. Available at http://www.wto.org/english/tratop\_e/serv\_e/gats\_fact\_e.htm, http://www.wto.org/english/tratop\_e/serv\_e/gats\_factfictionfalse\_e.htm.
- WTO. General Agreement on Trade in Services: An Introduction. Geneva: WTO Trade in Services Division, 2013.
- WTO Secretariat, ed. *Guide to the GATS–An Overview of Issues for Further Liberalization of Trade in Services*. London: Kluwer Law International, 2001.
- WTO. Trade in Services in the WTO. Geneva: WTO E-Learning, 2014.
- WTO. *The General Agreement on Trade in Services an Introduction*, Trade in Services Division. Geneva: WTO, 2013.
- WTO. World Trade Report 2019 The Future of Services Trade. Geneva: WTO, 2019.
- WTO. World Trade Statistical Review 2018. Geneva: WTO, 2019.
- Yergin, Daniel. The New Map, Energy, Climate and the Clash of the Nations. New York: Penguin Press, 2020.
- Zammit-Lucia, Joe. *The New Political Capitalism: How Business and Societies Can Thrive in A Deeply Politicized World.* London: Bloomsbury Business, 2022.

#### **Legal Documents**

- Council for Trade in Services. *Modalities for the Special Treatment for Least-Developed Country Members in the Negotiations on Trade in Services.* TN/S/13 (5 September 2003).
- House of Commons, Parliament of Canada. "What Canadians are Saying." *Report Number 9* (1999). http://www.parl.gc.ca/InfoComDoc/36/1-/FAIT/Studies/Reports/faitrp09/19. htm.
- Office of Technology Assessment. *Energy in Developing Countries*. OTA-E-486. Washington, DC: U.S. Government Printing Office (1991).
- Organization for Economic Co-operation and Development. "Special and Differential Treatment Under the GATS." *OECD Trade Policy Papers*, no. 26 (January 2006).
- The United Nations High Commissioner for Human Rights. Resolution 2002/28. *Globalization and Its Impacts*.
- UNCTAD. Energy Related Issues from the Trade and Development Perspective. TD/B/C.I/2 (8 March 2009).
- UNCTAD. Energy Services in International Trade: Development Implication. TD/B/COM/.01/EM.16/2 (18 June 2001).
- UNCTAD. Energy Services in International Trade: Development Implications. TD/B/COM.1/EM.16/2. 18 Juni 2001.
- UNCTAD. Energy Services in International Trade: Development Implications. TD/B/COM.1/EM.16/2 (18 June 2001).
- United Nations. The World Conference on Human Rights: Vienna Declaration and Programme of Action. UN Doc. A/CONF.157/23 (1993).
- United Nations Conference on Trade and Development. *Energy and Environmental Services: Negotiating Objectives and Development Priorities.* New York: United Nations (2003).
- United Nations Conference on Trade and Development. *Managing Request Offers Under the GATS: The Case of Energy Services*. Document UNCTAD/DITC/TNCD/2003/5.
- United Nations High Commissioner for Human Rights, Sub-Commission on Human Rights. Resolution 2001/21. *Intellectual Property and Human Rights*. UN Doc E/CN.4/SUB.2/RES/2001/21 (16 August 2001).
- United Nations High Commissioner for Human Rights. Report of the High Commissioner for Human Rights on the Impact of the TRIPS Agreement on Human Rights. UN Doc. E/CN.4/Sub.2/2001/13 (27 June 2001).
- United Nations High Commissioner for Human Rights. Resolution 2002/28. *Globalization and Its Impacts on the Enjoyment of Human Rights*. UN Doc E/CN.4/RES/2002/28 (22 April 2002).
- World Development Movement. *The GATS Debate: A Response to Common Arguments Used against the Critics of the General Agreement on Trade in Services* (2001).
- World Trade Organization. European Union and its Member States—Certain Measures Relating to The Energy Sector: Communication from The Chairperson of The Panel, WT/DS476/4 (22 August 2016).
- World Trade Organization. European Union and its Member States—Certain Measures Relating to The Energy Sector: Report of The Panel. WT/DS476/R (10 August 2018).

- World Trade Organization. European Union and its Member States—Certain Measures Relating to The Energy Sector: Request for The Establishment of a Panel by The Russian Federation. WT/DS476/2 (28 May 2015).
- World Trade Organization. TN/S/W/11 (3 March 2003). Downloaded on 14 November 2005. http://www.docsonline.wto.org/GEN\_highLightBottom.asp?qu=+%28+%40meta%5FSSymbol+S%FCC.htm.
- World Trade Organization Council for Trade In Services. *Communication from the United States*. S/CSS/W/24 (2000).
- World Trade Organization Ministerial Conference. "Declaration on the TRIPS Agreement and Public Health." WT/MIN (01)/DEC/2. World Trade Organization Ministerial Conference. Doha (14 November 2001).
- WTO. Communication from Canada, *Initial Negotiating Proposal on Oil and Gas Services*. S/CSS/W/58 (14 March 2001).
- WTO. Communication from Chile, *The Negotiation on Trade in Services*. S/CSS/W/88 (14 May 2001).
- WTO. Communication from Cuba, *Negotiating Proposal on Energy Services*. S/CSS/W/144 (22 March 2002).
- WTO. Communication from Indonesia. *Proposal on Classification of Energy Services*. S/CSC/W/42/Rev.1/Corr.1 (25 March 2004).
- WTO. Communication from Norway, *The Negotiation on Trade in Services*. S/CSS/W/59 (21 March 2001).
- WTO. Communication from Venezuela, *Negotiating Proposal on Energy Services*. S/CSS/W/69 (29 March 2001).
- WTO. *Energy Services Background Note by the Secretariat*, Council for Trade in Services. S/C/W/52 (9 September 1998).
- WTO. The General Agreement on Trade in Services an Introduction, Trade in Services Division (2013).
- WTO Council for Trade in Services. Energy Services. S/C/W/311.
- WTO Council for Trade in Services. *Energy Services Background Notes*. Document S/C/W311.
- WTO Council for Trade in Services Special Session. *Communication from Cuba*. S/CSS/W/144.

#### **Thesis**

Taapano, Paraadz. "The General Agreement on Trade and Services (GATS) and Energy Services Liberalization in the South African Development Community (SADC): Issues and Prospects." Master's thesis, University of the Western Cape, 2011.

#### **Web Sources**

- ASEAN. "Factsheet on ASEAN Economic Community (AEC)." Accessed 17 October 2020. http://asean.org/storage/2012/05/7c.-May-2017-Factsheet-on-AEC.pdf.
- Association of Southeast Asian Nations. "ASEAN Single Aviation Market: One Sky, One Region." Accessed 16 April 2020. https://www.asean.org/storage/images/2015/October/outreach-document/Multilateralagreement/Edited%20 ASAM-2.pdf.

- Djiwandono, J. Sudradjad. "Melembagakan Analisis Ekonomi Hukum." Kompas. Accessed 5 November 2022. http://uiupdate.ui.ac.id/article/j-soedradjad-djiwandono- melembagakan-analisis-ekonomi-hukum.
- Marceau, Gabrielle. "The WTO in the emerging energy governance debate." World Trade Organization. Accessed 13 December 2022. https://www.wto.org/english/res\_e/publications\_e/wtr10\_forum\_e/wtr10\_marceau\_e.htm.
- Ministry of Energy and Mineral Resources. "Indonesia Calls for Energy Transition in G 20." Accessed 5 January 2023. https://www.esdm.go.id/en/media-center/news-archives/ -luncurkan-transisi-energi-g20-indonesia-ajak-capai-kesepakatan-global-percepatan-transisi-energi.
- Singapore Business. "World Trade Organization, Singapore Welcomes WTO Deal on Services Domestic Regulation." Accessed 23 December 2022. https://sbr.com.sg/economy/news/singapore-welcomes-wto-deal-services-domestic-regulation.
- Tan, Alan Khee-Jin. "ASEAN's Single Aviation Market: Many Miles to Go." Centre for Asia Pacific Aviation. Published 13 March 2013. https://centreforaviation.com/analysis/reports/aseans-single-aviation-market-many-miles-to-go-100831.
- United Nations. "Ensure access to affordable, reliable, sustainable and modern energy for all." Accessed 10 December 2022. https://sdgs.un.org/goals/goal7.
- World Trade Organization. "Antidumping, Subsidies, Safeguards,: ContigenciesContingencies, etc." Accessed 11 March 2022. https://www.wto.org/english/thewto e/whatis e/tif e/agrm8 e.htm.
- World Trade Organization. "Understanding the WTO: The Agreements." Accessed 15 November 2005. http://www.wto.org/English/thewto e/whatis e/agrm6 e.htm.
- World Trade Organizations. "Energy Services." Accessed 6 December 2022. https://www.wto.org/english/tratop e/serv e/energy e/energy e.htm.

#### Others

- Abrenica, Joy and Adora Navvaro. "An Assessment of Trade and Investment Barriers in Energy Services in ASEAN." Working paper, ASEAN Energy Market Integration, Chulalongkorn University, 2014.
- Cali, Massimiliano, Karen Ellis and Dirk Willem te Velde. "The Contribution of Services to Development and the Role of Trade Liberalization and Regulation." Working Paper 298, London: Overseas Development Institute, 2008.
- Cottier, Thomas, et al. "Energy in WTO and Policy." Working Paper Number 25, Cambridge University Press, 2009.
- Gorodnova, N, et al. "Energy Service Sector, Problem of Government Regulation." Proceedings of the Second International Conference on Energy Production and Management, Ancona, 2016.
- Juwana, Hikmahanto. "Hukum Internasional dalam Konflik Kepentingan Ekonomi Negara Berkemang dan Negara Maju." Inaugural speech, Universitas Indonesia, 10 November 2001, Depok, Indonesia.
- Krajewski, Markus. "Public Services and the Scope of the General Agreement on Trade in Services." Research paper, written for Center for International Environmental Law (CIEL), Geneva, May 2001. Accessed 10 December 2002. http://www.gatswatch.org/docs/markus.html.
- Nelson, Julia and Daria Taglioni. "A Quick Guide to The GATS and Mode 4." Paper

- presented in OECD-World Bank-IOM Seminar on Trade and Migration, Geneva, 12-14 November 2003.
- Orford, Anne. "The Subject of Globalization: Economics, Identity and Human Rights." Proceedings of the 94th Annual Meeting of the American Society of International Law, 2000.