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**Degree of Master of International Studies
(International Area Studies)**

**Indonesia's Strategic Approach on
Environmental Goods List Tariff Reduction
Commitment in APEC Talks**

August, 2017

Development Cooperation Policy Program
Graduate School of International Studies
Seoul National University

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Indonesia's Strategic Approach on Environmental Goods List Tariff Reduction Commitment in APEC Talks

A thesis presented

by

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of the requirements for the degree of
Master of International Studies

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Abstract

Indonesia's Strategic Approach on Environmental Goods List Tariff Reduction Commitment in APEC Talks

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Majority of economic experts believe that trade liberalization will promote advantages on production efficiency, which then lead to increased welfare among trading countries. As global economy growth emerges, international communities beginning to realize that environmental preservations have a significant role in establishing and supporting economic activity. To achieve environment sustainability, the transformation of old-fashioned and high-polluted economic activitiess into a better pro-environmental sustainable economic ativities indeed necessary to be recognized collectively by all countries in the world.

The argument between trade and environment linkages centered on the fact that the world has experienced a lot of damage to ecosystems in different parts of the world, so that the creation of environmental provisions should not be hindered by the interest over trade policy. This idea met with resistance argument which state that world trade liberalization efforts started many years ago through hard multilateral negotiations which should not be restricted by new international regime on environmental preservation provisions.

In international trade regime practice, the most recent breakthrough on trade-environment linkage achieved by APEC organization, when they agreed to voluntarily reduce the import tariff duties of 54 environmental goods to 5% or less. APEC Environmental Goods list demonstrate that trade liberalization and environmental concern could go hand in hand. The agreement has been hailed by many observers as a

political breakthrough that represents the first international policy to liberalize trade on a set of goods that are considered “environmental”.

However, tariff rates elimination in international trade still facing massive objection, in particular from developing countries like Indonesia. In practice, Indonesian government will keep implement APEC Environmental Goods list tariff reduction to the some level in 2015 due to protection effort by related stakeholder within the country; and in order to fulfill that commitment comprehensively, the government has form a scheme to achieve trade and investment liberalization by 2020 as stated in Bogor Goals.

Keywords: (WTO, Trade, Environment, APEC, Environment Goods, Tariff Reduction, Indonesia)

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CHAPTER I

INTRODUCTION

1.1 Background

After the World War II end in 1945, along with massive industrial growth and the beginning of Cold War, the United States known as a proponent of tariff barriers elimination and international free trade. The United States (U.S.) also acted as the main supporting country that establish International Monetary Fund (IMF) along with World Bank (WB) which aim to reach economic cooperation and development for more stable and prosperous global economy; and in 1948, U.S. helped the establishment of General Agreement on Tariff and Trade (GATT). From 1970s, the U.S. government have concluded many international trade agreements, that starts with the establishment of North American Free Trade Agreement (NAFTA) in 1990s; concluded 14 FTAs in force with 20 countries in 2015; and currently attempting on the establishment of Trans-Pacific Partnership (TPP) and also Transatlantic Trade and Investment Partnership (TTIP). Many people believed that U.S. government capability to spread their liberal values of democracy and free trade caused by the disappearance of the Communist regime threat, which left the U.S. as the only superpower country in the world that lead to the era of democracy, prosperity and peace.¹

As GATT regulate multilateral agreement on international trade, there was an insistence by many countries that decided that GATT could serve better international trade expansion in case it became a formal international organization. This issue discussed during Uruguay Round (1986-1994), and finally WTO officially established under Marrakesh Agreement, which replacing GATT started from 1 January 1995. The GATT-WTO apply five primary principles, including non-discrimination frameworks

¹ “What we may be witnessing is not just the end of the Cold War, or the passing of a particular period of postwar history, but the end of history as such: that is, the end point of mankind's ideological evolution and the universalization of Western liberal democracy as the final form of human government.” (Francis Fukuyama, Summer 1989, The National Interest, source taken from <http://www.wesjones.com/eoh.htm>).

(MFN and National Treatment), transparency, safety valves, binding and enforceable commitment, and reciprocity. In brief, The WTO facilitates various functions, which the most important duties were to establish a framework for trade policies including negotiation, administration, operation, implementation, and settling disputes in international trade, which by consensus agreed and signed by member countries.

Along with Uruguay Round negotiation, US with many others Asia Pacific countries also try to establish Asia Pacific Economic Countries (APEC). Former Prime Minister of Australia, Bob Hawke, introduce the original idea of APEC, during his visit to Seoul-Korea on January 1989. Within one year afterward, an initial meeting of twelve Asia-Pacific region countries established APEC, consisting of: United States, Canada, Australia, New Zealand, Japan, South Korea, Singapore, Indonesia, Malaysia, Thailand, Brunei Darussalam, and the Philippines as the founding initiators of APEC.² In 1991, APEC Economies successfully agreed on the main principle objective of APEC organization, by proclaiming the goals to support free trade in Asia-Pacific region, even though that all APEC's meeting conducted informally by ministerial level and senior official dialogue. Due to APEC establishment on its core objectives, an establishment on annual practice of APEC Economies meeting formed by former President of United States, Bill Clinton, in order to eliminate the lack of leadership and to construct strategic economic cooperation within APEC Economies. Later on, an ambitious goals of the organization was made during APEC leaders meeting in Bogor-Indonesia, which determined that APEC Economies will achieve “free and open trade and investment” of the region in 2010 for developed countries and in 2020 for emerging countries (later known as Bogor Goals).

As world development growth, international community encounter many serious challenges of environmental issues, covering ecosystems damage, climate change, and global environmental disasters. In this regards, many effort had been made by international regime and United Nations through the adoption of Millennium

² China, Hong Kong, and Chinese Taipei joined in 1991. Followed by Mexico and Papua New Guinea in 1993. Chile acceded in 1994. And in 1998, Peru, Russia and Viet Nam joined, taking the full membership to 21. source taken from <http://www.apec.org/> (accessed September 2016).

Development Goals (MDGs), which committed to achieve eight main global development goals for the year 2015. As MDGs objectives emphasize on environment-development matter, all United Nations member states were committed to ensure environmental sustainability (7th MDGs) and to develop a global partnership for development (8th MDGs).

Another environment development approach also made by WTO through Doha Round in 2001. Since the Doha round of multilateral negotiations under the WTO stalled, plurilateral negotiations have commenced between likeminded countries under the Environmental Goods and Services Agreement (EGS). Main objective of trade-environment policies negotiation under Doha Round was to create a mutual win-win solutions method on trade-environment matter within economic development in the coming years. Those policies includes tariff reduction and elimination on non-tariff measures (NTMs) related to environmental goods and services. By finalizing EGS agreement policy, WTO members believe that it will increase the access for international community to get many benefits related to environment preservation, such as pollution abatement, resource-efficiency, environmentally friendly technology and facilitation, and many others. By having tariff elimination on goods and services related to environment sectors, EGS could be a strong approach to boost economic development and employment, which will facilitate the ease on technology transfer, educations, and experiences among WTO members. In brief, well organized trade liberalization within EGS policies could lead to sustainable development goals achievement as agreed in United Nations Sustainable Development Goals and others multilateral environmental agreements.

Understanding the importance of sustainable development, APEC Leaders meeting (2007) committed on a new comprehensive development actions, known as “Sydney Action Agenda”, which specify that: *“to ensuring the energy needs of the economies whilst addressing the issue of environmental quality and contributing to the reduction of greenhouse gas emissions.”* Leaders also affirmed that *“An open global trade and investment system is central to our clean development objectives and market*

opening in the WTO would advance our climate and energy security goals.” and recognized that “Joint research, development, deployment and transfer of low and zero emission technologies will be crucial in our shared efforts to address climate change.”

To actualize Sydney Action Agenda, on 9 September 2012, APEC Leaders meeting in Vladivostok-Russia bring off an exceptional agreement to voluntarily liberalize 54-subheading environmental goods tariff rates. Known as “Vladivostok Declaration”, the agreement committed that by the end of 2015 all APEC Economies will reduce applied tariff rates (as listed in Annex C) to five percent or less. International communities hail Vladivostok Declaration as a remarkable international political breakthrough to determine the first “environmental” set of products which successfully liberalized by international organization. Policy manifestation in Vladivostok Declaration also considered as a way out from Doha Round-WTO efforts that could not manage to reach an agreement in defining “environmental goods” which led to the failure of environmental goods and services liberalization.

As one of APEC Economies country and given its pivotal geographic position as a natural supporter of world ecosystem preservation, Indonesia recognizes its role to support sustainable development and combatting global climate change. Under the climate change convention (UNFCCC), Indonesia in 2009 has sought as a proponent of climate change preservation by expressing their commitment in the Intended Nationally Determined Contribution (INDC).³ In short, INDC mention that by the end of 2020 Indonesia will voluntarily achieve a 26 percent emissions reduction against the business-as-usual scenario, or maximum for 41 percent through international assistance. As an emerging country that still struggling with development and economic growth issues, Indonesia’s courageous figure to achieve that target becoming an agents of change toward the climate negotiations stagnancy during that time. Along with that

³ Intended Nationally Determined Contribution (INDC) of the Republic of Indonesia is a publicly outline stating what post-2020 climate actions will Indonesia intend to take as a global commitment by the conclusion of the UNFCCC-COP21. source taken from (accessed on September 2016) http://www4.unfccc.int/submissions/INDC/Published%20Documents/Indonesia/1/INDC_REPUBLIC%20OF%20INDONESIA.pdf.

commitment, in the 2012 APEC Economic Leaders' Meeting (AELM), Indonesia was also committed to the APEC Environmental Goods, including the AELM commitment to the tariff reduction of 54 EGs Tariff Lines (HS-6) to 5%. Through both INDC-UNFCCC and APEC commitment, Indonesia's government has demonstrated its strong commitment to support global sustainable development for a better future.

1.2 Research Questions

Elaborating from the previous chapter, the main question to be addressed in this thesis is: **“Due to international concerns to support environmental sustainability in development, how will Indonesian Government manage to overcome the commitment on Environmental Goods List of APEC against the sense of fear and rejection issues by domestic industry sectors stakeholders?”**

1.3 Theoretical Framework

Development period after post-Second World War was conceived of as an organized and coherent attempt to overcome constraints on economic growth, and often explicitly aimed at overcoming environmental constraints on that growth. However, in early year of 2000s, broader arguments on sustainability began to involve the human influence on global climate change. In general, sustainable development means that the challenges of global environment issues (damage of ecosystems or pollutions) should be tackled simultaneously together with global economic issues (poverty, health, etc.) without prejudice to either side. Although it is now acknowledge that these crises are linked, problems of environment and development are often addressed independently.⁴

⁴ W. M. Adams (2009), “Green Development 3rd Edition: Environment and Sustainability in a Developing World”, Routledge, London;

Majority of economic expert believe on general beneficial of trade liberalization, which promote production efficiency that lead to increased welfare among trading countries. As Mankiw (2015) mention about principles of economic that “People face trade-offs and trade can make everyone better off”.⁵ In international trade regime, the WTO remain the one and only international organizations which constitutes the global trade regulations among countries, which the main objective to establish a free and fair trade flows practices. In line with that matter, WTO also make a fundamental goals on environmental protection and preservation as a manifestation of sustainable development effort.

As stated in the preamble provision of WTO establishment, Marrakesh Agreement certify that economic endeavor should be organized in accordance with the objective of sustainable development, which emphasized that environment protection and preservation should be consistent with all WTO members concern on economic development.⁶ WTO determined a clear commitment on the principles of sustainable development. As a driver to sustainable development, former WTO Director General, Pascal Lamy, stated that WTO has a leading role to encounter climate change issues by opening the market of clean technology and services. Altoutgh that WTO does not specifically regulate environmental issue, entire multilateral trading regulation within WTO are truly relevant in supporting sustainable development (indirect approach to environment issues). WTO regulations in practices, never intended to put international trade interests above environmental issues interest, within international policy-making arena. However, a global consensus indeed becoming an obstacle for WTO to achieve sustainable development.⁷

⁵ N. Gregory Mankiw (2015), “Principles of Economics 7th Edition”, Cengage Learning, Singapore;

⁶ Marrakesh Agreement, source taken from (accessed on October 2016)
https://www.wto.org/english/docs_e/legal_e/04-wto_e.htm

⁷ Pascal Lamy was a former Director-General of WTO for 2005-2013 period. During European Parliament meeting in Brussel 2008, he made a speech conveying the need of consensual international accord on climate change. Source taken from https://www.wto.org/english/news_e/sppl_e/sppl91_e.htm (accessed on October 2016)

As WTO deliberately support for sustainable development, APEC itself had generate framework on sustainable development from the early stage of APEC establishment. APEC Economies. As 2010, APEC Economies develop new “APEC Growth Strategy”, which aimed to attain balance growth, to promote inclusive growth, to achieve sustainable growth, to enhance innovative growth, and to create secure growth.⁸ Further more, APEC Economies by consensus adopting Rio Declaration spirit, which in brief reaffirm the inextricably relation between economic development and environmental preservation as a fundamental basis of sustainable development in Asia-Pacific region.

The most recent breakthrough within APEC commitment to sustainable development was when in 2012 they agreed to voluntarily liberalize tariffs on 54-subheading environmental goods in Vladivostok, Russia. The establishment of this environmental goods list is a conclusive evidence of sustainable development in APEC Environmental Vision Statement which stated that *“All APEC members share a commitment to sustainable development. We support enhanced protection for our environment and greater sensitivity and concern for the environment in our economic decision-making processes by integrating environmental considerations into relevant policy development and economic decisions throughout the region. To this end, we encourage APEC working groups and policy committees to integrate environmental concerns into their work programs.”*

Based on all above international regime perspective on international trade, environmental issues, and sustainable development, Indonesia has to align all those current issues with Indonesia’s strategic development goals and Indonesia’s vision as a political sovereign and economically self-reliant nation with deep roots in its cultural identity. As the threat of environmental problems becomes reality, Indonesia should immediately take a stand to establish a policy (aligned with international policies) that could balance the current and future development and its poverty reduction priorities.

⁸ APEC Growth Strategy in 2010, source taken from <http://www.apec.org/Topics/Growth-Strategy.aspx> (accessed on October 2016)

1.4 Hypothesis

To achieve global sustainable development, international policy-making organizations should apply an integration approach on economic development and environmental preservation comprehensively and equitably. What was achieved by APEC in liberalizing “environmental goods” indeed a remarkable breakthrough, leaving behind WTOs achievements and role as the main organizations which facilitate international trade. Eventually, APEC Environmental Goods list tariff reduction set by APEC still requires follow up implementation within the domestic territory of each APEC Economies, which should have been implemented by the end of 2015.

However in domestic practice, Indonesian government was facing incompatible paradigm among stakeholders. Different conclusion made toward APEC commitment implementation, which made Indonesia Indonesia has not been able to actualize the commitment by the end of 2015. Indonesia's government understand the significance of Vladivostok Declaration commitment, and creating an effective and consistent domestic policy framework as the embodiment of APEC commitment will be beneficial for Indonesia not only to achieve the sustainable development but also to strengthen Indonesia's political influence in achieving their interests through APEC organization. Due to that matter, as an emerging country that appreciates the value of good faith within international commitment, Indonesian government to some extent will manage to overcome the obstacles and keep moving forward in realizing the APEC Environmental Goods list commitment.

1.5 Methodology

The methodology used in this paper is qualitative research method, which in general term, this paper attempt to resolve research questions by taking several ways, covering: study to seek comprehensive argument regard to research question; collections of evidences and data; processing the data and evidence into a conclusion;

and, produce findings that were not determined in advance. Qualitative research seek to understand a given research issue from the perspectives of the domestic role, and its especially effective in obtaining culturally specific information about the values, opinions, behaviors, and social contexts of particular division.⁹

Through qualitative research methodology, this thesis aimed to find some understanding on how current growth on free trade agreement and international trade led to many confrontation on environmental issues, by describing trade and environment linkage; roles and impacts of environmental policy toward economic matter; and how WTO deals with environment issues. Since this thesis focus on APEC Environmental Goods list, it try to explain on how international regime have struggled to define the area of goods and services related to environment which could be applied for international liberalization. For the final part, the analysis part of the thesis will examine the paradigm and implementation effort in practice toward APEC Environmental Goods tariff reduction, and along with that also try to compare on how other APEC Economies implement that issue.

In brief, this paper try to investigate the correlation of economic growth and environmental issues, in particular on how environmental policies support to achieve sustainable development will affect emerging countries behaviour in international relations. Recognizing the weakness of qualitative methodology and to simplify the outcomes, this thesis will focus on Indonesia, in particular on how the government try to set a long-term policy on trade liberalization on environmental goods.

1.6 Purpose of Research

The purpose of the research aims to discover on how international communities, in particular emerging countries, adapt with the provision of environmental preservation to achieve sustainable development within international

⁹ Qualitative Methodology, source taken from <http://www.ccs.neu.edu/course/is4800sp12/resources/qualmethods.pdf> (accessed on October 2016)

organization agreements will be in accordance with their development effort. The research will manage to review the argument of Indonesian government on how they implement APEC commitment along with many challenges within its territory. Referring to Vladivostok Declaration signatories by APEC's Leaders in Russia 2012, the purpose of this research could be briefly described as follows:

- a. To explain how Indonesian Government will manage to overcome the commitment on Environmental Goods List of APEC against the sense of fear and rejection issues by domestic industry sectors stakeholders, and
- b. To compare how other APEC Economies adopt the commitment on Environmental Goods List of APEC within their countries.

1.7 Contents List

As a whole, this thesis research contains five chapter, which in brief describing introduction part; trade and environment; environmental goods list in APEC talks; Indonesia's strategy in implementing APEC environmental goods list commitment; and conclusion. Within introduction chapter, it briefly covering factual background about the research; a research question; broad explanation about theoretical framework; hypothesis; qualitative methodology; and purposes of research.

In chapter II – Trade and Environment, it is divided into three parts. First part try to explain trade and environment linkages by using many other researcher argument related to trade and environment. Second part try to explain the role and impacts of environmental policies on economic by providing some arguments about best practices which should be conducted by government and what will be the result of those practices. Last part will try to explain role of WTO in protecting environmental issues within international trade regime, while also try to compare it with MEAs regulations which in general put some restriction in trade issues in order to protect environmental sustainability.

Chapter III – Environmental Goods List in APEC Talks will describe APEC organization in brief, covering its main organization agenda, structure of organization, achievements of APEC, and many others. This chapter also explaining the main object of research, which is APEC environmental goods list tariff reduction commitment. Further more, this chapter in detail try to explain what kind of goods that could be define as environmental goods; and APEC's approach to use “ex-out” in establishing environmental goods list.

After discussimg related literature reviews and main object of the research, chapter - IV try to explain analysis part on how indonesia's will implement APEC Environmental Goods list commitment. This chapter divided into 3 parts, which covering: Indonesia's paradigm on APEC Environmental Goods tariff reduction; Indonesia's Schedule Approach on APEC Environmental Goods tariff reduction implementation; and, APEC commitment comparation analysis among APEC Economies.

Lastly, chapter – V try to describe conclusion part. In short, this chapter formulate the result of the research and also describe some future challenges which will be faced in implementing APEC commitment. Due to those challenges, further studies on a wider range toward APEC current and future programs, which are important to be examined either by APEC Economies, other international organizations, government, and also academia, should get some consideration by global community in the future.

CHAPTER II

TRADE AND ENVIRONMENT

2.1 Trade and Environment Linkages

As global economy growth emerges, international communities beginning to realize that environmental preservations have a significant role in establishing and supporting economic activity. The nature provides a wide range of resources which are required as a basic capital in producing various goods and services, such as: fossil fuels as source of energy, mineral materials, water, lumber and many others. While indirectly, the nature also provides conditions favorable to the sustainability of economic activity, among other: maintaining climate change, providing oxygen, purifying the pollutions, and many others. However, its not a simply task to examine the relationship between economic development and environmental issues. Many factors need to be considered in assessing that relationship, covering the economic structure as a whole, such as government policies and interventions, investment matters, politic and economic stability, labors, resources, and even technology innovation that can boost economic growth while maintaining environmental preservation at the same time.¹⁰

Economic development persistently important to encourage many factors that support the improvement of human welfare and quality of life, such as: educations, health protection, food security, entertainment, etcetera. With good economic expansion, government can present better provisions in every sectors which devoted to increase services for public, such as: affordable household needs (electricity, house, security), advanced transportation system, improved health services, and good education system. All achievement in economic development would have been more

¹⁰ Tim Everett, Mallika Ishwaran, Gian Paolo Ansaldi and Alex Rubin (2010), “Economic Growth and the Environment paper”, Defra Evidence and Analysis Series, source taken from (accessed on September 2016) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69195/pb13390-economic-growth-100305.pdf

favorable if environment preservation also managed properly. As global community put more concern on environment sustainability, the transformation to a pro-environment and resources-efficiency within economic activities indeed necessary. Basic economic structure has to be changed through better economic development provisions and financially assisted with huge investments in infrastructure and technology.

Nowadays, it can be denied that global economic activities has faced great environmental challenges, covering ecosystems damage, climate change, and global environmental disasters. An inevitable debate arised on the possibility whether achievement on economic development could be accomplished simultaneously with efforts to tackle environmental issues. In the earlier literature on trade and environment, most of it concern on whether policy linkages between trade (as main factor of economic growth) and the environment can be justified. Most of the literatures focusing the debate, which are covering: what is the rationale reason toward environmental provision arrangement; how to linkage between trade and environment; how to manage trade restriction in order to achieve environmental preservation; how to deal with conflicts within trade and environmental issues; and, how multilateral organizations should react.¹¹

In practice, there is no single argument within trade and environment debate. Rather, there is a series of inter-related sub-issues which together fuel an ongoing debate as to what should be done within WTO, multilateral environment arrangement, or other international framework. An early argument stated that trade expansion will intensify productions and consumption, which consequently degrade the quality of environment. However, that perspective currently considered as overly simplistic and excessively assumed. Many emerging countries, which applying policies to boost productions and trade, seem to have achieved higher environmental standards. The 1992 GATT Annual Report observe that trade will generate economic advantages, in

¹¹ Gary Sampson and John Whalley (2005), “The WTO, Trade and the Environment: Critical Perspectives on the Global Trading System and the WTO”, Edward Elgar Publishing Limited, Cheltenham-UK

which trade expansion will improve more prosperity; furthermore, surplus on economic achievement can be used for environmental protections measurement, which will improve environmental sustainability.¹²

The argument between trade and environment linkages centered on the fact that the world has experienced a lot of damage to ecosystems in different parts of the world, so that the creation of environmental provisions should not be hindered by the interest over trade policy. The perspective of pro-environmental preservation argument emphasize more on the importance of trade-restriction enforcement in protecting environmental aspects, even though it is in contrary with GATT-WTO provisions. Therefore, trade provisions should embrace some consideration on environmental objectives; provisions on environmental standards should become sources of reference in the application of trade restrictions; existing international trade provisions should not impede the implementation of new trade instruments which has set environmental protection provisions; and furthermore, trade policy should also covering an arrangement on environmental provision regarding scarce-resources management.¹³

Previous idea met with resistance argument which state that world trade liberalization efforts started many years ago through hard multilateral negotiations which should not be restricted by such a new international regime on environmental preservation provisions. Trade regulations that adopting special treatment on environment sustainable matter could lead to a domino effect – application of special treatment on other sectors – which in the end, will weaken the multilateral rules-based in global trading systems. To justify more the argument of pro-trade liberalization side, many of international trade policies – that applying trade-restrictions provision due to environmental issues – are widely used as a form of trade protection within global

¹² GATT (1992), “Trade and the Environment”, International Trade 1990-1991, Volume I, Chapter III, Geneva: General Agreement on Tariff and Trade

¹³ Hiro Lee and David W. Roland-Holst (1997), “Trade and the Environment”, in Joseph F. Francois and Kenneth A. Reinert (eds), Applied Methods for Trade Policy Analysis: A Handbook, Cambridge University Press

economic activities rather than its primary purposes to achieve environmental sustainability.

Global debate about international trade role in determining policy direction on environmental issues has not been able to reach collective action approval. Antweiler, Copeland and Taylor (2001) through their research try to examine the correlation and potential possibilities over liberalization on international goods market will affect the level of environmental pollution – the consequences of international trade in environmental issues. By developing a new theoretical framework, they categorize the outcome of environmental pollution based on three approaches – scale, technique, and contexture – which were then combined and examined with SO₂ concentration data taken from Global Environment Monitoring Project. The examination result find out that SO₂ concentration (pollution level) was not significantly affected by international trade liberalization. Further more, through a comprehensive research methodology, they come out with an unexpected results, which indicate that when GDP/person increased by 1% due to trade liberalization, it will reduce pollution concentration level by around 1%. Its clearly explain that trade liberalization give some good impacts on environment.¹⁴

As trade-off between economic development and environments sustainability being recognized, the impact of international trade on the environment sustainability has become a crucial topic of discussion within global and domestic policy agendas, especially in addressing the phenomenon of the current trade relations between developing and developed countries. However on the current development, many policy makers from emerging countries imitate the same approach made by developed countries during their developmental phase, which less concern given for environmental preservation in promoting economic growth.

Applying general equilibrium model which incorporates detailed industrial pollution data, Lee and Roland-Holst (1997) try to examine the connection between

¹⁴ Werner Antweiler, Brian R. Copeland and M. Scott Taylor (2001), “Is Free Trade Good for the Environment?”, American Economic Review

environmental implication with trade and tax revenues regulations, and designate Japan-Indonesia trade activity as a case study (comparison study between developed and developing countries). Indonesia was selected as their research object because of its comparative-advantage in pollution-intensive industries and its trade performance, which indicate that Indonesia – with its trade and tax revenue policies - can generate an improvement in economy welfare along with environment sustainability. Taking into account on the level of development, it can be expected that Indonesia will be net-loser and encounter an environment degradation in trade relations with Japan. Export-oriented growth could cause high and unsustainable pollution levels, in particular Indonesia which has comparative-advantages in high-polluted industries. Their research comes out with four principal conclusion, which are:

- a. Government of Indonesia has put more precedence toward economic and trade determination over environmental issues, which make Indonesia encounter an environment degradation in trade relations, in particular with Japan;
- b. Indonesia's significant economic growth due to market liberalization will also contribute to pollutions escalation from domestic industries;
- c. The application of conformable waste-disposal tax policy will effectively decrease SO₂ pollutions;
- d. Discouragement on economic activities and market liberalization due to environment degradation should not be over-emphasized, and environmental provisions (tax/restrictions on trade) should not causing to the contraction within a country's economy.¹⁵

Another attempt made by Perroni and Wigle (1994) to perform a feasibility study on international trade potential impact toward a reduction in environmental sustainability, and to evaluate the leverage of environmental provisions in reducing the benefits of open market and liberalizations. They came out with a conclusion that open

¹⁵ Hiro Lee and David W. Roland-Holst (1997), *op. cit*

market and liberalization – to some limited extent – can relatively contribute a declining effect toward environment sustainability. They argue that to achieve an improvement and sustainability of environment preservation by applying trade restriction within the environmental provision can be a substantial burden for economic development. Environmental preservation has become one of the most influential aspect in designing economic and trade policies, which in its application, the results might differ among each country. Therefore, coordination between trade liberalization and envrionment preservation by both proponents should not be treated excessively. Eventually, open market and liberalization will generate more innovations in technology to improve the competitiveness and the efficiency in economic activities.¹⁶

As trade and environment has been a lively debate since the early 1990s, many international communities dedicated as environmental advocates try to develop a discourse on trade restrictions toward several types of trade in goods, which was opposed by many of less-developed countries who thought that trade restriction due to environmental concern will harm their economic development. In regards to this issue, many approaches have been explored to overcome trade and environment linkage; which in international practices, emerging countries are required to gradually reform their economic development policy in harmony with environmental preservation efforts so that the emerging countries could achieve better trade relationship with other developed countries. Abrego and friends (2001) resolve a global numerical simulation model which was devoted to examine the results of multilateral negotiations on trade and environmental issues. They come out with conclusion that mutual benefit could be achieved when negotiations on trade incorporate environment provision within it; however, emerging countries will gain less-favorable benefit within the application of trade and environment policies.¹⁷

¹⁶ Carlo Perroni and Randall M. Wigle (1994), “International Trade and environmental Quality: How Important are the Linkages?”, Canadian Journal of Economics

¹⁷ Lisandro Abrego, Carlo Perroni, John Whalley and Randall M. Wigle (2001), “Trade and Environment: Bargaining Outcomes from Linked Negotiations”, Review of International Economics

In determining the correlation of trade and environmental issues, international regime seems to acknowledge that both trade and environment provisions can equally achieve mutual objectives. Through environment preservation policies, supplies of natural resources to support economic growth will be maintained; while, through trade liberalization policies, economy development will encourage the awareness to apply environmental protection. To make both provision get along each other, it must be considered that protection constraint within environment regulation not contradictory against the provision applied in trade liberalization, and vice versa. It leads to a conclusion that cooperation among international organizations indeed required to synchronize and to overcome disputes in trade-environments issues.¹⁸

2.2 The Roles and Impacts of Environmental Policies on Economic

Over the last three decades, global communities have been overwhelmed by provisions measurement related to environmental issues which could give some potential influence on business activities. Achieving mutual benefits between environmental restriction along with economic liberalization has not been a simple task to overcome. The traditional view among economists thinks that a provision within environment protections has weighed on production cost for industrial players. Those additional cost on production will affect the level of competitiveness, which will lead domestic industrial players in a disadvantageous position toward foreign competitors, if domestic administration put more strict regulation on environment constraints compared with foreign provisions.

Another perspective argued that provisions over environmental preservation approach may encourage an innovation on pro-environmental technology, support the establishment of conducive environment for pro-environment industrial players, and improve economic development. This argument has received significant attention – both from trade liberalization and environmental preservation proponent – especially

¹⁸ Gary Sampson and John Whalley (2005), *op. cit.*

during current global economic development stagnancy which burdened with the effort to achieve sustainable development in the future.

Michael E. Porter (1990) proposed an argument that a strict environment provisions – applied consistently and effectively – may encourage mutual benefits within trade and investment activity, which will improve industrial player profit along with social well being. Furthermore, Porter Hypothesis explains that sticter regulations on environment can generate resources efficiency, promote technology innovation (eco-friendly technology), and increase competitiveness in global trade. Eventually, Porter Hypothesis has become an international benchmark that trigger an effort by global communities for further research which seeks to measure environmental regulation impact on business ventures.¹⁹

Everett et al. (2010) argue that environment policies have a significant roles to accomodate clear provisions on how to exploit natural resourcesand align it with the purpose to improve social benefits and welfare of human kind. Many explanations have arise to answer and to support the government interference in formulating environment provisions are indeed necessary to be enforced. Without any government interference, there will be some high risk that natural resources and even environment sustainability may get injured during economic activities, in particular related to market failure in development process. Everett in this case, try to formulate a comprehensive provisions which can accomodate a way out toward all possible market failures issues, among others:

- a. Applying market-based provisions, for example, REACH regulation by EU in order to protect the use of hazardous chemical;
- b. Assertive regulations, such as, industrial waste recycling;
- c. Government support on innovation programs, for example by encouraging more budget for education improvements;

¹⁹ Stefan Ambec, Mark A. Cohen, Stewart Elgie, and Paul Lanoie (2011), “The Porter Hypothesis at 20: Can Environmental Regulation Enhance Innovation and Competitiveness?, source taken from <http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-11-01.pdf> (accessed on October 2016)

- d. Standards regulations and other provisions that could improve the awareness on environment preservations.²⁰

In administration practices, various instruments significantly needed to achieve an effective and efficient environment provisions implementation. Each instrument should has its own role to overcome environment issues without having an overlapping provision one another. Application of environment provisions in a comprehensive and consistent approach will generate better assurance for investment climate, in particular to some industrial sector that have some interest to develop new technology innovations in a long-term period. In addition, designing an exact requirements within productions process will encourage the sustainable use of natural resources.

Everett in overall conclude that environmental provisions main objective is to make sure that natural environment utilization in accordance to sustainability approach, which consistently applied through any circumstances. Well maintained environment preservation will provide some social benefits for human being and also will - directly or indirectly – support economy activities. In general, the implementation of environment provision will give some impact on economic development, which include: innovation on new technology, investment plot, industrial productivity, and also competitiveness among industrial players. However, during short-time transition period, the application of pro-environmental approach - to some extent - will give some trade-off impact on economic growth; yet within long-term period, the advantages derived from the implementation of environmental provision more likely will surpass the cost needed during transition period. Government indeed can play an important roles to minimize that short-term trade-off impacts by establishing applicable policies which can boost economic growth.²¹

Dechezleprêtre and Sato (2014) based on recent evidence try to find out the answer of environmental regulations impact toward productivity and employment, international competitiveness, and innovation in green technologies. They argue that

²⁰ Tim Everett, Mallika Ishwaran, Gian Paolo Ansaloni and Alex Rubin (2010), *op. cit.*

²¹ *Ibid.*

environmental-related regulations can lead to negative growth of productivity by small amounts and also reduce employment. The occurrence of those effects tends to disadvantage more on industrial sector which produce high-intensive pollutions, especially during the period of transition, as many industrial stakeholders manage to shift their high-intensive pollutions productions into more eco-friendly productions process. Employment issues may also occur during transition period, while to overcome this issue the government can generate some policies to encourage employment growth; providing labor with health insurances; providing technical training; and many other policies, which can cover the cost of applying pro-environment regulations. Yet in long-term progress, with some macroeconomic adjustment, along with geographical and sectoral reallocation, will makes employment effects smaller than in the short-term progress.²²

In a global perspective, the implementation of environmental provision impacts toward international trade and investment are insignificant when compared to other economic factors like labor and market conditions issues. Along with that, the cost acquired to implement environment provision to achieve social advantages appear to be more burdensome rather than to simply achieve health improvement. The application of environmental provision apparently could no longer be reversed, although that to achieve sustainable development will not be an easy tasks. Furthermore, some findings conclude that environment provisions implementation may result on awareness to create technology innovations which will remove the development of old fashioned-polluting technology. Eventually, environment provisions may generate economic breakthrough in changing traditional-polluting economy activity into pro-environmental preservation economy activity.

In conclusion, many literatures indicate that environment provisions leverage over development matter depends on many aspects, such as: the term and conditions; what kind of environmental damage need to be addressed; the form of policies

²² Antoine Dechezleprêtre and Misato Sato (2014), “The Impacts of Environmental Regulations on Competitiveness”, Grantham Research Institute and Global Green Growth Institute, source taken from http://personal.lse.ac.uk/dechezle/Impacts_of_Environmental_Regulations.pdf (accessed on October 2016)

arrangement; and kinds of targeted sectors. In addition, environment provisions may be directed to encourage innovation in technology, advancing the process of productions, recycling systems, and many other innovations. Even though that innovations could lead to some short-term negative growth, yet innovations will provide better outcome for long-term economic growth. More over, Porter Hypothesis has broaden the perspective of policymakers to have a lucrative and comprehensive approach to arrange and to apply an environmental provision which can accomodate the efforts of businessman in finding a pro-environmental innovation. Porter Hypothesis suggest that provisions to protect environment preservation could also be a mutual solutions to improve trade liberalization, which later will benefit the entire communities.

2.3 GATT-WTO and Multilateral Environment Agreements Roles in Preserving Sustainable Development

International concern toward trade restriction impact caused by environmental preservation policies – and vice versa – has been emerged and discussed within global community started when United Nation held a Stockholm Conference on the Human Environment in 1972. Later on in 1992, following the results of Rio Declaration in Brazil-1992, global community aware that the spread of environment issues have occur throughout the world and collective action should be carry out to resolve those issues. Global concern on environmental issues make more than 200 MEAs has existed, consisting variety type and class of membership around the world. The main global MEAs covering many environment sectors, including: biodiversity and wildlife (the 1973 Convention on International Trade in Endangered Species-CITES, and the 2000 Cartagena Protocol on Biosafety); atmosphere (the 1992 UN Framework Convention on Climate Change-UNFCCC, and the 1997 Kyoto Protocol); marine environment (the 1982 UN Convention on the Law of the Sea); use of chemical (the 2001 Stockholm Convention on Persistent Organic Pollutants); waste (the 1989 Basel Convention on

the Control of Transboundary Movements of Hazardous Wastes and Their Disposal); and others.

In general for past decades, MEAs has grown rapidly in issuing environmental provision - covering small scale protection on species extinction (many of earlier MEAs dealt with individual populations) to involving wider area of economic activity. Sampson and Chambers (2001) argue that many of those MEAs stipulate some restrictions and barriers measures on trade in goods and enforced through all members and non-members of the agreements. Due to the gradual continuation of global environment issues, international agenda to achieve further improvement to overcome trade liberalization and environmental preservation conflicts shall be required in the near future, which mean that environmental provisions will interfere trade aspects determination through some trade restrictions or measurements.²³ Although that many possible options available for governments and international regime to encounter issues on environment; yet, trade measures that have been applied by many environmental provisions encourage GATT-WTO in early 1990s to accomodate trade liberalization and environmental preservation issues into a prominent trade agenda negotiations.

Trade and environment in general perspective obviously interconnected, especially in its application through policy instruments. This is largely because practical and applicable trade restrictions can facilitate environment goals as demonstrated through their use in some Multilateral Environment Agreements (MEAs). Such a correlation was recognized during the 1994 Marrakesh Ministerial Meeting which concluded the Uruguay Round and established the WTO Committee on Trade and Environment (CTE) in January 1995. However, due to some technical obstacles and broader precedents created through a change in GATT/WTO rules, as well as the North-South divisions generated by the issue, there has been limited support on the part of the trade community to modify the rules to accommodate the concerns of

²³ Gary P. Sampson and W. Bradnee Chambers (2001), "Trade, Environment, and the Millennium, Second Edition", UN University Press;

environmentalists. As the work of the CTE has been largely focused on exploring the implications of the linkages, progress has been gradual yet not as assertive as expected by my environmental supporters. Indeed, even after extensive debate, nothing near a consensus emerged on feasible options as to how to proceed in the WTO.

A GATT Secretariat study (1992) try to determine the conflict arising toward trade and environment through trade perspective approach. The argument advanced runs along the lines that trade liberalization effort and the environment preservations can go hand in hand and support each other. The argument continues that trade liberalization leads to real growth, more resources available for environmental management programs, which later it will facilitate global community to acquire eco-friendly goods and services more easily. To integrate the objectives of environment preservation and the effort to foster economic growth in to a sustainable development, convenient domestic policy related to environment provision should be attained in an appropriate ways. In the making of environment policies, overall analysis – started from productions process through waste management process – becoming a main reference to ensure that the environment provisions establishment which covering all aspects has been carefully taken into account. However, the provisions results related to environment preservation may be different among each country due to differences in delivering the perspectives.²⁴

In Charnovitz (1998) perspective, the multilateral response by the WTO requires a focus on both productions and consumptions of goods and services and questioning of the preference on the part of trade policy analyst for trade rules that treat ‘like’ products equivalently regardless of their method of production. WTO requires a comprehensive approach to accomodate harmonization on the differences of many international regime, in particular related to trade issues, while at the same time also try to realize the main objectives of WTO Preamble to achieve sustainable development.²⁵

²⁴ GATT (1992), *op. cit.*

²⁵ Steve Charnovitz (1998), “The World Trade Organization and the Environment”, Yearbook of International Environmental Law

Bhagwati and Srinivasan (1996) take up the same issue of linkage correlation between trade and environmental standards by asking the question of under what circumstances – if any – should trade be restricted because of the absence of harmonized environmental policies among countries? Their view is that the potency of the contention toward harmonization of domestic policies across trading partners is a precondition for market liberalization which should not be underestimated today. It is nowhere more manifest, or more compelling in its policy appeal, than in the area of environmental standards. The diversity in environmental standards is perfectly legitimate. This can arise not merely because the environment is differently valued among countries but also because of the differences in endowments and technology across countries.²⁶

Since WTO was established in 1995, in regards to environmental protection aspect, intensive discussion has been held to accommodate and to overcome potential conflicts which might occur due to different measurement between WTO provisions and MEAs provisions toward international trade activities. To further determine the role of MEAs, in general MEAs trade provisions is intended to encompass four main objectives:

- a. To put some restrictions on any unsustainably produced goods or environmentally harmful product from being traded in the market;
- b. To encourage governments to comply with the MEAs regulation;
- c. To prevent any free-riding countries benefiting the MEAs performance without playing an active roles;
- d. To achieve effectiveness on MEAs provisions by avoiding “loop hole” - which represent on any violation related to MEAs provisions.

Duncan Brack (1999) notes that some of the most important MEAs permit discrimination between parties on the basis of production processes and making use of quantitative restrictions, and in doing so are inconsistent with WTO rules. WTO

²⁶ Jagdish Bhagwati and T.N. Srinivasan (1996), “Trade and the Environment: Does Environmental Diversity Detract from the Case for Free Trade?”, in Jagdish Bhagwati and Robert E. Hudec (eds), *Fair Trade and Harmonization: Prerequisites for Free Trade?*, MA and London: MIT Press, Cambridge

regulations outlaw discrimination in trade, which is stipulated under GATT Articles I regarding Most Favored Nation (MFN) Treatment, and Article III regarding National Treatment. MFN treatment principle clearly explain to prohibit any kind of discrimination toward “like products” trading activity among WTO members. While MEAs on the other side, in order to achieve environmental sustainability, requires its members to apply some discriminations and restrictions in international trade based on environmental performances, which can apply discrimination to trade activity on “like products”. In addition, National Treatment principle emphasize more on equal treatment on any kind of measurements applied by domestic regulations. This principle become one of the main burden for WTO and MEAs provisions in achieving the same paradigm on how to pursue sustainable development in the future.²⁷

Article I GATT-WTO, General Most-Favored-Nation Treatment:

“With respect to customs duties and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, and with respect to all matters referred to in paragraphs 2 and 4 of Article III, any advantage, favor, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties“.*

Article III (1) GATT-WTO, National Treatment on Internal Taxation and Regulation: *“The contracting parties recognize that internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products so as to afford protection to domestic production”.*

²⁷ Duncan Brack (2000), “Multilateral Environmental Agreements: An Overview”, in Halina Ward and Duncan Brack (eds), Trade Investment and the Environment: Proceedings of the Royal Institute of International Affairs Conferences, London: Earthscan Publications Ltd

Further more, GATT-WTO also set a general elimination of quantitative restriction under Article XI (1), which mention that within international trade performance, WTO members are allowed to establish domestic arrangement policies which apply prohibitions or restrictions on trade only by applying tariff duties, taxes or other charges. In contrary, MEAs provision in order to preserve environment require some quantitative restrictions other than those stipulated within Article XI (1).

Article XI (1) GATT-WTO, General Elimination of Quantitative Restrictions: *"No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenser other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party".*

As in general overview, we might aware that no real conflict has emerge between WTO and MEAs. In international practices, there is no trade conflict has been occurred within WTO dispute settlement towards MEAs provision. With regard to WTO and MEAs relationship, many experts argued that GATT-WTO regulations has arranged some provisions which associated with non-conforming WTO rights and obligations, and the existing dispute settlement framework of the WTO is sufficient to overcome any potential conflicts. However, the counter-argument argued over some concern on different approach used by WTO and MEAs which could lead to formation of a conflicting provisions and causing MEAs efforts to protect the environment difficult to achieve in any MEAs negotiations. The uncertain relation is feared will lead to unnecessary problem and worsen the tensions between MEAs and WTO in the coming years.

Brack argues that the present situation creates an unstable and uncertain situation, threatens direct conflict between two important global regimes, weakens the effectiveness of future environment agreements, and does nothing to remove the perception that the WTO threatens the environment. He notes that the experience of

exceptions sought for environment purposes under Article XX of the GATT 1994, and that each of the environmental measures was found to be unacceptable because the measures were not the least trade restrictive, were extra-jurisdictional in nature or were applied in an arbitrary or unjustifiable manner.

Sampson (2001) offers a number of suggestions on how to improve the relation between WTO and MEAs within the scope of environmental issues. In brief, he considers that environmental matter should be dealt with by those institution that have both the mandate and expertise to do so. By applying waiver or exception provision, WTO members can generate domestic measurement in order to protect environment preservation, despite the fact that it violates WTO rights and obligations. Nevertheless, both waiver and exception provision approach can not simply be applied, yet it need WTO members' approval or even other stricter prerequisites.²⁸

Within GATT-WTO regulations, waiver provision is legally stipulated in Article XXV (5) which allowing WTO members to apply waiver approach toward any WTO obligations. This waiver provision could accommodate a non-confirming measures or restrictions which required by MEAs in order to protect environmental preservations. In addition, although that waiver approach is allowed, yet in order to achieve the application of waiver provision, general acceptance and approval by at least three-quarters of WTO members and also WTO official are needed. In brief, the reason for this matter are because of that; a waived obligation applies only for limited time and periodically must be renewed. Moreover, any kind of non-violation, nullification and impairment of WTO rights caused by waiver obligation, then WTO members who feel aggrieved by those waiver obligation could report and challenge it to WTO Dispute Settlement Body.

Article XXV (5) GATT-WTO, Joint Action by the Contracting Parties: *"In exceptional circumstances not elsewhere provided for in this Agreement, the CONTRACTING PARTIES may waive an obligation imposed upon a contracting party by this Agreement;*

²⁸ Gary P. Sampson (2001), "Effective Multilateral Environment Agreements and Why the WTO Needs Them", World Economy

Provided that any such decision shall be approved by a two-thirds majority of the votes cast and that such majority shall comprise more than half of the contracting parties. The CONTRACTING PARTIES may also by such a vote".

GATT-WTO also regulates an exceptions provision as described in Article XX. Further more, Article XX (b) and (g) explain that with respect to environmental purposes, a non-conforming approaches toward GATT-WTO regulation are allowed when its necessary to preserve human, animal, plant, and health; or, when its related to environment preservation of exhaustible natural resources which need to apply restriction on domestic production or consumption. Exception can be apply by fulfilling one of those condition, which should also accordance to additional requirement mention in the head explanation of Article XX.

Article XX GATT-WTO, General Exceptions: "*Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:*

- ...
*b) necessary to protect human, animal or plant life or health;
g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption".*

In regards to consensus mandatory in WTO systems, potential evolution and future development of trade and environmental debate will mostly be driven by factors outside the WTO rather than within it. Within WTO negotiation, trade and environment still a controversial matter to be discussed and to reach a collective agreement among members will be difficult to achieve in the near future. Different perspective to achieve sustainable development between developed countries and developing countries become one of main cause why WTO negotiations could not establish consensus agreement on environment-trade related policies. Due to that

matter, it is necessary for global community to go further than the WTO and support a new emerge of global environmental arrangements.

CHAPTER III

ENVIRONMENTAL GOODS LIST IN APEC TALKS

3.1 Background on Environmental Goods List

Current global economic policy pursue on free market principle based on Adam Smith and David Ricardo theories. Many economy experts believe that open market will create fair competitiveness and also encourage resources-efficient industrial production. Environment preservation now becoming an important aspect to be discussed along with trade liberalization effort. Global community is now beginning to realize that international commerce on products that were produced through a non-environmentally friendly process could cause the occurrence of damage on global ecosystem. Those environmental appearance which caused by trade activities covering many things, among others: climate change, waste-disposal on industrial activities, water scarcity, deforestation, pollutions, and many other.

One phenomenon of a systemic nature that raises considerable concern among trade officials is the continuing proliferation of regional trade agreement. Not only are their numbers increasing rapidly, the nature of the obligations they contain frequently reaches deep into the regulatory structure of the parties concerned. One such area where regional trade agreements are extending to new disciplines is environmental protection, which is also discussed under WTO negotiation.

Within WTO, the correlation issue on environment concern and global trading system managed by WTO Committee on Trade and Environment (CTE). The mandate of CTE (in monitoring trade and environment dispute) was agreed in 1995, yet it was officially established during Fourth Session of WTO Ministerial Conference (Doha Round). One issue that attracts most attention in CTE establishment was the discussion on environmental goods and services (EGS). By cautiously applying gradual international trade liberalization toward EGS, it will facilitate the access to EGS utilizations, which will later on generate many environmental advantages, such as:

reduction on water and air pollution; efficiency on natural resources use; well-managed waste disposal; utilization of sustainable energy; and many others. Further more, liberalization on EGS could also be a potential instrument to economic development, which will trigger new employment, transfer of technology and education, and creating new market.

CTE also in charge in monitoring trade and environmental issue by having a good interaction with other MEAs. Significant policy momentum was created in 2012 during Rio +20 Summit declaration, which reaffirm the importance of trade as an engine for sustained economic development. MEAs support on sustainable development will encourage CTE to solve their priority works on: trade rules, environment agreements and disputes; environment taxes and national requirements; environment and trade liberalization, and IPR. In brief, the achievement of sustainable development mandated by the UN Sustainable Development Goals (as successor of Millenium Development Goals) will be achieved by global community if EGS trade liberalization properly managed by CTE.²⁹

Keane and Hou (2015) argue that an increased trade in environmental goods and services (EGS) is a global climate change mitigation strategy. This is because use of these goods can result in more environmentally friendly outcomes compared to alternatives. Hence, reducing their costs, including through tariff reductions, can incentivize their use over conventional alternatives therefore improving global environmental outcomes. Efforts to conclude on a list of EGS at different levels, multilateral as well as regional, have been underway for some time, but lately have received a renewed impetus. Since the Doha round of multilateral negotiations within the WTO stalled, plurilateral negotiations have commenced between likeminded countries under the Environmental Goods Agreement (EGA). Regional efforts among members of Asia-Pacific Economic Cooperation (APEC) to liberalize EGS have also accelerated. Negotiations for a new global climate change framework to be agreed

²⁹ Rene Vossenaar (2013), “The APEC List of Environmental Goods: An Analysis of the Outcome & Expected Impact”, ICTSD Programme on Trade and Environment, source taken from (accessed on September 2016) <http://www.ictsd.org/downloads/2013/06/the-apec-list-of-environmental-goods.pdf>

under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) are ramping up in time for the next decisive round of negotiations for a new international climate change agreement to be held in Paris in December 2015. Although the liberalization agenda of EGS negotiated under the auspices of the WTO is not directly related to the UNFCCC process, an agreement by members could provide an important signal of intent towards the mitigation of global climate change.³⁰

The relevant trade and environment parts of the Doha Declaration are included in paragraphs 31–33, which agree to the reduction or, as appropriate, elimination of tariff and non-tariff barriers to EGS. As specified within Paragraph 31 (iii), Doha Round targeting liberalization of tariff and non-tariff barriers on environmental goods and services. Yet, to achieve this target, WTO should construct an universal definition and scope of goods and services which can be approved by all WTO members. Many challenges happened during negotiation meeting, and due to that matters, WTO has not been able to move forward toward liberalization on environmental goods and services. The main reason of WTO negotiation stagnate on environmental goods and services, caused by different perceptions among WTO members in determining what types of goods and services that can be classified as environmental goods and services, yet how to do it (list-approach in defining environmental goods and services was rejected by some WTO members). Along with definition and scope issue, “multiple-use” products which can be apply for environmental use and non-environmental use made WTO negotiation on environmental goods and services liberalization become more difficult to overcome due to consensus requirements as WTO legal basis.³¹

As environmental goods and services matter discussed under CTE, many WTO members argued that an overlapping effort in trade liberalization could have happened with WTO negotiating group for Non-Agricultural Market Access (NAMA), which

³⁰ Jodie Keane and Zhenbo Hou (2015), “Trade in Environmental Goods and Services: Issues and Interests for Small States”, The Commonwealth, source taken from (accessed on October 2016) <http://www.oecd-library.org/docserver/download/5js65z2nzd32.pdf?Expires=1475135397&id=id&accname=guest&checksum=F461A8F6104F96B02B99849969262DF8>

³¹ James K.R. Watson (2013), “The WTO and the Environment: Development of Competence Beyond Trade”, Routledge, London and New York

covering industrial products trade liberalizations. Due to uncertainty on environmental benefits, many WTO members also argued that the negotiation continuation on deeper tariff elimination in environmental goods and services should not need to be proceed. Even though that WTO negotiation will keep moving forward to solve environmental-trade issues, it will remain difficult for all WTO members to select and to agree on the scope of environmental product to be discussed in the negotiation levels.

Doha WTO Ministerial Declaration (2001), Trade and Environment

- Paragraph 31: “*With a view to enhancing the mutual supportiveness of trade and environment, we agree to negotiations, without prejudging their outcome, on:*

- i. *the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs). The negotiations shall be limited in scope to the applicability of such existing WTO rules as among parties to the MEA in question. The negotiations shall not prejudice the WTO rights of any Member that is not a party to the MEA in question;*
- ii. *procedures for regular information exchange between MEA Secretariats and the relevant WTO committees, and the criteria for the granting of observer status;*
- iii. *the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.”*

As WTO effort to achieve sustainable development still facing difficulties within WTO negotiations on environmental goods and services, similar initiative also carried out by APEC organization. However, better achievement made by APEC Economies, as APEC Leaders Meeting in Vladivostok-Russia (2012) voluntarily generate an agreement on 54-Subheadings environmental goods list tariff libaralization, by reducing import tariff duties to five percent or less through MFN tariff rate basis by the end of 2015.

Stagnant progress of Doha Round-WTO lead to gradual shift of trade liberalization effort from multilateral approach (WTO) into regional integration initiatives approach. Within 2010-2015 period, Japan, the United States, Russia,

Indonesia, China and the Phillipine were succesively chaired APEC negotiation meeting which deliver on the establishment of APEC Environmental Goods commitment. By concluding APEC Environmental Goods list tariff reduction commitment, APEC demonstrate that its inclusive and sustainable growth has becoming their prominence agenda. As global community still managing to liberalize international trade, APEC has managed to elaborate the social-economic issues and trade liberalization into best practices, which for WTO still regarded as a controversial matter. In brief, APEC's Bogor goals target promote better international trade liberalization compared to WTO.

APEC achievements in realizing APEC Environmental Goods list tariff elimination was not been achieved within a short period of time. What have been experienced within WTO negotiation also happened within APEC negotiation, in particular the effort to determine the scope of environmental products. Vossener (2013) argue that, the main reason why APEC Economies could succeed to achieve the establishment of 54-subheadings environmental goods, was probably because APEC Economies did not impose themselves to define an “environmental goods”, yet APEC Economies just simply agreed on an acceptable package of products that could be considered as “environmental goods”. That acceptable package of environmental product also prepared with “ex-out clausal” which aimed to overcome issue related to “multiple-use” products. Even though APEC implementation is based on voluntary basis and legally non-binding, the most critical reason which makes APEC negotiations achieve its target successfully is because of political commitment made by APEC Economies Leaders.³²

3.2 APEC's Environmental Goods List

APEC established in 1989 as a regional economic forum to facilitate the growth of inter-dependency of many countries within Asia-Pacific region. In brief,

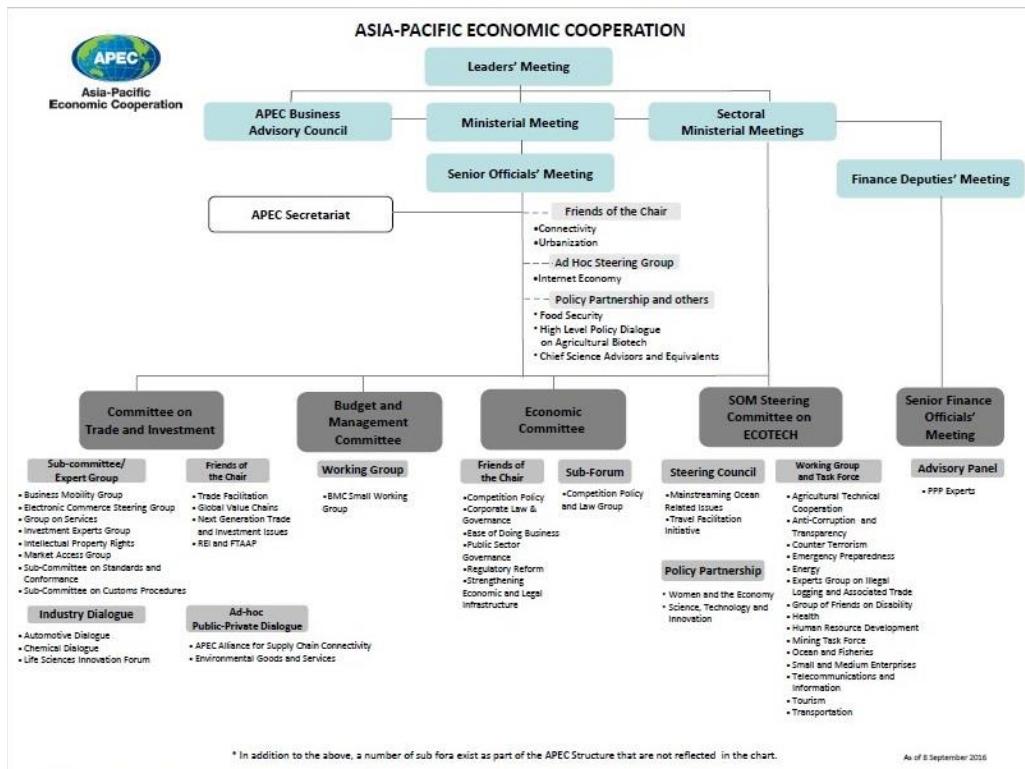
³² Rene Vossenaar (2013), *op. cit.*

supporting sustainable growth becoming the primary goals of APEC, while trying to reach other targets, including: to achieve free and open trade, and investment; promoting and accelerating regional economic integration, encouraging economic and technical cooperation (ECOTECH), enhancing human security, and facilitating a favorable and sustainable business environment. In practices, APEC Economies shall ensure that goods, services, investment and people could move easily beyond APEC Economies territorial. To achieve those targets, APEC Economies have to manage a simply custom procedures; applying equal and fair regulations and standard based on APEC agreements; to encourage more business climate, and other domestic policies that could support trade relations among APEC Economies .

As a regional forums focused on economic growth and sustainable development, APEC is the only international organization which not require legally binding obligations over their agreements. By applying voluntary basis mechanism, APEC Economies try to achieve its objectives by promoting fair and equal talks, and also concluding its decision by applying consensus approach.

In annual protocol practice of APEC meetings, every APEC Economies has the opportunities to host to APEC meetings, and act as the APEC Chairs. Elected APEC Economy host responsible for organizing the entire event, by managing annual Economic Leaders' Meeting, Ministerial Meetings (MM), Senior Officials Meetings (SOM), and the APEC Business Advisory Council and the APEC Study Centers Consortium. APEC Economy host also serve as Executive Director position at APEC Secretariat (until 2009), yet from 2010, position at APEC Secretariat was opened to all APEC Economies candidates, which will be appointed for 3 years fixed-term basis service period. As APEC Economies put more concern on sustainable development, in August 2014 during SOM3 APEC meeting in China, APEC Economies agreed to form Friends of The Chair on Environmental Goods (FoTC on EGs) as a forum to discuss the implementation on APEC Environmental Goods list in 2015.³³

³³ How APEC Operates, source taken from (accessed on October 2016) <http://www.apec.org/About-Us/How-APEC-Operates.aspx>



Source: www.apec.org

Table 3.1.: Structure of APEC

Asia-Pacific region, in particular APEC Economies, has become one of the most important regional forum in the world that stimulate the growth of economic development. In 2014, total population of all APEC Economies are estimated amounts to around 2.8 billion people, which represent approximately 57 percent of global GDP and 49 percent of global trade. APEC policies has resulted an economic growth in the region, with real GDP doubling from just USD 16 trillion in 1989 to USD 31 trillion in 2013. Along with that, residents of APEC Economies also experienced a rise on their income/capita by 45 percent, which eradicate poverty and create an increasing number of middle class economic welfare around Asia-Pacific regions. Due to fair and equal approach made in every APEC decision, all APEC provisions on trade facilitation

contribute significantly to the increase of prosperity. Within the period of 1989-2012, APEC Economies had achieve a remarkable increase of trade, which is generally caused by average fell of tariff import duties from 17 percent (1989) to 5.2 percent (2012).

Nevertheless, APEC also encourage economy-environment integration, and promoting sustainable development for the global prosperity. Its an anomaly, because APEC Economies could successfully promote sustainable development within trade liberalization context. Those support on sustainable economic growth stated in the 20th Leaders' Declaration for APEC list of environmental goods, which mention that "*APEC plays an important role in pursuing green growth in the region. While each economy has its own environmental and trade policies, it is vitally important to pursue common approaches to environmental challenges, and take coordinated actions to address climate change, such as promoting trade and investment in goods and services needed to protect our environment and developing and disseminating relevant technologies.*"

At earlier stage, the APEC Environmental Goods list commitment could be considered ambitious due to MFN-applied tariff approach, even though it just manage some provisions regarding import tariff duties elimination among APEC Economies. Furthermore, during APEC Economies meeting in United States (2011), APEC Leaders declare that APEC Economies "...will also eliminate non-tariff barriers, including local content requirements that distort environmental goods and services trade". Previous APEC Leaders statement clarify that APEC Economies ambitious level covering a comprehensive long-term efforts to achieve trade liberalization while promoting green growth at the same time.

The APEC Environmental Goods list were categorized using Harmonized System (HS) approach which divided in to "54-subheadings" different kind of products. HS is one of the most commonly used classification system of all traded products in the world, which internationally harmonized up to sub-headings level (6-digit level or HS6 level); therefore, APEC Environmental Goods list usually known as "54 HS6

APEC Environmental Goods list” or in short “EGs list”.³⁴ However, in national level tariff line (TL), products under 6-digit level HS can be further subdivided in 8-digit level HS or 10-digit level HS.³⁵ As in most case that product description at the 6-digit level of the HS are too general to exclusively or pre-dominantly in covering environmental goods; consequently, many other goods (which are not indicated as environmental goods) also are covered.

Therefore, in the APEC Environmental Goods list, the term “ex-out” is introduced to indicate that only part of a particular sub-heading is considered as an “environmental good”, in accordance with additional product specifications and remarks provided by APEC Economies. Based on national level TL classifications, those 54 sub-headings (in 6-digit level) identified in the APEC list will now need to be interpreted in the individual national tariff lines schedules of member economies as different APEC Economies may use different tariff codes and different product descriptions for the ex-outs, and only these ex-outs would benefit from tariff reductions. In conclusion, all those additional product specifications indicated as “ex-out” had already been submitted and approved by all APEC Economies, and also listed in Annex C of 20th APEC Economic Leaders’ Declaration in Vladivostok, Russia.

Overall, the APEC Environmental Goods tariff elimination is a significant international political achievement, which within 3 years period, all APEC Economies will effectively reduce import duties tariff of 54-Subheading products by the end of 2015. Unlike many other multilateral trade agreements, by applying MFN basis approach, all outcomes generated from tariff reduction will also be benefited by other non-APEC Economies countries including developed countries like EU, EFTA, and

³⁴ The Harmonized Commodity Description and Coding System generally referred to as "Harmonized System" or simply "HS" is a multipurpose international product nomenclature developed by the World Customs Organization (WCO). It comprises about 5,000 commodity groups; each identified by a six digit code, arranged in a legal and logical structure and is supported by well-defined rules to achieve uniform classification. The system is used by more than 200 countries and economies as a basis for their Customs tariffs and for the collection of international trade statistics. Over 98 % of the merchandise in international trade is classified in terms of the HS. Source: <http://www.wcoomd.org/> (acceseed on October 2016)

³⁵ A tariff line (TL) is a product, defined in a national tariff schedule, for tariffs. TLs are not internationally harmonized and may have 8, 10 or more digits. Any tariff reduction will have to be implemented by reducing MFN-applied rates for relevant national TLs.

also developing countries like Brazil, Argentina, South Africa, India, and others. Alternatively, all experiences and lessons learned in the establishment process of APEC Environmental Goods list, may give useful inputs for other other regional trade blocs that want to undertake similar initiatives within trade-environment issues, in particular, the WTO. Indeed, the lack of enforceability provisions within APEC regulations have been a critical issue for every outcome of APEC agreement; however, the non-binding nature and voluntary basis of APEC decision have successfully encourage all APEC Economies to liberalize their barriers on international trade even better than what they could give on WTO agreements.³⁶

³⁶ Rene Vossenaar (2013), op. cit.

CHAPTER IV

ANALYSIS: INDONESIA'S STRATEGY IN IMPLEMENTING APEC ENVIRONMENTAL GOODS LIST COMMITMENT

What stands out as an issue that flags many of the concerns of developing countries toward trade-environment issue is eco-labelling framework, which in general objectives try to discriminate products that viewed as less protective toward environment preservation. Appleton (2002) notes that while the overall goal is laudable, eco-labels are of both a systemic and commercial concern for most developing countries. In developing countries perspective, their domestic industry players are lack of resources and political expertise to adapt with the development of environmental labelling criteria, in particular those criteria generated by developed countries. Developed countries in this regards could formulate eco-labelling criteria based on their domestic conditions which are require high standard and not suitable for developing countries. In contrary to developing countries, regulatory requirements, the enforcement of regulations, and also wage consideration, are often viewed as sources of comparative advantage by developed countries. Eco-labelling formulation that warn global consumers to serious discrepancies in the above may disadvantage developing countries and be based on what can be very subjective factors.³⁷

Most emerging countries have seen little value in much trade and environment debate. Shahin (2002) provide an overview of the various key trade and environment issues from a developing country viewpoint. Her examination covers a range of issues, including MEAs, eco-labelling and trade-related intellectual property rights. She clearly articulates the developing countries' mistrust of the use of process-related environmental standards that frequently based on values that differ from one society to another; in particular, those in developing countries. This concern permeates much on rejection of an environmental window for Article XX of GATT 1994 and justifications

³⁷ Arthur E. Appleton (2002), "Environmental Labelling Schemes Revisited: WTO Law and Developing Country Implications", in Gary P. Sampson and W. Bradnee Chambers (eds), *Trade, Environment, and the Millennium*, Tokyo: United Nations University Press

for unilateral action in particular, and also the motivations behind some eco-labelling schemes as well as proposals to clarify the relationship between WTO rules and MEAs. She notes that setting ecological standards for process-related production mechanism could become a legal basis concept which lead as a restriction to incorporate other non-trade-related objectives. In this respect she identifies the specific areas of concern for a number of developing countries: human rights, good governance, labor standards, and other standards which have no relationship with the WTO.³⁸

Despite of all those developing countries concern on trade-environmental debate, global efforts to achieve sustainable development and inclusive economic growth has gained its momentum, which started from United Nation establishment on 8 measureable targets of Millennium Development Goals (MDGs) until they set a new 17 measureable targets of Sustainable Development Goals (SDGs) in 2015. Inclusiveness in SDGs considered as ambitious action made by UN, therefore policies integration mechanism must be accomplished among all UN members. Asia-Pacific region plays an important role to lead global economic growth, and international community has witnessed the significant economic growth has helped millions of people out of poverty line. However, economic growth itself is not sufficient to maintain sustainable welfare. Sustainable development and human welfare comprise wide range of aspect covering health, education, gender equality, economic development, security, and many others. In 2015, United Nation on Economic and Social Survey of Asia and the Pacific (ESCAP) emphasize that international community should generate and adopt an inclusive policies for effective performance toward MDGs commitment which continued with SDGs agenda.³⁹

Indonesia as a part of Asia-Pacific region country, which is a nascent yet stable democracy and the fourth most populous country in the world, also experienced a

³⁸ Magda Shahin (2002), “Trade and Environment: How Real Is the Debate?”, in Gary P. Sampson and W. Bradnee Chambers (eds), *Trade, Environment, and the Millennium*, Tokyo: United Nations University Press

³⁹ UN ESCAP 2015, source taken from (accessed on october 2016) <http://www.unescap.org/sites/default/files/Economic%20and%20Social%20Survey%20of%20Asia%20and%20the%20Pacific%202015.pdf>

remarkable economic growth during the last 5 years of its development. Despite continuous, multi-decade economic growth, approximately 11% of Indonesia's population is living below the poverty line. To encourage people out of poverty, the government of Indonesia is promoting long-term economic development projected to average at least 5% per year in order to reduce the poverty rate below 4% by 2025, as mandated by the Indonesian Constitution.

In 2010, the Government of Indonesia pledged to reduce emissions by 26% (41% with international support) against the business as usual scenario by 2020. The current administration, under President Joko Widodo, has determined priority actions within the national Nawacita (Nine Agenda Priorities) framework, which includes protecting Indonesia's citizens, encouraging rural and regional development, improving the quality of life, and improving productivity and global competitiveness. These core missions are consistent with the national commitment toward a climate change-resilient development path, in which climate change adaptation and mitigation constitute an integrated and cross-cutting priority of the National Medium-Term Development Plan.

Indonesia's environment however, is facing continuous challenges from natural phenomena to human activity, in which the greatest threat to the environment challenge is associated with development. In general, those environmental challenges in Indonesia covering, among other: deforestation; smoke and haze from forest fires; chemical pollution caused by industrial wastes, sewage-flow issue; to include, air pollution in urban areas that caused by vehicles disposal. Many international and domestic environmental NGOs have made an approach toward Indonesia's government to be responsible, to monitor and to take legal action, in tackling environmental issues in its territories. For the last five decades, Indonesia's government has noticed the emergence of environment issues along with development progress. Lots of action has taken already, which cover: enactment related to natural resources management and enforcement; construct some feasibility study on development-environment impact; and many other policies which gives authority for related ministries to harmonize

environmental protection and development efforts. In spite of these actions, corruptions practices and legal uncertainties on ministries jurisdictions, in addition with overlapping authorities among government departments, have slowed progress against environmental degradation.

In 2014, World Bank environment project (2014) report that Indonesia's administration and its set of regulations could not yet achieve sustainable development objectives, though the government together with international support has issued many policies and technical capacity development. Indonesia's government effort on sustainable development also supported by many civil society organization (NGOs), which use their significant advocacy experience to take some real actions, such as: giving educations to people, creating network and solidarity, yet also monitoring and giving policy suggestion toward related ministries concerned with environment issues. However in general, the reports conclude that Indonesia's effort to manage natural resources utilization along with environmental preservation is hard to achieve in near future.⁴⁰

As Indonesia considers sustainable development efforts as a part of its development plan, another approach in pursuing green growth was made in 2012 by engaging in APEC List of Environmental Goods commitment. Trade and investment liberalization in environmental goods will encourage APEC Economies businesses and markets to obtain pro-environment technologies with relatively minimum cost, which will be beneficial for environment preservation; and later contribute significantly to APEC's core mission to promote free and open trade and investment, as stipulated in the Bogor Goals. However, given its wide diversity, Indonesia still faces some challenges on implementing this commitment in accordance with the initial agreement whereby each country should have to implement at the end of 2015.

⁴⁰ Environment in Indonesia by World Bank, source taken from (accessed on October 2016)
<http://www.worldbank.org/en/country/indonesia/brief/world-bank-and-environment-in-indonesia>

4.1 Indonesia's Paradigm on APEC Environmental Goods Tariff Reduction

As a developing country, Indonesia notice that their domestic industries are beginning to experience serious trade-environmental difficulties, and these issues will grow as environmental concern are not going to disappear from the international trade agenda. Through APEC Environmental Goods list commitment, Indonesia attempt to support sustainable development within international trade. However, Indonesia aware that their having difficulties in implementing the commitment in accordance with a predetermined time limit. APEC Environmental Goods list require all APEC Economies to apply tariff reduction of 54 subheading (HS6) products to 5% or less by the end 2015.

The import duty tariff rates of Indonesia is established under the Custom Law No. 10/1995 on the Section III, which has been replaced/renewed with Custom Law No. 17/2006. The law stipulates that each detailed tariff applied in each product (line-by-line) is regulated according to the derivative legal instruments, for example trade policies generated by related ministries. Each tariff applied is decided based on the domestic industry condition. Therefore based on Indonesia's tariff lines, those 54 HS6 APEC Environmental Goods list are covering 157 national tariff lines products (set at ten-digit, tariff item level, or known as HS10).

There are different priorities among stakeholder in Indonesia in addressing the commitment on APEC Environmental Goods list tariff elimination. Ministry of Trade (MoT) and Ministry of Foreign Affairs (MoFA) of the Republic of Indonesia as Indonesia's vocal point ministries in APEC negotiation meeting emphasize more on how they could facilitate Indonesia's Leader statement in Vladivostok declaration in accordance with what has been agreed. On the other side, Ministry of Industry of the Republic Indonesia (MoI) together with local industry associations emphasize more on how liberalization within APEC commitment will not harm the development of domestic industries. Tend to favor on MoI, Ministry of Finance (MoF) of the Republic

of Indonesia emphasize more on the practice of custom issues and how Indonesia should maintain its balance of payments.

All decisions related to tariff reduction on 157 HS10 products are under the authority of MoI, prior coordination with MoT and MoF. MoI categorized those 157 HS10 environmental goods list into four groups, which are: forestry product (1 product); automotive product (1 product); electronic product (69 products); and machinery product (86 products). In early 2015, Indonesia had already imposed a 0-5% MFN tariffs on 46 HS6 of 54 HS6 in APEC Environmental Goods list, in which those 46 HS6 products are covering 141 HS10 products. Meanwhile the other remaining 8 HS6 products, covering 16 HS10 products, still imposed >5% MFN tariffs. Along with this fact, MoI at the same time was proposing to increase the tariff of 9 HS10 products (6 HS10 products belong to the group of 46 HS6 products that already imposed 0-5% MFN tariff; while the other 3 HS10 products belong to the group of 8 HS6 products that still imposed >5% MFN tariff). Up to this time, Indonesia still has not been able to meet the commitment for the remaining 16 HS10 products (another 3 HS10 still applying MFN tariff accordance to APEC commitment, yet in the proposing process of TL increase – see table 4.1.).

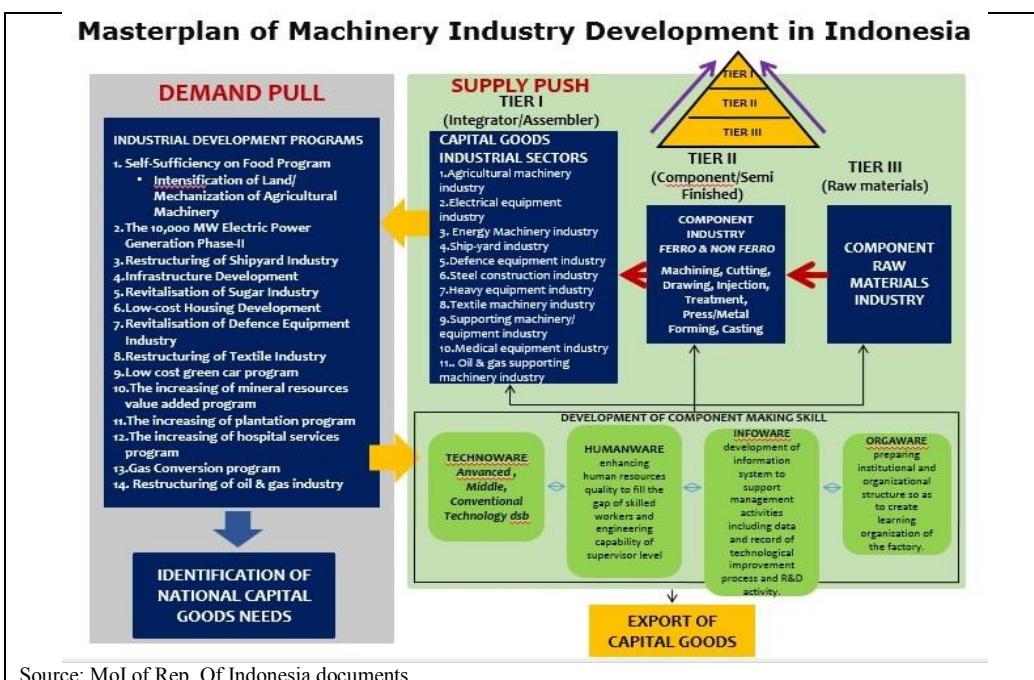
HS6	HS6 Products Description	Item	Economy TL HS10 Products	HS10 Products Description	MFN TL	New TL Proposed
8402.90	Parts of steam or other vapour generating boilers (other than central heating hot water boilers capable also of producing low pressure steam) and super-heated water boilers	1	8402.90.10.00	-- Boiler bodies or shells	5	35
		2	8402.90.90.00	-- Other	5	15
8404.10	Auxiliary plant for use with boilers of heading 8402 or 8403 (for example, economizers, super-heaters, soot removers, gas recoverers)	3	8404.10.20.00	-- For use with boilers of heading 84.03	10	
8404.20	Condensers for steam or other vapour power units	4	8404.20.00.00	- Condensers for steam or other vapour power units	10	35
8404.90	Parts of auxiliary plant for use with boilers of heading 8402 or 8403 and condensers for steam or other vapour power units	5	8404.90.11.00	-- Boiler bodies or shells	10	35
		6	8404.90.19.00	-- Other	10	15
		7	8404.90.21.00	-- Boiler bodies or shells	10	35
		8	8404.90.29.00	-- Other	10	15
		9	8404.90.90.00	-- Other	10	15
8419.19	Instantaneous or storage water heaters, nonelectric (other than instantaneous gas water heaters)	10	8419.19.10.00	-- Household type	10	
8479.89	Machines and mechanical appliances having individual functions, not specified or included elsewhere in this chapter, nesoi	11	8479.89.30.00	-- Other, electrically operated	10	
8501.64	AC generators (alternator), of an output exceeding 750 kVA	12	8501.64.00.00	-- Of an output exceeding 750 kVA	10	
8502.31	Wind-powered generating sets	13	8502.31.10.00	-- Of an output not exceeding 10,000 kVA	10	
		14	8502.31.20.00	-- Of an output exceeding 10,000 kVA	10	
8502.39	Electric generating sets, nesoi	15	8502.39.10.00	-- Of an output not exceeding 10 kVA	10	
		16	8502.39.20.00	-- Of an output exceeding 10 kVA but not exceeding 10,000 kVA	10	
		17	8502.39.31.00	-- Of an output of 12,500 kVA (10,000 kW) or more	10	
		18	8502.39.39.00	-- Other	10	
8541.40	Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light-emitting diodes	19	8541.40.22.00	-- Photovoltaic cells assembled in modules or made up into panels	5	15

Note: Item number 10 and 19 categorized as electronic products, and the other categorized as machinery products (MoI).
Source: MoI of Rep. Of Indonesia documents

Table 4.1.: 19 HS10 Disputed Products

There are several arguments why Indonesia still struggling to achieve their national TL commitment on 19 HS10 align with APEC Environmental Goods list. As a developing country, Indonesia's industry characteristic may vary. The government (MoI) noted that there were approximately 27 industries that have the capacity to produce goods under the 6 subheadings. These industries and their products are part of a group of products that used in the construction of many priority projects for Indonesia's development, in particular electricity infrastructure development and the sugar factory. MoI estimate that the value of domestic demand for the all disputed products will cover many priority sectors, such as: oil and gas sector (US\$ 15 billion/year); electricity sector (US\$ 3.5 billion/year); plant machinery sector – textile and sugar industry (US\$ 2.2 billion in 5 years); medical sector (US\$ 16.6 billion in 5 years); industrial sector – processing machinery and machine tools (US\$ 8 billion/year); and conversion equipment system – cylinder tank and converter kit (US\$ 20 million in 5 years).

However, with a total investment amounted to approximately US\$ 401.4 million in 2015, these industries are still in its early development phase, where its production is targeted to fulfill the local consumption rather than to be export-oriented industry. The local consumption has been increasing for the past several years due to the requirement of bigger local content in electricity infrastructure, as regulated in the Minister of Industry of the Rep. Of Indonesia regulation No. 04/M-IND/PER/1/2009 (see table 4.2.). While electricity infrastructure might be a seemingly different case from environmental goods, same products might be used in both cases and they are indifferent in many ways. Through tariff protection, it is expected that within 10 years the domestic industry can supply domestic needs (self-sufficient).



Source: MoI of Rep. Of Indonesia documents

Table 4.2.: Masterplan of Machinery Industry Development in Indonesia

Align with previous argument, based on trade balance perspective, Indonesia has experienced continuous severe trade deficit for the 6 subheadings (19 HS10 products), reaching US\$ 63.75 million per year in average since 2010. This condition

has got even plummeting as the trade deficit in 2014 increased by 38.53% compared to the previous year, which more than half of these trade balance deficit caused by imports come from APEC economies, such as China, United States, and Japan. (see table 4.3.).

TL HS10	Description	Trade Balance (US\$)					Major Importers
		2010	2011	2012	2013	2014	
8402.90.10.00	- Boiler bodies or shells	-38,738,712	18,406,198	-61,175,203	-34,677,719	-22,519,306	Korea
8402.90.90.00	- - Other	-89,495,956	-31,846,450	-124,990,133	-65,766,466	-138,322,961	China
8404.10.20.00	- - For use with boilers of heading 84.03	-8,427,200	-14,921,160	-953,140	-1,738,681	-2,223,623	China
8404.20.00.00	- Condensers for steam or other vapour power units	-27,764,314	-18,596,265	-10,539,838	-15,556,332	-6,078,600	China
8404.90.11.00	- - - Boiler bodies or shells	-20,208	-19,111	-3,587,528	-37,591	-576,688	China
8404.90.19.00	- - - Other	-9,630,108	-181,271	-2,428,307	-5,888,942	-25,412,974	Korea, Japan
8404.90.21.00	- - - Boiler bodies or shells	-90	-8,794	0	0	-17,999	China
8404.90.29.00	- - - Other	-1,863,161	-653,731	-4,077,254	-228,989	-46,854	US
8404.90.90.00	- - Other	-230,938,235	-96,865,284	-32,090,013	-16,874,511	-38,033,292	China
8419.19.10.00	- - - Household type	-179,932	-230,988	-717,361	-622,911	-441,283	China
8479.89.30.00	- - - Other, electrically operated	-73,571,380	-37,428,717	-62,248,541	-106,391,855	-176,139,075	Japan
8501.64.00.00	- - Of an output exceeding 750 kVA	-42,690,536	-77,252,932	-26,064,094	-25,827,143	-22,484,821	China, Japan, Singapore
8502.31.10.00	- - - Of an output not exceeding 10,000 kVA	-698,339	-97,337	-2,536,191	-1,399,808	-135,070	Spain, India, US
8502.31.20.00	- - - Of an output exceeding 10,000 kVA	-392,670	35	-12,270	-9,531	-30,767	Malaysia, China
8502.39.10.00	- - - Of an output not exceeding 10 kVA	-1,169,989	-12,281,759	-286,297	-38,220,951	-87,381,174	China, France
8502.39.20.00	- - - Of an output exceeding 10 kVA but not exceeding 10,000 kVA	-19,311,512	-18,920,355	-78,790,105	-18,732,169	-35,586,218	Japan
8502.39.31.00	- - - - Of an output of 12,500 kVA (10,000 kW) or more	-9,028,543	-10,653,900	-55,271,562	-7,277,090	-13,777,697	US
8502.39.39.00	- - - - Other	-49,436,630	-29,779,194	-17,558,319	-12,735,620	-59,432,280	China, US
8541.40.22.00	- - - Photovoltaic cells assembled in modules or made up into panels	0	0	-1,665,279	-4,881,480	-1,494,139	China

Source: trademap.com

Table 4.3.: Trade Balance of 19 HS10 Disputed Products

Considering the previous mention conditions, reduction of MFN tariff as mandated by the commitment is expected to cause injury to the domestic industry. This infant industry condition argument amplified with the result of revealed comparative advantage (RCA) calculation method toward all those disputed products. In this regards, RCA method using HS6 products to simplify the calculation among all countries in the world. Based on the result of RCA calculation, three HS6 products (841919, 840420, and 850231) categorized as “very weak” and “weak” due to negative trend/year, which mean that those products are indicated could not compete with imported products and the domestic industries will be harmed in the coming years. While another seven HS6 products are categorized as “moderate”, which mean that

those products could compete to some extend yet will get injured after sometime in the future. (see table 4.4.)

HS6	Description	2010	2011	2012	2013	2014	Avg.	Trend/ Year	Category
840290	Parts of steam or other vapor generating boilers (other than central heating hot water boilers capable also of producing low pressure steam) and super-heated water boilers	0.24	1.42	1.26	0.50	0.77	0.838	0.133	moderate
840410	Auxiliary plant for use with boilers of heading 8402 or 8403 (for example, economizers, super-heaters, soot removers, gas recoverers)	0.00	0.01	0.43	0.03	0.12	0.118	0.028	moderate
840420	Condensers for steam or other vapor power units	6.44	6.07	5.66	4.51	0.24	4.585	-1.550	weak
840490	Parts of auxiliary plant for use with boilers of heading 8402 or 8403 and condensers for steam or other vapor power units	0.37	0.16	1.56	0.12	0.92	0.626	0.137	moderate
841919	Instantaneous or storage water heaters, nonelectric (other than instantaneous gas water heaters)	0.19	0.09	0.11	0.01	0.04	0.089	-0.037	very weak
847989	Machines and mechanical appliances having individual functions, not specified or included elsewhere in this chapter, nesoi (other)	0.05	0.09	0.20	0.14	0.06	0.109	0.004	moderate
850164	AC generators (alternator), of an output exceeding 750 kVA	0.01	0.00	0.00	0.01	0.01	0.006	0.001	moderate
850231	Wind-powered generating sets	0.00	0.00	-	-	0.00	0.000	0.000	very weak
850239	Electric generating sets, nesoi (other)	0.01	0.06	0.01	0.01	0.05	0.030	0.011	moderate
854140	Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light-emitting diodes	0.04	0.05	0.06	0.10	0.11	0.072	0.016	moderate

Source: Industrial Resilience Information System-MoI and trademap.com

Table 4.4.: Revealed Comparative Advantage Method on Indonesia-Global

Lesson-learn on the Information Technology Agreement (ITA) also one of another argument why Indonesia quite concerned with MFN tariff reduction through WTO mechanism. ITA was established in December 1996 during the Singapore Ministerial Conference-WTO, consist of 29 original member countries, and increased to 82 countries which representing about 97 percentage of global trade in information technology products. All ITA participants' countries were committed to completely eliminating their import duties tariffs rate on information technology products as stipulated in the agreement (including computers, telecommunication equipment, semiconductors, semi-conductor manufacturing and testing equipment, scientific instruments, software, as well as most of the parts and accessories of these products).⁴¹

⁴¹ ITA frameworks, source take from (accessed on October 2016)
https://www.wto.org/english/tratop_e/inftec_e/inftec_e.htm

The ITA tariff elimination was implemented on a most-favored nation (MFN) basis (same as APEC Environmental Goods list tariff reduction approach), which mean that all WTO member countries (free rider) can gain benefit from the trade opportunities generated by ITA tariff elimination. Severe experience in the development of the IT industry have occurred since that time and make the government (MoI) must take more cautious action toward APEC commitment.

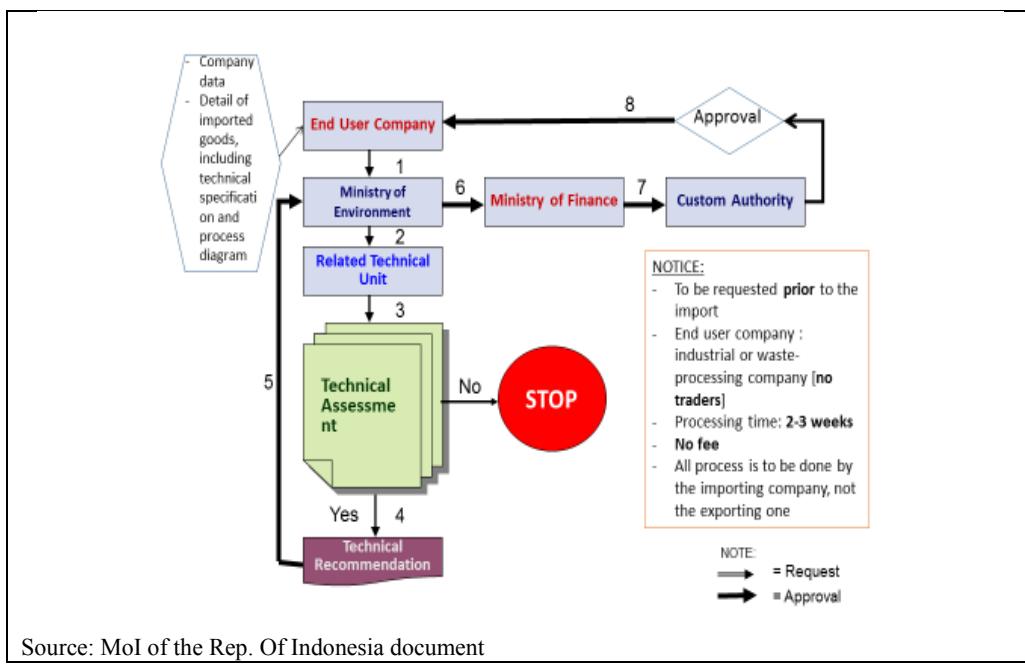
Unilateral liberalization as a way to implement APEC EGs List Commitment is facing massive objection from domestic stakeholders, particularly for the industries of goods under these 6 subheadings products. Whilst, the current trade balance itself has been in severe condition, and the situation implies that a decrease in MFN tariff would result in a significant decrease on absorption of domestic supply causing adverse injury to domestic industry. Thus, unilateral liberalization is deemed to be not a feasible solution for Indonesia at this time being.

4.2 Indonesia's Schedule Approach on APEC Environmental Goods Tariff Reduction Implementation

Several approach were made by Government of Indonesia to exclude the 19 HS10 products from APEC Environmental Goods list commitment, including “Ex-out approach” and “Utilization of MoF Regulation No. 101/PMK.04/2007 that regulates Import Duty Exemption on Imported Equipment and Materials used to Prevent Environmental Pollution” (PMK 101 approach). Through Ex-out approach, Indonesian Government propose to insert all 19 HS10 disputed products into “Ex-out/Additional Product Specification” in Annex C-APEC List of Environmental Goods. Eventually it was rejected by APEC Economies, argued that the content of Annex C-APEC List of Environmental Goods agreement was finalized since the Vladivostok Leaders’ Declaration in 2012.

Realizing that they could not use Ex-out approach toward the disputed products, Indonesian Government try to utilize PMK 101 approach. Under this regulation, any kind of imported goods and materials – which will be used for the

environmental preservation objectives – could be excluded from the imposition of import duties based on the recommendation of Minister of Environment (MoE) authorities and the approval of MoF authorities. Based on MoF Regulation, Government of Indonesia argue that this legal instrument has carried out the philosophical objective and spirit of APEC Environmental Goods Initiative (see table 4.5.). However, this approach was also rejected during FoTC on EGs forum meeting (March 2015), because tariff elimination in APEC commitment agreed to use list approach (MFN tariff elimination) not project approach.



Source: MoI of the Rep. Of Indonesia document

Table 4.5.: Flowchart of MoF Regulation Number 101/PMK.04/2007

APEC finalization meetings related to the implementation of APEC Environmental Goods list was planned to be held on November 18-19, 2015, in Manila, Philippine. To improve Indonesia's level of commitment on those APEC tariff elimination, Indonesian government stakeholders had organized several meeting to discuss further on disputed products tariff reduction (more liberal than previous – see

table 4.1.). By October 2015, Indonesia's government finally finalized their position, however its still could not achieved the required target set by APEC. This final position later on was conveyed during APEC Senior Officials Meeting on November 2015 in Philippine, which in this meeting Indonesia's representative stated that "*In line with the 2012 APEC Economic Leaders' Meeting (AELM), Indonesia is committed to the APEC Environmental Goods, including the AELM commitment to the tariff reduction of 54 EGs Tariff Lines (HS-6) to 5%. On the other hand, under current economic circumstances, with deep regret I need to frankly say that the timeline for Indonesia to be able to fully comply with the commitment deadline needs to be extended. Indonesia will be reducing the remaining 8% of related national tariff lines above 5% gradually*" (see table 4.6.)

TL HS10	Description	Tariff Elimination Schedule							Note
		2015	2016	2017	2018	2019	2020	2021	
8402.90.10.00	-- Boiler bodies or shells	5	5	5	5	5	5	5	Standstill to MFN tariff
8402.90.90.00	-- Other	5	5	5	5	5	5	5	Standstill to MFN tariff
8404.10.20.00	-- For use with boilers of heading 84.03	10	10	9	8	7	6	5	Periodical Decline
8404.20.00.00	- Condensers for steam or other vapour power units	10	10	9	8	7	6	5	Periodical Decline
8404.90.11.00	-- Boiler bodies or shells	10	10	9	8	7	6	5	Periodical Decline
8404.90.19.00	-- Other	10	10	9	8	7	6	5	Periodical Decline
8404.90.21.00	-- Boiler bodies or shells	10	10	9	8	7	6	5	Periodical Decline
8404.90.29.00	-- Other	10	10	9	8	7	6	5	Periodical Decline
8404.90.90.00	-- Other	10	10	9	8	7	6	5	Periodical Decline
8419.19.10.00	-- Household type	10	10	9	8	7	6	5	Periodical Decline
8479.89.30.00	-- Other, electrically operated	10	10	9	8	7	6	5	Periodical Decline
8501.64.00.00	-- Of an output exceeding 750 kVA	10	10	9	8	7	6	5	Periodical Decline
8502.31.10.00	-- Of an output not exceeding 10,000 kVA	10	10	9	8	7	6	5	Periodical Decline
8502.31.20.00	-- Of an output exceeding 10,000 kVA	10	5	5	5	5	5	5	Tariff Elimination
8502.39.10.00	-- Of an output not exceeding 10 kVA	10	10	9	8	7	6	5	Periodical Decline
8502.39.20.00	-- Of an output exceeding 10 kVA but not exceeding 10,000 kVA	10	10	9	8	7	6	5	Periodical Decline
8502.39.31.00	-- Of an output of 12,500 kVA (10,000 kW) or more	10	5	5	5	5	5	5	Tariff Elimination
8502.39.39.00	-- Other	10	5	5	5	5	5	5	Tariff Elimination
8541.40.22.00	-- Photovoltaic cells assembled in modules or made up into panels	5	5	5	5	5	5	5	Standstill to MFN tariff

Source: MoI data

Table 4.6.: Tariff Elimination Progress on 19 HS10 Disputed Products by October 2015

Align to Leaders Declaration in APEC Economic Leaders Meeting in Vladivostok (2012), which stated that: "*We reaffirm our commitment to reduce our applied tariff rates to five percent or less on these environmental goods by the end of 2015, taking into account economies' economic circumstances without prejudice to*

their positions in the WTO", Indonesian government's made a justification that they apply above schedule was based on "economic circumstances" reasons (as mention in sub-chapter 4.1 Indonesia's Paradigm on APEC Environmental Goods Tariff Reduction). As the result of the meeting, Indonesia's government claim that they have 13 HS10 remaining disputed products that will be periodically declined started from 2017, and will entirely comply with the commitment on 2021.

By applying this schedule, Indonesia try to be committed to use MFN basis for their tariff elimination in APEC Environmental Goods list, even though that they still could not fulfill all 54 HS6 products tariff reduction by the end of 2015. Toward 13 HS10 remaining disputed products, Indonesian government encourage all APEC Economies to use PMK 101 approach. The main provisions stipulated in PMK 101 is to provide import duty exemption to any equipment or materials which are used to prevent or control environment pollution referred to installation, engine and kind of engines, also spare parts are used to process waste, so when it is thrown not make contamination or damage of environment. The definition of those equipment and material are covering all products, not restricted only to the 54 HS6 products as mention on APEC Environmental Goods list, as long as it does not conflict with applicable technical regulations. Furthermore, importing goods which get exemption of import duty, if had been used for 2 years since registration date of import customs declaration, can be sold or used for other purpose after get approval from Director General of Custom and Excise-MoF. By running on this regulation, Indonesian government demonstrate that they strongly supports sustainable economic development, in particular to environment preservation in international trade regime.

4.3 APEC Commitment Comparison Analysis among APEC Economies

What makes tariff elimination still important to be discussed in international trade, is because many countries still applying tariff as a protection from imported goods. In this regard, the average import tariff duties of Indonesia (7.25%) could be

indicated as one of the lowest in the world, compared to many other developing countries like Brazil (11.6%), India (13.17%), South Africa (7.99%), or Argentina (11.68%). Within APEC Economies, many countries still applying high average import tariff duties, led by South Korea (17.21%), Thailand (12.66%), Viet Nam (10.5%), and China (9.7%), although the world trend leads to tariff reduction (see Table 4.7.).

APEC Economies	All Items excl. NA		Dutiable Items		Duty-free
	No. Of TL	Avg. TR	No. Of TL	Avg. TR	
Australia	6167	2.62	3224	5	2943
Brunei Darussalam	9861	1.74	2235	7.66	7626
Canada	6935	2.68	1930	9.62	5005
China	8246	9.7	7547	10.6	699
Chile	7785	5.97	7750	6	35
Hong Kong, China	3365	0	0	0	3365
Indonesia	9947	7.25	8696	8.3	1251
Japan	8578	4.8	5038	8.32	3540
Korea, South	10905	17.21	9188	20.41	1717
Malaysia	9314	5.49	3233	15.8	6081
Mexico	12275	5.44	5029	13.28	7246
New Zealand	7472	2.35	3091	5.67	4381
Papua New Guinea	5522	4.64	1352	18.96	4170
Peru	7507	2.24	2242	7.52	5265
Philippines	9557	7.03	9087	7.39	470
Russia	9885	6.7	8057	8.22	1828
Singapore	9552	0	0	0	9552
Chinese Taipei	8768	6.32	6134	9.03	2634
Thailand	8812	12.66	7129	15.64	1683
United States	9512	4.03	5640	7.3	3872
Viet Nam	9520	10.5	6470	15.45	3050
AVERAGE	8547	5.68	4908	9.53	3639

TL (Tariff Lines); TR (Tariff Rate); MFN tariff using latest update in WTO database
Data source taken from Tariff Analysis Online-WTO, October 2016

Table 4.7.: Current MFN Tariff Rate of APEC Economies

During the First APEC Senior Officials Meeting which held on March 2016 in Lima-Peru, APEC published a forum document called “*Annex H - 2016 APEC Economy Progress in Implementing Their Commitments to Reduce Tariffs on the 54 Products in the APEC List of Environmental Goods to Five Per Cent or Less by the End of 2015 (As of 27 February 2016)*”, which briefly elaborate all APEC Economies date of implementation of tariff reductions. At the time this document was issued, most APEC Economies already implemented APEC Environmental Goods tariff elimination

by the end of 2015 or early 2016, while there are 5 remaining APEC Economies still in the progress to fully implement it (see table 4.8.).

APEC Economy	Submission Date of Detailed Implementation Plan and Date of Subsequent Revision/s	Date of implementation of tariff reductions
Australia	30 April 2015	Already implemented
Brunei Darussalam	11 June 2015	Already implemented
Canada	8 May 2015	Already implemented
China	13 November 2015	1 January 2016
Chile	5 September 2015	In implementation
Hong Kong, China	31 March 2015	Already implemented
Indonesia	24 February 2016	We expected to be fully comply to the APEC EGs commitments on 2021
Japan	16 April 2015	Already Implemented
Korea, South	6 November 2015	1 January 2016
Malaysia	12 October 2015	1 January 2016
Mexico	11 November 2015	Already Implemented. (January 6, 2016)
New Zealand	01 March 2015	Already Implemented
Papua New Guinea	01 May 2015	By the end of 2015
Peru	31 August 2015	Already implemented
Philippines	31 August 2015	Already implemented
Russia	10 November 2015	By the end of 2015
Singapore	30 April 2015	Already Implemented
Chinese Taipei	• 10 November 2015 • 21 January 2016 (revision)	• Four tariff lines are already implemented. • Two lines are under reviewed by the Executive Yuan.
Thailand	18 February 2016	--
United States	• 06 August 2015 • December 2015	• Already implemented. • Presidential proclamation issued on December 23, 2015. Tariff cuts went into effect on December 31, 2015.
Viet Nam	01 May 2015	--

Note: Date of implementation for Thailand and Viet Nam were not conveyed yet by both government (N/A)
Source: www.apec.org

Table 4.8.: APEC Economies Tariff Elimination Progress by February 2016

Most of Chile imported goods has a uniform 6% MFN tariff lines applied. To be align with APEC commitment, Chile's government had present a new bill to regulate the implementation of 5 percent flat rate tariff for 54 subheading goods to its Congress. Yet, Chile's government could not ensure the definite date of the implementation, since at that time, the new regulation still discussed in the lower chamber within the Finance Committee.

Another effort of tariff reduction on APEC Environmental Goods also conducted by Chinese Taipei's government. The process of tariff rates reduction has to pass through several stages, involves policy approval by Customs Tariff Commission under the Ministry of Finance, whose determination is submitted to the Ministry of Finance and subsequently referred to the Executive Yuan for approval. In early 2016,

two lines of APEC Environmental Goods are under reviewed by the Executive Yuan. In case the Executive Yuan approves the draft amendments, they are then referred to the Legislative Yuan for deliberation. The office of the president promulgates the customs import tariff amendments shortly after they are passed by the Legislative Yuan.

For Thailand, the tariff system is regulated under the Customs Tariff Decree B.E. 2530 (A.D. 1987). Through the Cabinet's approval, statutory rates can be adjusted or a special duty can be imposed (but not more than 50 percent of the statutory rate), and later new tariff rates can be applied to all imported goods from all of the world (WTO and non-WTO members). However, Thailand's government effort to reduce or to increase general tariff lines requires an amendment to Section 12 of the Customs Tariff Decree B.E. 2530 (A.D. 1987). The Section 12 mention that "*For the sake of national economy or public welfare or national security, the Minister of Finance with the approval of the Cabinet is empowered by notification, to reduce the rate of duty of any goods from that specified in the Customs Tariff Schedule or exempt from the payment of duty of any goods or additionally charge special duty for any goods at the rate not exceeding fifty percent of the rate specified in that Tariff Schedule for such goods and may also set rules and conditions therewith*".

In regards to Section 12 regulation, overall process of tariff elimination for Thailand comprise of: submission of the proposal notification from Ministry of Finance to Cabinet; policy approval by Cabinet; reviewing and approval of proposal notification by the Office of Council of State; and finally, implementation procedures by submitting the notification approval which already signed by Minister of Finance to the Customs Department. Later on, the cancellation or the modification of the notifications shall be published in the Government Gazette. Yet, Thailand's government could not ensure the definite date of the implementation.

Another APEC Country which also in the process of fulfilling EGs list commitment is Viet Nam. In regards to APEC commitment, Viet Nam's government already achieved 52 of 54 subheading products in accordance with APEC commitment. In addition, Viet Nam's government through Ministry of Finance together with

Ministry of Industry and Trade are working together to achieve two remaining 6-subheading products in line with APEC commitment. However, Viet Nam's government still could not ensure the definite date of the implementation.

In contrary to above statement by APEC Economies, the implementation of the APEC adopted by APEC economies which are stated in Annex H have not been thoroughly updated in the WTO database. Accessed in October 2016, many tariff rate profiles of most APEC Economies still applying tariff above 5% toward APEC Environmental Goods. Out of 21 APEC Economies countries, only Australia, Brunei Darussalam, Hong Kong-China, Japan, New Zealand, Peru and Singapore have adjust their APEC commitment in accordance with MFN tariff rate in WTO database (see Table 4.9.).

APEC Economies	Year A	Number of TL	Duty Range			Year B	Number of TL	Duty Range		
			0%	≤ 5%	> 5%			0%	≤ 5%	> 5%
Australia	2011	71	33	38		2016	71	33	38	
Brunei Darussalam	2011	160	69		91	2014	157	73	84	
Canada	2011 Rev.1	109	100	5	4	2016	91	86	4	1
China	2011 Rev.2	135	48	39	48	2015	139	49	41	49
Chile	2011 Rev.1	80			80	2016	73			73
Hong Kong, China	2011 Rev.2	30	30			2016 Rev.1	33	33		
Indonesia	2012 Rev.1	161	10	135	16	2014 Rev.1	157	10	131	16
Japan	2011 Rev.2	73	72	1		2015 Rev.1	73	72	1	
Korea, South	2011 Rev.2	247	72	12	163	2016	206	57	6	143
Malaysia	2012	84	68	6	10	2013	76	62	6	8
Mexico	2012 Rev.1	250	183	10	57	2016	264	191	39	34
New Zealand	2011 Rev.2	77	34	43		2016	77	26	51	
Papua New Guinea	2010	54	53		1	2014	54	53		1
Peru	2011 Rev.1	105	102		3	2015	104	104		
Philippines	2012 Rev.2	159	28	125	6	2016	156	29	126	1
Russia	2011	152	118	7	27	2016	136	111	14	11
Singapore	2011	159	159			2016	156	156		
Chinese Taipei	2013 Rev.1	129	66	52	11	2016	129	66	56	7
Thailand	2012 Rev.1	159	48	77	34	2014	156	56	66	34
United States	2011 Rev.2	152	85	56	11	2016 Rev.2	152	85	62	5
Viet Nam	2010	163	143	12	8	2015	155	141	9	5

Note: Year A: MFN tariff in early initial discussion of APEC EGs commitment
Year B: MFN tariff latest update in WTO database
Data source taken from Tariff Analysis Online-WTO, October 2016

Table 4.9.: Tariff Rate Transformation on APEC Environmental Goods National Tariff Lines

Since APEC Environmental Goods commitment apply MFN basis tariff elimination as their approach, this mean that determining a member's concession for a specific tariff line could involve, in some case, examining several different legal

instruments to WTO Secretariat. In WTO, all members are allowed to modify or withdraw concessions from their schedule through negotiation and agreement with other members. Article XXVIII of the GATT 1994 entitled “Modification of Schedules” is the main provision dealing with the renegotiation of a tariff concession. In regards to that matter, to fulfill what was agreed in APEC commitments, any changes of APEC Economies MFN tariff rate concession should then be reported to the WTO Secretariat.

As most of APEC Economies still applying import tariff duties (except Hong Kong and Singapore), a tariff elimination in APEC Environmental Goods list will encourage more enhancement in international trade practice, in particular related to pro-environmental products. However to some extent, tariff protection is still needed by developing countries, in particular Indonesia, to secure the development of their domestic industries. Indonesia itself actually has been in a position which is less favorable due to the refusal on the filing of several products into “Ex-out/Additional Product Specification” in the Annex C - APEC List of Environmental Goods. Along with that matter, WTO database show that Indonesia’s MFN consider to be lower than many other developing countries (China, Brazil, Thailand, Viet Nam, etc.), which make Indonesia experiencing less favorable competition in international trade. So in conclusion, Indonesia’s government has made a reasonable effort to delay their tariff elimination in APEC commitment (or even if the government decide to rise some commodity products tariff rate in the coming years), as they have apply quite low average of import tariff duties among many developing countries in the world.

CHAPTER V

CONCLUSION

APEC Environmental Goods list demonstrate that trade liberalization and environmental concern could go hand in hand. APEC also demonstrate that, even though commitments are undertaken on a voluntary basis, they could liberalize tariff reduction on products defined as environmental goods, which WTO fail to define up until now. APEC Environmental Goods tariff elimination is an implementation practice to achieve green development goals, by addressing climate change and securing sustainable economic development as committed by APEC's leaders. Which at the end, it will contribute significantly to APEC's core mission to promote free and open trade and investment, as specified in the Bogor Goals. As one of the early successes in eliminating tariff liberalization related to environmental policy, APEC Environmental Goods commitment will open the international community paradigm on how to linkage trade and environmental issue into a mutual benefit in international trade. APEC Environmental Goods commitment focus started on tariff elimination, yet it will be expanded to cover many other issue (trade barrier, investment, technical cooperation, etc.) that would be practical in facilitating international trade relations in the future.

For the coming years, it was estimated that a very huge amount of investment will be needed to achieve APEC's clean energy, clean air, sanitation and other environmental goals. Assuming that APEC Economies able to achieve these goals at the minimum cost, utilizing the latest technologies, while also creating new, green jobs, yet will be another significant challenge to be faced. Seen from another perspective, these challenges actually provides opportunities for APEC's member business to become market leader in new environmental technologies in the world. The government indeed playing an important role to set a long-term policy framework, as a form of assurance for global businesses in making a pro-environment technologies investment in APEC Economies region.

Started with the success of WTO tariff liberalization on IT products in 1996 and continued with tariff elimination on APEC Environmental Goods which also use MFN –WTO basis in 2015, trade liberalization using specific goods approach could further develop penetrated many other sectors. A new approach currently made by Indonesia and several other developing countries of APEC Economies to eliminate tariff on products which is defined as “development goods”. This proposal aims to encourage the trade of “development goods” of the APEC region, while also to synchronize the economic balance between advanced and development countries among APEC Economies. In this regards, Policy Support Unit (PSU) of the APEC support the proposal to promote the trade of “development goods” in Asia-Pacific markets.⁴² Initial study by PSU have identify correlation between trade, rural development, and eradication of poverty. PSU also discovered the intercourse of promoting trade of development goods through elimination of tariffs rate, which are highly competitive and potential to increase in trade relations.

This paper partially discover the challenges of developing countries toward tariff liberalization, in particular for Indonesia. Indonesian government demonstrate their best effort to achieve APEC Environmental Goods commitment along with their domestic policies and without being oppressed by other APEC Economies. In this regards, APEC has also made a lot of achievement, and one of the most important achievement is by facilitating ease in international trade while also accommodate development gap among APEC Economies. APEC had been instrumental in providing some important breakthroughs and their policies becoming a benchmark for other international organizations. The APEC deal seems politically important, yet more than that, by reaching an agreement on a list of environmental goods for which applied tariff

⁴² PSU is the policy research and analysis arm of APEC comprising openly recruited professionals working together with APEC SOM, committees and fora, in improving the quality of their deliberations and decision and promoting policies that support the achievement of APEC’s goals, by providing objective and high quality research, analytical capacity and policy support capability. Source: <http://www.apec.org/About-us/Policy-Support-Unit.aspx>.

rates are to be cut to 5 percent or less, APEC has been also obtain an important achievement in international trade regime.

As APEC constantly promote free and open trade and investment, there are still many challenges to be faced by APEC economies. To support the implementation of APEC Environmental Goods commitment, currently APEC also on the progress in implementation of the Environmental Services Action Plan (ESAP) which is organized to promote liberalization facilitation and cooperation in environmental services. At the same time, APEC is also currently faced with demands by developing countries to demonstrate the correlation between tariff elimination in “development goods” toward poverty eradication. There are still many other challenges, and all of those challenges lead to the need of further studies on a wider range toward APEC current and future programs, which are important to be examined either by APEC Economies, other international organizations, government, and also academia.

References

A. Books/Journals

1. Antoine Dechezleprêtre and Misato Sato (2014), “The Impacts of Environmental Regulations on Competitiveness”, Grantham Research Institute and Global Green Growth Institute, source taken from
http://personal.lse.ac.uk/dechezle/Impacts_of_Environmental_Regulations.pdf
2. Arthur E. Appleton (2002), “Environmental Labelling Schemes Revisited: WTO Law and Developing Country Implications”, in Gary P. Sampson and W. Bradnee Chambers (eds), *Trade, Environment, and the Millennium*, Tokyo: United Nations University Press;
3. Carlo Perroni and Randall M. Wigle (1994), “International Trade and environmental Quality: How Important are the Linkages?”, *Canadian Journal of Economics*;
4. Duncan Brack (2000), “Multilateral Environmental Agreements: An Overview”, in Halina Ward and Duncan Brack (eds), *Trade Investment and the Environment: Proceedings of the Royal Institute of International Affairs Conferences*, London: Earthscan Publications Ltd;
5. GATT (1992), “Trade and the Environment”, *International Trade 1990-1991*, Volume I, Chapter III, Geneva: General Agreement on Tariff and Trade;
6. Gary P. Sampson (2001), “Effective Multilateral Environment Agreements and Why the WTO Needs Them”, *World Economy*;
7. Gary P. Sampson and W. Bradnee Chambers (2001), “Trade, Environment, and the Millennium, Second Edition”, UN University Press;
8. Gary Sampson and John Whalley (2005), “The WTO, Trade and the Environment: Critical Perspectives on the Global Trading System and the WTO”, Edward Elgar Publishing Limited, Cheltenham-UK;

9. Hiro Lee and David W. Roland-Holst (1997), “Trade and the Environment”, in Joseph F. Francois and Kenneth A. Reinert (eds), *Applied Methods for Trade Policy Analysis: A Handbook*, Cambridge University Press;
10. Jagdish Bhagwati and T.N. Srinivasan (1996), “Trade and the Environment: Does Environmental Diversity Detract from the Case for Free Trade?”, in Jagdish Bhagwati and Robert E. Hudec (eds), *Fair Trade and Harmonization: Prerequisites for Free Trade?*, MA and London: MIT Press, Cambridge;
11. James K.R. Watson (2013), “The WTO and the Environment: Development of Competence Beyond Trade”, Routledge, London and New York;
12. Jodie Keane and Zhenbo Hou (2015), “Trade in Environmental Goods and Services: Issues and Interests for Small States”, The Commonwealth, source taken from <http://www.oecd-ilibrary.org/docserver/download/5js65z2nzd32.pdf?expires=1475135397&id=id&accname=guest&checksum=F461A8F6104F96B02B99849969262DF8>;
13. Lisandro Abrego, Carlo Perroni, John Whalley and Randall M. Wigle (2001), “Trade and Environment: Bargaining Outcomes from Linked Negotiations”, *Review of International Economics*;
14. Magda Shahin (2002), “Trade and Environment: How Real Is the Debate?”, in Gary P. Sampson and W. Bradnee Chambers (eds), *Trade, Environment, and the Millennium*, Tokyo: United Nations University Press;
15. Mahesh Sugathan and Thomas L. Brewer (2012), “APEC's environmental goods initiative: How climate-friendly is it?”, ICTSD, source taken from <http://www.ictsd.org/bridges-news/biores/news/apecs-environmental-goods-initiative-how-climate-friendly-is-it>;
16. N. Gregory Mankiw (2015), “Principles of Economics 7th Edition”, Cengage Learning, Singapore;
17. Rene Vossenaar (2013), “The APEC List of Environmental Goods: An Analysis of the Outcome & Expected Impact”, ICTSD Programme on Trade and

- Environment, source taken from <http://www.icts.org/downloads/2013/06/the-apc-list-of-environmental-goods.pdf>
18. Stefan Ambec, Mark A. Cohen, Stewart Elgie, and Paul Lanoie (2011), "The Porter Hypothesis at 20: Can Environmental Regulation Enhance Innovation and Competitiveness?", source taken from
<http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-11-01.pdf>
 19. Steve Charnovitz (1998), "The World Trade Organization and the Environment", Yearbook of International Environmental Law;
 20. Tim Everett, Mallika Ishwaran, Gian Paolo Ansaldi and Alex Rubin (2010), "Economic Growth and the Environment paper", Defra Evidence and Analysis Series, source taken from
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69195/pb13390-economic-growth-100305.pdf
 21. W. M. Adams (2009), "Green Development 3rd Edition: Environment and Sustainability in a Developing World", Routledge, London;
 22. Werner Antweiler, Brian R. Copeland and M. Scott Taylor (2001), "Is Free Trade Good for the Environment?", American Economic Review;

B. Websites

1. APEC in brief, PSU Policy, and Environmental Goods List Commitment database, source taken from <http://www.apec.org/>;
2. Development Products, sources taken from
<http://www.asianews.network/content/jakarta-push-zero-tariff-%E2%80%98development-goods%E2%80%99-apec-meet-3819>, and
<http://www.antaranews.com/en/news/99036/apec-supports-indonesian-proposal-on-development-product-trade>;

3. Environment in Indonesia by World Bank, source taken from
<http://www.worldbank.org/en/country/indonesia/brief/world-bank-and-environment-in-indonesia>
4. Harmonized Systems, source taken from <http://www.wcoomd.org/>;
5. INDC of Indonesia, source taken from
http://www4.unfccc.int/submissions/INDC/Published%20Documents/Indonesia/1/INDC_REPUBLIC%20OF%20INDONESIA.pdf
6. Green Stories: Porter Hypothesis, source taken from http://www.go-green.ae/greenstory_view.php?storyid=314;
7. Pascal Lamy statement, source taken from (accessed on October 2016)
https://www.wto.org/english/news_e/sppl_e/sppl91_e.htm
8. Qualitative Methodology, source taken from
<http://www.ccs.neu.edu/course/is4800sp12/resources/qualmethods.pdf>;
9. Tariff Analysis Online-WTO, source taken from <http://tao.wto.org/>
10. The End of Histories-Francis Fukuyama, source taken from
<http://www.wesjones.com/eoh.htm>;
11. UN ESCAP 2015, source taken from
<http://www.unescap.org/sites/default/files/Economic%20and%20Social%20Survey%20of%20Asia%20and%20the%20Pacific%202015.pdf>

C. Ministry of Industry of The Republic of Indonesia's documents

요약 (국문초록)

대부분의 경제학자들은 세계무역이 효율성을 증대시키고 교역국의 부를 늘려준다는 점을 들어 일반적으로 유익하다고 생각한다. 세계의 경제성장이 부상함에 따라, 국제사회는 환경보전이 경제활동을 형성하고 지지하는데 있어 핵심적인 역할을 한다는 것을 깨닫기 시작했다. 국제사회가 환경의 지속가능성에 주안점을 두게 되면서, 저탄소 및 자원 효율적 경제로의 전환이 요구되는데, 이것은 경제 구조의 근본적인 변화를 필요로 한다.

무역과 환경간의 관련성에 관한 논의는 환경문제가 현재 매우 심각해지면서, 무역정책이 우선적으로 고려됨에 따라 필수적인 새로운 환경정책이 시행되지 못해서는 안된다는 것에 초점을 맞추고 있다. 이러한 아이디어는 지난 50년간 다자간 협상에 의해 체계적으로 구축되어온 개방무역시스템에 의한 국제 무역의 이익은 환경 문제에 대한 우려로 합리화되는 새로운 보호주의에 의해 포기되어서는 안된다는 반론에 직면하게 된다.

국제 무역 체제의 시행에서, 무역-환경 관련 문제에 대한 가장 최근의 타개는 APEC에 의해, 자발적으로 54개의 environmental goods에 대한 관세를 5% 이하로 낮추는 협정을 맺음으로써 이루어졌다. APEC Environmental Goods list는 무역자유화와 환경문제의 해결은 함께 이를 수 있는 것임을 보여준다. 이 협정은 “환경적”인 것으로 고려되는 재화들의 무역을 자유화하는 첫번째 국제 정책에 해당하는 정치적 돌파구로써 많은 사람들에게 환영받았다.

하지만, 국제무역의 관세인하는, 특히 인도네시아와 같은 개발도상국에 의해 여전히 상당한 반대에 직면해있다. 실제로 인도네시아 정부는 국내의 이해관계자들의 보호 노력에 의해 APEC Environmental

Goods list 의 관세 인하를 2015 년의 어느 수준까지 시행하고, 협약의 완전한 시행을 위해 정부는 2020 Bogor Goals 에 명시된대로 자유개방무역과 투자를 달성하기 위한 계획을 수립하였다.

주요어: (WTO, Trade, Environment, APEC, Environment Goods, Tariff Reduction, Indonesia)

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