



## **REPORT**

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**ACTIVITY CODE: ICB-10**

**“IMPROVE NEGOTIATION AND IMPLEMENTATION OF INTERNATIONAL COMMITMENTS ON ENVIRONMENTAL GOODS AND SERVICES”**

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## ACRONYMS

APEC	Asia-Pacific Economic Cooperation
EGA	Environmental Goods Agreement
EGS	Environmental Good and Service
EGs	Environmental Goods
EPPs	Environmentally Preferable Products
ESs	Environmental Services
HS	Harmonized Commodity Description and Coding System
ICTSD	International Centre for Trade and Sustainable Development
IISD	International Institute for Sustainable Development
ITC	International Trade Center
MFN	Most-favoured nation
NTBs	Non-tariff barriers
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

## I. INTRODUCTION

Negotiations at the World Trade Organization (WTO) on the liberalization of Environmental Goods and Services (EGS) are ongoing. Five rounds of negotiations were completed, during which the list of EGS was discussed on a sectoral basis. A key aspect of the negotiations is the identification of the goods and services which could be included in the final list of EGS to be liberalised. The following sectors are concerned:

- reduction and mitigation of air pollution,
- solid and hazardous waste management,
- soil and water treatment,
- environmental remediation and clean-up,
- noise and vibration abatement,
- cleaner and renewable energy, and energy efficiency,
- goods related to energy and resource efficiency,
- environmentally preferable products,
- protection of natural resources,
- environmental monitoring and analysis.

The preliminary list of EGS was identified during the 5th round of the negotiations. At the time of writing this report, in principle, no new submission for extending the list of EGS can be considered in the context of WTO negotiations. It is expected that the list of EGS will be finalized during the next round of negotiations, and that negotiators will begin discussions on other issues related to the liberalization of EGS.

Vietnam needs to clarify its position in the context of these negotiations and to ensure their outcome supports its policy and strategies regarding the promotion of EGS. Demand for EGS is growing in Vietnam. While EGS provide an obvious response to critical environmental needs in Vietnam, they also provide interesting opportunities for industrial development in a sector which is globally growing. Therefore, at domestic level, there is a challenge to ensure that both policy aspects of EGS are adequately addressed, while at the same time, ensuring Vietnam's ability to sustain compliance with the existing and forthcoming international trade commitments. Two previous reports conducted under the auspices of MUTRAP (Activity INVEN-1) provided recommendations for policies related to EGS and the measures Vietnam may take in order to foster the use of, and investments in EGS in the light of the existing international practices. The key trade-related recommendations in the reports were the following :

- Develop an official list of EGS, which would clearly and unambiguously benefit from the incentives the Government of Vietnam wishes to provide to EGS. Such list would provide credibility and certainty to potential investors;

- Consider implementing the tariff reductions on environmental goods proposed under APEC. Vietnam may also wish to consider adopting more liberal market access opportunities to foreign services and service suppliers than those covered by its WTO or ASEAN commitments;
- Consider providing well targeted financial incentives for EGS according to clearly identified objectives, focusing more on activities than sectors;
- Consider fostering green public procurement as a proven method to foster the use of and investments in EGS.

The objective of this study is to provide an update on Vietnam's industrial strategy and regulations related to EGS and on Vietnam's current international commitments which have an impact on EGS. This study also presents the current situation of production of EGS in Vietnam and the potential such sector represents in the country. It also describes the current negotiations at the WTO related to EGS and the remaining negotiating issues and challenges. The ultimate goal is to provide Vietnam's WTO negotiators with a strategy for the liberalization of EGS at multilateral level, which would support Vietnam's policy choices in the sector. Such outcome would foster capacity to implement international commitments on EGS and in particular the ability of the Science and Technology Department of MOIT to meet Vietnam's environmental commitments.

This study is structured in five distinctive parts:

- The first part describes the part of Vietnam's industrial policy supporting EGS in the context of its overall environmental policy. This part also lists the laws and regulations affecting EGS in Vietnam. This part also describes the current policy and regulatory framework, within which trade liberalization commitments may be undertaken.
- The second part provides a map of the production of EGS in Vietnam, looking at active enterprises in the sector and describing their location, turnover, ownership (state, foreign-invested, private Vietnamese company) and their market shares. This part also identifies the available EGS in Vietnam and the main difficulties and challenges that the country encounters to further expand the availability of EGS. It also describes the current state of the market of EGS in Vietnam and lists foreign competitors in the national market. It comments on the competitiveness of Vietnamese operators and the efficiency of their operations. It finally provides basic trade statistics on EGS in Vietnam. This second part provides critical information that is necessary to identify optimal trade commitments that Vietnam may take in the sectors of EGS. The idea is to see how trade policy can address shortcomings of other policies in Vietnam and ensure promotion of

domestic production of EGS and their availability through both domestic and foreign direct investment.

- The third part provides an analysis of international commitments of Vietnam pertaining to EGS. It describes the commitments concerned and assesses their consistency with domestic policies. This part also describes the international commitments of three other countries pertaining to EGS and, for benchmarking purposes, compares them with those of Vietnam. This part, like the previous ones, provides important analysis for the purposes of fine-tuning Vietnam's current policy, laws and regulations regarding EGS, while at the same time ensuring their consistency with its negotiating stance.
- The fourth part analyses the impact of the liberalization of EGS. It provides lessons learned from the three other countries and analyses the advantages and disadvantages of liberalization of selected EGS from economic, technological and environmental viewpoints.. The sectors analysed are the most important ones for Vietnam, namely (a) air pollution control, (b) renewable energy, (c) waste management, (d) water treatment, (e) environmental technologies, and (f) carbon capture and storage. This part also describes the current status of the WTO negotiations pertaining to EGS and the remaining negotiating issues. It addresses negotiation methodologies already proposed during the Doha Negotiations and the opportunities and challenges of adopting one of the negotiation methodologies already proposed during the Doha Negotiations. This part completes the analysis of all relevant factors that are important to identify a realistic negotiating stance for Vietnam in the context of trade negotiations on EGS.
- The fifth and final part provides final recommendations for the Government of Vietnam, on the basis of the analyses contained in the four previous parts. Recommendations include guidelines for a Vietnamese trade policy on EGS and an indication of the optimal negotiating strategy in international trade negotiations relating to the liberalization of trade in EGS.

This first three parts of the study are mainly descriptive. They are based on an extensive library research, information gathering in Vietnam, desktop review of data collected and qualitative assessments.

The legal considerations contained in the third part and the assessments of the fourth part are more analytical. The report, however, does not propose a quantitative assessment of the impact of the liberalization of selected EGS on the economy of Vietnam.

It is expected that with this report, the Government of Vietnam will have a useful tool that will enable it to negotiate an optimal outcome of the EGS negotiations at the WTO, supporting a proactive industrial strategy in the sector, while at the same time fostering the capacity of the country to enhance its environment protection.

## II. VIETNAM'S ENVIRONMENTAL AND INDUSTRIAL POLICIES SUPPORTING EGS

### II.1 Vietnam's environmental policy supporting EGS

#### II.1.1 EGS related laws

**1. The Constitution of Vietnam of 2013** added environmental concerns in Article 63, Chapter III which have not been mentioned in the Constitution of 1992. Article 63 states as follows:

- *The Government issues policies in order to protect the environment; manage and use effectively natural resources; preserve nature and biodiversity; actively prevent natural disasters and cope with the climate change.*
- *The Government encourages all activities of the environmental protection, the development and use of new energy, renewable energy.*
- *Organizations and individuals that cause the environmental pollution, the depletion of natural resources and biodiversity, must be strictly penalized and responsible for overcoming and compensating damages.*

**2. The 2014 Environmental Protection Law**, which came into effect on 1<sup>st</sup> January 2015, amended, supplemented and replaced some of the articles of the 2005 Environmental Protection Law. Clause 14, Article 3 of the Law, defines Environmental Industry as follows:

*"Environmental Industry is an economic sector that supplies the technology, the equipment, the service and the product serving the requirement of protecting environment".*

Article 153, Chapter 16 of the Law, states that the environmental industry is considered an important resource for environmental protection activities:

*"The Government invests and provides benefits and support to individuals, organizations being involved in environmental industry development; constructing and upgrading of technical infrastructure for waste treatment and recycling; establishing centralized waste treatment and recycling sites; producing and supplying equipment, products to support environmental protection."*

Article 150 of the Law states that the Government encourages organizations, individuals to establish environmental service enterprises through bidding, public-private partnership (PPP) in the following areas:

- Collecting, transporting, recycling and treating waste;
- Monitoring, environmental analysis and environmental impact assessment;
- Developing and transferring environmental friendly production technology;



- Providing environmental consultancy, training, and information;
- Checking environmental issues related to goods, machinery, equipment, and technology;
- Checking environmental damage and health;
- Other environmental protection services.

Pursuant to Article 151 of the Law, the Government provides incentives and supports to environmental protection activities as specified below:

- Constructing household wastewater treatment systems;
- Constructing plants for recycling, treating conventional solid waste, hazardous waste, and waste landfill sites;
- Constructing environmental monitoring stations;
- Constructing environmental industrial bases, and public environmental protection infrastructures;
- Manufacturing, and trading in eco-friendly products;
- Ceasing operations of industrial parks, industrial complexes, and entities causing serious environmental pollution.

## II.1.2 EGS policy

**1. Directive No. 36-CT/TW of the Party Central Executive Committee** dated 25 June 1998 emphasized that *"Environmental protection is responsibility of the Party, of residents, and the army. It is an inseparable component of the economic – social development at all levels and regions, and an enabling condition ensuring sustainable development and successful implementation of national industrialization"*. The Directive also states that *"Pollution prevention, pollution treatment, and the environmental improvement and nature preservation are key principles of environmentally sustainable development. It must promote maximizing internal strength of the country, and take advantages of international cooperation in the areas of environmental protection and sustainable development"*.

**2. Resolution of the Governing Communist Council No. 41-NQ / TW** dated 15 of November, 2004 on the environmental protection in period of accelerating industrialization and modernization of the country, emphasises requirements for strengthening socializing of environmental protection activities. Especially, the Resolution considers environmental service development as a major policy tool of the Party and the Government in leading and managing sustainable development in Vietnam. The government has to (1) build up legal and policy mechanisms to encourage individuals, organizations and communities to participate in the environmental protection activities; (2) establish organizations in charge of verifying, consulting, assessing, recognizing and certificating environmental protection activities; (3) encourage all economic sectors to take part in waste collection, transportation, recycling, and treatment services and other related services to protect the environment.

**3. The Vietnam Sustainable Development Strategy 2011 - 2020** adopted under Decision 432/QĐ-TTg dated April 12, 2012 of the Prime Minister enumerates the following priorities:

- Building and implementing green growth strategy, ensuring economic development towards a low carbon economy, efficient and effective use of energy; developing clean energy and renewable energy to ensure national energy security. Step by step marketization of energy pricing and gradual increase in proportion of clean energy and renewable energy in the total energy consumption. Building an environmental economic accounting system to add environment and social aspects into the System of National Accounts (SNA);
- Sustainable industrial development; actively preventing and coping with industrial pollution, building up the "green industry", prioritizing development of friendly environment sector, sound technologies and environmental friendly products; promoting high tech development in large urban areas; gradually developing the environmental industry.

**4. The National Environmental Protection Strategy up to 2020 and a vision to 2030** approved by the Government with Decision No. 1216/QĐ-TTg on September 5<sup>th</sup>, 2012 aims to control and limit an increase in environmental pollution, resource degradation and depletion of biodiversity; to improve environmental quality, capacity to cope with climate change, the quality of life; to form the basic conditions for a green economy, low waste, low-carbon for the prosperity and sustainable development of the country. The strategy also prescribes activities to be undertaken to achieve these objectives:

- Supporting development of sectors that supply friendly environmentally products and goods, recycled products, and energy produced from waste; encouraging environmental services demands, promoting EGSs consumption to accelerate environmental economic sectors development;
- Promulgating policies to promote environmental industry as a green economic sector to deal with environmental issues, create jobs and raise income; Focus on enhancing environmental service supply capacity, especially in waste recycling, treatment and environmental treatment solutions areas;
- Developing subsidy price policy to encourage consumption of environmental friendly products, clean energy, renewable energy, and recyclable products;
- Focusing on environmental issues in negotiating and signing bilateral and multilateral trade agreements, especially in Trans-Pacific Strategic Economic Partnership Agreement; promoting implementation of WTO commitments relating to environmental services;

- Attracting foreign investment for environmental protection, and building up capacity of environmental service supply to meet domestic demand, and to gradually expand into the markets of ASEAN countries;
- Promoting international cooperation in order to attract investment in environmental protection; being active and creative in proposing initiatives in the field of international cooperation; acting for effective implementation of international treaties signed by Vietnam.

#### **5. The Plan for implementing the environmental protection strategy up to 2020, a vision to 2030**

under Decision No. 166/QĐ-TTg dated January 21<sup>st</sup>, 2014 identified activities necessary to develop the environmental protection industry in order to support other economic sectors in addressing the environmental issues, including:

- Building and carrying out a program: Establishing environmental economic industry through producing environmentally friendly products, recycled products, and energy products produced by waste;
- Mainstreaming environmental protection service policies and laws, focusing on enhancing capacity of the environmental service supply, especially in waste treatment and recycling and environmental treatment solutions to meet the country needs.

The plan also issued a list of priority programs and projects to achieve the objectives. This included:

- A Program for development of environmentally friendly products and in particular recycled products and energy produced from waste. Hosted by the Ministry of Industry and Trade in the period of 2015 to 2020;
- A Plan for implementing the WTO commitments relating to environmental services. Hosted by the Ministry of Natural Resources and Environment in the period of 2014 – 2020.

#### **6. The National Strategy on Green Growth for the period 2011 to 2020 and a vision to 2050**

under Decision No. 1393/2012/QĐ-TTg dated December 31<sup>st</sup>, 2012 by the Prime Minister aims at shifting toward low carbon economy, enriching natural resources; gradually introducing mandatory emissions reduction, promoting clean energy and renewable energy; accelerating greening manufacturing industry; greening lifestyles and promoting sustainable consumption.

The strategy provides targets up to 2020: (1) product value of the high-tech and green technology industry accounting for 42-45% GDP; proportion of factories meeting environmental standards accounting for 80% of the enterprises; the number of enterprises applying clean technology of over 50%; investment in sectors involved in environmental protection and improving natural resources reaching 3 - 4% of GDP.

**7. The National Action Plan for Green Growth in the period 2014-2020** under Decision No 403/QĐ-TTg dated 20<sup>th</sup> March 2014 implementing **National Strategy for Green Growth for the period 2011-2020 and Vision to 2050** signed by the Prime Minister, approved the activities related to the development of environmental goods and services, including:

- Saving, efficiency energy use and reduction of GHG emissions in energy intensive industries;
- Saving, efficiency energy use and reduction of GHGs emissions in transportation sector;
- Renovating technology and improving practical management to reduce GHG emissions intensity in agriculture, forestry, and fishery sector;
- Developing clean energy and renewable energy sources;
- Effective and sustainable use of natural resources and development of green economic sectors;
- Promoting environmental goods production and environmental services supply;
- Improving capacity of energy management in industry and construction sectors;
- Developing and implementing priority policies to boost clean energy sources;
- Supporting, encouraging and investing in research, deployment, and use of green technology.

## **II.2 Industrial policy directly promoting environmental goods and services**

### **II.2.1 General policies**

**1. The Program on environmental industry development up to 2015, a vision till 2025** under Decision 1030/QĐ-TTg dated July 20<sup>th</sup>, 2009 of the Prime Minister requires to: *"provide technologies, equipment, services, and products for the purpose of environmental protection in order to process, control, monitor, and solve pollution problems and improve environmental quality"*. One of the main points of the program is to promote development of environmental industrial enterprises and equipment production activities, and a supply of environmental services. It intends to:

- Encourage industrial environmental enterprises development in all kinds of economic ownership and diversify forms of investment to enhance environmental industry;
- Boost innovating and developing environmental protection equipment and products:
  - Strengthening innovative ability through investing in specialized software design, infrastructure, technology and training labor force;
  - Promoting programs on scientific research, technology transfer and use;
  - Strengthening connection between research institutions and enterprises;
- Promote environmental services development, including: environmental monitoring service; environmental analysis service; environmental impact assessment service; environmental audit services; cleaner production application; water collection, transportation, treatment and recycling services; design services, manufacturing, and

building environmental treatment system; training services to improve environment protection capacity.

**2. The Action Plan for environmental industry development and the energy-saving strategy to implement the industrialization strategy of Vietnam within the Vietnam – Japan cooperation framework towards 2020, the 2030 vision** through Decision No. 1292/QĐ-TTg dated August 1<sup>st</sup>, 2014 of the Prime Minister aims at:

- Improving preferential policies and mechanism to attract investment in environmental industrial and energy-saving sectors;
- Inspecting, monitoring and raising awareness, enhancing capacity and law compliance in the field of environmental protection and energy savings;
- Attracting investment and boosting technology transfer;
- Improving research, absorption and transfer capacity of environmental technologies.

The plan proposes 36 actions in 5 fields benefiting from Japanese assistance to enhance the environmental industry, namely:

- Production of environmental treating devices;
- Environmental Service;
- Waste recycling and reuse;
- Energy saving, GHG emissions reduction;
- EGS policies, mechanism and supporting activities.

**3. The Program on environmental service development until 2020** under Decision 249/QĐ-TTg dated February 10<sup>th</sup>, 2010, approved by the Prime Minister aims at providing environmental protection services to sectors, fields, and localities in order to increase contribution of the service sector to the economy and job creation, and to pursue sustainable development.

The program also affirms that environmental services are an important part of the service sector, which contributes to improve competitiveness of environmental services enterprises in compliance with WTO agreements and with the economic – social development of the country. The government encourages and creates enabling conditions for organizations and individuals, both domestic and foreign, to develop environmental services. Furthermore, organizations and individuals involved in supplying environmental services may benefit from incentives such as favourable land use conditions, loans, credits, subsidies, and the highest possible tax exemptions prescribed by relevant laws.

There are five component projects destined to support the program. They consist of:

- Elaborating of environmental service development strategy until 2020 and an orientation towards 2030;

- Developing and improving policy and law frameworks in the field of environmental services;
- Developing an environmental service enterprise network project;
- Training human resource.

**4. The Strategy of clean technology use up to 2020 and a vision towards 2030** defined in Decision No. 2612/QĐ-TTg dated December 30<sup>th</sup>, 2013 approved by the Prime Minister enumerates several objectives:

- Setting up and applying technical standards, regulations on clean technologies to industrial production facilities with a special focus on energy-intensive industries such as textile, dyeing; fertilizers and pesticides; steel; mineral mining and processing sectors; thermoelectricity; paper; cement; and sugar sectors;
- By 2020, 100% of new investment projects from those sectors must meet technical standards, regulations on clean technologies; 60-70% production facilities must apply clean technologies.

The strategy prescribes six actions to ensure positive results, which are:

- Building and applying technical standards and regulations on clean technologies to energy-intensive industries;
- Increasing the use of clean technologies;
- Research, transfer, apply and demonstrate clean technologies to pollution intensive industries such as textile, dyeing, fertilizer, battery, steel, mineral mining and processing, thermoelectricity, paper, cement, sugar;
- Broadly applying clean technology to energy-intensive industry such as chemicals, metallurgy, engineering, and construction materials and other industries;
- Improving mechanisms, policies and laws related to clean technologies, eliminating outdated technology for selected manufacturing and processing industries;
- Propagandizing and disseminating clean technologies, technical standards, regulations, mechanisms, policies, and laws.

## ***II.2.2 Sectoral policies related to environmental goods and services***

**1. Government Decree No. 46/2014/ND-CP dated 15 May 2014 on land and surface water rent** contains provisions offering incentives related to EGSs. According to Article 19 of the Decree, enterprises renting land and surface water are:

- Exempted from land and surface water rent within construction period (not over 3 years) in cases of: investing in building water supply constructions including: water extraction, water treatment, water supply, and other constructions that supports water supply system management and operation;

- Benefit from exemption extended to 11 years if the project is realized in areas facing socioeconomic difficulties; and from exemption extended to 15 years if the investment is realized in the listed areas facing extreme socioeconomic difficulties;
- Exempted from land rent if an investment is made in the field of public constructions used for environmental purposes.

**2. Government Decree No.59/2007/ND-CP dated 9 April 2007 on solid waste management** which offers incentives and assistance to enterprises. Article 12 of the Decree states that the Government encourages all forms of investment in the solid waste sector, including through business cooperation contracts (BBC), build-operate-transfer (BOT) contracts, build-transfer-operate (BTO) contracts, build - transfer (BT) contracts, the acquisition of enterprises, bonds, stocks exchange investment and other forms of investment under the Investment Law.

Article 14 concerns investment sources and investment incentives, whereby the Government encourages all organizations and individuals to participate in investing in solid waste treatment facilities and supportive facilities. The incentives include:

- Exemption of land use fee, support in relation to expenses for site clearance compensation;
- Preferential credits from state budget loan and low interest rate of commercial loans;
- Mortgage with assets from borrowed capital;
- Exemption from import tax for equipment, materials used to build solid waste treatment facilities, and exemption/reduction of corporate income tax;
- Building up technical infrastructure systems, including transport, power supply, energy supply, information and communication, water supply and drainage systems up to the project sides;
- Supporting research and development for recycle, reuse, and solid waste treatment technologies from state budget through scientific and technological programs and projects;
- Supporting workers' training from state budget through training programs.

**3. Decision No. 2149 / QD-TTg dated December 17th, 2009 on approving the National Strategy for Integrated Solid Waste Management up to 2025 and a 2050 vision** approved by the Prime Minister include 10 programs proposed to deal with solid waste issues, namely:

- Accelerating solid waste prevention, reduction, reuse and recycling;
- Sorting solid waste at-source;
- Investing in building solid waste treatment plants at regional level;
- Urban household solid waste treatment in the period of 2009 to 2020;
- Environmental recovery at solid waste treatment and landfilling facilities;
- Strengthening solid waste management in rural areas and handicraft villages;
- Building up solid waste databases and monitoring system;

- Raising public awareness;
- Building up integrated solid waste management policies, laws and institutions;
- Health solid waste treatment program in the period of 2009 to 2025.

**4. Government Decree No. 38/2015/ND-CP dated 24 April 2015 on waste and scrap waste management** focuses on: (1) waste management including hazardous waste, household solid waste, normal industrial solid waste, liquid waste, wastewater, industrial waste gases and other particular waste and (2) environmental protection in scrap waste import. In order to successfully manage waste and scrap waste, the enabling principles for waste management were set out in Article 4 of the Decree as follows:

- Organizations and individuals have responsibility to enhance saving natural resources and energy use; use renewable natural resources and environmentally friendly products; apply environment auditing to waste and other measures to prevent and minimize waste;
- Organizations and individuals are responsible for classifying household waste in order to enhance reusing and recycling waste, producing energy from waste;
- Investing in waste treatment facilities must obey environmental regulations and laws in construction;
- Wastewater must be collected, treated, and reused or transferred to the organization that have capacity to reuse/treat waste meeting environmental standards before being discharged into the environment;
- Emissions must be processed to meet environmental regulations before being emitted into the environment;
- The government encourages socialization waste collection, transportation, reuse, recycling, and treatment and energy recovery from waste;
- Organizations and individuals that discharge waste are responsible for payment of charges and prices of services for waste collection, transportation, management prescribed laws;
- Encourage application of environmentally friendly waste treatment technologies. The use of probiotics in waste treatment must comply with the law.

### **II.3 Other policies and laws**

**1. The Investment Law No. 67/2014/QH13** issued on 26 November 2014 by the Government of Vietnam offers investment incentives to a number of areas related to EGS. Article 16, Section 1 in Chapter III of the Law indicates that enterprises investing in (1) new energy, clean energy, renewable energy; and energy-saving products production; and (2) waste collection, treatment, recycling, reuse projects; environmental pollution treatment projects and environmental protection projects are eligible to benefit from investment incentives such as:

- Lower corporate income tax for the whole/part of project life;
- Exemption/reduction of corporate income tax;



- Tariff exemption or reduction for imported goods used to create fixed assets; materials, equipment in investment projects;
- Exemption/reduction of land rent, land use fee, land use tax.

**2. Law No. 32/2013/QH13 amending and supplementing some articles of Law on Corporate Income Tax 2008 voted by The Parliament** provides exemptions from income taxes to EGSs enterprises. The Article 13 and 14 of the Law offers incentives to EGS enterprises, including:

- Income tax rate of 10% within 15 years for enterprises that invest in renewable energy, clean energy production, and energy production from the waste; biotechnology development and environmental protection;
- Income tax rate of 10% for enterprises that promote environment activities;
- Income tax rate of 20% within 10 years for enterprises that invest in the field of energy-saving products and 17% from January 1, 2016.

**3. The Export and Import Tax Law No. 45/2005/QH11** provides tariff exemption to enterprises that import environmental goods as well as equipment, materials, technologies related to EGSs in the areas of: waste collection, treatment, recycling, reuse projects, environmental pollution treatment and environmental protection projects. The tariff exemption also applies where project scale is expanding or technologies are being upgraded.

**4. The Value Added Tax Law No. 13/2008 / QH12** contains provisions in favour of environmental goods and services. The Article 5 of the Law states that public services such as sanitation street service, drainage services in the street and residential areas are not subject to tax. Article 8 provides tax rate of 0% applying to oversee supplying of sanitation street service, drainage services in the streets and residential areas; tax rate of 5% applying to goods and services in relation to clean water for production and household.

**5. The Water Resources Law No.17 / 2012 / QH13** adopted by the National Assembly on June 21<sup>st</sup>, 2012 offers incentives in relation to water resource services. Section 4, Article 4 of the Law indicates that the Government encourages organizations and individuals to invest in research and advanced technologies for water resources management aiming at efficient exploitation, saving and using of water resources; wastewater treatment must meet technical standards and regulations for reuse purposes". The incentives include tax exemption, preferential loans with low interest rate.

**6. The Law on saving and efficient use of energy No. 50/2010/QH12** regulates saving and efficient use of energy; it specifies measures to promote saving and efficient use of energy. It enumerates rights, obligations, and responsibilities of organizations, households and individuals in saving and efficient use of energy.

Article 5 ("Government policies on saving and efficient use of energy") provides for:

- Measures to use energy effectively and efficiently as a top priority of the country;
- Financial support and subsidy to energy pricing and other necessary incentives to promote saving and efficient use of energy;
- Increase in investment and diversification of investment resource forms to promote research, develop and apply energy saving and efficient technologies; develop renewable energy in order to contribute to ensuring energy security and environmental protection;
- Encouraging use of energy-saving devices and equipment; designing and implementing of an energy labelling roadmap; progressive eliminating energy intensive devices and equipment;
- Encouraging consultant services development; and investment in communication, education that support for organizations, households and individuals to use energy effective and efficiently.

In order to encourage enterprises involved in boosting saving and efficient energy activities, Article 41 of the Law provides incentives for saving and efficient use of energy. It indicates that:

- Projects promoting saving and efficient use of energy shall be considered for financial support from the national target program on saving and efficient use of energy;
- Organizations and individuals producing energy-saving products, investing in production assembly or expanding production scale with energy-saving technologies are entitled to the following incentives and supports:
  - Incentives on import and export duties and enterprise income tax under the tax law;
  - Incentives under the land law;
  - Access to preferential loans from Development Bank, National Foundation for Science and Technology Development, National Technology Innovation Fund, Vietnam Environment Protection Fund and supported from the National Program for Hi-Tech Development, National Target Program on saving and Efficiency Energy Use;
  - Other incentives under this Law and other relevant laws.
- Devices, equipment, components used for research activities to develop energy-saving technologies and products, vehicles that are fuel-saving and use liquid gas, natural gas, electricity and mixed fuels and biofuels which have not been produced yet in the country and are listed by the Government are entitled to benefit from import duty exemption or reduction under the tax law.

**7. Decree No. 04/2009 / ND-CP dated 14 of January 2009 on incentives with respect to environmental protection activities** offers several incentives promoting development of environmental goods and services which mainly focus on land, capital, tax exemption, tax and fee reductions; and price subsidies, including:

#### Articles 9 and 10: Support and Incentives to land infrastructure

- The authorities are responsible for arranging lands to hand over clear ground areas for which ground clearance compensation have been paid for environmental protection investment projects (Article 9);
- Exemption from land rent and eligibility for land use levy for projects which invest in environmental pollution treatment and environmental protection; environmental treatment and monitoring equipment production; wastewater collection and treatment; emission collection and treatment; waste reuse and recycling;
- 50% reduction of land use levy and land rent and delayed payment of land use levy and land rent within five years after they are handed over. (Article 10).

#### Article 12: Support and Incentives on Capital, Taxes, Fees

- The Government supports 50% of construction investment capital, including 40% from the central budget, 10% from local budgets; the remaining 50% are preferential loans of the Vietnam Development Bank or Vietnam Environment Protection Fund. Are eligible consolidated daily-life solid waste treatment facilities applying treatment technologies with which less than 10% of treated waste volume must be buried and consolidated daily-life wastewater treatment systems .
- Post-investment interest rate supports of Vietnam Development Bank, Vietnam Environment Protection Fund under the current Laws and policies for projects that invest in environmental pollution treatment and environmental protection; environmental treatment and monitoring equipment production; wastewater collection and treatment; emission collection and treatment; waste reuse and recycling; waste treatment system.

#### Article 14. Incentives on export and import tax

- Exemption from import and export tax for machinery, equipment, vehicles, tools and materials used directly in waste collection, storage, transport, recycling and treatment; environmental monitoring and analysis; clean energy and renewable energy production.

#### Articles 16, 17, 18 and 19: Other incentives

- Exemption from environmental protection charge for projects that invest in environmental pollution treatment and environmental protection; environmental treatment and monitoring equipment production; wastewater collection and treatment; emission collection and treatment; waste reuse and recycling; waste treatment (Article 16);
- More than 2 times faster fixed assets depreciation as compared to those under the current regime for projects that invest in environmental pollution treatment and environmental protection; environmental treatment and monitoring equipment

production; wastewater collection and treatment; emission collection and treatment; waste reuse and recycling; waste treatment (Article 17);

- Hazardous waste treatment; hazardous chemicals treatment activities can benefit from state supports equal to 50% of freight for transportation of wastes from waste sources to treatment facilities; and to 50% of electricity price for direct production. (Article 18);
- The Government encourages State agencies to use environmentally friendly products and recycled products provided these products are up to standards and are listed by the Government (Article 19).

## **II.4 Summary**

Vietnam has a rather elaborated environmental policy, with clearly specified goals. Furthermore, it is clearly in Vietnam's objective to promote the use of EGS in its territory as well as domestic industrial capacity in the sector.

All measure described above are intended to provide incentives to enterprises and investors to meet these objectives, through tax reductions (in most cases), or direct provision of financial support.

It is observed that Vietnam's measures are neutral from the point of view of trade. They are focused on the promotion of EGS in its territory and do not seek to foster export competitiveness of domestic companies producing EGS. Furthermore, they do not provide for any specific trade protectionist measures. On the contrary, all imports and foreign direct investments that enable the country to meet its environmental objectives seem welcome.

### III. DEVELOPMENT OF ENVIRONMENTAL GOODS AND SERVICES IN VIETNAM

#### III.1 EGS market in Vietnam

##### III.1.1 Business operation situation of EGSs enterprises

According to the Decision No. 39/2010/QĐ-TTg of the Prime Minister published the 1<sup>st</sup> of May, 2010, regarding the classification system of Vietnamese product categories, the environmental industry is defined mainly in the sector code E which contains: water supply; management and treatment of sewage and wastewater, and in some fields in other sector codes.

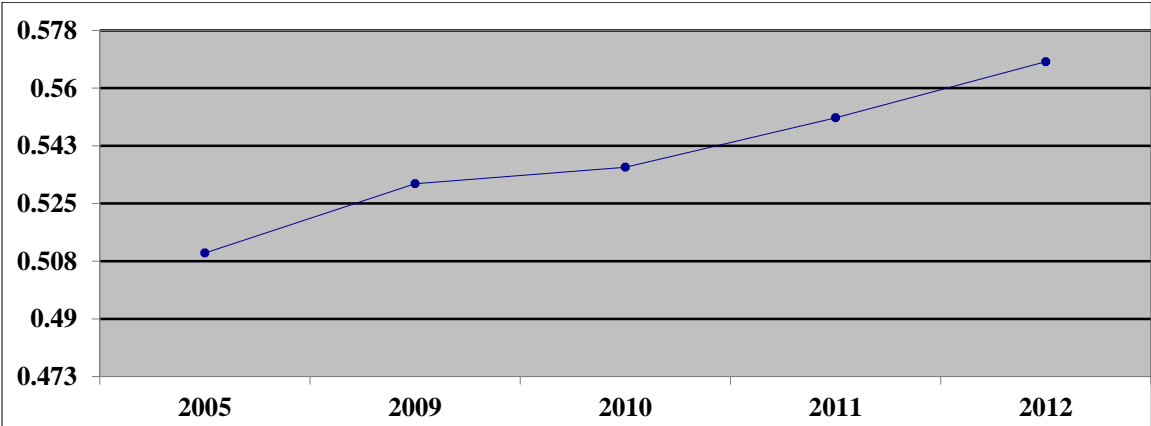
##### *Classification of environmental goods and services in Vietnam*

<b>E: Natural water exploitation, waste treatment and management; and wastewater services</b>							
<b>E1</b>	<b>36</b>	<b>360</b>	<b>3600</b>	<b>36000</b>			<b>Natural water exploitation</b>
					360001		Natural water exploitation
						3600011	Drinkable water
						3600012	Undrinkable water
					360002	3600020	Water distribution service by pipeline
					360003	3600030	Water sale service by pipeline
<b>E2</b>	<b>37</b>	<b>370</b>	<b>3700</b>				<b>Sewerage and wastewater treatment service</b>
				37001	370010	3700100	Sewerage Service
				37002	370020	3700200	<b>Wastewater treatment service</b>
<b>E3</b>	<b>38</b>						<b>Collection, treatment and disposal; scrap recovery services</b>
		381					Waste collection service
			3811	38110			Non- hazardous waste collection services are not toxic
					381101		Non- hazardous waste collection services
						3811011	Non- hazardous recyclable waste collection services
						3811012	Non- hazardous, non-recyclable waste collection services
					381102		Non-hazardous waste was collected
						3811021	Non-hazardous, non-recyclable waste was collected
						3811022	Non-hazardous, recyclable waste was collected
					381103	3811030	Material structures for demolition
					381104	3811040	Hazardous waste sorting and preparing treatment service

			3812				Hazardous waste collection services
				38121	381210	3812100	Medical Waste Collection Services
				38129			Other hazardous waste collection services
					381291	3812910	Other hazardous waste collection services
					381292	3812920	Hazardous waste collected
					381293	3812930	Classification and prepare for hazardous waste service
		382					Waste treatment and disposal service
			3821	38210			Non-hazardous waste treatment and disposal service
					382101	3821010	Non-hazardous waste treatment service for disposal
					382102	3821020	Non-hazardous waste disposal service
					382103	3821030	Waste organic solvents
					382104	3821040	Slag and ash from the incineration of waste burning
			3822				Hazardous waste treatment and disposal service
				38221	382210	3822100	Health waste treatment and disposal service
				38229	382290	3822900	Other hazardous waste treatment and disposal service
		383	3830				Scrap recycling and secondary raw materials recycling services
				38301			Scrap metal recycle services
					383011	3830110	Metal structures dismantling services
					383012		Secondary metal materials; scrap metal recycling services
						3830121	Secondary precious metals materials
						3830122	Other secondary precious metals materials
						3830123	Scrap metal recycling services
				38302	383020		Non-metal scrap; non-metallic scrap recycling services
						3830201	Non-metal scrap; non-metallic scrap recycling services
						3830202	Non-metallic scrap recycling services
<b>E4</b>	<b>39</b>	<b>390</b>	<b>3900</b>	<b>39000</b>			<b>Pollution treatment service and other waste management activities</b>
					390001	3900010	Pollution treatment services and cleaning services
					390002	3900020	Other treatment services and specific pollution control service

In recent years, there has been an increased trend in the proportion of the environmental industry in GDP, from 0.51% in 2005 to nearly 0.57% in 2012, meeting about 5% the need of urban wastewater treatment, processing approximately 15% of solid waste demand and 14% of hazardous waste.

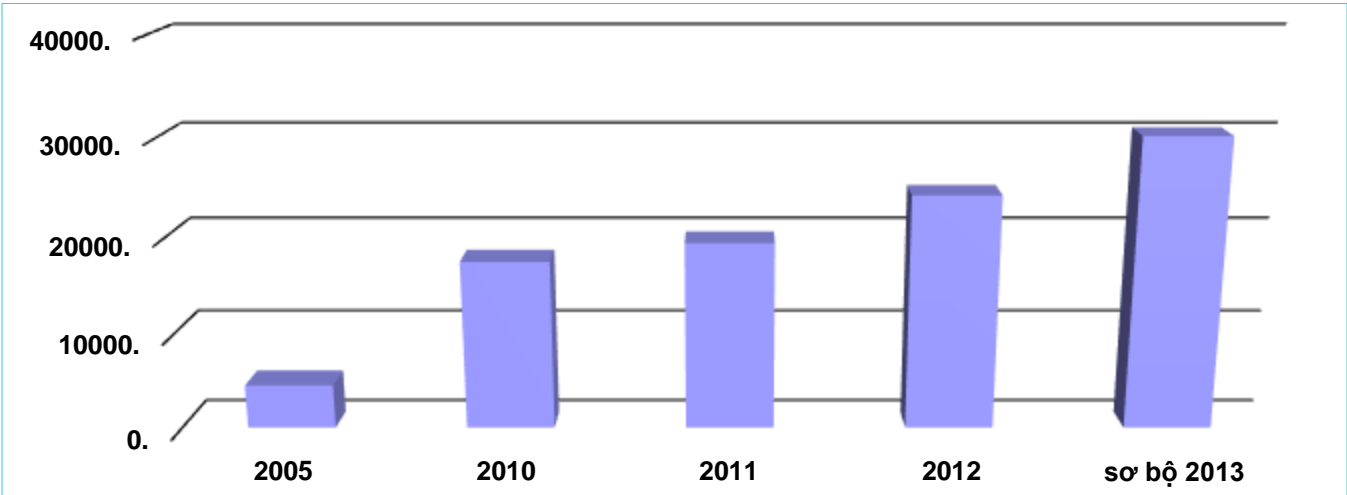
*Contribution of the environmental industry in GDP (%)*



Source: General Statistics Office 2012

Environmental Industry in Vietnam is an infant industry, but has made significant contributions to the economy. The industrial production value by current price related to EGSs has increased from 4,518.2 billion VND in 2005 to 30,163.8 billion VND in 2013, which is equivalent to more than 6.7 times within 7 years, accounting for about 0.5% of production value of the whole industry.

*Industrial production value of EGS under current price*

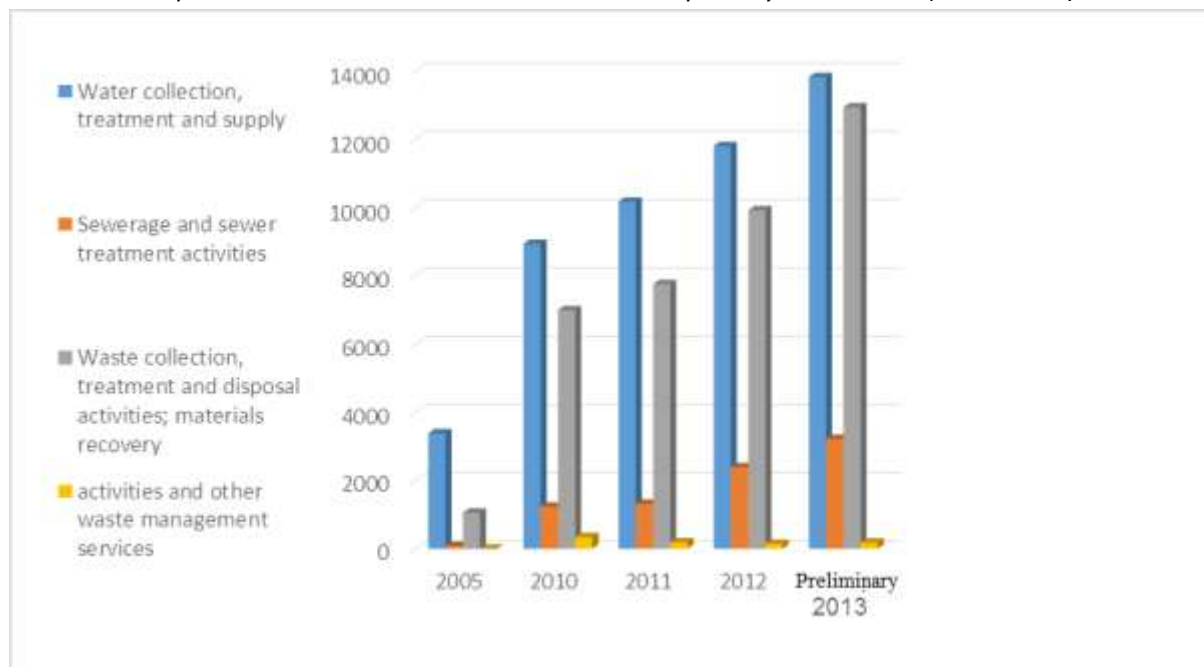


Source: General Statistics Office 2013

Industrial production value of exploiting, treating and supplying water achieved the highest position with a value of 13823.7 billion VND in 2013, 76.5 times higher than the value of pollution treatment industry and other waste management activities.



*The industrial production value 2005-2013 under current price by sub-sectors (billion VND)*



Source: Statistical Yearbook 2013

In 2014, as reported by the Ministry of Industry and Trade, water supply, management and treatment of wastewater and sewage sectors had a lower growth rate than the general growth rate of the whole industry. It reached 6.4% which is lower than the increase level of the same period last year (9.1%).

*Growth rate of E2 sector in 2014*

Sector code	Name of sector	Comparison between December and November of 2014	Comparison between December , 2014 and December of 2013	Comparison between 2014 and 2013
E	Water supply; sewage, wastewater management and treatment activities	101.8	107.6	106.4
36	Water exploitation, treatment and supplying	101.0	108.5	107.4
3600	Water exploitation, treatment and supplying	101.0	108.5	107.4

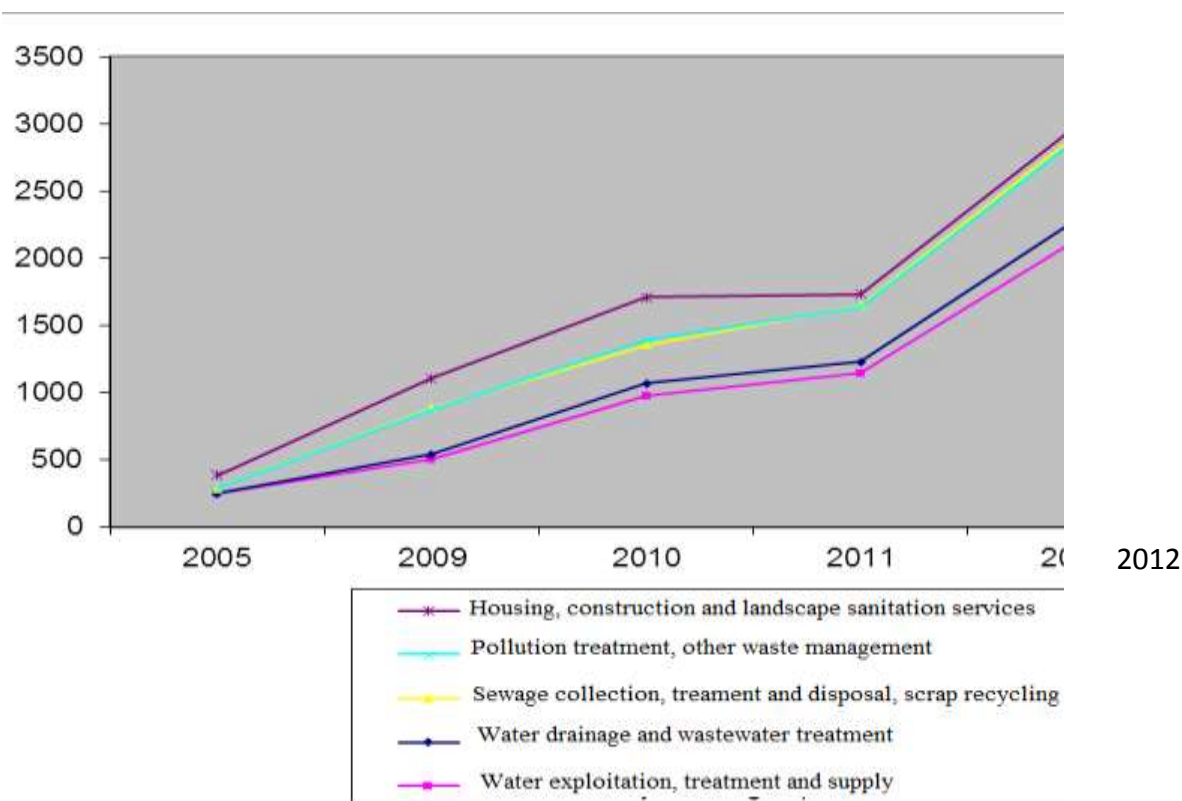
38	Sewage collection, treatment and disposal activities; scrap recycling activities	103.5	105.7	104.3
3811	Non-toxic waste collection	103.5	105.7	104.3

Unit: %

Source: Report on industrial production and trade 2014 and plan 2015

In terms of profit before taxes of EGS enterprises, profit of E sector equaled 286 billion VND in 2005, increased to 1,390 billion VND in 2010 and reached 2,877 billion VND in 2012. However, there was an uneven distribution in sub-sectors of this sector. While the exploitation, treatment and water supply reached profit before taxes of 2,134 billion VND in 2012, the pollution treatment and other waste management activities recorded profit before taxes of minus (-) 42 billion VND.

Profit before taxes of EGS enterprises (billion VND)



Source: Statistical Yearbook 2013

### **III.1.2 Position and location of EGS enterprises**

According to the Statistical Yearbook 2013, in the end of 2012 the total number of all enterprises reached 346,777 entities, of which the number of enterprises in the field of water supply, sewage and wastewater management and treatment activities equals 1,133 accounting for 0.33% of the total number of enterprises. The number of enterprises in housing, construction and landscape sanitation services amounts to 1,258 accounting for 0.36% of the total number of enterprises.

In 2012, all enterprises supplying environmental goods and services, and the number of enterprises in the field of sewage collection, treatment, and scrap recycling account for the highest proportion of 48.3%, followed by the sub-sector of water exploitation, treatment and supply (32.1%), water drainage and wastewater treatment (16.6%); pollution treatment and other waste management activities (2.9 %).

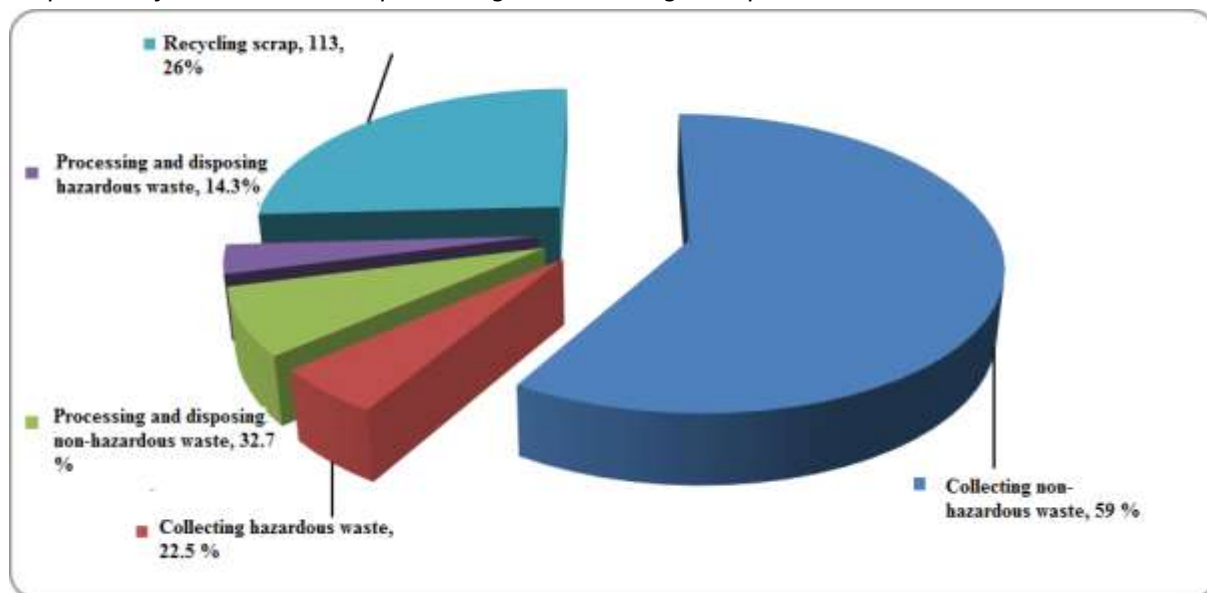
Hanoi and Ho Chi Minh City have the highest number of enterprises in the field of supplying environmental goods and services with the highest growth rate, approximately 100% in the period of 2000-2008. It is the result of the adoption of the Environmental Protection Law and many supporting policies from the State. One more reason for the significant increase in the number of EGS enterprises in Hanoi and Ho Chi Minh City is high demand of the society for environmental protection, people's health and safety. Other locations with high and rapidly increasing number of enterprises includes Lang Son, Hai Phong, Vinh Phuc and Hung Yen (in the North), Nghe An, Ha Tinh, Khanh Hoa (in Central Vietnam), Binh Duong, Dong Nai and Can Tho (in the South). These locations have high economic growth rate, concentrating many key industrial zones and are characterized by high urbanization process which causes environmental degradation. However, the environmental industry sector have not developed in the rest of the country yet.

The following sections analyse the position and geographical distribution of EGS enterprises in some specific sectors.

#### ***1. Collection, treatment and disposal of waste and scrap recycling sectors***

Among enterprises in E38 sector, non-hazardous garbage collection enterprises account for 59% of enterprises in the entire field, followed by waste recycling activities (26%), non-hazardous waste disposal, processing and handling activities constituting 7%, hazardous waste collection accounting for 5% and finally hazardous waste disposal, processing and handling activities reaching 3% of the total.

*Proportion of hazardous waste processing and collecting enterprises in 2009*

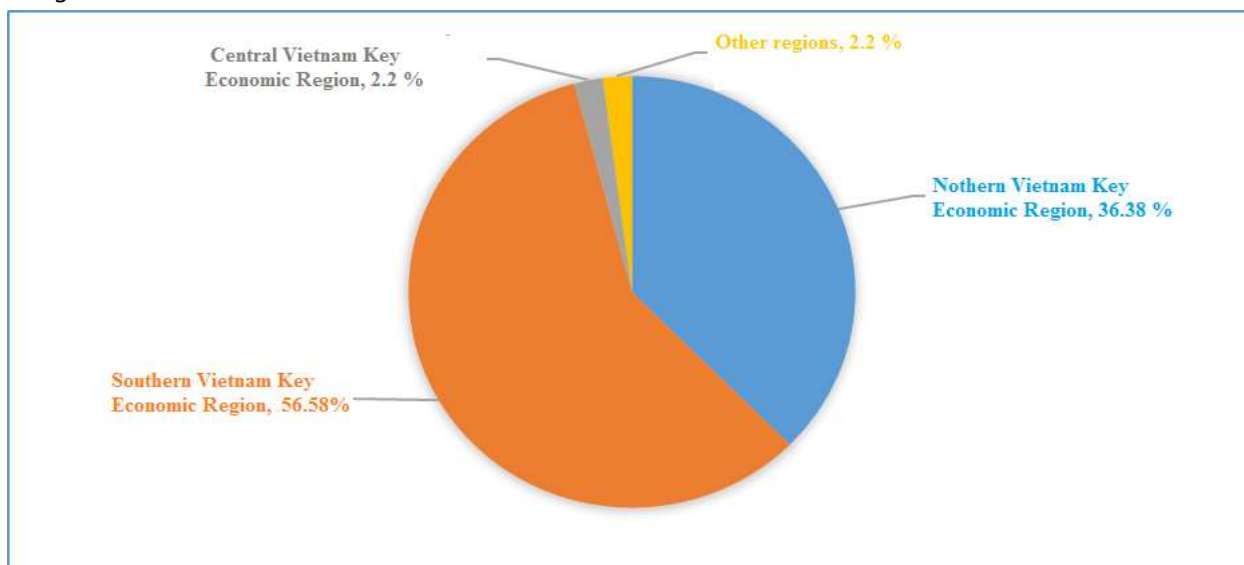


*Source: Environmental Statistics in 2009*

(i) For ordinary solid waste: Currently the country comprises only 12 provinces and 16 waste processing factories with the capacity of approximately 3000-4000 tons/day. 14 remaining factories are under construction. Southern region concentrates the largest processing capacity, accounting for 57% of processing capacity in the whole country with a processing capacity of 7150 tons/day, of which Ho Chi Minh City represents 5,700 tons/day. Subsequently, the northern region has a total processing capacity of 4,275 tons/day, representing 34% of total capacity, the central region only reaches a processing capacity of about 1150 tons/day, accounting for 9% of total capacity.

(ii) Regarding industrial solid and hazardous waste, until March 2015, the whole country comprised 15 hazardous waste processing enterprises (HW) licensed by Vietnam Environment Administration under the provisions of Circular No. 12/2006/TT-BTNMT and 63 hazardous waste enterprises licensed under Circular No. 12/2011/TT-BTNMT dated April 14th, 2011. According to Circular No. 12/2011/TT BTNMT of the Ministry of Natural Resources and Environment, hazardous waste collecting and transporting activities are being conducted in 8 areas. Transporting and handling hazardous waste activities are heavily concentrated in the south, in Ho Chi Minh city in particular (56%) and in the North, especially in Hanoi capital (36%), where focalize industrial zones and population. There is a small number of hazardous waste processing enterprises in the North West, North Central, South Central Coast and the Central Highlands.

*The location and capacity sharing of Hazardous Waste processing enterprises by key economic regions*



Source: List licensed by Vietnam Environment Administration (updated until May 07th, 2012)

## **2. Drainage and waste water treatment and processing sector**

According to the Statistical Yearbook 2013, Vietnam has 189 enterprises in drainage and waste water treatment and processing sector with net revenue of 1,942 billion VND, accounting for about 7% of the revenue of total environmental industry. Wastewater comes from two main sources, including: (i) household and healthcare in urban area and (ii) industrial wastewater from the industrial zones, independent enterprises outside industrial zones, industrial clusters and handicraft villages.

(i) Urban wastewater: There is still a small number of wastewater processing plants in urban areas. Currently, there are only 6 provinces/cities across the country which have concentrated wastewater processing plants. Most of them are public enterprises. Approximately 62% of the total processing capacity (415,000m<sup>3</sup>/day and night), is concentrated in the North (257,000 m<sup>3</sup>/day and night) and 34% approximately in the South (141,000m<sup>3</sup>/day and night). The remaining areas, including central area and highland area, constitute 3% of the total processing capacity.

(ii) Wastewater of industrial zones: In 2014 the country comprised 311 established industrial zones. Out of 311, 209 industrial zones operate in a total area of over 47,300 ha, 103 remaining industrial zones are in the construction phase. Average industrial production value over 1 ha of land reaches approximately 1.6 million/year. Up to date, the industrial zones have created job opportunities for more than 1.6 million people directly and nearly for 1.8 million people indirectly. In terms of regions, the southern area accounts for the highest number of industry

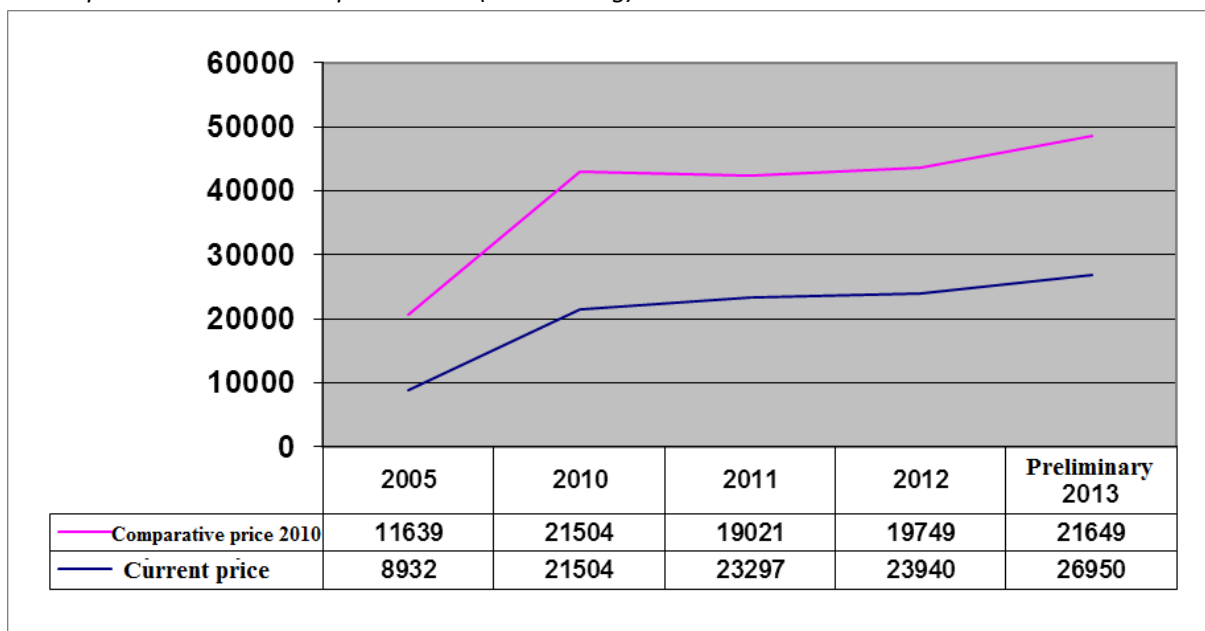
zones with 149 areas, occupying 49.3% of the country. The northern region comprises 63 industrial zones representing 20.8% of the total number in country. The central region includes 42 industrial zones accounting for 13.9%. The Mekong Delta region embraces 47 industrial zones.

There is nearly 80% of industrial zones with a wastewater treatment system in Vietnam. 20% of the remaining industrial zones lack such facilities or are presently investing in their construction.

### III.1.3 Investment in EGS development

The total investment stock of the country related to EGS is estimated at 26,950 billion (in current prices) and 21,649 billion (in comparative prices in 2010) in 2013 which has increased by 201% and 86% as compared to 2005, respectively. The government has 57.3% share in the total investment stock, i.e. 15,462 billion dong (2013).

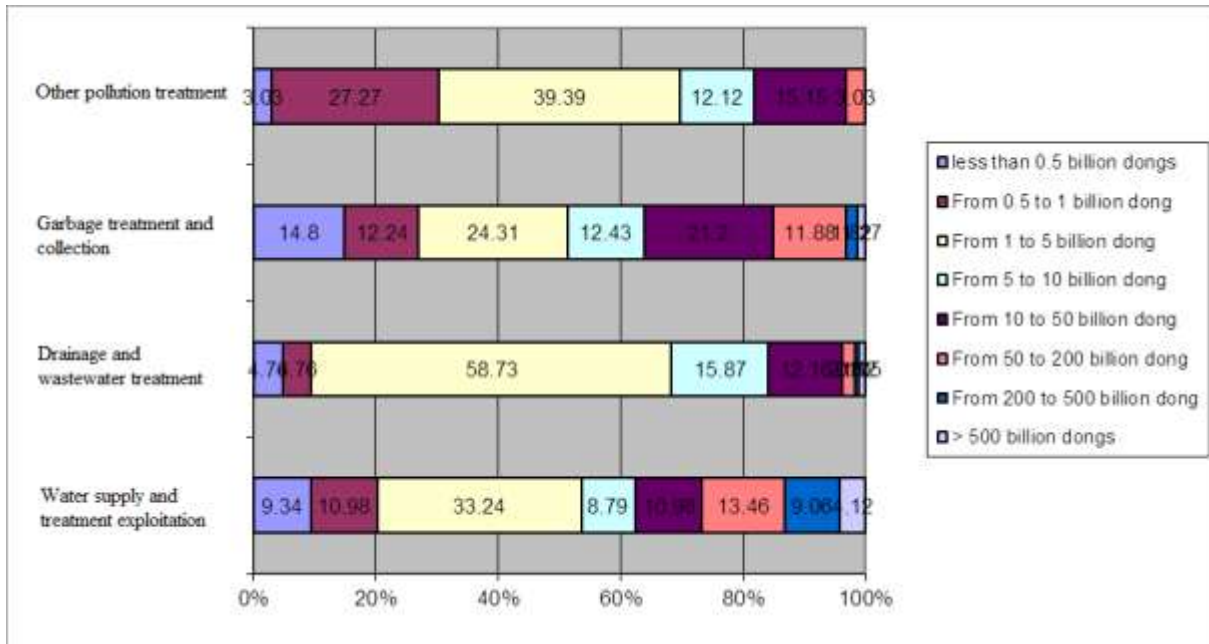
*Development investment capital in EGS (billion dong)*



Source: Statistical Yearbook 2005-2013

The number of EGSs enterprises having the authorized capital from 1 to 5 billion VND accounts for between 55% and 80% of the total. The number shows that EGS enterprises in Vietnam are currently small and medium sized with low capacity.

*The sharing percentage of enterprises in EGS by size of capital, 2012*



*Source: Statistical Yearbook in 2013*

The total investment of EGSs enterprises in 2012 reached 71,393 million VND, accounting for 0.47% of the total investment in Vietnam.

#### *Annual EGS investment*

*In Million VND*

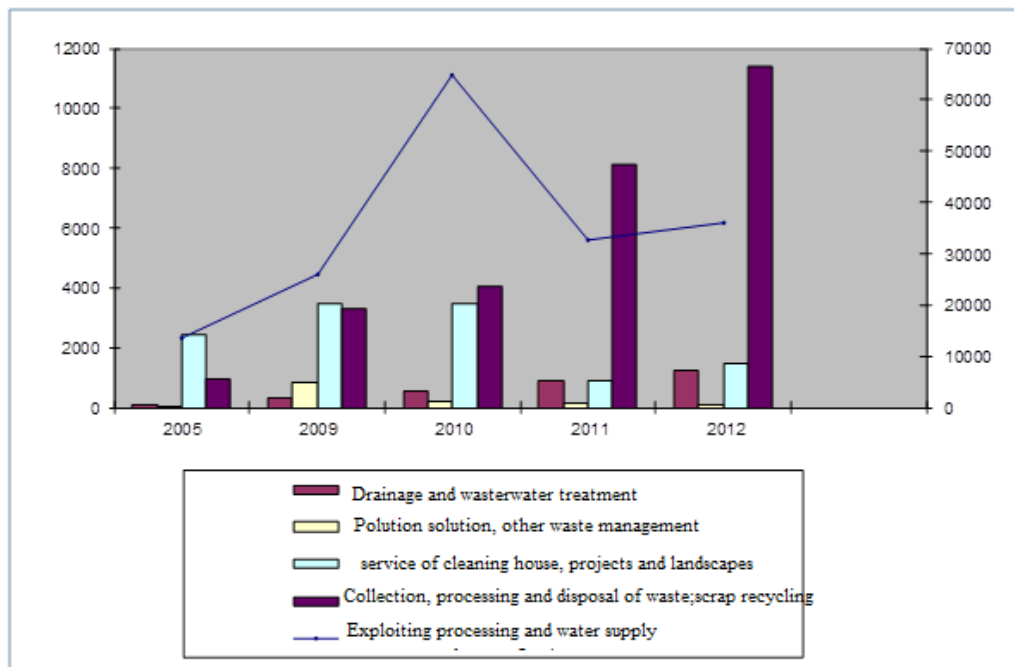
Field/Year	2005	2009	2010	2011	2012
Water collection, treatment and supply	17306	29954	71113	39670	43042
Sewerage and sewer treatment activities	220	742	1406	1936	2783
Waste collection, treatment and disposal activities; materials recovery	1566	5023	6618	18252	19222
Remediation activities and other waste management services	44	672	527	327	265
Services and building and landscape activities	5168	8235	12630	3580	6082

Source: Statistical Yearbook 2013

The value of fixed assets from EGSs enterprises in 2012 reached 50.421 million in the following sectors:

- Exploiting, processing and water supply: 36.164 million
- Drainage and sewage: 1262 million
- Collection, processing and disposal of waste, and scrap recycling: 11.422 million
- Pollution treatment and other waste management: 97 million
- Cleaning services of house, building and landscape: 1,456 million.

The value of fixed assets and long-term financial investments of EGS enterprises until 2012



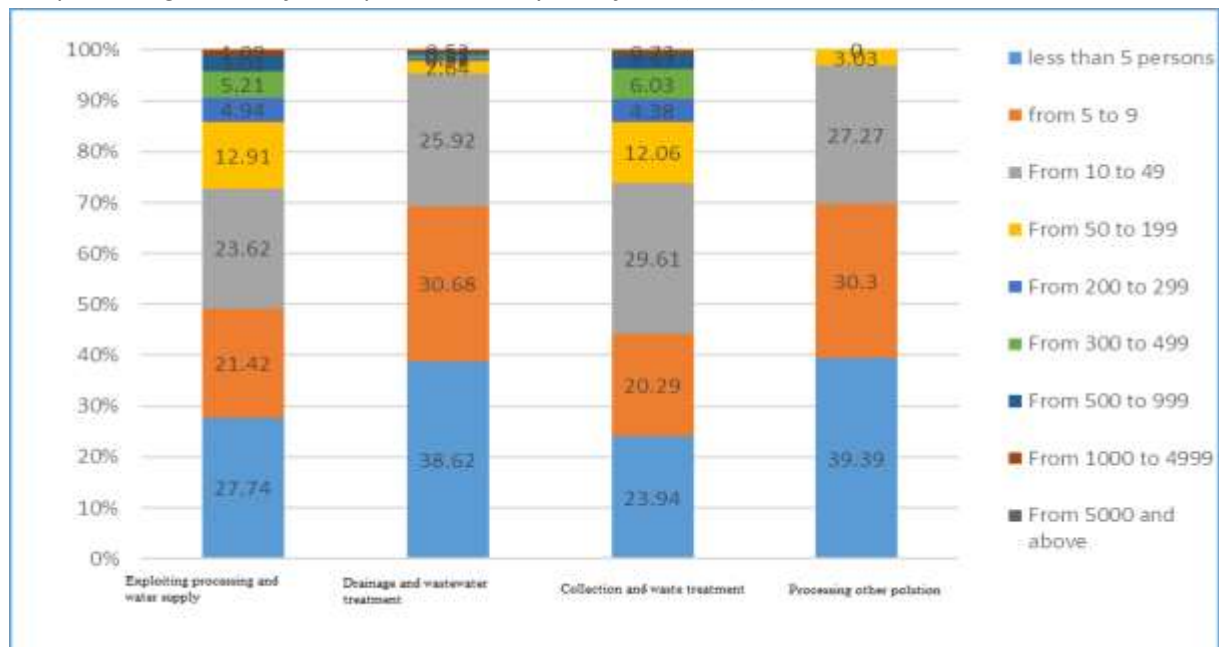
Source: Statistical Yearbook 2013

### III.1.4 Labour in EGS sector

- **Scale of labour force:** in terms of labour, most of EGS enterprises in Vietnam are small and medium-sized enterprises. With a total of 928 EGS enterprises in 2011, the number of enterprises under 49 employees accounted for the largest proportion of around 85%. Enterprises employing between 200 and 500 workers represent 10%. 2.9% of enterprises have from 500 to 1000 employees and there is only 1% with 1000 to 5000 employees.



*The percentage share of enterprises in EGS by workforce (2012)*

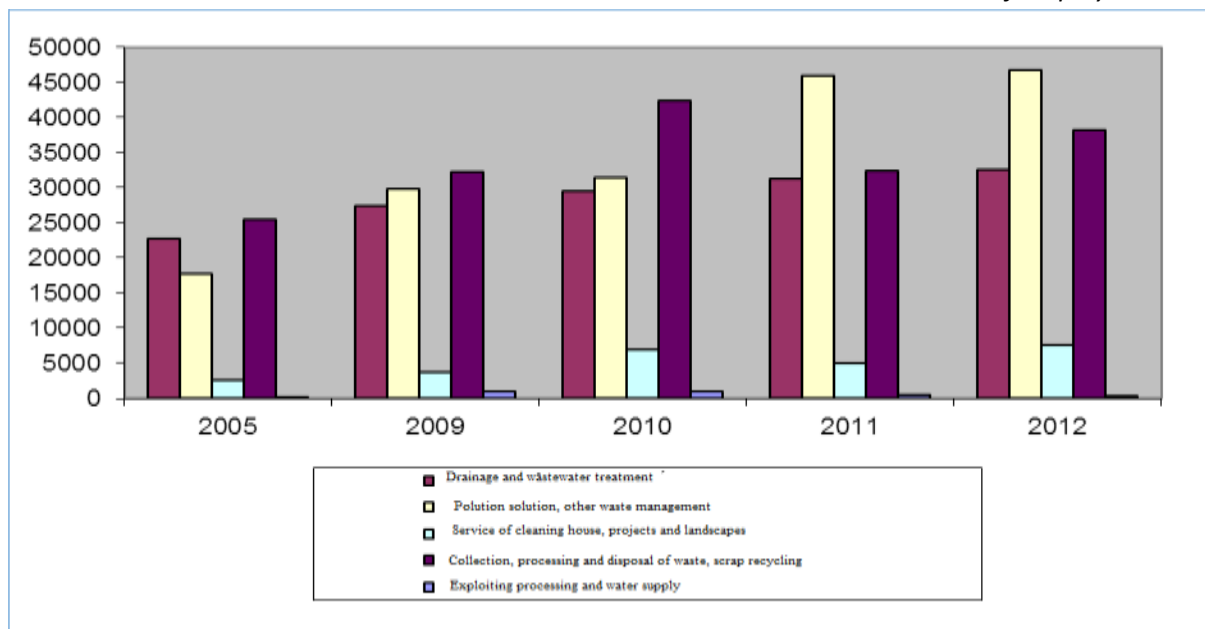


Source: Statistical Yearbook 2013

The largest group of enterprises (50 employees or less) consists of small and medium-sized enterprises. This reflects partly the reality of EGS business activities which focus primarily on waste collecting activities. There is no capacity to increase the EGS activities. This is because Vietnam enterprises are SMEs and therefore they lack of finance to invest in EGs which are expensive. Furthermore, it requires high-skill employees to operate environmental services and Vietnam enterprises do not have them.

## Employees in EGS enterprises

### Number of employees



Source: Statistical Yearbook 2013

**- Income of workers:** In 2012, the total income of employees in E sector reached 6.649 billion and has increased 5.2 times comparing to 2005. Therefore, the average monthly income of employees increased from 2.071 thousand up to 6.448 thousand VND.

### Total income and the average income of workers in the EGS enterprises

Field/Year	2005	2009	2010	2011	2012
<b>Total income of employees (billion)</b>					
Water collection, treatment and supply	674	1342	1995	2211	2713
Sewerage and sewer treatment activities	88	217	388	435	653
Waste collection, treatment and disposal activities; materials recovery	306	986	1243	2611	3262
Remediation activities and other waste management services	6	43	54	17	21
Building services and landscape activities	586	1149	1790	1415	2068

Income per month (thousand)					
Water collection, treatment and supply	2471	4182	5722	6058	7041
Sewerage and sewer treatment activities	2798	4931	5500	7669	7353
Waste collection, treatment and disposal activities; materials recovery	1432	2837	3329	4846	5903
Remediation activities and other waste management services	9110	3821	4801	3386	4729
Building services and landscape activities	1921	3361	3833	3831	4616

*Source: General from the Statistical Yearbook 2014*

### **III.1.5 Ownership and the market share of EGS enterprises**

According to 2014 statistics, the number of enterprises of Vietnam in the end of 2013 was 373.212. The state enterprises accounted for 3.198 (0.9% of the total) and the non-state enterprises reached the number of 359.794 (96.4%). There were 10.220 FDI enterprises (2.7%). The part of EGSs enterprises is limited. The number of enterprises in water supply, waste management and treatment, wastewater equals 1,133, accounting for 0.33% of total number of enterprises. The cleaning services enterprises consist of 1258 entities, accounting for 0.36% of the total.

According to the types of ownership, for the total of 928 EGS enterprises in 2011, the number of non-state enterprises still accounts for the highest rate. The state enterprises are on the second position and the FDI enterprises are the fewest.

*Number of EGS enterprises by ownership*

Enterprise kind/ year	2006	2007	2008	2009	2010	2011
State enterprises	134	156	165	166	171	191
Non-state enterprises	227	318	436	593	670	724
FDI enterprises	8	8	8	8	9	13
Total	369	482	609	767	850	928

*Source: Report on Foreign direct investment enterprises in the period of 2006-2011, General Statistic Office, 2014*

The table above shows that the non-state enterprises in E sector constitute the highest proportion equalling to 78% of total EGSs enterprises, followed by state enterprises, which accounted for 20.6% and FDI enterprise accounting for 1.4%. Although the proportion of a number of FDI enterprises accounted for a relatively small percentage, they represent a considerable part in terms of investment. For a total of 13, there are 5 FDI enterprises of over 50 billion VND in capital and two enterprises with capital above 500 billion. In the state area, there is only 5.5% of enterprises of over 50 billion capital and three enterprises with capital above 500 billion VND.

From 2006 to 2011, the number of EGSs private enterprises has increased by 3 times and their share in the total number of EGS enterprises has increased from 61.5% to 78%. In contrast, the relative importance of the state sector has decreased in relation to other sector during the same period. In general, the state role has phased out in the field of EGS. It only participates in the form of capital contributions to limited liability companies with the smaller capital rate of 50%.

Regarding the FDI area, according to the statistics data of the Department of Foreign Investment, and the cumulative calculation until 31 December 2014, the whole country embraces 17.768 projects with the total registered capital of \$ USD 252,715.96 million and the charter capital of US 84.601.97 million. There are 38 projects in the field of waste disposal and water supply representing 368.62 million USD of charter capital of and 1.348.49 million USD of total registered investment capital.

Particularly, in 2014, 1.843 new projects were granted investment certificates representing total registered capital of US \$ 16.503.77 million for the whole country. In the field of water supply, activities, management and disposal of wastewater and waste in 2014, 8 new projects are granted investment certificates and correspond to the total registered capital of 63.31 million USD.

*Number of FDI projects in 2014 according to sub-sector*

No	Lines	Number of new granted projects	Capital registration on new granted	Total projects capital increase	Registration on capital extra increase (million USD)	Registration capital new granted and extra increase (million USD)
1	Industrial processing and manufacturing	880	11,298.05	572	4,207.31	15,505.36
2	Real estate business	44	2,530.71	6	302.12	2,832.84
3	Construction	122	964.15	18	120.59	1,084.74
4	Board and accommodation services	31	137.01	7	357.05	494.07
5	Health and social subsidy	6	229.77	4	185.93	415.71
6	Repair, retail, wholesale	257	335.68	37	69.09	404.77
7	Professional contract, science and technology	171	211.44	51	67.13	278.57
8	Production and distribution of electricity, gas, water, air-conditioning	6	221.42	1	7.00	228.42
9	Transportation and storage	66	148.69	7	28.05	176.74

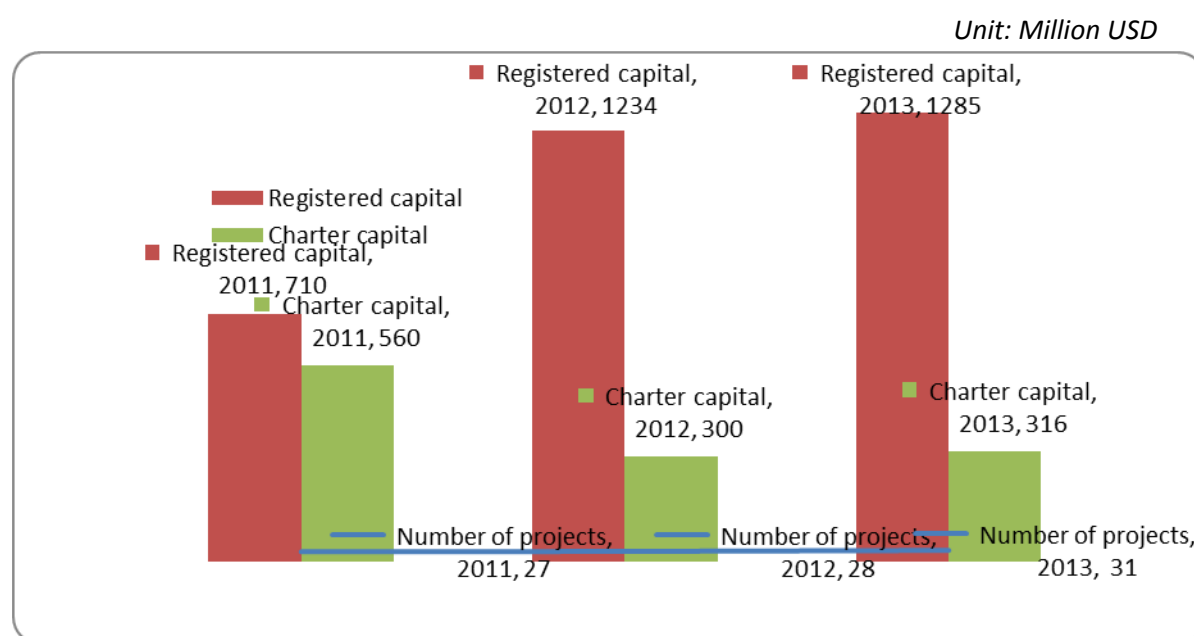
No	Lines	Number of new granted projects	Capital registration on new granted	Total projects capital increase	Registration on capital extra increase (million USD)	Registration capital new granted and extra increase (million USD)
10	Agriculture and forestry; aquatic product	28	80.98	17	55.40	136.38
11	Training and education	25	77.26	2	0.20	77.46
12	Information and communication	160	69.34	19	6.56	75.90
13	Water supply; Waste disposal	8	63.31	0	0.00	63.31
14	Administrative and support service	11	8.39	1	0.18	8.57
15	Other service	13	5.35	4	1.91	7.26
16	Mineral ores	5	101.65	2	5.65	107.30
17	Finance, banking, insurance	3	9.68	0	0.00	9.68
18	Arts and entertainment	7	10.89	1	3.7	14.59
<b>Total</b>		<b>1,843</b>	<b>16,503</b>	<b>749</b>	<b>5,417</b>	<b>21,921</b>

Source: Department of foreign investment – Ministry of planning and investment

The average investment per project in the field of water supply and wastewater treatment is lower than the average investment per project in the country. The table above shows the average

investment in a FDI project in 2014 amounted to \$ US 8.9 million while the average investment in a FDI project in the field of water supply and wastewater treatment amounted to 7.9 million USD. Although the data does not reflect the entire FDI investment in the field of EGS the data regarding other related fields such as environmental consultancy being unavailable, it may be found that FDI in the EGS field is still very low as far as both the number of projects and the total registered capital are concerned. So far, domestic waste treatment is attracting the highest number of FDI projects in Vietnam. These projects are mainly run in Ho Chi Minh City.

*Number of projects and registrations in the field of wastewater treatment and waste in Vietnam from 2011 to 2013<sup>1</sup>*



Source: General Department of Statistics

Regarding direct investment of Vietnam enterprises abroad, by the end of 2013 there were 89 registered projects with the total registered capital of 4420 million USD. However, there were only 3 EGSs projects with the total registered capital of 9.4 million USD, corresponding to a proportion of 0.4% of the total number of the projects and 0.05% of the total registered capital. The average investment per EGSs project reached only 3.1 million USD, which is equivalent to 1/16 of average investment of Vietnam enterprise overseas. Thus, both investment of Vietnamese EGS enterprises abroad as well as foreign direct investment in Vietnam in the field of EGS were greatly limited in terms of the number of projects and the registered capital.

*The number of projects and the amount of FDI registered capital abroad from 2008– 2013*

<sup>1</sup> Including increased capital of projects which have been licensed since last year.

Year	No. of project	registered capital (MUSD)
2008	104,0	3147,5
2009	91,0	2597,6
2010	108,0	3503,0
2011	82,0	2531,0
2012	84,0	1546,7
Subtotal in 2013	89,0	4420,0

Source: General Department of Statistics

## III.2 Advantages and challenges regarding the availability of EGS in Vietnam

### III.2.1 Advantages

***Firstly, the institutional environment facilitating the local development of environmental goods and services has been gradually consolidated.*** This started with the Environmental Protection Law 2005, and its Article 121 which assigns the Ministry of Industry (now the Ministry of Industry and Trade) with a mission to direct the development of the environmental industry (EI). In July 2009, the Prime Minister decided to approve “the project of developing the Environment Industry up to 2015, vision up to 2025” and “*the development of the Environmental Industry and Economic Industry with significant contribution in Vietnam Industry developing Structure*”.

Following the Decision No. 1030 of the Prime Minister, the Ministry of Industry and Trade developed and implemented the development planning for Environmental Industry up to 2020, Vision up to 2030. In June 2011, the Ministry of Interior Affairs decided to recognize Vietnam Environmental Industry Association (VIEA) as a professional association of environmental enterprises under the Ministry of Industry and Trade.

On 11 November 2012, the Government issued Decree No.95/2012/ND-CP approving responsibility and duties of the Ministry of Trade and Industry in the field of Environmental Industry (Clause 8, Section đ). This is a significant change, which means that MOIT is now competent in the field of environmental industry policy at central and local levels.



The statistical system has also been updated and currently, there are 4 EGS groups included in the national statistics with code E38:

- E381 – waste collecting,
- E382 – processing, treatment and waste disposal,
- E383 – scrap recycling, and
- E384 – exploitation, treatment and water and draining water processing, and wastewater processing and treatment.

***Secondly, the number of environmental laws and regulations is increasing*** in order to provide support for the environmental industry sector. Environmental protection awareness raising has been included in the Party's Resolution (Resolution No. 41-NQ / TW dated November 15, 2004) as well as the relevant strategies and regulations, such as the national environmental protection strategy until 2010 and orientation up to 2020, the Law on Environmental Protection, Program of Environmental Service Development until 2020. Policies to encourage investment in Environmental Services have been issued. Large cities, such as Hanoi and Ho Chi Minh City, have carried out policies in order to expand the awareness raising in the field of environmental services, and have tested several supplying models of non-state environmental services. Besides that, policy framework for environmental protection, including economic instruments is being increasingly improved. This creates pressure increasing along with environmental protection requirements.

It is necessary to complete the policy framework with additional policy directions in order to create a more competition-friendly and more equitable regulatory environment for service suppliers. The completion of this policy will create favourable conditions to develop business in the environmental services sector.

***Thirdly, the international economic integration trend is closely associated with an increase in FDIs in the field of EGSs in Vietnam.*** Environmental service sectors have been formed and developed. The implementation of bilateral and regional trade agreements leads to an increase in the participation of EGS suppliers from foreign countries in Vietnam. The number of companies involved in EGS field has been continuously increasing, especially in the private sector and as far as foreign direct investment is concerned.

***Furthermore, the market needs of EGS development are increasing.*** The need for environmental services is rapidly increasing. According to a forecast<sup>2</sup>, the demand of environmental services between 2010 and 2020 would triple. Collection and treatment services of solid waste would increase from 2,263,595 million VND to 6,111,706 million VND; hazardous waste treatment is

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<sup>2</sup> Report of the status of environmental service development in Vietnam, pages 125-127, done by MONRE. The document that prepare for issue draft of National Strategy on Environmental Services Development till 2020, an orientation to 2030.

expected to increase from 13,581,570 million VND to 36,670,236 million VND; wastewater treatment increase is estimated from 4,465,885 million VND to 12,057,888 million VND; air treatment services would grow from 6,078,730 million VND to 14,547,620 million VND; Environmental investment services are expected to increase from 297,000 million VND to 801,900 million VND.<sup>8</sup>

***Finally, the credible increase in the government commitment for promoting environmental services must be mentioned.*** The Government has committed to support the development of environmental services sector and economic integration. Government expenditure for environmental protection field tends to increase. Within 6 years from 2004 to 2010, the budget for environmental protection has increased 3-fold from approximately 2,000 billion VND to 6,000 billion VND. At present, there are many preferential policies to support environmental services enterprises and to promote development of environmental industry in our country. The establishment of environmental services development strategy by 2020 is one of the latest efforts in implementing these commitments.

### **III.2.2 Challenges**

The environmental industry has been dramatically growing in the recent years, nevertheless it is still an infant industry. The number of enterprises in the sector is small and they have limited capacity; they meet only 15% of urban waste treatment demand, about 14% of demand for treatment of hazardous wastes, and only 2-3% of the demand for residential waste water treatment. Environmental technologies are also not up to meet the demand. Although the recent positive policy changes have brought about tremendous opportunities for the EGS industry, the challenges remain.

***First of all, the policies promoting EGS are not efficient and synchronized.*** Although, the Government has paid attention and developed policies and strategies to foster EGS industry, there are many other, closely linked, policies and strategies that have not been implemented yet. Especially, there is a lack of specific guideline under those policies and strategies. The most relevant legal document is Decree 04/ND-CP on economic incentives for environmental protection activities. The decree encourages organizations and individuals to invest in the field of environmental protection through the reduction of corporate income tax, VAT, improvement of infrastructure, low interest rate for loans, and a support for product promotion. However, although the decree has been approved, an implementing circular has not been issued. Therefore, an enterprise does not exactly know how to proceed to benefit from incentives offered by the government.

***Secondly, there is no specific incentive policy for the fields which face difficulties in attracting investment from the private sector such as exhaust gas, noise, and hazardous waste treatment.*** The development of such environmental sectors usually require large investments and involve important operating costs while there exists no mechanism to attract the private sector. For

example, the case of urban wastewater treatment shows that investment need of that service is usually 3 times higher than the investment in water supply.

***Thirdly, the administrative system is complex, troublesome and time-consuming, especially in the stage of licensing.*** Delays and late delivery in public administration system is a problem when the private enterprises acquire the state companies under socialization policy. Some businesses have access to preferential policies on land, however, they must advance funds for ground clearance, and the time of repayment has not been specified, which causes economic damage to the enterprises.

***Moreover, organizations supporting the EGS sector are missing in Vietnam.*** Although the environmental industry association has officially been operating, the link between EGS enterprises and the association is still not effective. There is a dire need for information and market transparency. In recent years, Vietnam has recognized the success of the environmental protection funds, however, it is also not easy to access as the funding process is cumbersome.

Although EGS is managed by the Ministry of Industry and Trade, there are still overlaps in the mandates of various ministers since environmental goods and services are a cross-cutting sector. For example, the Ministry of Natural Resources and Environment was assigned to establish the development strategy for environmental services, while the Ministry of Industry and Trade was assigned with Environmental Industry Planning, which also include environmental services. At the same time, clean water production is under the responsibility of the Ministry of Construction.

***Finally, the discrimination between state enterprises and private enterprises remains.*** State enterprises often operate inefficiently, but continue to receive support from the government. They receive exclusive rights and privileges in the allocation of resources. For example, the socialization of garbage collection has been done in many provinces and cities but the private enterprises can only reach the suburban or adjacent areas where the population density is low. Therefore, the margin benefit is lower than in the central area.

#### **IV. THE ANALYSIS OF VIETNAM INTERNATIONAL COMMITMENTS PERTAINING TO EGS**

##### **IV.1 The existing international commitments of Vietnam pertaining to EGS**

###### **IV.1.1 WTO obligations and commitments**

###### ***1. Environmental goods***

The treatment of trade of environmental goods is subject to the obligations contained in the Multilateral Agreements on Trade in Goods contained in Annex 1A of the Marrakesh Agreement Establishing the World Trade Organization (WTO) and specific tariff commitments of each WTO member undertaken for such goods. Among the most relevant agreements which may affect domestic policies in the area of environmental goods are the Agreement on Subsidies and Countervailing Measures (ASCM), the Agreement on Agriculture (AoA), the Agreement on the Trade-Related Investment Measures (TRIMs) and the Agreement on Technical Barriers to Trade (TBT).

It is important to mention at this stage that WTO rules generally recognize the need for environmental protection and may allow trade restrictive environmental measures under specific conditions. For example Article XX GATT allows a WTO member to adopt measures that are necessary to protect human, animal or plant life or health. It also allows trade restrictive measures if these are related to the conservation of natural resources, provided that such measures are made effective in conjunction with restrictions on domestic production or consumption. Trade restrictive measures for environmental purposes, however, cannot be “applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on international trade”.<sup>3</sup>

In the areas of standards and technical regulations, pursuant to the TBT Agreement, WTO Members may adopt them to pursue environmental objectives provided they are not useless or unduly burdensome. Ideally they should be based on existing international standards and constitute the least trade restrictive measure available to achieve the environmental objective sought.

As to investment measures, while the WTO rules pertaining to trade in goods do not directly regulate the conditions of foreign direct investments, they do prevent that such rules are unduly trade distortive. These are for instance the conditions imposed on an investor to use local content as opposed to imported material or to export at least a certain quantity of the products manufactured. The WTO TRIMs agreement specifies at length the type of prohibited trade distortive investment measures.

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<sup>3</sup> Article XX of GATT.

Finally, with respect to subsidies, the WTO SCM Agreement provides for the actions that can be taken against trade distortive subsidies. These may encompass incentives, such as tax incentives, that are specific to certain sectors of industry. While not all subsidies are prohibited or even actionable, environmental subsidies may be actionable under certain conditions.

The Doha Declaration adopted as a result of the Fourth WTO Ministerial Conference (2001) asked WTO members to identify environmental goods and services as a group for liberalization. Paragraph 31 (iii) of the Doha mandate establishes that negotiations should pertain to “the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services”.

While the mandate is clearly for both goods and services, the present analysis concerns only goods, as experience in the WTO discussions has shown that these probably offer the most potential for environmental and economic benefit, but also the most difficult path forward. The Doha mandate does not specify what constitutes an environmental good or the desirable extent of liberalization; therefore countries have been struggling since its adoption to come up with a list of environmental goods and modalities for liberalization. That effort entails two sorts of decision:

- What types of goods will be considered appropriate for preferential treatment?
- What sort of negotiating approach will the members take in liberalizing?

On the first question, there are at least three candidate types of goods that have been mooted for special designation as —environmental:

- Type I: Goods that are environmentally superior in end use
- Type II: Goods for which environmental improvement is a primary object
- Type III: Goods that are environmentally superior in production and processing

Type I goods operate in their end use (or in disposal) in a manner that causes less environmental damage than some baseline cases<sup>4</sup>. Japan, for example, has proposed a listing for HS870390: passenger motor vehicles other than those with internal combustion engines. When operated, these vehicles have low emissions compared to conventional motor vehicles. High-efficiency

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<sup>4</sup> This classification is a sub-set of what are known as environmentally preferable products (EPPs) (UNCTAD, 1995; Tothova, 2005). EPPs cause significantly less environmental harm at some stage of their life cycle than alternative products that serve the same purpose. The classification proposed in this paper divides this up such that the production phase of the life cycle is covered as Type III goods, and the end use and disposal is covered under Type I. In the spring 2010 Chair’s summary of the negotiations, the EPPs grouping contains only six goods, all included because of their biodegradability (WTO, 2010).

home appliances, such as washing machines and refrigerators, are also examples of Type I goods (Japan has proposed HS841510 – efficient air conditioners). Renewable energy technologies also fall into this category; in their end use they generate power, but they do so in an environmentally superior manner as compared to conventional technologies (the U.S. and EU have proposed HS730820 – towers that can be used to support wind turbines)<sup>5</sup>.

Type II goods have environmental improvement as a primary object. These include environmental remediation technologies (a number of countries have proposed HS842119 – centrifuges that can be used to remove oil from water in oil spills); pollution prevention technologies (Saudi Arabia has proposed a number of chemicals and mechanical inputs used in the end-of-pipe process of carbon capture and storage) and natural resource management technologies (such as HS901540 – photogrammetrical surveying instruments, used for GIS imaging).

Type III goods use processing and production methods (PPMs) that cause less environmental damage than PPMs of other similar goods. Organic agriculture is an example of this sort of good. The current Chair's listing of proposed goods (WTO CTESS, 2010, Annex III) does not contain any goods distinguished by virtue of their PPMs, but organic agricultural goods have been indirectly proposed by, among others, Brazil, in discussing the types of EGS liberalization from which developing countries might benefit (Brazil, 2007).

The lack of progress is a concern, but is understandable; first, these negotiations do not take place in isolation from the other, more pressing and politically more visible topics, especially the negotiations on agriculture and NAMA: no progress will be made in any other subject without first solving the remaining issues in these two areas; furthermore, at the technical level, the WTO Members in Doha may have underestimated the scale of the journey on which they were embarking as far as EGS are concerned. Beyond the difficult questions of which goods to include on the list and how to negotiate, which has been the main preoccupation to this point, are other challenges that could require the WTO to innovate and branch out in ways it has never done. A list of EGS must be a living document, to which new items can be added, and from which the existing items can be dropped when they are rendered ordinary by technological advances. Without that ability, any list would soon cease to serve the basic objectives it was meant to achieve; goods that deserved special treatment would not be listed, and goods that did not would be. In essence, assembling a list of goods that are preferred is a classic exercise in standard-setting, an activity that, to date, the WTO has studiously avoided. And proper standard-setting demands good institutions, both of governance and of information.

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<sup>5</sup> Some might argue that wind-power turbines are Type II goods—primarily aimed at environmental improvement. But in fact renewable energy technologies are primarily aimed at producing energy. They happen to do so in a way that is more environmentally friendly than their conventional competitors.

## **2. Environmental services**

The WTO rules affecting environmental services are those contained in the General Agreement on Trade in Services (GATS). GATS provides for four modes of supply of a service:

- Cross-border supply (Mode 1) (the possibility for non-resident service suppliers to supply services cross-border into the Member's territory, e.g. online banking),
- Consumption abroad (Mode 2) (the freedom for the Member's residents to purchase services in the territory of another Member, e.g. tourism services),
- Commercial presence (Mode 3) (the opportunities for foreign service suppliers to establish, operate or expand a commercial presence in the Member's territory, such as a branch, agency, or wholly-owned subsidiary),
- Presence of natural persons (Mode 4) (the possibilities offered for the entry and temporary stay in the Member's territory of foreign individuals in order to supply a service e.g. services supplied by professionals temporarily delegated abroad).

In services, such as environmental services, market access and national treatment obligations apply only for those services sectors which are subject to specific commitments taken by each Member separately, per mode of supply. Members' commitments are inscribed in their respective Schedules of Specific Commitments.

WTO members can make special commitments on market access<sup>6</sup> and national treatment<sup>7</sup>. Market access commitments imply that a Member must abolish quantitative and qualitative restrictions on the supply of a service (e.g. quotas). By making commitments on national treatment, Members must treat foreign services and service suppliers no less favourably than their own domestic like services and like service suppliers.

Commitments may be limited by specific conditions indicated in a Member's schedule of services commitments. Furthermore WTO Members can make horizontal commitments which apply to all sectors. Thus, understanding Vietnam's schedule of commitments is essential to assess the scope of its obligations under GATS in environmental services.<sup>8</sup>

Vietnam has scheduled commitments regarding the following environmental services: sewage services, refuse disposal services, sanitation and similar services, cleaning services and exhaust

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<sup>6</sup> Article XXVI GATS.

<sup>7</sup> Article XVII GATS.

<sup>8</sup> Vietnam's schedule of specific commitments is available at:

[https://docs.wto.org/dol2fe/Pages/FE\\_Search/FE\\_S\\_S006.aspx?Query=\(@Symbol=%20gats/sc/\\*\)%20and%20\(\(%20@Title=%20viet%20nam%20\)%20or%20\(@CountryConcerned=%20viet%20nam\)\)&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#](https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=(@Symbol=%20gats/sc/*)%20and%20((%20@Title=%20viet%20nam%20)%20or%20(@CountryConcerned=%20viet%20nam))&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#).

gases, noise abatement services, nature and landscape protection services, and other environmental protection services.

*The table below provides a summary of Vietnam's specific commitments related to environmental services under GATS*

Services covered	Mode	National treatment	Market access	Comments
<b>A. Sewage services</b>	<b>Mode 1:</b> Cross-border supply	Unbound, except consulting services	Unbound, except consulting services	Foreign companies are allowed to do business activities in Vietnam in the form of build-operate-transfer (BOT) and build-transfer-operate (BTO)
	<b>Mode 2:</b> Consumption abroad	Liberalized - subject to horizontal commitments		
	<b>Mode 3:</b> Commercial presence			
	<b>Mode 4:</b> Presence of a natural person	Unbound, except horizontal commitments		
<b>B. Refuse-disposal services</b>	<b>Mode 1:</b> Cross-border supply	Unbound, except consulting services	Unbound, except consulting services  Exception for collecting refuse directly from households (authorization of local authorities can be required)	Foreign companies are allowed to do business activities in Vietnam in the form of build-operate-transfer (BOT) and build-transfer-operate (BTO)



Services covered	Mode	National treatment	Market access	Comments
	<b>Mode 2:</b> Consumption abroad	Liberalized - subject to horizontal commitments		
	<b>Mode 3:</b> Commercial presence			
	<b>Mode 4:</b> Presence of a natural person	Unbound, except horizontal commitments		
<b>D. Other Environmental Services:</b> • cleaning services of exhaust gases, • environmental impact assessment services	<b>Mode 1:</b> Cross-border supply	Unbound, except consulting services	Unbound, except consulting services	
	<b>Mode 2:</b> Consumption abroad	Liberalized - subject to horizontal commitments		
	<b>Mode 3:</b> Commercial presence			
	<b>Mode 4:</b> Presence of a natural person	Unbound, except horizontal commitments		

Mode 1 – For cross-border supply, Vietnam has left unbound all specified environmental services except environmental impact assessment services. This means Vietnam is free to introduce or maintain measures inconsistent with market access or national treatment (except for related consultancies services). With respect to environmental impact assessment services Vietnam cannot impose limitations on market access and national treatment<sup>9</sup>.

<sup>9</sup>When the term “none” appears in the sector-specific part of the schedule it means that there are no limitations specific to this sector but there may exist relevant horizontal limitations in the first part of the schedule. Vietnam did not schedule any horizontal commitments for mode 1 – cross border supply.

With respect to mode 2 – consumption abroad, no limitations have been provided by Vietnam to market access and national treatments in the above-mentioned environmental services sectors. These commitments, however, are of little importance with respect to the promotion of investments in EGS in the territory of Vietnam.

Concerning mode 3 – commercial presence, Vietnam’s limitations to market access and national treatment have lapsed. Hence, for those services which are in commerce, foreign services suppliers are free in principle to establish themselves in Vietnam and respond to local demand for the services concerned. However, Vietnam’s mode 3 commitments for specific environmental sectors should be read in conjunction with Vietnam’s horizontal commitments for mode 3. In this respect, additional conditions related to market access are imposed: representative offices of foreign service suppliers are permitted to be established in Vietnam, but they shall not engage in any direct profit-making activities and the establishment of branches is unbound. Regarding national treatment, relevant horizontal commitments state that eligibility for subsidies may be limited to Vietnamese service suppliers, i.e. to juridical persons established within the territory of Vietnam, or a part thereof. The granting of one-time subsidization to promote and facilitate the process of equitisation is not in breach of this commitment. Vietnam remains unbound for subsidies for Research and Development and for subsidies in the Health sectors.<sup>10</sup>

Concerning Mode 4 – presence of natural persons, work permits and visa requirements constitute regulations which restrict trade in environmental services. In the case of Vietnam there are restrictions indicated in the horizontal section. In this respect Vietnam remains free to adopt measures that are inconsistent with market access and national treatment except for measures related to the entry and temporary stay of intra-corporate transferees, sales persons, persons responsible for setting up commercial presence and contractual service suppliers. The text specifies that the entry of these persons is allowed among others for engineering services which may be relevant for environmental services.

Additionally, Vietnam’s commitments must be read in conjunction with exemptions to most favoured nation (MFN) principle. Vietnam scheduled a general exemption concerning mode 3 – commercial presence, which applies to measures extending preferential treatment pursuant to bilateral investment treaties (BIT).<sup>11</sup> This means in practice that Vietnam reserves itself the

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<sup>10</sup> Vietnam’s schedule of specific commitments is available at:

[https://docs.wto.org/dol2fe/Pages/FE\\_Search/FE\\_S\\_S006.aspx?Query=\(@Sym-bol=%20gats/sc/\\*\)%20and%20\(\(%20@Title=%20viet%20nam%20\)%20or%20\(@CountryConcerned=%20viet%20nam\)\)&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#](https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=(@Sym-bol=%20gats/sc/*)%20and%20((%20@Title=%20viet%20nam%20)%20or%20(@CountryConcerned=%20viet%20nam))&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#).

<sup>11</sup> Vietnam’s list of Article II (MFN) exemptions; available at:

[https://docs.wto.org/dol2fe/Pages/FE\\_Search/FE\\_S\\_S006.aspx?Query=\(@Sym-](https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=(@Sym-)

possibility to discriminate in favour of FDI originating in the countries with which it concluded BITs.

It should be noted that across all modes of supply and services, Government procurement is exempted from Most Favoured Nation treatment, market access and national treatment obligations. Actually government procurement regimes are not covered by the GATS.<sup>12</sup>

Finally, irrespective of commitments taken, like in trade in goods, GATS allows Members to take trade restrictive measures if these are necessary for the national security or human, animal or plant life or health. Trade restrictive measures, however, cannot be “applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in services”.<sup>13</sup>

#### **IV.1.2 ASEAN**

The Association of Southeast Asian Nations (ASEAN) cooperates on environment promotion since 1997. Vietnam has become a part of ASEAN in 1995.

ASEAN environmental cooperation concentrates on ten priority areas of regional importance as stated in the Blueprint for the ASEAN Socio-Cultural Community (ASCC Blueprint) 2009-2015:

- Addressing global environmental issues,
- Trans-boundary Movement of Hazardous Wastes
- Promoting sustainable development through environmental education and public participation,
- Promoting environmentally sound technology,
- Promoting quality of living standards in ASEAN cities /urban areas,
- Harmonizing environmental policies and databases,
- Promoting sustainable use of coastal and marine environment,
- Promoting sustainable management of natural resources and biodiversity,
- Promoting sustainability of freshwater resources,
- Responding to climate change and addressing its impacts ,
- Promoting sustainable forest management.

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[bol=%20gats/el/\\*\)%20and%20\(\(%20@Title=%20viet%20nam%20\)%20or%20\(@CountryConcerned=%20viet%20nam\)\)&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true#](#).

<sup>12</sup> The only current disciplines on government procurement under the WTO are those contained in the Agreement on Government Procurement, which is an optional (plurilateral) agreement.

<sup>13</sup> Article XIV GATS.

## **1. Environmental Goods**

Regarding trade in goods, ASEAN Members aim at creating an ASEAN Free Trade Area (AFTA) and an ASEAN Economic Community (AEC) by 2015. Under AFTA and the AEC tariffs on all intra-ASEAN goods will be eliminated by 2015 with flexibilities for some sensitive products by 2018, for CLMV countries. The AEC Blueprint also provides for the full elimination of all non-tariff barriers by 2010 for ASEAN-5, by 2012 for the Philippines, and by 2015 with flexibilities to 2018 for Cambodia, Laos, Myanmar and Vietnam (the CLMV countries), in accordance with the Work Programme on Non-Tariff Barriers (NTBs) elimination. Thus ASEAN would liberalise trade in goods for substantially all products exchanged between the its Member States. This also concerns environmental goods, which would therefore not be subject to intra-ASEAN customs duties and NTBs.

One can also expect a substantial level of regulatory convergence in standards and technical regulations applicable to such goods among ASEAN Members. ASEAN has indeed developed a Policy Guideline on Standards and Conformance which provides the guiding principles for *“the implementation of joint efforts of ASEAN Member Countries in the area of standards and conformance both in regulated and non-regulated sectors as one of the measures for accelerating economic integration towards the AEC”*. There also exists an ASEAN Consultative Committee for Standards and Quality (ACCSQ), whose mandate is to deal with TBTs and to assist ASEAN member states in their harmonization efforts. While no specific working group was established with respect to environmental goods yet, this is a possibility to consider in a not too distant future.

ASEAN rules, however, by contrast with those of the WTO, do not address subsidies, such as tax breaks and investment incentives. Hence ASEAN does not restrict governments' capacity to extensively use such tools.

## **2. Environmental Services**

Concerning trade in services, an ASEAN Framework Agreement on Trade in Services (AFAS) was adopted in Bangkok in December 1995. Under AFAS, ASEAN Member States enter into rounds of negotiations to liberalise trade in services with the aim of submitting increasingly higher levels of commitments. The negotiations result in commitments that are set forth in schedules of specific commitments annexed to the Framework Agreement. These schedules are often referred to as packages of services commitments. At present, ASEAN has concluded eight packages of commitments under AFAS. The subsectors include:

- Business services
- Communication services
- Construction and engineering related services
- Distribution services
- Educational services

- Environmental services
- Healthcare services
- Tourism and travel related services
- Recreational, cultural and sporting services
- Transport services

Vietnam's most recent commitments in environmental services are included in the eighth package of commitments dated 15 May 2012.<sup>14</sup> Vietnam's commitments absorb those made under the GATS, while they also somehow extend them. Vietnam's commitments are made partly in the same environmental services as under GATS: "sewage services", "refuse disposal services", "other services: cleansing services, noise abatement services and environmental impact assessment services". Vietnam also made commitments in additional environmental services sectors, such as "sanitation and similar services", and "nature and landscape protection services". AFAS' scope of environmental sectors concerned is therefore slightly larger than the one under the GATS. The horizontal commitments Vietnam scheduled under AFAS are the same as those under the GATS.

The 8<sup>th</sup> Package of Commitments under ASEAN Framework Agreement concerns, just like in the case of GATS commitments, 4 Services Modes of Supply:

- Cross-border supply
- Consumption abroad
- Commercial presence
- Presence of natural persons

*Vietnam's commitments under the ASEAN Framework Agreement on environmental Services*

Sub-sector	Limitations on Market Access	Limitations on National Treatment	Other remarks
Access to certain geographic areas may be restricted for national security reasons			

<sup>14</sup> Available at: <http://www.asean.org/communities/asean-economic-community/item/member-countries-horizontal-commitments-schedules-of-specific-commitments-and-the-list-of-most-favoured-nation-exemptions> [Annexes to the Protocol to Implement the Eighth Package of Commitments under the ASEAN Framework Agreement on Services](#).

Sub-sector	Limitations on Market Access	Limitations on National Treatment	Other remarks
Sewage Services(CPC 9401)	<p>(1) Unbound due to technical feasibility, except related consulting services</p> <p>(2) None</p> <p>(3) None, except: Confirming that services supplied in the exercise of governmental authority as defined in Article I:3(c) may be subject to public monopolies or exclusive rights granted to private operators. Joint ventures with foreign capital contribution not exceeding 51 % are allowed until 11 January 2011. After that, none</p> <p>(4)Unbound, except as indicated in the horizontal section</p>	<p>(1) None</p> <p>(2) None</p> <p>(3) None</p> <p>(4) Unbound, except as indicated in the horizontal measures</p>	Foreign companies are allowed to do business activities in Viet Nam in the form of build-operate-transfer (BOT) and build-transfer-operate (BTO).

Sub-sector	Limitations on Market Access	Limitations on National Treatment	Other remarks
<u>Refuse disposal services</u> (CPC 9402)	<p>(1) Unbound, due to technical feasibility (except related consulting services).</p> <p>(2) None</p> <p>(3) None, except: Confirming that services supplied in the exercise of governmental authority as defined in Article I:3(c) may be subject to public monopolies or exclusive rights granted to private operators. Foreign ownership is limited to 51 % until 11 January 2011. After that, none.</p> <p>For the purpose of ensuring public welfare, foreign-invested enterprises are restricted from collecting refuse directly from households. They are only permitted to provide services at the refuse collection points as specified by local municipal and provincial authorities</p> <p>(4) Unbound, except as indicated in the horizontal section</p>	<p>(1) None</p> <p>(2) None</p> <p>(3) None</p> <p>(4) Unbound, except as indicated in the horizontal section</p>	Foreign companies are allowed to do business activities in Viet Nam in the form of build-operate-transfer (BOT) and build-transfer-operate (BTO).
Sanitation and similar services (CPC 9403)	<p>(1) None</p> <p>(2) None</p> <p>(3) None</p> <p>(4) Unbound, except as indicated in the horizontal section</p>	<p>(1) None</p> <p>(2) None</p> <p>(3) None</p> <p>(4) Unbound, except as indicated in the horizontal section</p>	

Sub-sector	Limitations on Market Access	Limitations on National Treatment	Other remarks
Nature and landscape protection services (CPC 9406)	(1) None (2) None (3) None (4) Unbound, except as indicated in the horizontal section	(1) None (2) None (3) None (4) Unbound, except as indicated in the horizontal section	
<u>Other services</u> - Cleaning services of exhaust gases (CPC 94040) and noise abatement services (CPC 94050)	(1) Unbound, except related consulting services. (2) None. (3) None, except: Confirming that services supplied in the exercise of governmental authority as defined in Article I:3 (c) may be subject to public monopolies or exclusive rights granted to private operators. Foreign ownership is limited to 51 % until 11 January 2011. After that, none. (4) Unbound, except as indicated in the horizontal section.	(1) Unbound, except related consulting services. (2) None (3) None (4) Unbound, except as indicated in the horizontal section.	
- Environmental impact assessment services (CPC 94090*)	(1) None. (2) None. (3) None, except that foreign ownership is limited to 51% until 11 January 2011. After that, none. (4) Unbound, except as indicated in the horizontal section.	(1) None. (2) None. (3) None. (4) Unbound, except as indicated in the horizontal section.	



Concerning “sewage services”, Vietnam did not bind market access for Mode 1, except for consulting services, for the obvious reasons that it is technically impossible to provide sewage services at a distance. Unlike in the GATS, there are no limitations for national treatment concerning Mode 1. Like the GATS, there are no limitations of market access and national treatment for Mode 2, also for obvious reasons, since mode 2 concerns the delivery of the services abroad. Limitations do not apply any longer for Mode 3 – commercial presence, except the same horizontal limitations as those specified in the GATS. Vietnam AFAS commitment however adds the commitment that Foreign-invested enterprises shall be permitted by the competent authorities of Vietnam to lease the land to carry out their investment projects. The land leasing period must correspond to the time of operation of those enterprises and must be stipulated in their investment licenses. It must be extended whenever the time of operation of those enterprises is extended by the competent authorities. Finally, in relation to Mode 4 – presence of natural persons, Vietnam made the same commitments and limitations as those under the GATS.

Concerning “refuse disposal services”, market access for Mode 1 is unbound except for consulting services, for reasons similar to those applicable to “sewage services”. Vietnam did not schedule limitations for national treatment. There are also no limitations for mode 2 with respect to both market access and national treatment. Concerning Mode 3 – commercial presence, the same condition as for sewage services are imposed and, like in the GATS, Vietnam’s commitment excludes the service of collecting refuse directly from households. The same conditions as for sewage services also apply for mode 4 – presence of natural persons.

Concerning “sanitation and similar services” and “nature and landscape protection services”, Vietnam made full liberalisation commitments. Its schedule does not contain any limitation related to market access and national treatment, except the horizontal limitations, which apply to all sectors in mode 3 and mode 4, like under the GATS. Vietnam made similar commitments as under GATS in relation to “other services” (i.e. cleaning services of exhaust gases and noise abatement and environmental impact assessment services). Vietnam’s MFN exemptions are also the same as under the GATS agreement. The ASEAN provides a wider, yet more precise, framework for the protection of the environment than the WTO.

Furthermore, ASEAN members agreed on more trade liberalization measures affecting EGS. While trade in EGS does not seem to have been specifically addressed in the negotiating framework, EGS overall benefit from the wider liberalization efforts generally undertaken under ASEAN patronage.

This is also the case with respect to the protection of investors and their investment. There are deeper commitments in this respect in the ASEAN Comprehensive Investment Agreement and in the ASEAN bilateral FTAs with third countries than in any other WTO Agreement. The ASEAN framework for investment is certainly of a benefit for regional investments in the area of EGS.

However, the ASEAN remains an incomplete framework with respect to some of the policies that may affect EGS (these policies will be addressed in the second study). This concerns the possible use of trade remedy cases as applied to EGS and the use of border tax adjustments. Furthermore, by contrast with the WTO, rules governing subsidies and government procurement are non-existent in the ASEAN legal framework.

Overall, the ASEAN is a relatively comprehensive agreement with respect to liberalization efforts, the protection of investments and investors, and the specific attention that is given to the protection of the environment and the conservation of nature and natural resources. It may suffer from some of the same shortcomings as those of the WTO with respect to non-tariff barriers to trade and the possible abuse of subsidies and public procurement. These shortcomings may create unnecessary and ineffective distortions to the trade and investments in the sectors of EGS. It will remain a challenge for ASEAN to provide, in addition to its existing provisions, a coherent set of rules for EGS.

#### ***IV.1.3 APEC initiative***

APEC is an economic forum set up with the objective of supporting sustainable economic growth and prosperity in the Asia-Pacific region, including by championing free and open trade and investment. Vietnam joined APEC in November 1998.

APEC's activities on environmental goods and services are carried out under its core pillar of trade and investment liberalization and as part of its commitment toward green growth and sustainable development. APEC economies have been working on liberalization of trade in environmental goods for a long time.

In 2007 in Sydney, APEC Members made a commitment to avoid barriers to trade and investment in order to foster clean and sustainable development. Concomitantly, they launched an action agenda promoting Environmental Goods and Services (EGS). In 2009 they endorsed the APEC Work Programme on EGS. It aims at facilitating an agreement on the actions to support sustainable growth in the region, increase utilization and dissemination of EGS, reduce barriers to trade and investment in EGS and enhance capabilities of countries to advance their EGS sector.<sup>15</sup>

#### ***1. Environmental goods***

At their 2011 Annual Meeting — in Honolulu, United States (US) — leaders resolved to reduce, by the end of 2015, applied tariff rates on environmental goods to 5 percent or less, taking into

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<sup>15</sup> Annex C to 2011 APEC Honolulu Declaration “Trade and Investment in Environmental Goods and Services”.

account states' economic circumstances, without prejudice to APEC economies' positions in the WTO. The Honolulu Declaration enumerates the following steps to promote the green growth goals<sup>16</sup>:

- "Rationalize and phase out inefficient fossil-fuel subsidies that encourage wasteful consumption, while recognizing the importance of providing those in need with essential energy services, and set up a voluntary reporting mechanism on progress, which we will review annually;
- Aspire to reduce APEC's aggregate energy intensity by 45 percent by 2035;
- Promote energy efficiency by taking specific steps related to transport, buildings, power grids, jobs, knowledge sharing, and education in support of energy-smart low carbon communities;
- Incorporate low-emissions development strategies into our economic growth plans and leverage APEC to push forward this agenda, including through the Low-Carbon Model Town and other projects; and
- Work to implement appropriate measures to prohibit trade in illegally harvested forest products and undertake additional activities in APEC to combat illegal logging and associated trade."

In 2011, leaders agreed to reduce by the end of 2015 tariff rates on environmental goods to 5 percent or less, without prejudice to APEC economies' positions in the WTO.

Moreover, the APEC economies resolved to eliminate non-tariff barriers, including local-content requirements that distort environmental goods and services trade. Other actions which were agreed upon require member economies to<sup>17</sup>:

*"Ensure that all government support and incentive programs aimed at promoting environmental goods and services are transparent and consistent with economies' WTO obligations.*

*Ensure that all government procurement policies pertaining to environmental goods and services are transparent, consistent with the 1999 APEC Non-Binding Principles on Government Procurement.*

*Promote regulatory coherence and cooperation in areas affecting environmental goods, including by better aligning approaches to standards and conformance in the environmental goods sector.*

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<sup>16</sup> 2011 APEC Honolulu Declaration, available at: [http://www.apec.org/Meeting-Papers/Leaders-Declarations/2011/2011\\_aelm.aspx](http://www.apec.org/Meeting-Papers/Leaders-Declarations/2011/2011_aelm.aspx).

<sup>17</sup> Annex C to Honolulu Declaration "Trade and Investment in Environmental Goods and Services", available at: [http://www.apec.org/Meeting-Papers/Leaders-Declarations/2011/2011\\_aelm/2011\\_aelm\\_annexC.aspx](http://www.apec.org/Meeting-Papers/Leaders-Declarations/2011/2011_aelm/2011_aelm_annexC.aspx).

*Affirm our commitment to pursue liberalization of environmental goods and services in the World Trade Organization (WTO), including by exploring creative and innovative solutions to advance the Doha mandate to reduce and, as appropriate, eliminate tariff and non-tariff barriers to these goods and services.*

*Pursue progressive liberalization of trade in environmental goods and services in our Free Trade Agreements.”*

At their 2012 Annual Meeting (Vladivostok, Russia), leaders endorsed the APEC List of Environmental Goods (Annex C to the APEC Economic Leaders’ Declaration). These goods are supposed to “directly and positively contribute to green growth and sustainable development objectives.”

The ‘environmental goods’ on the APEC List fall under 54 sub-headings of the Harmonized System (HS), a classification system for traded products that is internationally harmonized up to the 6-digit level.<sup>18</sup> Therefore, the APEC List is sometimes known as the list of ‘54 Environmental Goods.’ This may be confusing, because these sub-headings include more narrowly defined ‘environmental goods,’ which in most cases represent only part of the sub-headings (known as ex-outs). Trade figures based on 6-digit HS codes tend to significantly overestimate trade in ‘environmental goods’ that may benefit from tariff reductions.

At the 6-digit level of the HS, product descriptions are, in most cases, too general to exclusively or pre-dominantly capture environmental goods. Consequently, other goods also are included. In the APEC List, the term ‘ex-out’ is used 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 (and included in Annex C). Only these ex-outs would benefit from tariff reductions. Certain ex-outs have been clearly described in Annex C. For example, solar water heaters (SWH) have been included as an ex-out of HS 841919 (non-electric water heaters). However, in the case of many sub-headings, for example in the area of environmental monitoring, analysis and assessment equipment, Annex C lists “optional ex-outs,” which “may include” a range of products that might be selected for tariff reductions as part of the APEC tariff pledge.

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<sup>18</sup> 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).

*Distribution of the APEC EG list by Product Category*

Category	Subheadings		Examples
	Number	Share	
Total HS sub-headings	54	100%	
Environmentally Preferable Products	1	1.9%	Bamboo flooring panels
Air pollution control	5	9.3%	Filtering and purifying machinery and apparatus for gases
Management of Solid and Hazardous waste and recycling systems	12	22.2%	Fumaces, ovens and incinerators to destroy solid waste and pollutants
Renewable Energy (RE)	15	27.8%	Products for the generation of wind, solar, biomass, biogas, geothermal energy
Waste Water Management and Potable Water Treatment	5	9.3%	Sludge driers, water filters, water purification machines, parts of UV disinfection ozonizers
Natural Risk Management	1	1.9%	Surveying instruments and appliances
Environmental Monitoring Analysis and Assessment Equipment	15	27.8%	Manometers, gas and smoke analyzers, spectrometers, chromatographs, microtomes

APEC's accomplishment in developing the APEC EG list is a culmination of several years of efforts. Since the talks on the APEC's Early Voluntary Sectoral Liberalization (EVSL) in the 1990s, it has not been possible to reach consensus on an EG list despite several attempts to do so. The breakthrough came in November 2011 when APEC Leaders made a decisive intervention and instructed their specialists to develop the EG list. This led to an intensification of efforts in 2012, and the positive outcome that APEC has today.

If trade barriers are lowered or eliminated on all products included in the APEC EG list, not only within APEC but around the world, the already dynamic world trade in EGs that is already worth USD 545.6 billion would be further boosted. Moreover, there would be positive spill overs for the society, for example, by providing cheaper access to products, which promote environmental objectives such as increased use of energy-efficient products, the expansion of renewable energy sources and reduced air pollution, among others.

Generally speaking, the APEC list mainly (60%) covers peripheral product categories such as “other types of products in this category” and “parts”, and only to a limited extent targets main categories of environmental goods. Products related for instance to renewable energy generation from hydro or wind energy sources are largely absent from the list (but the more polluting gas turbines are included). Pollution monitoring and control, wastewater and waste management, and various forms of energy efficiency are frequently referred to, but it is unclear to what extent the list covers the most important codes related to such fields.

The APEC list contains 54 HS Codes and we have found that the product universe covered by these codes mainly consists of products that are not environmental goods:

- 46 of the 54 HS Codes on the APEC list mainly cover products that are not used primarily for environmental purposes.
- 5 of the codes on the list cover both environmental goods and non-environmental goods in fair amounts.
- 2 of the codes cover mainly environmental goods
- 1 code refers exclusively to environmental goods.

*Overview of the APEC codes analysed by content and ex-out precision level*

APEC	Content of the 6-digit sub-category				Assessment of EX-outs		
	Only EGs	Mostly EGs	EGs and non-EGs	Mostly non-EGs	Ex-outs ensure only EGs	Ex-outs don't ensure only EGs	Incl. EGs not mentioned
1				44.18.72		x	
2				84.02.90	X		
3				84.04.10		X	X
4				84.04.20		X	X
5				84.04.90	X		X
6				84.06.90		X	
7				84.11.82		X	
8				84.11.99		X	
9				84.12.90		X	

APEC	Content of the 6-digit sub-category				Assessment of EX-outs		
	Only EGs	Mostly EGs	EGs and non-EGs	Mostly non-EGs	Ex-outs ensure only EGs	Ex-outs don't ensure only EGs	Incl. EGs not mentioned
10				84.17.80	X		
11				84.17.90	X		
12			84.19.19		X		
13			84.19.39		X		
14				84.19.60		X	
15			84.19.89			X	
16				84.19.90		X	
17			84.21.21			X	
18				84.21.29		X	
19		84.21.39				X	
20				84.21.99		X	
21				84.74.20		X	
22			84.79.82			X	
23				84.79.89		X	
24				84.79.90		X	
25				85.01.64	X		
26	85.02.31						
27		85.02.39			X		
28				85.03.00		X	
29				85.04.90		X	
30				85.14.10		X	
31				85.14.20		X	

APEC	Content of the 6-digit sub-category				Assessment of EX-outs		
	Only EGs	Mostly EGs	EGs and non-EGs	Mostly non-EGs	Ex-outs ensure only EGs	Ex-outs don't ensure only EGs	Incl. EGs not mentioned
32				85.14.30		X	
33				85.14.90		X	
34				85.41.40	X		
35				85.43.90		X	
36				90.13.80	X		
37				90.13.90	X		
38				90.15.80		X	
39				90.26.10		X	
40				90.26.20		X	
41				90.26.80		X	
42				90.26.90		X	
43				90.27.10		X	
44				90.27.20		X	
45				90.27.30		X	
46				90.27.50		X	
47				90.27.80	X		
48				90.27.90		X	
49				90.31.49		X	
50				90.31.80		X	
51				90.31.90		X	
52				90.32.89		X	
53				90.32.90		X	



APEC	Content of the 6-digit sub-category				Assessment of EX-outs		
	Only EGs	Mostly EGs	EGs and non-EGs	Mostly non-EGs	Ex-outs ensure only EGs	Ex-outs don't ensure only EGs	Incl. EGs not mentioned
54				90.33.00		X	
Total	1	2	5	46	12	42	3

### ***Environmental Goods Agreement (EGA)***

The relevance of the APEC list is demonstrated by the fact that on 24 January 2014 at the World Economic Forum in Davos, the EU, together with 13 other WTO members pledged to launch negotiations to liberalize global trade in environmental goods with the APEC List of 54 Environmental Goods as a starting point, and with the intent of expanding it to include a “broad list of additional products”. The relevance of the agreement in terms of the size and scope of potential impacts is significant: states currently engaging with the plurilateral negotiations account for approximately 86 percent of global trade in the environmental goods sector. A key objective of the negotiations is to create a 'living agreement' that would be able to respond to the changes in technologies in the years to come, to add new products, as well as to potentially address trade in environmental services and non-tariff barriers. The list of environmental goods will be determined in the negotiations, in which each participant will be able to submit their own proposals.<sup>19</sup>

### ***2. Environmental services***

Most APEC countries agree that environmental services are very difficult to define. Despite different national definitions and classifications of environmental services, most APEC countries made their GATS commitments on environmental services by referring to the GATS classification list<sup>20</sup> which itself cross-references the UN Central Product Classification (CPC). Environmental services in the GATS list include the following: sewage services (CPC Prov. 9401), refuse disposal services (CPC Prov. 9402), sanitation and similar services (CPC Prov. 9403) and “other”.

However, many APEC and WTO Members agree that the current classification for environmental services is not adequate, as it excludes a range of services that are in fact environmental services. Considerable discrepancies exist among countries' national definitions of environmental services, which adds to the difficulties in agreeing on a common list.

<sup>19</sup> <http://www.egatradesia.com>

<sup>20</sup> Services Sectoral Classification List, GATT document MTN.GNS/W/120, dated 10 July 1991.

#### **IV.1.4 Bilateral agreements**

Vietnam has concluded over 100 bilateral agreements including various Free Trade Agreements and over 40 bilateral investment treaties. All of them condition and shape investment and trade environment in Vietnam but none of them expressly mentions the EGS and very few make a reference to environment protection.

##### **1. US-Vietnam Bilateral Trade Agreement**

Of note is the 2007 Trade and Investment Framework Agreement between **Vietnam and the United States**.<sup>21</sup> The agreement's Preamble states the desire of both contracting parties *"to ensure that their trade and environment policies mutually promote sustainable development"*.

The US-Vietnam Bilateral Trade Agreement, is based in large part on the WTO Agreements. Many of the key WTO provisions are incorporated either directly or by reference, such as the provisions on Import Licensing or TRIPs. The US-Vietnam agreement contains extensive obligations regarding trade in goods and services, the protection of intellectual property rights, investment, business facilitation, transparency and dispute settlement. The Agreement also contains general exception provisions mirroring those of Article XX and Article XXI of the GATT.

In the field of investments, the US-Vietnam BTA has a much wider scope than the WTO. It encompasses not only commercial presence (FDI) in services, but also portfolio investment, tangible and intangible properties, contractual rights and other rights conferred pursuant to law. The investment-related provisions of the BTA partly replicate WTO provisions and partly they go beyond them.

The provisions of the BTA going beyond WTO provisions include:

- Elimination of export performance requirements (which are not covered by TRIMs);
- Commitments to license or register foreign-invested projects in non-sensitive sectors;
- Removal of restrictions regarding equity participation and the establishment and management of U.S.-invested enterprises;
- Commitments to allow U.S. investors to set up joint stock companies and to issue securities in Vietnam; and,
- Provision of improved investment protection procedures and dispute settlement mechanisms between investors and the State, including access to international

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<sup>21</sup> The US – Vietnam Trade and Investment Framework Agreement is available at: [http://www.ustr.gov/sites/default/files/uploads/agreements/tifa/asset\\_upload\\_file81\\_12935.pdf](http://www.ustr.gov/sites/default/files/uploads/agreements/tifa/asset_upload_file81_12935.pdf).

arbitration under the World Bank's International Center for Settlement of Investment Disputes (ICSID).

However, the US Vietnam BTA does not contain Vietnam's GATS commitments on environmental services. Even more, US directly-invested ventures are not permitted to carry out, among others services, environmental investigations unless authorized by the Government of Vietnam.

## **2. Japan-Vietnam Economic Partnership Agreement**

The Agreement boosts cooperation between the two countries in many areas such as: trade in goods and services, investment, business climate, human resource transfer, technical transfer, etc. Under this Agreement, 92% of goods exchanged between the two countries will enjoy duty free treatment within 10 years from the date of validity of the Agreement.

The Agreement is also to advance Supporting Industries (SI) for both Japanese and Vietnamese enterprises operating in fields of automobile, motorbike and electric-electronics in Vietnam.

The Agreement between Japan and Vietnam for the Liberalization, Promotion and Perfection of Investment should be highlighted as well, as it is one of the few bilateral agreements that contains environment related provision. Article 21 states: *"The Contracting Parties recognize that it is inappropriate to encourage investment by investors of the other Contracting Party by relaxing environmental measures. To this effect each Contracting Party should not waive or otherwise derogate from such environmental measures as an encouragement for the establishment, acquisition or expansion in its Area of investments by investors of the other Contracting Party."*<sup>22</sup>

## **3. Vietnam – Chile Free Trade Agreement**

Under this agreement 73% of Chilean exports will enter Vietnam duty-free, while the rest of concessions is to be phased in over time. 75% of Vietnamese exports enter Chile duty-free as from the entry into force of the Agreement. The remaining part of the products will be liberalized progressively.

The agreement covers only on trade in goods. It concerns market access, rules of origin, sanitary measures, epidemiological, animal and plant quarantine, technical barriers to trade, trade defense instruments. There are not any specific commitments on EGS in this agreement. The negotiation of services and investment incorporation will be held as a second stage of the process.

Chile obtained from Vietnam various tariff concessions, such as:

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<sup>22</sup> Full text available at: <http://www.mofa.go.jp/region/asia-paci/vietnam/agree0311.pdf>

- Zero tariff rate instead of the current 5% tariff on fishmeal and medical supplies;
- Zero tariff rate instead of the current respective 18%, 14% and 10% tariffs on glass, electrical switches and leather (applicable from the fifth year of the Agreement).
- Zero tariff rate instead of the current 5% tariff on algae, copper wire and copper tubes (applicable from the fifth year of the Agreement)
- Zero tariff rate instead of the current 3% tariff (applicable from the fifth year of the Agreement)

#### **4. Other Free Trade Agreements**

Vietnam 's Free Trade Agreement refer only to goods. They concern market access, rules of origin, sanitary measures, epidemiological, animal and plant quarantine, technical barriers to trade, trade defense instruments. There are not any specific commitments on EGs in these agreement.

Vietnam recently concluded negotiations of a free trade agreement with Russia, Belarus, and Kazakhstan, a free trade agreement with Korea and a free trade agreement with the European Union. The first two agreements are, however, limited in their scope. The former focuses primarily on reducing trade barriers in the field of capital goods whereas the latter is almost exclusively related to trade in goods. It is however more comprehensive than the ASEAN FTA - South Korea (AKFTA).

Vietnam is currently negotiating three Free Trade Agreements:

- ASEAN-Hong Kong, China Free Trade Agreement;
- Regional Comprehensive Economic Partnership between the ten member states of ASEAN (Brunei, Myanmar, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam) and the six states with which ASEAN has existing FTAs (Australia, China, Japan, South Korea and New Zealand);
- Trans-Pacific Partnership (Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam);

As far as environmental services are concerned, in general, Vietnam's GATS commitments as compared to its most comprehensive FTAs in this respect, the country generally maintain the same level of liberalization.<sup>23</sup>

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<sup>23</sup>“Viet Nam's Participation in FTAs: History, Commitments and Challenges”, Ngan K. Vu, Policy Brief, N° 1, March 2014, available at: [http://aric.adb.org/pdf/policy\\_brief/vietnam-participation-fta-history-commitments-and-challenges.pdf](http://aric.adb.org/pdf/policy_brief/vietnam-participation-fta-history-commitments-and-challenges.pdf)

## **IV.2 Assessment of the compliance of the domestic policies of Vietnam with its international commitments**

### ***IV.2.1 Scope of the section***

Overall, Vietnam's domestic environmental policies are in line with a general trend at the international level increasingly taking into consideration environmental concerns.

It is important, however, to closely assess domestic regulations related to environmental goods and services or other regulations to ensure that:

- Domestic regulations pertaining to environmental goods and services are in line with Vietnam's EGS-related and other international commitments;
- EGS domestic regulations do not constitute trade restrictive measures which would infringe Vietnam's international commitments.

Indeed, it has to be observed that despite Vietnam's general inclination towards trade liberalization, including trade in EGS, several issues have raised concerns to other WTO Members as to their compliance with WTO obligations or simply hindering trade. Such concerns voiced by WTO countries that can also relate to EGs, include: frequent changes in tariffs, the use of ceiling bindings to "support" specific industrial sectors, the relatively high tariff protection afforded to some industrial sectors, some new licensing requirements, customs valuation practices, and classification issues, tax incentives and subsidies, and local content requirements in government procurement.<sup>24</sup> Adequate protection of intellectual property rights, crucial for EGS, is considered as one of the first concerns for both Vietnam and many of its trading partners.<sup>25</sup>

This section focuses on Vietnam's domestic regulations' compliance assessment with WTO and ASEAN rules as well as with the afore-mentioned plurilateral or bilateral agreements. It must be pointed out that since ASEAN commitments comprise those relating to WTO and go beyond them, any potential WTO rules violation signifies as well a potential ASEAN violation. It should be also noted that the most demanding instrument, and also the one that may entail the most adverse consequences should the incentives employed proved be illegal is the WTO SCM Agreement.

As far as environmental services are concerned, since major free trade agreements commitments do not extend obligations beyond those undertaken under the WTO, only GATS compliance is evaluated in this section.

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<sup>24</sup> Trade Policy Review, WTO; Report by the Secretariat, Vietnam; WT/TPR/S/287; 13 August 2013

<sup>25</sup> Idem.

This section will be divided into two sub-sections according to different types of national measures to be assessed considering Vietnam's international commitments, namely:

- border measures, and
- Behind-the-border measures.

The following analysis exclusively concerns multilateral and bilateral law and leaves economic aspects concerning favorable/detrimental effects of Vietnam policy measures aside.

Finally, it is essential to stress that as in any legal analysis, various interpretations of particular provisions are conceivable. The definitive decision on the legality of a given measure continues to be subject to the interpretation of the WTO.

#### **IV.2.2 border import measures**

Import border measures comprise mainly measures related to tariffs, import licensing procedures, reference values or minimum transaction prices or trade bans.

Among measures identified in sections above one is particularly relevant here: the Export and Import Tax Law No. 45/2005/QH11 which provides tariff exemption to enterprises that import EGSs as well as equipment, materials, technologies related to EGSs in the areas of: waste collection, treatment, recycling, reuse projects, environmental pollution treatment and environmental protection projects. These goods benefit from tariff exemption. This is a trade facilitating measure which goes in line with liberalization efforts.

However, there are a few other potentially trade restrictive measures that drew attention of Vietnam's trading partners, and which have been notified as well in the eleventh European Commission Report on Potentially Trade Restrictive Measures.<sup>26</sup>

##### **1. Circular No. 20/2014/TT-BKHCN**

Circular No. 20/2014/TT-BKHCN effective from 1 September 2014 was adopted to encourage imports of new machinery, equipment and production lines that are manufactured with the latest technology. Environmental protection is one of the explicit objectives of the Circular. It tends to simulate imports of new technology and therefore favours trade in environmental goods.

The Circular allows the imports of used machinery and equipment provided its usage period is of not more than 5 years and the remaining quality is of 80%. In other words, goods which do not

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<sup>26</sup> European Commission Directorate-General for Trade, 11<sup>th</sup> Report on Potentially Trade Restrictive Measures Identified in the Context of the Financial and Economic Crisis; 1 June 2013 – 30 June 2014; available at: [http://trade.ec.europa.eu/doclib/docs/2014/november/tradoc\\_152872.pdf](http://trade.ec.europa.eu/doclib/docs/2014/november/tradoc_152872.pdf)

comply with these two cumulative conditions are not eligible for import. It should be noted that it is troublesome to evaluate the quality of technology and production lines due to limited available information of the products. It is practically not possible to apply these standards across all types of technology and production lines.

Consequently, other WTO members may perceive this rule as a new trade restrictive measure that could be considered as violation of Vietnam's international treaties and agreements giving a rise to a complaint. Indeed, a question of consistency with Article XI of the GATT prohibiting quantitative restrictions and with the WTO Agreement on Technical Barriers to Trade arises. In this regard, Vietnam could claim that the measure is not more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create. Possible legitimate objectives include environment protection.

#### **IV.2.2 Behind-the-border measures**

Behind the border measures are internal policies, which govern domestic market and which may negatively affect the imports of goods, provision of foreign services or economic activities of foreign operators. These may cover for instance technical regulations, provisions and incentives such as domestic taxes, subsidies, local content requirements, public procurement limitations, policies related to investment and the conditions for establishment of foreign companies and service providers.

This sub-section will be divided into two parts: investment incentives as well as public procurement.

##### ***1. Investment incentives***

Investment incentives may constitute subsidies, which are to be assessed under the WTO Agreement on Subsidies and Countervailing Measures (SCM). Pursuant to the SCM, a subsidy is identified if there is a '*financial contribution*' by the government or '*any form of income or price support*', as a result of which a '*benefit*' is conferred to the recipient.

Therefore a subsidy exists in the situation where the government:

- provides money that is not otherwise available in the market or at the same conditions (grant or loan), or
- waives a tax that is normally due, or
- sells input material at a price that is below market prices, or
- purchases items from the beneficiary at a price that is above the market price.

Tax incentives, such as those provided in Vietnam and identified in the first part of the study, loans at preferential rates or land concessions at below market prices all constitute subsidies and they must be assessed according to the WTO SCM Agreement.

It should be noted, however, that when a subsidy concerns the provision of a service, there are no relevant international trade rules in Vietnam since Vietnam exempted itself from the national treatment provisions with respect to subsidies in the horizontal section of its schedule of services commitments and the GATS agreement does not otherwise regulate subsidies in services. Furthermore, among the agreements to which Vietnam is a Party, only the WTO regulates the granting of subsidies. Neither ASEAN, nor APEC contains provisions in this respect. It must be expected, however, that the forthcoming EU-Vietnam agreement will address this issue.

The WTO SCM Agreement provides for three categories of subsidies: prohibited subsidies, actionable subsidies and non-actionable subsidies.

**Prohibited subsidies** are export subsidies and local content subsidies. Export subsidies are those that are contingent upon export performance. In other words, WTO law does not accept that a country provides a subsidy to a company or a group of companies based on the expectation that they will increase their exports. The final test in this respect is whether or not the subsidy would be granted in the absence of exports. If the response is no, the subsidy is prohibited. Seldom, environmental subsidies fall in this category. As to local content subsidies, these are subsidies that are provided at the condition that the recipient uses local input as opposed to imported input. Like export subsidy, this type of subsidy is heavily trade distortive. Hence a feed-in tariff above market rates that would be limited to the local production of energy is prohibited by WTO law. An accelerated dispute settlement procedure is available against prohibited subsidies with a view to eliminate them. From 1 January 2012, Vietnam, following its WTO commitments, has removed tax incentives based on export criteria and domestic material usage ratio. Resident who benefited from tax incentives on the basis of export criteria could select and notify the tax authorities of alternative incentives and apply them for the remaining period.<sup>27</sup>

**Actionable subsidies** are non-prohibited subsidies that are specific to a company or group of companies. If it is established that a measure constitutes a specific subsidy, and if it causes 'adverse effects' to the interests of one Member or 'material injury' to the domestic industry of a Member or nullification or impairment of benefits accruing directly or indirectly to other Members under GATT, an action can be taken against its negative trade effects.<sup>28</sup> An adverse effect to the interests of one Member of the WTO exists, for instance, in case of downward price effects in various markets caused by the subsidy, or a loss of market shares in world markets. In these situations, the subsidy is actionable before the WTO dispute settlement body (and should be

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<sup>27</sup> Vietnam Pocket Tax Book; PWC; 2012; available at: [https://www.pwc.com/en\\_VN/vn/publications/2012/assets/PwC\\_Vietnam\\_Vietnam\\_Pocket\\_Tax\\_Book\\_2012\\_English.pdf](https://www.pwc.com/en_VN/vn/publications/2012/assets/PwC_Vietnam_Vietnam_Pocket_Tax_Book_2012_English.pdf)

<sup>28</sup> These three possible conditions for actionable subsidies are found in Article III of SCM Agreement.



withdrawn or its effects removed). The subsidised products can also be subject to countervailing duties in the affected domestic jurisdiction. As further indicated below, environmental subsidies that are provided to a preferred group of sectors or regions fall in this second category.

**Non-actionable subsidies** are subsidies that are neither prohibited nor specific. In other words, these are subsidies that are provided to all companies in all sectors, on the basis of objective criteria. It is important to ensure that the reason of the subsidy is unrelated to a particular sector of the economy. The subsidy is not specific if the eligibility of the subsidy depends on ‘objective criteria or conditions’, that is ‘criteria or conditions which are neutral, which do not favour certain enterprises over others, and which are economic in nature and horizontal in application, such as number of employees or size of enterprises’.<sup>29</sup> The criteria or conditions must be clearly stated and explained by law, regulation or other official document as to enable the verification. Environmental subsidies that are available across all sectors could fall within this category. This is the case, for instance, of a subsidy paid to all companies that purchase clean energy or which dispose of their waste in an environmentally friendly manner. It is very important to avoid that the subsidies are specific to a particular sector, such as turbines, solar panels or others. Otherwise they are actionable.

In general, the **taxation incentives** Vietnam offers pursuant to the Amended Law on CIT 2013 are not prohibited. However, since they are offered in special zones, or for groups of preferred products, they are specific. They can be continued if no trade partner complains that the subsidy affects its trade interests. The complaint is unlikely if the subsidy is intended to foster local investment in a local market only. Nevertheless, if the investment is made by a company who takes substantial market share from its foreign competitors in whatever geographical market, it may result in a complaint.

Vietnam also maintains an **exemption from import duties for Foreign invested enterprises (FIEs)**, which invest in encouraged or special encouraged sectors and/or geographical areas. These exemptions are not subsidies under the SCM agreement, if the goods do not enter the Vietnamese customs territory and are re-exported. Hence they should not pose particular problems. However, if the imported goods are processed into goods which are then marketed in Vietnam, the duty exemption can be seen as an actionable subsidy and may raise difficulties if a foreign competitor complains.

Finally, concerning **land-use incentives** offered by Vietnam to investors who invest in encouraged sectors and geographical areas are subsidies if the land rent and land use fees are reduced or exempted. Since the incentives are for encouraged sectors and geographical areas, the subsidies are specific and thus actionable, although not prohibited. It is important to verify the overall international competitiveness of the beneficiary companies and assess which trade partner they

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<sup>29</sup> SCM Agreement

are likely to disturb. This analysis will enable to assess the chances of a complaint. In case there is no complaint, the subsidy can be maintained.

Certain **regulatory incentives** are common in the **renewable energy sector**. Governments use mandates, containing quantity- or price-based minimum requirements, to raise the demand for, or the price of, renewable energy. Good examples are FITs (Feed-in-Tariffs) measures. There are at least two types of situations concerned: first, where the government requires that private operators purchase clean energy generation at a price higher than that for other energy types and second where the government itself is involved in the purchase of the energy, for delivery through a state monopoly, state enterprise or for resale to private sectors for example. There is a controversy on whether these kind of measures amount to subsidies. The status of such measures is also unclear under the legal definition of SCM Agreement<sup>30</sup>. Vietnam, however, does not seem to maintain such measures.

#### *Specific subsidies in EG market*

All specific subsidies are actionable in theory. The problem consists on the fact that environmental policy often requires the measure to be as targeted as possible to be effective. In practice it means that there is clearly a preference for a specific measure. According to a well-established case-law the fact that a large number of undertakings or even sectors are affected by a measure is not enough to demonstrate that the subsidy is general and not specific. Accordingly, there are propositions to develop illustrative lists of designed features and operational practices that should be presumed consistent with the “objective criteria or conditions” on the basis of which a subsidy can be provided without being considered as specific.

This being said, as indicated above, specific subsidies may be actionable only if they cause adverse effects to the interests of other countries. The examination of the adverse impact on trade must be based on a case-by-case approach and take into account different elements of the various

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<sup>30</sup> According to the SCM Agreement and as mentioned above, in order to qualify as a subsidy under the SCM Agreement, a financial contribution or a measure of income or price support has to confer a benefit. If the government is acting in the market, however, the determination of the existence of a benefit may be difficult. The WTO Appellate Body has stated that the reference in this case is the ‘marketplace’. This may be difficult in the context of energy markets that have been considerably distorted by various forms of government intervention with as a consequence the fact that price and other market signals are not fully reliable. However, the Appellate body in the Ontario FIT case clearly indicated that even if markets are distorted by government interventions, they remain markets and the price that is normally applicable in such distorted market can provide a relevant benchmark. In other words, if the government obliges economic operators to buy clean energy at a price that is lower or equivalent to the market price (even if distorted) the scheme is not a subsidy for the clean energy producer. It is one if the compulsory price is above the market price. The same applies to direct purchases by the Government or by its energy distribution monopoly.

legal tests. This is not easy to generalize. Thus, when a subsidy for the use of EGS is provided, most of the time it is important to assess which are the competitors in the same market that may be negatively affected by it and to what extent they are likely to complain.

It should be noted that WTO Members tend to tolerate subsidies in green energy sector unless they are export subsidies or local content subsidies. The situation may however change with the increased competition and industrial opportunities offered by EG. For instance, the US has already complained against Vietnam for the alleged subsidy provided on wind towers originating in Vietnam.

#### *Particular potentially trade-restrictive measures*

There are several Vietnamese domestic regulations, which drew attention and even gave rise to objections of Vietnam's trading partners. These measures have not been discussed in the first part of the study and may concern environmental goods and services only incidentally. Nevertheless, they should be pointed out since they present trade-restrictive features, may discourage imports or investments in Vietnam and may possibly give rise to a complaint.

**Circular 122** of the Ministry of Finance on price controls enacted in August 2010 and entered into force in October 2010 requires operators to register their selling prices and price changes with competent state authorities. This, according to foreign exporters, creates an unnecessary administrative burden for retailers and wholesalers in Vietnam trading in the listed products. Although the circular does not in particular target imported products, in practice it may be perceived as discrimination of foreign importers since certain products from other WTO members seem to be particularly affected.<sup>31</sup> This may be interpreted by foreign importers as contrary to the national treatment principle of WTO.

**Government Resolution no. 18/NQ-CP dated 6 April 2010** on "key measures to ensure macroeconomic stability, curb inflation and achieve a GDP growth rate of approx. 6.5% in 2010 which comprises measures on prices, restriction of foreign currency loans for those goods for which imports are not encouraged, specifications on the use of materials and equipment of domestic production to replace imports under projects and works. It promulgates the list of "inessential" import goods - non-encouraged import of consumer goods. It takes measures to control foreign currency loans for the imports concerned. This measure may be seen as according less favourable treatment to products of the territory of other contracting parties imported into the territory of Vietnam than that accorded to like products of national origin and seems to go against a national treatment principle (Art.III.4 GATT).

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<sup>31</sup> European Commission Directorate-General for Trade, 11<sup>th</sup> Report on Potentially Trade Restrictive Measures Identified in the Context of the Financial and Economic Crisis; 1 June 2013 – 30 June 2014; available at: [http://trade.ec.europa.eu/doclib/docs/2014/november/tradoc\\_152872.pdf](http://trade.ec.europa.eu/doclib/docs/2014/november/tradoc_152872.pdf)

## **2. Government procurement measures**

Regarding public procurement, since Vietnam is not a party to the WTO Government Procurement Agreement (GPA), a challenge against possible discriminations in favour of domestic EGS in public procurement is impossible. Therefore, Vietnam can engage into the promotion of domestic EGS through preferential public procurement measures.

It should be noted that Vietnam is participating in a voluntary initiative of ASEAN + 3 Network on Green Public Procurement and Eco-labelling.

It must be also recalled that in 1999 APEC Experts Group completed the development of a set of Non-Binding Principles on Government Procurement (NBPs) for adoption by APEC economies on a voluntary basis. The Transparency Standards on Government Procurement (APEC Standards) have been agreed in 2004 by the APEC member economies, including Vietnam.

Vietnam adopted several laws related to public procurement including the Law on Procurement (Law No. 61/2005/QH11), adopted in 2005 and amended by Law No. 38/2009/QH12 in 2009. The government issued implementing regulations for the Law on Procurement in Decree 85/2009. Rules concerning public procurement were also enumerated in the Law on Construction (2003). The 2013 law on public procurement was passed by the National Assembly on November 26, 2013 and took effect on July 1, 2014.

So far the Government has stated its intention of including environmental criteria in public procurement. The challenge is however to establish policy tools to implement green public purchasing.<sup>32</sup>

Vietnam could use public procurement as an effective tool to promote EGS. In this regard, it must be noted that the existing non-binding international and regional instruments on government procurement are sufficiently flexible to allow EGS promotion through public procurement. To use public procurement policy to promote EGS, however, it would be recommended to improve its general public procurement standards.

## **3. Conclusion**

When developing national policies and incentives for the promotion of environmental goods and services, Vietnam must consider its commitments at various levels: multilateral, plurilateral and bilateral. The adopted incentives must not go against its international commitments. Vietnam should also pay particular attention to its general legal framework ensuring that other measures

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<sup>32</sup> "Green Public Procurement in Asia-Pacific Region - Challenges and Opportunities for Green Growth and Trade", APEC Committee on Trade and Investment, April 2013.

do not directly or indirectly affect EGS or constitute a general discouragement for investment in Vietnam.

Incentives introduced by Vietnam to stimulate development of EGS do not seem prohibited under the SCM Agreement. The analysis in the first part of the study indicates that the current tax and land incentives Vietnam offers to investors in EGS are neither contingent upon export performance nor upon the use of domestic input as opposed to imported one.

It appears however, that Vietnam's current incentives are reserved to selected (specific) sectors and geographical locations. They constitute specific subsidies. Should there be competitors who do not benefit from the same subsidies, an action against Vietnam's incentive programmes cannot be excluded. The assessment of likelihood of such adverse action in the case of the incentives requires a case-by-case analysis of each affected sector.

The first part of the study analyses all incentives offered by Vietnam. There exist, however, additional policy opportunities such as promoting the use of EGS or to advocate effective intellectual property protection to domestic innovations in EGS, and fully enforce IPRs embodied in foreign environmental goods and services pursuant to Vietnam's existing obligations under the TRIPS Agreement.

### **IV.3 The international commitments of three other countries pertaining to EGS and comparison with the commitments of Vietnam**

#### ***IV.3.1 Introductory remarks***

The regulatory framework on international trade in EGS has strong influence on the evolution and formulation of the Vietnamese policy regarding the on-going negotiations on trade liberalization. The regulatory framework covers not only commitments set out by WTO agreements, i.e. GATT and GATS, but also regional and bilateral FTAs, and other trade related international agreements, especially those which are aimed at the protection of natural resources (Multilateral Environmental Agreements—"MEAs").

International rules and laws on trade in EGS do not constitute homogeneous regulatory environment. The obligations of countries participating in international trade are diverse, and dependable upon many conditions. Among them, there are *inter alia* those which stem from the membership in WTO and regional economic integration organizations, participation in other multilateral treaties, and—first and foremost—trade policy goals which are pursued by taking on new international trade commitments. Hence, the comparison of international obligations in the field of EGS accepted by other countries can outline background of recent evolutions, which have occurred in the field of international trade law and policy in respect of EGS.

This study is focused on international commitments related to trade in EGS of Singapore, Malaysia and India, and aimed at drawing a comprehensive comparative picture of international trade commitments taken on by those countries with those undertaken by Vietnam. For this purpose, not only regulations introduced under the auspices of WTO are considered, but also those which are set out by means of regional and bilateral cooperation, as well as MEAs.

#### **IV.3.2 Commitments related to Environmental Goods**

Trade in EGs is regulated on international level in various dimensions, *inter alia* by rules which are set under the auspices of WTO, as well as regional and bilateral FTAs, in which further tariff concessions can be agreed by parties.

##### **1. WTO rules on trade in EGs**

It has to be pointed out, that on the WTO level there is a series of international agreements related to trade in EGs, however none of them set out any commitments specifically devoted to trade in EGs. All compared countries have committed to certain tariff concessions in the process of trade liberalization. Nevertheless, there is no binding WTO agreement setting out further reductions of tariffs only in respect of green goods.

Moreover, as indicated in the chapters above, there are other WTO agreements which may affect domestic policies in the area of EGs, such as the Agreement on Subsidies and Countervailing Measures (ASCM), the Agreement on the Trade Related Investment Measures (TRIMs) and the Agreement on Technical Barriers to Trade (TBT). Apart from the differences in the tariff concessions undertaken by Singapore, India, Malaysia and Vietnam, the obligations of those countries—under the auspices of WTO—in terms of rules governing trade in EGs remain substantially the same.

However, some WTO Members have intensified their efforts to strengthen the liberalization of trade in green goods by further tariff reductions. Currently those countries are negotiating the list of EGs, to which those additional commitments will be applicable. In this project, called the "Davos initiative"—from the group of the compared countries—only Singapore has decided to participate. Those negotiations are based on the list of EGs, which was agreed by the APEC countries (so-called the "APEC list") in 2012.

##### **2. ASEAN and APEC**

The other forum of trade cooperation on which new rules of trade in EGs are being introduced is ASEAN. Singapore, Malaysia and Vietnam participate in this regional form of economic cooperation. ASEAN is aimed at the establishment of single market for goods and services (AEC) until the end of 2015. Up to this moment, lower tariffs for goods are applicable, in accordance

with FTA agreed between ASEAN Member States (this FTA is called "AFTA"). Under the ASEAN trade regime, the applicable tariffs shall not exceed 5%, and this rule is also applicable to EGs.

Apart from the liberalization of tariffs, ASEAN has introduced a regulatory cooperation, which is aimed at convergence of various product safety standards. Discrepancies in the product safety norms—including those which relate to the environmental impact of production methods and product use—can impose some restrictions on international trade and effectively narrow the possibility to enter into any foreign market. Hence, the regulatory convergence should significantly facilitate the establishment of single market by reducing non-tariffs barriers to trade.

Similarly to the economic integration within ASEAN, Singapore, Malaysia and Vietnam participate in various projects of APEC which are devoted to fostering international trade and development in the Pacific region. The "APEC list" initiative, aiming at reducing the level of tariffs on listed 54 up to maximum level of 5% by the end of 2015, has tremendous influence on the international policy on EGs, and have been serving as a reference and starting point for plurilateral WTO negotiations on EGs, which started in 2014 under the aegis of the "Davos initiative".

Although the APEC list is considered to be a significant turning point in the process of liberalization of trade in green goods, its practical dimension has rather only limited impact. The level of most tariffs on concerned green goods in participating countries is far below the agreed threshold. Singaporean applied tariff for EGs is 0, whereas Malaysian average is 1,94% and in the case of Vietnam it is 1,59%. However, in Malaysia there is 12% tariff lines related to green goods for which the applied tariffs are above the APEC threshold of 5%. In the case of Vietnam, this level of tariff lines beyond 5% equals 4% of all "green" tariff lines. The tariff concessions taken under the auspices of APEC can be implemented by participating countries on the voluntary basis.

In comparison to Singapore, Malaysia and Vietnam, India do not participate neither in APEC nor ASEAN. Therefore, the Indian level of commitments is not comparably far-reaching as the Vietnamese, Singaporean or Malaysian. However, India is a signatory to some international trade agreements, according to which some liberalization commitments in respect of trade in goods have been taken on. They are as follows:

- Asia Pacific Trade Agreement (APTA),
- South Asian Free Trade Area (SAFTA), and
- Global System of Trade Preferences among Developing Countries (GSTP).

It has to be mentioned that also Vietnam and Singapore participate in GSTP. However any commitments undertaken within GSTP, or any other above-mentioned international forms of cooperation to which India belongs, do not refer directly and specifically to trade in EGs.

### ***3. Free trade agreements***

Free trade agreements create also new set of additional commitments in respect of trade in green goods. Each of studied countries have signed some FTAs, both bilateral or concluded by regional economic international organization, e.g. ASEAN. Singapore entered 19 FTAs which are in force, Malaysia 11, India 10, whereas Vietnam has concluded 8 FTAs. Tariff reductions which are incorporated in FTAs bind only parties to respective treaties, and do not fall within the scope of MFN clause in GATT.

#### ***IV.3.3 Commitments related to Environmental Services***

Commitments on liberalization of trade in ESs can be found also in WTO agreements, especially in GATS, as well as in other regional and bilateral trade agreements. As explained in detail the chapters above, services related trade concessions are based on schedules, in which each country has decided which sectors, and in which modes (i.e. in which forms of physical presence of a service supplier on the territory of this state) are open to nationals of other countries (market access commitments). In addition, schedules set out commitments on sectors and modes in which foreign service suppliers can be granted national treatment. Those schedules of commitments are appendixes to GATS, and to all other FTAs addressing the issue of trade in services. The part 6 of each schedule is devoted to liberalization of trade in ESs.

##### ***1. WTO rules on trade in ESs***

Neither Singapore nor India and Malaysia have made any commitments regarding ESs in their GATS schedules. In such a case only horizontal provisions of the schedules—which are applicable to the whole range of sectors—are applicable to ESs too. In horizontal commitments, Singapore has granted market access in respect of natural persons staying in the country up to 5 years, under mode 3 (commercial presence). In mode 4 (presence of natural persons) Singapore has imposed obligations to cooperate with local agents/managers in order to enjoy market access, and has remained unbound in relation to national treatment. Malaysia—in mode 3—has imposed limitations on M&A which can be subject to prior approval (market access), and introduced some limitations for foreign enterprises to use land, property, or enjoy any national business incentives schemes (national treatment). Under mode 4, Malaysia has granted right to stay within the country for natural persons up to 5 years for intra-corporate transfers, or 90 days for independent service suppliers (market access).

In comparison to those commitments, India has reserved the possibility of more favorable treatment for entities which engage in technology transfer in cooperation with state owned enterprises (mode 3 in respect of national treatment), and reserved its right to introduce measures affecting stay of natural persons within the country (mode 4 in respect of market access).

In comparison to all those countries and as already explained in Chapter IV, Vietnam has undertaken not only horizontal commitments, but also commitments which are specifically



devoted to liberalization of trade in ESs. In terms of horizontal commitments, Vietnam has agreed to limit rights of foreign companies to enjoy public subsidies and incentives (mode 3 in respect of national treatment), with exceptions for some types of projects (related to R&D, health, education, audiovisual services, welfare and employment of minorities). In mode 4 in respect of market access, Vietnam has introduced the possibility to impose certain conditions on the duration of stay and qualifications of service suppliers, or engagement of local managers. Vietnam commitments related to ESs are summarized in the table in Chapter IV.1.1.

On the level of GTAS, Vietnam has much more developed commitments on ESs than the rest of compared countries. Four types of ESs (sewage services, refuse-disposal services, cleaning services of exhaust gases, and environmental impact assessment services) are broadly open for foreign suppliers, which can benefit from the far-reaching level of trade liberalization.

## **2. ASEAN**

Singapore and Malaysia have undertaken some further liberalization concessions under the auspices of ASEAN. Vietnam is also a member of ASEAN, and also has taken further liberalization steps for trade in ESs.

Under the aegis of ASEAN, Singapore has opened access to its service market in the following types of services (commitments cover both market access and national treatment in modes 3 and 4):

- Sanitation and similar services,
- Cleaning of exhaust gases, and
- Noise abatement services.

Malaysia has granted market access and national treatment in modes 1, 2 and 3 (with limitations related to joint ventures, in which foreign ownership cannot go beyond 51% of shares) in the following type of ESs:

- Wastewater management,
- Refuse disposal services,
- Protection of ambient air climate,
- Noise abatement services,
- Nature and landscape protection, and
- Services covering only contaminated soil clean-up and remediation.

Following the above-mentioned commitments, Vietnam has also decided to pursue policy of openness. Vietnam however has built up its ASEAN concessions on the basis of its GATS commitments adding to scope of liberalized services:

- Sanitation and similar services, and
- Nature and landscape protection services.

Moreover, in comparison to the schedule under GATS, Vietnam has recalled its limitations on national treatment in mode 1, and taken on new commitments in mode 3. According to those, enterprises based in Vietnam but owned by foreign investors can be granted by competent authorities a permission to lease the land to carry out their business.

### **3. Commitments related to ESs in FTAs**

The level of commitments undertaken by the compared countries in their FTAs is significantly diverse. The most developed system of FTAs is the set of agreements concluded by Singapore. Furthermore, in a few of them Singapore has introduced almost full liberalization, including only a list of some reservations (so-called "negative list").

Other studied countries have taken less liberalization commitments in their FTAs. Vietnam has introduced some liberalization provisions in FTA ASEAN-China, and Malaysia in its agreement with India. India has liberalized some types of ESs in its FTA with Japan and Malaysia. The overview of commitments on liberalization of ESs by those countries is presented in the table below.

#### *Comparison of provisions of FTAs in respect of ESs*

##### *Legend:*

- Acronyms: NT - National treatment; MA - Market access; A - Sewage services; B - Refuse-disposal services; C - Sanitation and similar services; D - Other Environmental Services
- If any profiles of services (e.g. A, B, C) are not mentioned in the table, they are subject to horizontal commitments of the relevant FTA; however horizontal commitments of relevant FTAs can also influence on the scope of commitments described below

Party of FTA	Singapore	Malaysia	India	Vietnam
India	<ul style="list-style-type: none"> <li>• Full liberalization of services B and C</li> <li>• In A and D Singapore remains unbound in mode 1 due to lack of technical</li> </ul>	<ul style="list-style-type: none"> <li>• In respect of services A, and wastewater management Malaysia remains unbound (mode 4)</li> </ul>		

Party of FTA	Singapore	Malaysia	India	Vietnam
	feasibility, and in mode 4, except HC in MA.	<ul style="list-style-type: none"> <li>In D some other services remain unbound (mode 4)</li> </ul>		
<b>EFTA</b>	Like above			
<b>Malaysia</b>			<ul style="list-style-type: none"> <li>Services B and C remain unbound (mode 4)</li> </ul>	
<b>Japan</b>			Like above	
<b>ASEAN-China</b>	<ul style="list-style-type: none"> <li>In C, mode 1 is unbound due to lack of technical feasibility, and mode 4 remains unbound</li> <li>In respect of services D (cleaning services of exhaust gases, noise abatement services), mode 1 is unbound due to lack of technical feasibility, and mode 4 remains unbound</li> </ul>		<ul style="list-style-type: none"> <li>In respect of services A: mode 1 remains unbound, except consultancy services, in mode 3 some limitations on states monopolies are introduced, and mode 4 remains unbound</li> <li>In B and D Vietnamese obligations remain the same as under GATS, with additional limitations in respect of services D</li> </ul>	
<b>Korea</b>	<ul style="list-style-type: none"> <li>Full liberalization, reservations only in the field of waste water management services (negative list approach)</li> </ul>			
<b>Panama</b>				
<b>Trans-Pacific Strategic Economic Partnership Agreement</b>				
<b>Peru</b>				

Party of FTA	Singapore	Malaysia	India	Vietnam
<b>Australia</b>	<ul style="list-style-type: none"> <li>• Full liberalization, reservations only in the fields of services A, refuse disposal, sanitation and other environmental protection services (negative list approach)</li> </ul>			
<b>USA</b>	<ul style="list-style-type: none"> <li>• Full liberalization, reservations only in the fields of services A and B (negative list approach)</li> </ul>			
<b>Costa Rica</b>	<ul style="list-style-type: none"> <li>• Full liberalization, reservations only in the fields of new environmental services, waste water management (negative list approach)</li> </ul>			

#### ***IV.3.4. Environment-related exceptions in the WTO system***

Although the WTO imposes disciplines on national trade rules and measures, the WTO system protects genuine public interests and allows the recourse by States to non-conforming trade measures in order to pursue public policies, including regulation in the field of protection of the environment. However, in order to qualify, such non-conforming measures should meet certain strict criteria, among which the most important is “necessity”. Thus both GATS and GATT provide WTO Member States with some policy space, in the scope of which they can impose some trade restrictive measures as far as those measures are aimed at the protection of societal values mentioned by the respective provisions of GATS or GATT. Article XIV of GATS and XX of GATT which contain the relevant provisions have been discussed in Chapter IV.

If, challenged, the legality of concrete measures taken pursuant to these provisions is reviewed by Dispute Settlement Panels and the Appellate Body.

#### *Trade-related measures of Multilateral Environmental Agreements (MEAs)*

Apart from WTO rules, liberalization commitments, and EGS-related provisions of FTAs, there are MEAs which regulate trade in EGS. Those international treaties are aimed solely at the protection of natural environment, but they affect international trade, insofar as they contain some specific trade provisions necessary to meet some environmental goals set out by those treaties. In other words, these MEAs do not regulate trade *per se*, but in particular some of their provisions allow the limitation of market access by signatories in order to comply with their environment protection obligations under the MEAs concerned. For instance, they may contain measures that prohibit trade in certain species or products, or that allow countries to restrict trade in certain circumstances.

There are over 250 MEAs from which only 20 overlap with international regulations applicable to trade in goods. Among those 20 agreements, some of them include directly trade related provisions, whereas the rest of them can touch trade related issues indirectly, or those issues can arise in the course of application of MEAs under the discretion of signatories which they provide for. Trade related measures in MEAs can be classified as follows:

- Trade bans,
- Export/import licenses,
- Notification requirements, and
- Packaging and labeling requirements.

Although there is no coordination between MEAs and WTO in terms of application of any trade restrictive measures, and due to the lack of convergence of WTO rules and provisions of MEAs, some inconsistency between application of both two different regimes can occur. However, it has never happened that a WTO Member has ever challenged the compliance of another WTO Member State with any trade restrictions, which were based on any MEA. In addition, it can be

claimed that in the case of that kind of dispute, the application of a MEA trade restrictive measure could fall within the scope of exceptions provided by Articles XIV of GATS and XX of GATT.

The table below presents the main MEAs which can have impact on trade, and to which any of compared countries has ever entered. The table compares also how Singapore, Malaysia, India and Vietnam are bound by provisions of those MEAs.

#### *Trade related MEAs*

*Legend: X means that a respective country signed and has been bound by a MEA.*

MEA	Trade related measures	Singapore	Malaysia	India	Vietnam
<b>International Plant Protection Convention</b>	Regulations on phytosanitary certification	X	X	X	X
<b>Convention on International Trade in Endangered Species of Wild Fauna and Flora</b>	Control measures on international trade in specimens of selected species	X	X	X	X
<b>Convention on the Conservation of Antarctic Marine Living Resources</b>	The convention does not contain any trade related measures, but they can be introduced following the provisions of Convention			X	
<b>Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal</b>	A right of a signatory to introduce a prohibition of the import of hazardous wastes or other wastes	X	X	X	X
<b>Convention on Biological Diversity</b>	The provisions of the Convention, with a few exceptions, set goals and establish only general principles. The specific measures required to achieve these goals and operationalize these principles are largely the prerogative of the parties, but they can also relate to international trade	X	X	X	X

MEA	Trade related measures	Singapore	Malaysia	India	Vietnam
<b>Kyoto Protocol</b>	No measures directly related to trade is set out, but they can follow in the course of implementation	X	X	X	X
<b>International Tropical Timber Agreement</b>	No measures directly related to trade is set out, but they can follow in the course of implementation		X	X	X
<b>Fish Stocks Agreement</b>	The right of a signatory to prohibit, under certain conditions, landings and transshipments of fish			X	
<b>Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade</b>	Bans or restrictions on trade in certain chemicals	X	X	X	X
<b>Stockholm Convention</b>	Elimination or restrictions on the production and use of persistent organic pollutants	X	X	X	X

## **V. IMPACT OF THE LIBERALIZATION OF EGS ON VIETNAM**

### **V.1 Lessons drawn from the experience of three other countries**

#### ***V.1.1 Lessons regarding Environmental Goods***

International commitments of Singapore, and Malaysia, as well as Vietnam in respect of trade in EGS remain substantially convergent. All those countries actively participate in development of new forms of trade liberalization, which can contribute to environment protection. In particular, all those countries are members of APEC, and they agreed to the list of EGs—widely known as an APEC list—which is a basis for further voluntary reductions of tariffs on green goods included in this list below the threshold of 5% by the end of 2015. The practical dimension of this list is limited, as average tariffs on EGs applied by all those countries are below 5%. Notably the Singaporean level of tariffs on EGs equals zero. However, the engagement in any political process, which is aimed at fostering trade in green goods can contribute to further spill-over and encourage other countries to pursue strategy of trade liberalization.

The current stay of play in respect of new commitments in green goods shows the general tendency, in the light of which the Vietnamese policy towards EGs should be considered. The trade regime for green goods is relatively liberalized. Nevertheless both Vietnam and Malaysia are not contributing to the environmental negotiations on other forums than APEC, and only Singapore—from the group of above-mentioned countries—is taking part in the negotiations on tariff reductions under the plurilateral Environmental Goods Agreement ("EGA") discussed above.

As the level of tariff reductions as such cannot lead to significant improvement in the international trade in green goods, EGA—first and foremost—can provide some new more efficient rules on NTBs, as NTBs still remain the most important obstacles to trade in EGs. It is expected that after an agreement on the final list of EGs will have been reached, the question of NTBs will be also addressed on this forum.

However, not all countries pursue the policy of openness. India has not been participating in the plurilateral EGA negotiations, as well as it is not bound by, or even does not participate in any voluntary trade agreement negotiation regulating tariff levels in respect of green goods.

However it has to be pointed out that Indian economy is very large, and environment-friendly technologies play a key role in the development of innovative and efficient industry in this country. The domestic demand for green goods and technologies is therefore growing, and any trade restriction could potentially affect the availability of green products on the Indian market. The internal demand for EGs is not only one driver of Indian market capacity for fostering trade in green goods. India has also several comparative advantages in export of such goods to third



countries, and lack of further trade liberalization can substantially distort export perspectives<sup>33</sup>. For these reasons, despite India is not taking an active part in the ongoing international negotiations, it maintains a rather liberal trade regime with respect to environmental goods<sup>34</sup>.

Considering the above, a lesson can be drawn. In particular, in the areas where comparative advantages of national economy can be identified, pursuing strategy of openness by engaging in international liberalization negotiations can foster competitiveness of the national green sector.

### **V.1.2 Lesson regarding Environmental Services**

From the group of countries, which were evaluated in the comparative study of international trade commitments on EGS, none has ever committed to liberalize market access and national treatment in ESs on GATS level. By contrast, Vietnam has taken on several commitments liberalizing access to ESs on the level of GATS. Furthermore, it has to be pointed out that the most significant commitments in terms of liberalization of ESs have been taken in FTAs. In particular, Singapore is a signatory to 19 FTAs, whereas India and Malaysia are parties to respectively 10 and 11 FTAs, and Vietnam is a signatory to 6.

Singapore has taken on significant commitments in the field of ESs in 10 of its FTAs. In some of its FTAs (e.g. with the US, Peru, Panama, Korea or Australia), Singapore has agreed on the full liberalization of trade in ESs, including in its schedules only negative lists of exceptions, in which some discriminatory measure can be applied. In comparison to this, other compared countries have never agreed in their FTAs on the principle of full liberalization subject to the negative list of reservations.

In addition, the emerging role of service sector is strikingly being emphasized by on-going negotiations on bilateral and multilateral level. The trade in services is a part of the EU-Vietnamese negotiations of FTA, and has been a part of agreement which is concluded by the EU and Singapore. Furthermore, there is also another plurilateral agreement negotiated at the WTO level—Trade in Services Agreement (“TiSA”). In growing economies, in countries such as Vietnam, India and Malaysia, ESs play an emerging role in the implementation of local development policy, due to intensive process of urbanization, industrialization, and population growth.

Considering the above, it can be emphasized that the international trade in ESs can be effectively empowered by FTAs, and that FTAs remain flexible instruments which allow negotiating countries to implement their trade strategy of liberalization in a manner appropriately suitable to a type of

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<sup>33</sup> Kallummal M., Khushwaha H., *Doha Negotiations and India's Trade in Environmental Goods: Analysis of NAMA Sectoral Impact*, Centre for WTO Studies Indian Institute of Foreign Trade New Delhi, January 2014; Gupta A., *Indian Management: Thought and Practice*, p. 331.

<sup>34</sup> Kallumal M., Poornima V., Shruti, Sh., *An Analysis of Intra Industry Trade in Environmental Goods: A Case Study of BRICS countries*, Federalismi.it, 24 October 2014.

trade relations between the negotiating parties, and their economic potential. The case of FTAs concluded by Singapore clearly shows that there is no one single effective trade strategy in the field of ESs, as both approaches, the negative list and traditional one based on positive commitments, can be pursued simultaneously, in order to compromise the growing demand for ESs, local needs, and capacity of national service suppliers.

In addition, the liberalization of trade in ESs can create more economic opportunities, both for local suppliers, and investors of third countries which can decide to stay present in the importing state. In particular, the presence of foreign suppliers can substantially boost the transfer of technology and grant local entrepreneurs access to knowledge and state-of-the-art technology, not yet available to local service suppliers.

### **V.1.3 General lessons**

There is somehow a link between international commitments in trade in EGS and the general level of participation of a state in various forms of international economic cooperation. As an example, it is worth to mention that Singapore is a party to 19 FTAs and simultaneously participates actively in the negotiations of the "Davos initiative" or EGA. In comparison, India has only a limited scope of international commitments in EGS and it does not support all on-going liberalization processes on the WTO level, despite it maintains a rather open market autonomously. It may afford to do so, since it plays an emerging and rather important— but still not leading—role in the green goods and services markets<sup>35</sup>. However, as indicated above, India's approach has its own limits as it may impair India's capacity to acquire technology and to dispose of sufficient EGS to satisfy its growing domestic demand.

It is also worth to note that taking on any further commitments in the field of EGS can substantially facilitate trade cooperation with third countries in general terms. The issue of green goods and services can play an important role in the process of articulating and negotiating Vietnamese trade interest during bilateral, or multilateral negotiations. The win-win approach could imply not only further trade liberalization in respect of EGS, but also could entitle Vietnam to obtain from negotiating partners other commitments or forms of support, essential for Vietnamese trade and development policies.

Taking on new commitments typically is done after an in-depth evaluation of local business needs, demand for imported ES, and the influence which imported ES can have on local industries and communities, as well as on the economy as a whole, especially in a dynamic perspective. In the chapters above, it was noted that Vietnam strongly needs ES and environmentally sound

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<sup>35</sup> Compare with *The Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective Report by a Panel of Experts to Second Preparatory Committee Meeting for United Nations Conference on Sustainable Development*, [http://www.unep.org/greeneconomy/Portals/88/documents/research\\_products/UN-DESA,%20UNCTAD%20Transition%20GE.pdf](http://www.unep.org/greeneconomy/Portals/88/documents/research_products/UN-DESA,%20UNCTAD%20Transition%20GE.pdf).

technologies, as its domestic enterprises cannot satisfy domestic demand. Vietnam therefore could benefit from further acquisition of the latter in an open trade environment (see section V.2 below). Furthermore, any financial support from developed countries for the promotion of environmentally sound technologies and environment-friendly standards could be further discussed and analysed.

## **V.2 The advantages and disadvantages, from an economic, technological and environmental point of view, of liberalizing selected EGS to Vietnam**

### **V.2.1. Advantages**

***First, Vietnam has committed to voluntary reductions for 54 categories of environmental goods in the framework of APEC with tariffs below 5%, so that,*** these are favorable conditions for Vietnam to continue to open up markets for goods and environmental services in the framework of other international commitments.

***Second, Vietnam has reduced tariffs to zero (0),*** without applying import duties for most of the important environmental goods within 54 categories of environmental goods in the framework of APEC, primarily focused on commodities for pollution treatment, waste treatment, GHGs reduction, such as environmental technology, machinery and equipment for wastewater treatment, waste management, renewable energy production, high-tech. Therefore, Vietnam seems to be ready for further trade liberalization negotiation on EGSs.

***Third, Vietnam has developed a comprehensive policy system and tools supporting the development of environmental goods and services.*** Vietnam has developed the national program on environmental services, the national program on environmental industry and a draft of National Strategy for environmental services development. Vietnam has also specified environmental goods and services development in the Environmental Protection Law 2014. Meanwhile, incentives for research, manufacturing and supply of environmental goods and services has also been enacted and put into operation.

***Fourth, demand for goods and environmental services in Vietnam has been increasing dramatically, while the domestic supply of goods and environmental services is not met.*** Demand for goods and environmental services in Vietnam are increasing due to high economic growth rate and increase in investment, which result in blooming pollution from production process. Environmental service supply meets only about 5% of the demand in wastewater treatment of urban, approximately 15% of waste treatment demand, and 14% of solid waste and hazardous waste.

**Table 1: Advantages of trade liberalization to Vietnam selected environmental goods and services**

No	Selected EGS	Advantages
1.	Air pollution control	<ul style="list-style-type: none"> <li>- High domestic demand due to an increase in air pollution, especially in big city and industry zones.</li> <li>- Reduce pollution cost to enterprises due to lower prices of technologies, machines and equipment from lower tariff.</li> </ul>
2.	Renewable energy	<ul style="list-style-type: none"> <li>- High domestic demand due to Government target that the percentage of renewable energy use account for five percent in the total energy consumption to 2020. Government also delivery Feed in Tariff to support renewable energy development with a focus on wind energy and solar energy in firms and solar energy in household.</li> <li>- Reduce investment cost of establishing a factory due to lower tariff to technologies, machines and equipment.</li> </ul>
3.	Waste management	<ul style="list-style-type: none"> <li>- High domestic demand due to an increase in waste from household and economic development. Waste treatment industry only meet 20-30 percent of demand.</li> </ul>
4.	Water treatment	<ul style="list-style-type: none"> <li>- High domestic demand due to urbanization and economic development that lead to an increase in wastewater.</li> <li>- Reduce investment cost in establishing a new factory due to lower tariff to technologies, machines and equipment</li> <li>- Wastewater treatment industry only meet 15-20 percent of demand.</li> </ul>
5.	Environmental technologies	<ul style="list-style-type: none"> <li>- High domestic demand due to significant increase in pollution from high economic growth and export-oriented development which lead to higher production.</li> <li>- High demand due to current resource-based intensity of economic development.</li> <li>- Reduction of pollution and reduction investment cost of purchasing technologies, machines and equipment due to lower tariff</li> </ul>
6.	Carbon capture and storage	<ul style="list-style-type: none"> <li>- Not clear</li> </ul>

### V.2.2. Challenges

*First, Vietnam has issued several policies to support the development of goods and environmental services, however, they do not have separate regulations for each type of environmental goods and services.* These policies are so general to environmental technologies, renewable energy technologies, however, they do not go into detail for each type of environmental goods and services under product classification of Vietnam. Consequently, this

has caused difficulties in taking measures for the specific environmental goods that have not been specifically mentioned.

***Second, trade liberalization for goods and environmental services may have negative influence to domestic producers of environmental goods and environmental service providers in the country.*** In particular, Vietnam enterprises are mostly small and medium-sized enterprises so that it is difficult to compete with foreign suppliers. Furthermore, Vietnamese enterprises lack of technological capacity and finance to be in competition with foreign companies.

***Third, Vietnam has not identified the list of types of environmental goods and services in detail.*** While some environmental services have been categorized in the industry code E, the environmental goods just focus on some goods related to environmental technology, renewable energy technology, and waste treatment in general. Therefore, this will hinder Vietnam in determining the list of environmental goods for negotiations if international negotiations still continue with the selection method for specific goods negotiations.

***Fourth, Vietnam has several support and incentives for businesses, individuals and organizations involved in the research, testing and production of environmental goods, and providing environmental services such as the exemption and reduction of corporate income tax, personal income tax, preferential land rent, water.*** This may cause obstacles to joining the commitment to liberalize trade because Vietnam may be requested to remove subsidies and incentives. Vietnam may have to adjust its policies to match its future commitments.

The removal of subsidies will affect to domestic enterprises while increasing dependence of Vietnam from overseas producers of environmental goods and providers of environmental services.

This stated, subsidies Vietnam provides do not seem to be prohibited by WTO Law. An action can be taken against them only if they entail a negative effect on the trade interests on other Members of the WTO and if these other members complain.

***Fifth, trade liberalization will reduce revenues from taxes on environmental goods and services in Vietnam.*** With a total market volume of 20 billion dollars in term of export and import, the tariff reduction would remove a source of government revenue.

**Table 1: Disadvantages of trade liberalization to Vietnam selected environmental goods and services**

N <sub>o</sub>	Selected EGS	Disadvantages
1.	Air pollution control	- Reduce the competitive position of domestic enterprises due to environmental goods producer and environmental services provider in oversea

2.	Renewable energy	<ul style="list-style-type: none"> <li>- Reduce of competitive of domestic enterprises due to environmental goods producer and environmental services provider in oversea</li> <li>- Domestic market is under potential</li> </ul>
3.	Waste management	<ul style="list-style-type: none"> <li>- Reduce the competitive position of domestic enterprises due to environmental goods producer and environmental services provider in oversea</li> </ul>
4.	Water treatment	<ul style="list-style-type: none"> <li>- Reduce the competitive position of enterprises due to environmental goods producer and environmental services provider in oversea</li> </ul>
5.	Environmental technologies	<ul style="list-style-type: none"> <li>- Reduce the competitive position of domestic enterprises due to environmental goods producer and environmental services provider in oversea</li> </ul>
6.	Carbon capture and storage	<ul style="list-style-type: none"> <li>- Vietnam is not ready to participate</li> </ul>

### V.3 The WTO Doha Negotiations

#### V.3.1 *Status of the Doha negotiations with respect to Environmental Goods and Services*

The negotiations on liberalizing trade in EGS are a part of the Doha negotiations. The basis for including the relations of trade and environment into the negotiation agenda is the paragraph 31 of the Doha Declaration. The Declaration formulates a negotiation mandate for the Doha round, and points inter alia the following issues referring to trade and natural environment:

- ...
- *"the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services"* — para. 31 (iii) of the Doha Declaration.

The negotiations on trade and environment are conducted under the auspices of the WTO Committee on Trade and Environment — Special Session, and focus on the fostering environment protection by the reduction of tariff and non-tariff barriers to trade in green goods and services.

At the beginning of the negotiations, the proper definition of EGS that would be subject to the tariff reduction commitments was the main issue at stake. Negotiating parties were active in submitting proposals of EGS that potentially could be included in the definition. In particular a group of a few states, called the "Friends of Environmental Goods"<sup>36</sup> submitted two versions of a list consisting of only EGs (so-called "green goods"). Initially the list contained ca. 400 positions,

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<sup>36</sup> The group consisted of following countries: Canada, the EU, Japan, Korea, New Zealand, Norway, Chinese Taipei, Switzerland and the US.

then it was revised and limited up to 153 different EGs. Nevertheless none of the proposals was accepted by negotiating parties<sup>37</sup>. Finally, based on the all submissions received, the Committee on Trade and Environment compiled and published a reference list of EGs in 2010<sup>38</sup>.

Lack of compromise on the definition of EGS led the negotiations to a standstill and there has been no progress on this issue in the Doha Round since 2011. In consequence, the APEC countries<sup>39</sup> took the initiative to establish their own list of EGs, which was finally agreed in 2012 (so-called "APEC list"). The list contains 54 EGs, on which the APEC countries had agreed to reduce their tariff rates up to the maximum level of 5% by the end of 2015. However, the liberalization of tariffs is not obligatory for the APEC countries, and can be implemented by them on a voluntary basis.

The conclusion of the APEC list brought a new impetus to the negotiations. On 24 January 2014, Australia, Canada, China, Costa Rica, Chinese Taipei, the European Union, Hong Kong, Japan, Korea, New Zealand, Norway, Switzerland, Singapore, and the United States launched the initiative (so-called the "Davos initiative") to at least pursue, in the context of the Doha Round, plurilateral negotiations on EGA. The negotiations started in July 2014. Israel joined the "Davos initiative" in January 2015 and it is expected that Turkey and Iceland will join in March 2015<sup>40</sup>. Similarly some of the APEC countries are interested in joining the negotiations.

At this moment, five rounds of negotiations were completed. The last took place on 16-20 March 2015. During the negotiations, the list of EGs is discussed on a sectoral basis. In order to provide negotiators with technical support in the field of environmental technology, the rounds are attended by experts from international organizations (e.g. the OECD, UN Environmental Program, International Energy Agency, International Renewable Energy Agency), as well as national environmental agencies, NGOs, business associations, industry, academia, etc. Their role is to assist negotiators in the accurate identification of green goods which could be included in the final list. During the negotiations, the following sectors are covered:

- reduction and mitigation of air pollution,
- solid and hazardous waste management,
- soil and water treatment,
- environmental remediation and clean-up,
- noise and vibration abatement,

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<sup>37</sup> WTO. JOB(09)/132; Mahesh Sugathan, *Lists of Environmental Goods: An Overview*, Information Note 12/2013, ICTSD.

<sup>38</sup> WTO, TN/TE/19.

<sup>39</sup> Member states of APEC are: the United States; Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; The Philippines; Russia; Singapore; Republic of Korea; Chinese Taipei; Thailand; and Vietnam.

<sup>40</sup> European Commission, [http://trade.ec.europa.eu/doclib/docs/2015/march/tradoc\\_153187.pdf](http://trade.ec.europa.eu/doclib/docs/2015/march/tradoc_153187.pdf).

- cleaner and renewable energy, and energy efficiency,
- goods related to energy and resource efficiency,
- environmentally preferable products,
- protection of natural resources,
- environmental monitoring and analysis.

The preliminary list of EGs — based on goods nominated by the negotiating parties — has been completed on the 5th round of the negotiations. Therefore, any new submissions for extending the list of EGs will not be considered. In the further rounds of the negotiations, the list of EGs will be finalized, and negotiators will begin discussions on other issues related to the text of EGA.

It is believed that the ongoing negotiations on green goods on the WTO forum can have a great impact on the fostering trade in EGs, as the countries who launched the "Davos initiative" represent together ca. 86% of world trade in green goods. Furthermore these negotiations are seen as a support to the favorable outcome of the on-going climate negotiations, which is expected to be concluded in December 2015 in Paris. It is believed that new international commitments related to trade in green goods represent a significant step for the intensification of efforts in the prevention of dangerous climate change.

### ***V.3.2 The negotiation methodologies proposed during the Doha Negotiations***

#### ***1. The development of the APEC list***

An approach proposed to speed up the negotiations is to use the APEC list as a reference point. According to this approach — as it was done by the APEC countries — the negotiating parties must identify the covered EGs in a more detailed manner than the application of standardized 6-digits HS codes. The tariff concessions can be therefore agreed and applicable only to specific goods, identified on the final list independently of their initial 6-digits HS codes. Such specified goods are referred to as "ex-outs".

The negotiations on EGA have only a plurilateral character. Although the interrelations between environment and trade are still one of the subject matters of the Doha negotiations, there is no progress on multilateral level in this file. Nevertheless, the plurilateral process is conducted also under the auspices of the WTO. The final outcome of the negotiations on EGA will have to be well-coordinated with the trade liberalization negotiations.

The primary goal of the negotiations, under the current approach, is to find an agreement on tariff liberalization in the field of green goods. Therefore, the environmental services (ESs) are not discussed. However, the negotiating parties do not exclude the possibility to discuss at a later stage the liberalization of services related to the trade in EGs, i.e. installation and maintenance services. Similarly, NTBs in trade of EGs will be negotiated as well.



The negotiating parties intent to keep the potential EGA open to all WTO Members. Therefore, there is a possibility to include in the agreement a revision clause, which would allow — in the case of a new party accessing to EGA — the extension of the list by adding new entries for certain green goods which are important for the international trade exchange of the acceding party. In addition, such a mechanism will enable amendments to the EGs list, by adding and removing entries, in this latter case when they no longer reflect the highest environment standards at the time. Hence, the parties will have an opportunity to keep the list updated in accordance with the state-of-the-art green technologies.

The above mentioned approach, does not envisage any kind of preferential or differential treatment in favour of developing countries. At the same time the negotiating parties are requested to take into account exceptional circumstances justifying transitional periods for developing states. Nevertheless, the prospective EGA will probably set out only limited grounds for their application.

Moreover, the final plurilateral EGA will be based on the MFN principle. This implies that the Contracting parties will apply their tariff concessions to goods originating in all WTO Member States, regardless of their commitments under EGA, or their non-participation.

## **2. Other approaches**

During the multilateral negotiations on EGS, other approaches were also discussed. However, none of them have met the acceptance of the majority of the negotiating parties, thus contributing to the impasse of the negotiations at multilateral level. The negotiating parties discussed inter alia the adoption of other lists of EGs, like those prepared by the OECD, or UNCTAD. The OECD list was based exclusively on 6-digit HS codes, and included potential tariff reductions on some environmentally sound technologies.

Firstly, in comparison to the OECD proposal, the list of EGs issued by UNCATD, was based on the concept of environmentally preferable products (EPPs). EPPs are *"products which cause significantly less environmental harm at some stage of their life cycle (production/processing, consumption, waste disposal) than alternative products that serve the same purpose, or products the production and sales of which contribute significantly to the preservation of the environment"*<sup>41</sup>. The concept of EPPs is therefore based on the identification of less ecologically harmful goods, which serve as substitutes to other goods used for the same purpose<sup>42</sup>.

Secondly, other approaches based on the concept of a single list of EGS were also considered. However, it was claimed that the list should be flexible in order to make it reflect the most recent

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<sup>41</sup> UNCTAD/COM/70.

<sup>42</sup> UNCTAD, *WTO Negotiations on Environmental Goods, Selected Technical Issues*, UNCTAD/DITC/TED/2011/1.

developments in the field of environmental technologies. Such a "living list" would not have to be built upon the entries of different categories of products, but would have incorporated several international standards related to products, or labelling schemes (e.g. eco-labelling). This approach was inter alia suggested by the EU.

Thirdly, some other countries (e.g. Argentina, India<sup>43</sup>) offered to build the tariff concession for EGs on the basis of "project approach", which could imply granting the tariff concessions in relation to the specific project conducted on the territories of parties, for the purpose of which certain goods or services would be imported. The projects should serve the environmental goals, like fulfillment of the Kyoto protocol. Only goods authorized to be used in those projects could benefit from the reduced tariffs.

Fourthly, some other countries made proposals for the combination of the above-mentioned approaches (e.g. New Zealand, Columbia). Those involved inter alia the establishment of a fixed list of EGs with simultaneous creation of an alternative mechanism, such as the project approach, or introduction of a screening mechanism upon which the selected goods could be authorized to benefit from special tariff arrangements.

Finally, a "request and offer approach" was suggested during the negotiation. Upon this approach, the final commitments of parties to reduce their tariffs would be based on prior bilateral agreements among the parties, similarly to the manner in which other WTO liberalization negotiations are conducted.

### ***V.3.3 The opportunities and challenges of adopting one of the negotiation methodologies already proposed during the Doha Negotiation***

The negotiations' approach, which follows the APEC list of EGs — at this particular moment — seems to be the only one acceptable — at least — on the plurilateral forum. However, it should be pointed out, that the adoption of the APEC model of liberalization of the trade in EGs leads to some challenges and difficulties.

To start with, the APEC lacked to develop a review mechanism that would be linked to its list. Without any special mechanism to enable the quick review of the list, the introduction of any new good in the list can be very burdensome, since it would require consultations and agreement among all the parties. As the environmental technology rapidly develops, a list without a review clause would not effectively serve its purpose. Therefore, a review clause — based on scientific and technology grounds — should ideally be included in the final agreement.

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<sup>43</sup> IISD, *Lessons from multilateral environmental agreements and ecolabels for breaking the impasse*, 2010.

Moreover, the APEC list is identified according to the specific liberalization interests of the participating states. Hence, most of the goods it contains are industrial products, which are imported by developing countries. Therefore, basing the on-going negotiations on this list can be problematic for developing countries, which do not have comparative advantage in the production of these goods, and could hardly take a commercial advantage from the reduction of their tariffs.

Another challenge which stems from the application of the APEC list is the possible inconsistent implementation of the EGA by the customs authorities of the contracting states. As the list is based on the “ex-outs”, there is not necessarily a uniform customs classification for them. Indeed the international standardized classification is developed at the level of 6-digits HS only. Yet, more detailed specifications of products may require more digits (up to 10 digits). This falls within the responsibility of national authorities. Therefore, it can occur, that “ex-outs” would not be classified in each participating state in the same manner, thus entailing a risk of non-uniform application of EGA.

In addition, the APEC list based approach does not eliminate the risk that double use goods are included in the list and benefit from the preferential tariffs it entails. Double use goods are those which can serve both environmental and non-environmental purposes. However, the more detailed a qualification of goods is beyond the 6-digits HS codes, the lower there a risk that a good is dual use, especially if comparison is made with the OECD list of EGs, which specifies goods only to the 6-digits level<sup>44</sup>.

At his particular moment, other approaches are not followed in the negotiations. However, should they be adopted, they would also entail several challenges. While the APEC list approach merely implies a technical discussion on goods, which should or should not be covered by the tariff concessions, other approaches, such as the initiative to create a permanent screening mechanism or an expert panel, or the inclusion in the final list of labelling schemes or standards — require a discussion on a new institutional framework, or a compromise on the applicable standards, and the policy goals of the whole mechanism, much more difficult to achieve than one coherent list of goods.

As mentioned above, participants that have initiated the EGA negotiations have decided that the APEC list will only be the starting point of their negotiations which would include a “broad list of additional products”. More importantly, they also decided that the EGA will be a 'living agreement' that would be able to respond to the changes in technologies in the years to come, to add new products, as well as to potentially address trade in environmental services and non-tariff barriers. Thus the lacunas identified in the APEC list are likely to be fixed by EGA negotiators.

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<sup>44</sup> ITC, *Trade in Environmental Goods and Services: Opportunities and Challenges* (Technical Paper), Geneva 2014; ICTSD. *Lists of Environmental Goods: An Overview*, Information Note 12/2013.

## VI. Recommendations

Based on the analysis and observations provided in this study, the following recommendations can be proposed, in addition to those proposed in the MUTRAP Study INVEN-1.

- Join the WTO negotiations on EGS
- Identify a precise list of environmental goods and services. With respect to environmental goods, these would be the so called “ex-outs” from the APEC list of EG.
- Issue an implementing Circular for Decree 04/ND-CP on economic incentives for environmental protection activities. This may entail the identification of specific incentives for each type of environmental goods and services.
- Measure the impact of the incentives provided on the trading interests of third countries’ enterprises in order to avoid undue trade distortions and possible complaints.
- Identify a specific incentive policy in the fields which face difficulties in attracting investment from the private sector such as exhaust gas, noise, and hazardous waste treatment, while measuring the impact of the incentives provided on the trading interests of third countries’ enterprises in order to avoid undue trade distortions and possible complaints.
- Streamline domestic regulation and administrative procedures affecting EGS as recommended in the IVEN-1 study.
- Re-examine the favourable treatment that still seems to be granted to State enterprises active in the EGS sectors.
- Revise Circular No. 20/2014/TT-BKHCH with respect to used machinery and equipment, especially with respect to the test of “quality”.
- Review Circular 122 of the Ministry of Finance on price controls enacted in August 2010 and entered into force in October 2010, requiring operators to register their selling prices and price changes with competent state authorities.
- Review Government Resolution no. 18/NQ-CP dated 6 April 2010 on “key measures to ensure macroeconomic stability, curb inflation and achieve a GDP growth rate of approx. 6.5% in 2010” and assess its specific impact on the trade of EGS.
- Carry out an in-depth evaluation of local business needs, demand for specific imported EGS, and the influence which specific imported EGS can have on local industries and communities, as well as on the economy as a whole.