

Final Report (Year 2) – Viet Nam

Asia Pacific Green Public Procurement Partnership Project

2019. 02

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Many others contributed to the Study, including the members of the Advisory Committee, focal points of each partner country that participated actively through all the consulting items. Government officials and experts also provided their opinions on the Legal recommendations and GPP criteria.

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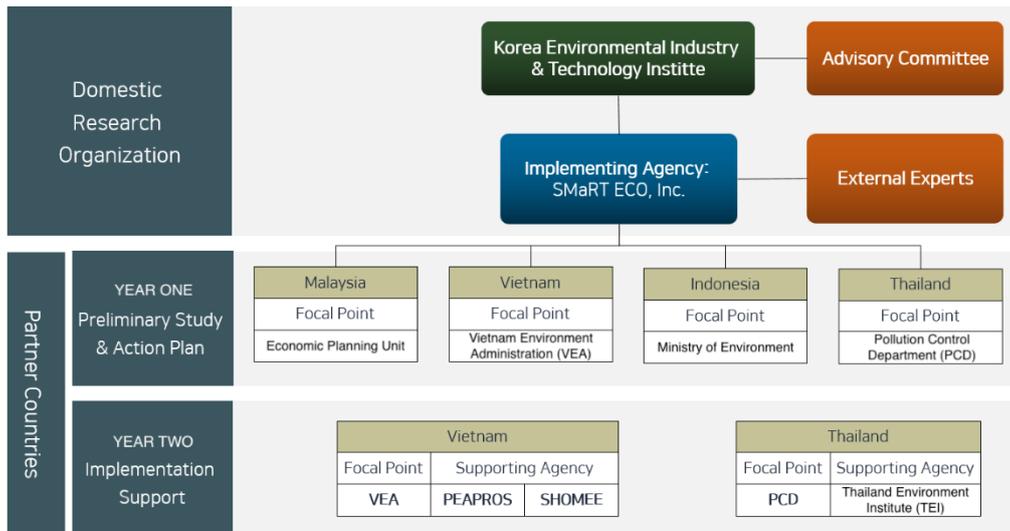
Executive Summary

I Introduction

(Purpose) The Asia-Pacific Green Public Procurement Partnership Project aims to establish the foundation for Green Public Procurement (GPP) and promote its implementation by strengthening the capacities of partner countries and providing support for the creation of a market for environmentally-friendly products and services by transferring the experience of Korea in operating GPP and eco-labeling scheme.

(Project Partners) Figure 1 shows the organizations involved in the project.

- ▼ Korea Environmental Industry & Technology Institute took overall leadership for the project, providing funds for the operation of the project and coordinating with the partner countries. As the Operating Agency of GPP and eco-labeling program in Korea, KEITI provided consultation on experience and expertise of Korea, and supported direction setting in project implementation.
- ▼ Focal Points, the appointed lead government agencies of the partner countries, provided necessary cooperation for the project activities.
- ▼ SMaRT ECO, Inc. carried out the key activities of the project as the Implementing Agency, and sought validation by external experts for some of the technical elements of this process.
- ▼ For some of the consulting items, local research institutions or consulting companies were employed as Supporting Agencies. Certain tasks were assigned to Supporting Agencies capitalizing on their local and institutional knowledge, networks and language capabilities.
- ▼ An Advisory Committee composed of Economy Division and Asia-Pacific Regional Office of UN Environment, European Office of ICLEI, and KEITI provided advice on project direction and methodologies.



[Figure 1] Project implementing mechanism

(Main Activities of Year One) The following summarizes the first year of the project’s implementation in 2017.

- ▼ The Implementing Agency assessed the current status of, and future plans for GPP and eco-labeling schemes in Viet Nam, Malaysia, Thailand, and Indonesia through literature review and interviews. The Implementing Agency then prepared a preliminary study report, which integrated a SWOT analysis and reflected the demand for technical support expressed by the countries.
- ▼ The project Advisory Committee selected Thailand and Viet Nam as partner countries for Year Two of the project based on the results of the preliminary study. Selection criteria included: the willingness to participate in the project, political willingness to implement GPP, the need for consulting support, and the possibility of advancement of GPP in the country.
- ▼ As the first step to establish the Action Plans, the Implementing Agency identified potential consulting items that could be provided to these countries, considering the relevant expertise in Korea, and shared them with Focal Points.
- ▼ For the potential consulting items sent to the partner countries, the Focal Points of the partner countries have notified their priorities to the items that the supports from Korea are most needed. Partner countries and the Implementing Agency reached final agreement on the consulting items and subsequently prepared draft Action Plans.
- ▼ The Implementing Agency shared draft Action Plans with the Focal Points and relevant line ministries for each country. The Implementing Agency revised the Action Plans following the discussions made at the Interim Meeting (early November 2017), and finalized the Action Plans during workshops held in each partner country in late November 2017.

- ▼ In addition, a knowledge-sharing workshop for the Focal Points and related ministry officials was held in Korea in connection with the meeting held in early November 2017.

(Detailed Goals) The following detailed goals have been established for the implementation of the Action Plans, which is the main activity of Year Two, and for the presentation of follow-up projects.

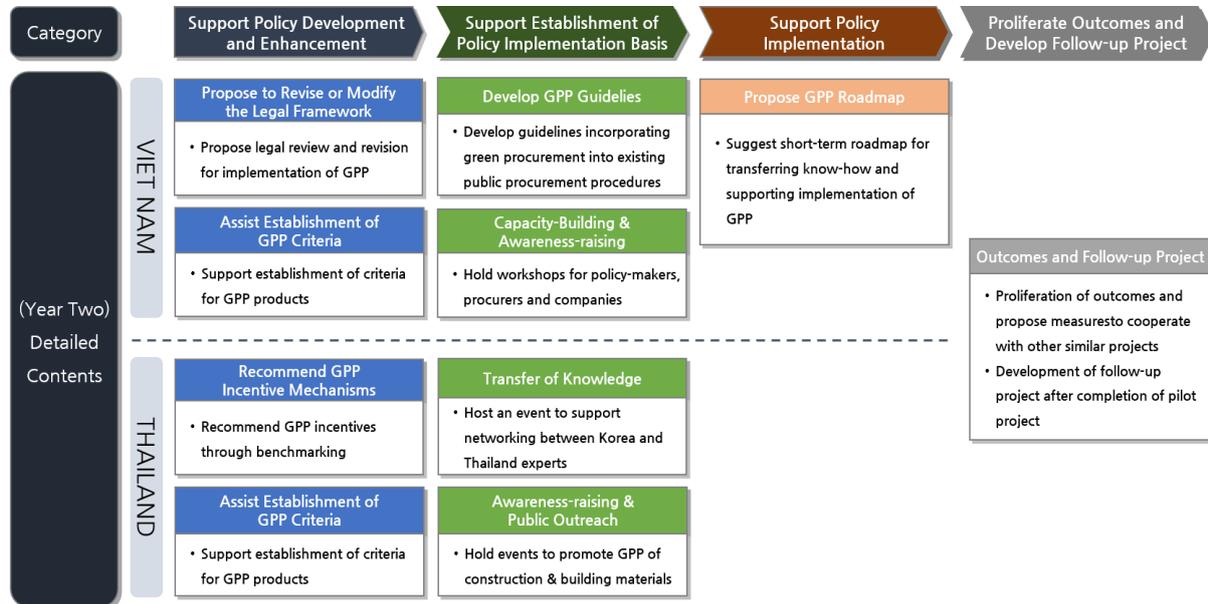
- ▼ Customize implementation of the Action Plan established for the partner countries.
- ▼ Establish a foundation to help establish project within the region.
- ▼ Share and present the outcomes achieved in comparison to the goals set.
- ▼ Propose follow-up projects upon completion of the project.

(Consulting Items) In Year Two, the Implementing Agency focused on implementing the Action Plans established for the partner countries. The following consulting items were agreed for the project.

- ▼ For Viet Nam, the following series of activities were planned to establish a basis for GPP implementation:
 - (1) GPP-related laws of Viet Nam will be reviewed in order to modify the legal basis for GPP. Then, recommendations for the enactment and revision of these legal documents will be proposed by benchmarking the Vietnamese legal system with that of Korea.
 - (2) Develop criteria to support the selection of environmentally-friendly products in the market during the public procurement process.
 - (3) Provide a methodology for GPP and develop guidelines for strengthening the capacities of government procurers.
 - (4) Propose a short-term roadmap to support the pilot implementation of GPP by transferring the institutional knowledge of Korea.
 - (5) Support capacity-building and awareness-raising for GPP stakeholders, including policy-makers, procurers, and manufacturers.
- ▼ For Thailand, promotion of GPP for construction and building materials was selected as one of the new priority areas for support:
 - (1) Establish a foundation for GPP by developing criteria for construction and building materials.
 - (2) Present recommendations for incentives that promote GPP in a manner appropriate to Thailand by benchmarking other countries' systems, including Korea.
 - (3) Transfer Korean institutional knowledge through the establishment and activation of green

building expert networks between Korea and Thailand.

- (4) Support activities to raise awareness around and promote GPP in the construction sector for a diverse range of stakeholders, including procurers, experts, and manufacturers.

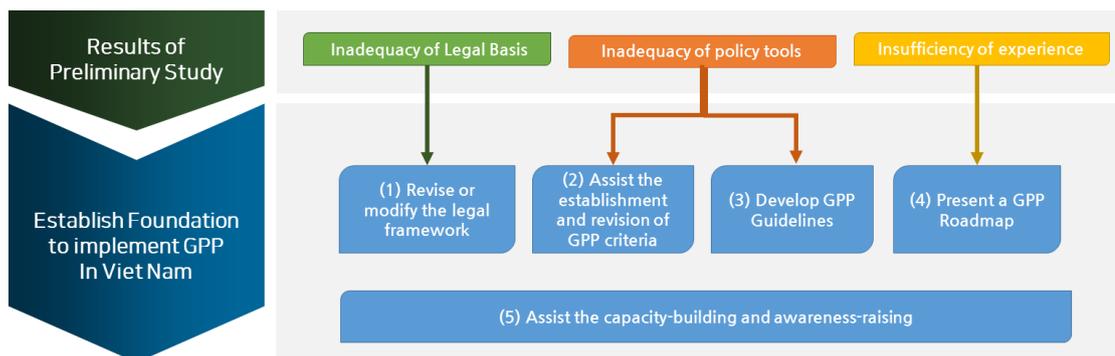


[Figure 2] Consulting Items for Partner Countries

I Consulting items for Viet Nam

(Overview) Viet Nam announced the national strategy on green growth to promote Green Public Procurement and established the National Sustainable Development Goals (VSDGs).

- ▼ Since the GPP has not yet been fully implemented in Viet Nam, this project is focused on establishing the basis for introducing the system necessary for the implementation of GPP.
- ▼ The Implementing Agency proposed the legal framework, GPP criteria, and GPP guidelines in the consultation process, and a GPP roadmap for the pilot implementation, an alternative item for pilot implementation, previously prepared since the related regulations for the pilot implementation did not come into effect in the first half of 2018.
- ▼ The following diagram depicts the relationship among the consulting items in Viet Nam.



[Figure 3] Relationship between consulting items in Viet Nam

[Revise or modify the legal framework] In order to improve the legal basis for the implementation of GPP, the Implementing Agency reviewed the laws related to GPP in Viet Nam and benchmarked the legal framework in Korea to propose legal recommendations for institutional amendment.

- ▼ **(Purpose)** This consulting item aimed to propose legal recommendations to address GPP within Vietnam's legal framework related to environmental protection and procurement.
- ▼ **(Analysis of Legal Frameworks)** After analyzing the legal frameworks of Republic of Korea and Viet Nam as relevant to GPP, the SWOT analysis for the Vietnamese legal framework in terms of implementing GPP is carried out by comparing the legal frameworks between the two countries.
- ▼ **(Legal Recommendations)** Based on the SWOT analysis, a revision of Laws on Environmental Protection, State Budget, Public Investment and Bidding law was drafted for GPP of Viet Nam.
- ▼ **(Review by Stakeholders)** Adjustments to the legal recommendations were suggested in response to the opinions from ministries related to GPP in Viet Nam.
- ▼ **(Results and Utilization)** Based on the legal recommendations, the Focal Point will establish the legal basis for GPP by enacting a circular and amending related laws in 2019, and by publicizing them in 2020.

[Assist the establishment and revision of GPP criteria] To support the development of GPP criteria, the Implementing Agency drafts the criteria of Vietnam Green Label which are frequently purchased in the public procurement market and have a large environmental impact.

- ▼ **(Purpose)** This consulting item will expand the product categories subjected to GPP by developing Vietnam Green Label criteria, thus providing the basis for eco-product market.
- ▼ **(Selection of Prioritized Products)** Wooden furniture, computer monitor, and air conditioner

were selected as three product categories for the criteria development, in agreement with the focal point. Procedures for establishing the criteria are based on the procedures for establishing the Korean Eco-label criteria.

- ▼ **(Literature Review and Market Readiness Study)** The Implementing Agency drafted the criteria of three product categories by literature review on the ecolabel criteria of Korea and other countries. Then PEAPROS conducted a market readiness survey to find out the acceptability of the drafted criteria by local manufacturers in Viet Nam.
- ▼ **(Review by Stakeholders)** The drafted criteria were reviewed and adjusted by collecting opinions from local manufacturers, Vietnam Green Label Office, experts of Korea and Viet Nam.
- ▼ **(Results and Utilization)** The Focal Point will register the developed criteria as Vietnam Green Label criteria through the committee's evaluation by Ministry of Natural Resources and Environment (MONRE).

[Develop GPP Guidelines] GPP guidelines was developed to provide a practical methodology for GPP and by which the stakeholders to the bidding process can consider environment-friendly products and comply with the existing procurement procedure.

- ▼ **(Purpose)** The objective of the guidelines is to help procurement officers understand GPP and to strengthen their capacity by proposing procurement procedures and methods for purchasing environment-friendly products approved by the government.
- ▼ **(Analysis of Procurement Procedures)** By comparing and analyzing the procurement procedures of Korea and Viet Nam, the Implementing Agency benchmarked GPP guidelines of Korea and other countries, and propose procurement procedure and method for environment friendly products recognized by the government in the procurement market in Viet Nam.
- ▼ **(Main Contents)** GPP guidelines defines the target product categories, target organizations, and GPP criteria; and describes the GPP procedure and method in Vietnamese procurement process.
- ▼ **(Review by Stakeholders)** The guidelines were firstly reviewed by consulting with Korea Institute of Procurement (KIP) and were revised in local consultation with the Vietnamese ministries and related stakeholders, who participate in policy making for GPP
- ▼ **(Results and Utilization)** The guidelines will be utilized in the legislative process and implementation of GPP. The Focal Point can introduce the guidelines to the procurement personnel as an education material to understand the concept of GPP and its procedures.

[Proposal for GPP Roadmap] The Implementing Agency will propose a GPP Roadmap that can transfer Korea's experience on GPP and support the pilot implementation.

- ▼ **(Purpose)** The objective of the roadmap is to help the pilot implementation by providing policies and goals necessary to activate GPP in Viet Nam.
- ▼ **(Benchmarking of Korean GPP Policy)** The Implementing Agency analyzed the feasibility of Korean GPP policy in Viet Nam based on the Basic Plans for promotion of Green Purchase in Korea from 2006 to 2020. Then, the Implementation period of the policies is divided into short, medium and long term.
- ▼ **(Main Contents)** By establishing vision, goals, and strategies for GPP, the main tasks for short-term period are presented with the detailed process and methods.
- ▼ **(Review by Stakeholders)** The roadmap was reviewed by the Vietnamese ministries and related stakeholders and the implementation period and the contents were supplemented to meet the local opinions.
- ▼ **(Results and Utilization)** The Focal Point will endeavor to achieve a short-term goal, 300 green labeled products by accomplishing the short-term tasks presented in the roadmap. The implementation will officially begin by preparing the institutional and legal preconditions in 2020.

[Assist the Capacity-building and Awareness-raising on GPP] The two workshops were held to strengthen the capacities and improve awareness of GPP targeting various stakeholders such as policymakers, government procurers, and local companies.

- ▼ **(The first Workshop)** It was held in Ha Noi last April and aims to inform stakeholders in the related ministries about the success of GPP in Korea and to promote the participation in GPP by apprising of its importance and necessity.
- ▼ **(The Second Workshop)** It was held in Ho Chi Minh City in last September and promotes GPP to various levels including private sector such as university, institutions and companies.
- ▼ **(Main Contents)** The workshops shared the current status and performance of GPP in Korea and other countries. Future plans for GPP in Viet Nam were discussed by panel discussions and stakeholders' opinions were considered in the development of the consulting items.
- ▼ **(Implications)** The two workshops transferred knowledge of GPP in Korea to the stakeholders in Viet Nam. The preceding conditions for the implementation of GPP were identified as public

education and publicity; and the establishment of legal basis.

[Consulting Outcomes and Limitations] The project in year two was implemented following the agreed-upon Action Plan. All of the scheduled consulting items were successfully completed within the project period with the cooperation of the Focal Point and Supporting Agencies.

- ▼ The Implementing Agency planned pilot GPP implementation. Since the related regulations did not come into effect in the first half of 2018, this consulting item was shifted to a GPP roadmap proposal which was an alternative item previously prepared.
- ▼ The Implementing Agency were aware of the possibility in delay in coordinating with the Focal Point in Viet Nam. These issues have been resolved by consistently improving communication methods during the project period.
- ▼ The local circumstances and schedules were coordinated by the aid of Vietnam-Korea Environmental Cooperation Center (VKECC), PEAPROS and SHOMEE. The Focal Point also actively cooperated in the areas where additional consultation and local opinions were needed.
- ▼ Although the Implementing Agency sought to solve some limitations faced in implementing the project in Viet Nam, the voluntary efforts of the Focal Point or the next stage of the project will be needed to overcome limitations.

I Proposal for Follow-up Project

(Proposal) Follow-up project should focus on strengthening the capacity of the government officials and experts and enabling them to participate in the design of GPP policy and program directly. This focus would replace that of quantifiable outcomes from the project such as developing documents to help to establish the legal and institutional basis - for which the Implementing Agency has no direct control.

- ▼ The focus should be placed on providing support for the following two areas: the cultivation of experts through training, and support for eco-labeling certification for local companies. Each is described below.
- ▼ First, the cultivation of experts and the strengthening of their capacities to design the system themselves may be preferable and more feasible in the time frame allowed. In the future, trained experts would take a leading role in carrying out education and training for the general public, government officials, and companies/industrial associations.

- ▼ Second, providing support for eco-labeling and/or GPP certification for local companies will help to increase the number of environmentally-friendly products in the local market.

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Abbreviations

AITCV	Asian Institute of Technology Center in Vietnam
CO₂	Carbon Dioxide
CO₂eq	Carbon Dioxide Equivalent
EMS	Environment Management System
FSC	Forest Stewardship Council
ISO	International Organization for Standardization
GEN	Global Ecolabelling Network
GDP	Gross Domestic Product
GPP	Green Public Procurement
GPN	Green Purchasing Network
GWP	Global Warming Potential
GR	Good Recycled
KEITI	Korea Environmental Industry & Technology Institute
KS	Korean Industrial Standard
ODP	Ozone Depletion Potential
MONRE	Ministry of Natural Resources and Environment
MOF	Ministry of Finance
OECD	Organization for Economic Cooperation and Development
PBDES	Polybromobiphenyl diphenyl ethers
PBBS	Polybrominated biphenyls
PCD	Pollution Control Department
PPS	Public Procurement Service

SCP	Sustainable Consumption and Production
SDGs	Sustainable Development Goals
SME	Small and Medium Enterprise
SPP	Sustainable Public Procurement
UNEP	UN Environment
UNCSD	United Nations Conference on Sustainable Development
VEA	Vietnam Environment Administration
VOCs	Volatile Organic Compounds
10YFP	10-Year Framework of Programmes on SCP (UNEP)

1. Introduction

The Asia Pacific Green Public Procurement Partnership Project (henceforth “the project”) provided customized support for the governments of select countries in the Asia-Pacific region in implementing Green Public Procurement (GPP). The overarching project goal was to strengthen capacity for introducing and implementing GPP, and to build the market for environmentally-friendly products and services within the partner countries. The project also aims to increase the capacity of partner countries to implement the UN Sustainable Development Goal (SDG) Target 12.7 (“SPP Implementation”).

This project is part of a larger effort to build capacity of national governments in the Asia-Pacific region in implementing GPP. It builds on the findings of the Asia Pacific Roadmap of Sustainable Consumption and Production (SCP),¹ and was implemented according to the work plan of the 10-Year Framework of Programs (10YFP) SPP Programme (Work Area 1: “Provide Direct Support for SPP Implementation”). The project was guided by an Advisory Committee comprised of KEITI, UN Environment AP, UN Environment Economy Division, and ICLEI Europe Office.²

The Implementing Agency for the project, Korean consulting group SMaRT ECO, Inc. provided policy consultation and technical assistance tailored to the needs of the two partner countries. Partner countries Viet Nam and Thailand were selected for the project because they possessed the strong political willingness to introduce or implement GPP, the suitability to provide support based on Korea’s experience, and the possibility of sharing their experience to other countries in the future. In Year One of the project, the Implementing Agency developed Action Plans with each partner country. In Year Two, the Implementing Agency focused on implementing GPP with each partner country as established in the Action Plans.

In this report, the Implementing Agency explains the background and motivation for the project. Then for each of the partner countries, it provides an overview of the structure and organizations involved in project implementation, provides a summary of the project activities and consulting items undertaken (as planned in Year One), and provides the results and next steps for continuing to advance GPP and SCP in the partner countries and the region.

¹ UN Environment, n.d., “Asia Pacific Roadmap on Sustainable Consumption and Production Roadmap 2017-2018”, Retrieved 25 February, 2019, from <https://www.unenvironment.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/asia-pacific-roadmap>.

² One Planet Network, n.d., “Sustainable Public Procurement”, Retrieved 25 February, 2019, from <http://www.oneplanetnetwork.org/sustainable-public-procurement>.

1.1 Background

Concern over climate change, unsustainable patterns of consumption and production, and waste generation are increasing worldwide. To counter these trends, governments, industry and non-governmental organizations are focusing on finding and engaging key areas of leverage to change course and deliver more sustainable solutions.

One such lever is to increase the demand for environmentally-friendly products and services through institutional procurement or purchasing. This action has the effect of reducing the negative environmental impacts associated with the procurement, usage, and disposal of products and services throughout their life cycle.

Public procurers exercise enormous purchasing power. On average, OECD countries' annual public procurement is equivalent to approximately 12 percent of the country's GDP. In some developing countries, this can be as high as 30 percent.³ The procurement activities of government agencies play an essential role in the national economy, and can exercise enormous influence on other sectors.

Through Green Public Procurement (GPP), national governments can help to reduce the adverse environmental impacts of their procurement actions by procuring environmentally friendly products and services, and by reducing waste. This can stimulate a "ripple effect" through the economy, encouraging a virtuous cycle of ever-improving products and services. By demanding and buying more environmentally-friendly products, large institutional procurement agencies help establish and grow the market. In turn, suppliers can increase the number and variety of environmentally friendly products and services, and can scale-up production, which reduces costs and expands markets.

In recognition of the potential to enable more sustainable consumption and production systems, the United Nations has adopted and encouraged the concept of GPP. In 2012, the United Nations established the 10-Year Framework of Programs (10YFP) at the United Nations Conference on Sustainable Development (UNCSD), held in Rio de Janeiro, Brazil. The 10YFP sought to promote the concept of Sustainable Consumption and Production (SCP) globally. Activities and initiatives launched at this conference led to the inclusion of SCP as a goal in the subsequent UN Sustainable Development Goals (SDGs), adopted by the UN General Assembly in 2015. The SDG goal for sustainable consumption and production (SDG 12) includes a target for GPP to "*Promote public procurement practices that are sustainable, in accordance with national policies and priorities*" (Target 12.7).

Sustainable Public Procurement is defined by the United Nations as: "*the process whereby public*

³ UNEP, 2017a, "Global Review of SPP 2017".

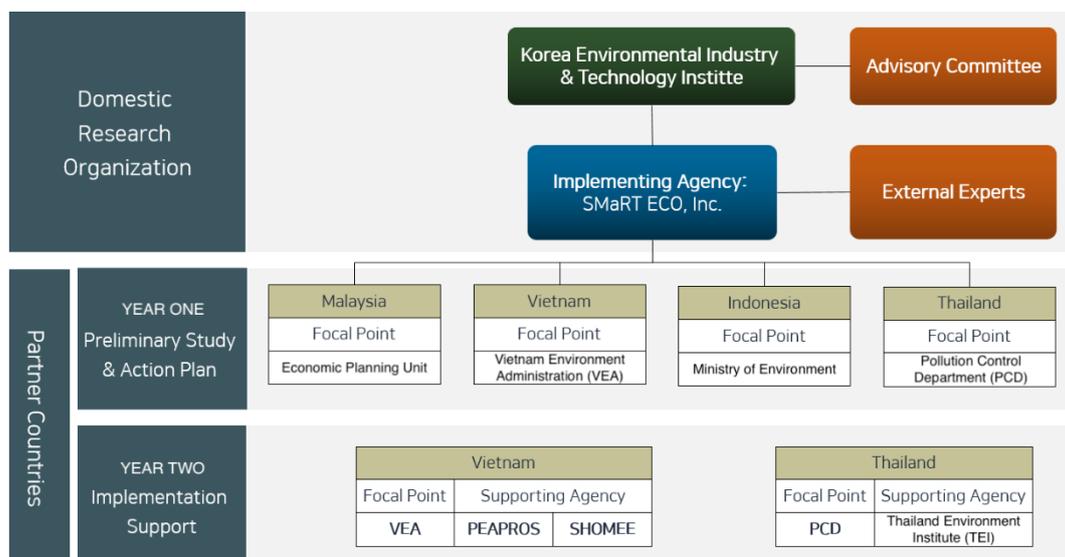
organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life-cycle basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst significantly reducing negative impacts on the environment.”⁴

Following the economic growth, and the worsening of environmental pollution it has engendered, more and more national governments in the Asia-Pacific region have adopted policies and programs on GPP. The Korea Environmental Industry & Technology Institute (KEITI), as the Coordination Desk of Sustainable Public Procurement Program under the 10YFP SCP, established an expert network, named GPPEL, that shares knowledge, expertise, and best practices in GPP in the Asia-Pacific Region.

In addition to the GPPEL network, a number of countries requested that KEITI provide direct policy and technical support to them, using as a foundation Korea’s advanced experience in implementing GPP. The resulting Asia Pacific Green Public Procurement Partnership Project is aimed at strengthening government capacities for the implementation of GPP through the provision of direct customized policy and technical consultation to countries in Asia-Pacific region. By so doing, the project seeks to promote sustainable consumption and production, and grow the market for environmentally-friendly products and services.

1.2 Project Partners and Organization

Figure 1 shows the organizations involved in the project.



[Figure 1] Project implementing mechanism

KEITI took overall leadership for the project, providing funds for the operation of the project and

⁴ Definition adopted by the Task Force on Sustainable Public Procurement. Ibid.

coordinating with the partner countries. As the Operating Agency of GPP and eco-labelling program in Korea, KEITI provided consultation on experience and expertise of Korea, and supported direction setting in project implementation. Focal Points, the appointed lead government agencies of the partner countries, provided necessary cooperation for the project activities.

SMaRT ECO carried out the key activities of the project as the Implementing Agency, and sought validation by external experts for some of the technical elements of this process. For one of the consulting items, the task of establishing GPP criteria, local research institutions or consulting companies were employed as Supporting Agencies. Certain tasks, such as survey administration, were assigned to Supporting Agencies capitalizing on their local and institutional knowledge, networks and language capabilities.

An Advisory Committee composed of Economy Division and Asia-Pacific regional office of UN Environment, European Office of ICLEI, and KEITI provided advice on project direction and methodologies. The first and second meetings of the Committee in the second year were held in May and August of 2018, and concluded in agreement on the process and direction of the project. The third Advisory Committee held in Bangkok, Thailand in November 2018 included the representatives of the UN Environment Asia-Pacific regional office. At this meeting, the Implementing Agency shared project outcomes and discussed how the partner countries plan to use them in the future. The UN Environment Asia-Pacific regional office expects to develop case studies with the Focal Points of the partner countries after the project is completed, and will share them with stakeholders in the 2019 Asia-Pacific regional workshop.

1.3 Project Activities in Year One

The following summarizes the first year of the project's implementation in 2017.

The Implementing Agency assessed the current status of, and future plans for GPP and eco-labeling schemes in Viet Nam, Malaysia, Thailand, and Indonesia. To do so, the Implementing Agency conducted a literature review and interviewed ministry representatives in these four countries. The Implementing Agency then prepared a preliminary study report, which integrated a SWOT analysis and reflected the demand for technical support expressed by the countries.

The project Advisory Committee selected Thailand and Viet Nam as partner countries for Year Two of the project based on the results of the preliminary study. Selection criteria included: the intention to participate in the project, political willingness to implement GPP, the need for consulting support, and the possibility of advancement of GPP in the country.

Tailored Action Plans were then developed for each partner country. As the first step to establish the Action Plans, the Implementing Agency identified potential consulting items that could be provided to these countries, considering the relevant expertise in Korea, and shared them with Focal Points. This process focused on devising items that were deemed necessary to improve the implementing system of GPP, including eco-labeling, based on the results of the preliminary study and the demand for technical support expressed by the Focal Points.⁵

For the potential consulting items sent to the partner countries, the Focal Points of the partner countries have notified their priorities to the items that the supports from Korea are most needed. The Implementing Agency made site visits, in September 2017, to the partner countries to further identify the current level and the desired goals regarding each consulting item. Partner countries and the Implementing Agency reached final agreement on the consulting items and subsequently prepared draft Action Plans.

The Implementing Agency shared draft Action Plans with the Focal Points and relevant line ministries for each country. The Action Plans were further discussed in a meeting held in Korea in November 2017. Discussion topics included a review of the detailed activities, expected roles of each participating organization and schedules for each consulting item, and proposed revisions of the draft Action Plans. The Implementing Agency revised the Action Plans accordingly, and finalized the Action Plans during workshops held in each partner country in November 2017.

In addition, a knowledge-sharing workshop for the Focal Points and related ministry officials was held in Korea in connection with the meeting held in November 2017. Relevant details were discussed in detail in the final report of Year One.

1.4 Project Activities in Year Two

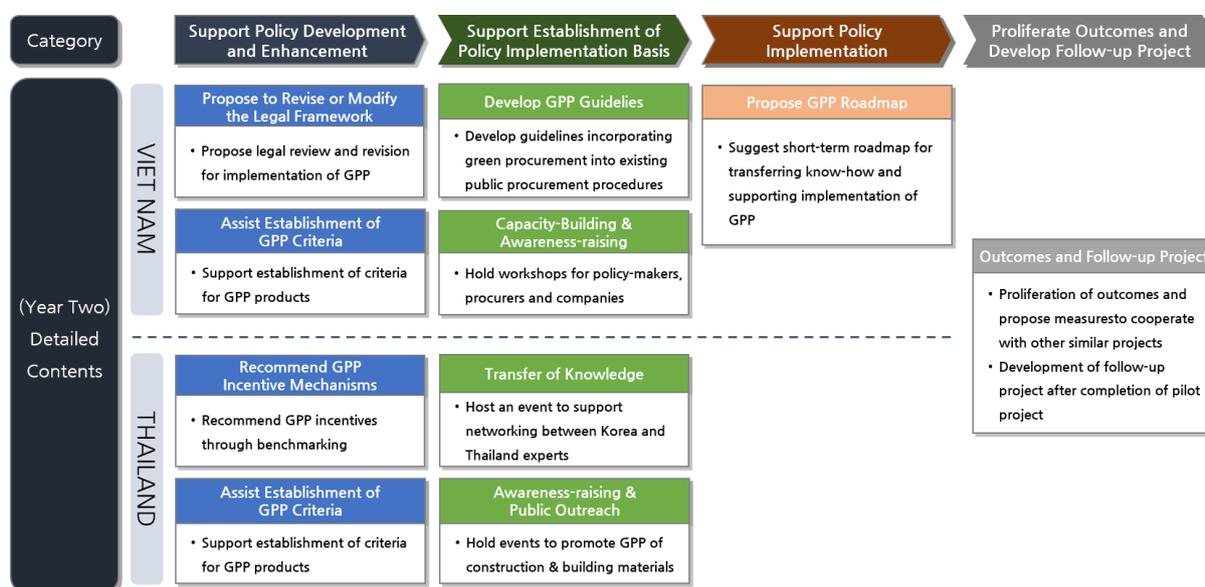
The project in 2018 aimed to establish the foundation for GPP and promote its implementation by strengthening the capacities of partner countries and providing support for the creation of a market for environmentally-friendly products and services. Table 1 displays the Year Two project objectives.

⁵ All relevant information and results are detailed in the final report for each country of Year One.

Support Implementation
<ul style="list-style-type: none"> ▽ Customize implementation of the Action Plan established for the partner countries. ▽ Establish a foundation to help establish project within the region.
Present Outcomes and Propose Follow-up Projects
<ul style="list-style-type: none"> ▽ Share and present the outcomes achieved in comparison to the goals set. ▽ Propose follow-up projects upon completion of the project.

[Table 1] Objectives of the project in Year Two

The customized implementation of the Action Plan for each country included four-to-five specific consulting items, as shown in Figure 2.



[Figure 2] Consulting Items for Partner Countries

For Viet Nam, the following series of activities were planned to establish a basis for GPP implementation:

- (1) GPP-related laws of Viet Nam will be reviewed in order to modify the legal basis for GPP. Then, recommendations for the enactment and revision of these legal documents will be proposed by benchmarking the Vietnamese legal system with that of Korea.
- (2) Develop criteria to support the selection of environmentally-friendly products in the market during the public procurement process.
- (3) Provide a methodology for GPP and develop guidelines for strengthening the capacities of government procurers.
- (4) Propose a short-term roadmap to support the pilot implementation of GPP by transferring the institutional knowledge of Korea.
- (5) Support capacity-building and awareness-raising for GPP stakeholders, including policy-makers,

procurers, and manufacturers.

For Thailand, promotion of GPP for construction and building materials was selected as one of the new priority areas for support. The following activities were agreed for the project:

- (1) Establish a foundation for green procurement by developing criteria for construction and building materials.
- (2) Present recommendations for incentives that promote GPP in a manner appropriate to Thailand by benchmarking other countries' systems, including Korea.
- (3) Transfer Korean institutional knowledge through the establishment and activation of green building expert networks between Korea and Thailand.
- (4) Support activities to raise awareness around and promote GPP in the construction sector for a diverse range of stakeholders, including procurers, experts, and manufacturers.

The fourth consulting item in Viet Nam, which is to propose a short-term roadmap, was modified from the original pilot GPP implementation activities as proposed in the Year One Action Plan. The modification was due to the delay in the domestic policy-making process, which was deemed prerequisite for carrying out the planned activities. The new consulting item was previously prepared as an alternative through close consultation with the Focal Point and KEITI. The related content is described in more detail in Section 2.4.

Throughout the project, the Implementing Agency focused on communicating with the Focal Points about project implementation, using regular email communication and scheduled in person site visits. In addition, the Implementing Agency anticipated that risks could arise during the implementation of the project, and suggested incorporating risk management plans at the beginning of the project. The risk management plans are integrated into this report as relevant.

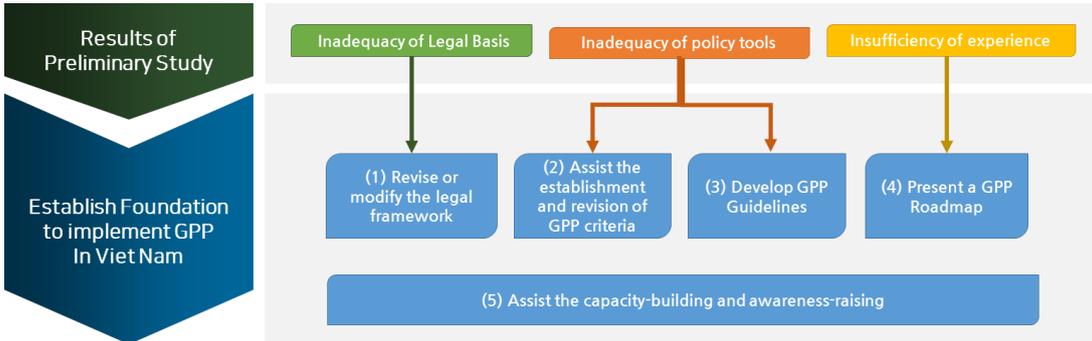
In each of the following chapters, the progress, results and outcomes of implementing the Actions Plans in Viet Nam and Thailand are described in greater detail.

2. Consulting Items for Viet Nam

Over the last several years, the government of Viet Nam has laid the groundwork to establish Green Public Procurement (GPP), developing, for example, policies such as the Decision on National Green Growth Strategy and Vietnam Sustainable Development Goals (VSDGs). Because GPP has still not been formally implemented in Viet Nam, this project focused on proposing the aspects necessary to institute GPP.

The United Nations Environment Programme (UNEP) project “Stimulating the Demand and Supply of Sustainable Products through Sustainable Public Procurement and Ecolabelling” (SPPEL) has also provided support for the development and implementation of GPP Policies in Viet Nam. Based on the SPPEL project outcomes, Viet Nam is currently establishing policies and action plans for GPP, ecolabels, and certifications.

Based on the results of the Year One feasibility study for this project and supported by input from Vietnamese government personnel, the Implementing Agency identified five consulting items for technical support in Year Two. These items are described in Figure 3 below.



[Figure 3] Framework of the consulting items in Viet Nam

Of the five consulting items, the top priorities identified were the recommendations to address GPP within Vietnam's legal framework, improve the connections between the laws related to GPP, and establish mechanisms for relevant Ministries to cooperate in implementing GPP. Some legal provisions in Viet Nam support GPP implementation. The Vietnam Green Label operated by the Vietnam Environment Administration (VEA) has a sufficient legal foundation. However, it has been difficult to introduce GPP within the procurement process since the Law on Environmental Protection No. 09/2014L-CTN (henceforth the “Law on Environmental Protection”) and the key procurement law No. 43/2013/QH13 (henceforth the “Bidding Law”) have not been integrated.

The Implementing Agency also provided the support for institutional foundation of GPP through the development of GPP criteria and GPP guidelines. This work will encourage GPP by analyzing the

current status of Vietnam Green Label, supporting the additional enactment and revision of criteria, and developing GPP guidelines for interested parties of related ministries and companies participating in bidding processes. In addition, the Focal Point requested support for capacity-building and awareness-raising with stakeholders involved in government procurement in Viet Nam.

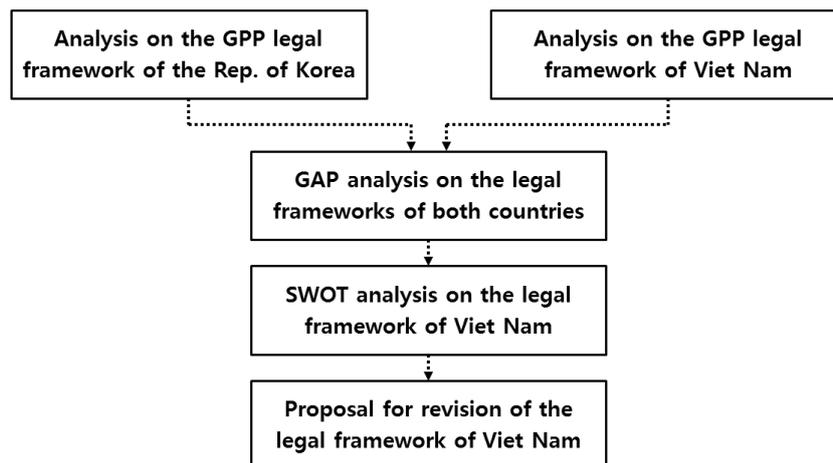
Based on the developed guidelines, the Implementing Agency planned pilot implementation of GPP but also prepared a GPP Roadmap as an alternative item because the implementation depended on the legislation and enactment of related laws. The legal enforcement for GPP had not yet been established by the first half of 2018. Therefore, this consulting item was modified to a GPP roadmap for the pilot implementation, rather than pilot implementation itself.

2.1 Revise or Modify the Legal Framework

As of 2018, a legal mechanism to mandate GPP has not been implemented in Viet Nam. The law on Environmental Protection has a clause that calls for the priority purchase of environment-friendly products. However, it is still difficult to introduce GPP in the Vietnam's procurement process as the Bidding law does not require the preferential purchase of environment-friendly products.

Recommendations to address GPP within Vietnam's legal framework are a top priority among the five consulting items integrating the Law on Environmental Protection and Bidding Law. By making these adjustments to the legal system, the Implementing Agency and the Focal Point hoped that GPP criteria would be integrated, and cooperation between related ministries established to enable the implementation of GPP

Procedures for the legal recommendations for GPP are shown in Figure 4 The Implementing Agency first analyzed the elements of the legal framework of Korea that enabled the successful implementation of GPP. They also analyzed the legal framework of Viet Nam as relevant to GPP. The Implementing Agency then conducted a SWOT analysis (strengths, weaknesses, opportunities, threats) for the Vietnamese legal framework in terms of implementing GPP in Viet Nam as compared to Korea. On the basis of the SWOT analysis, the Implementing Agency proposed recommended revisions to the existing legal framework with a justification for each recommendation.



[Figure 4] Procedures for proposing revisions to the legal framework

The key activities and schedules of the consulting item are given in Table 2.

Implementation steps	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
1. Analysis of Korean Legal Framework										
2. Analysis of Vietnamese Legal Framework										
3. Review of UNEP legal analysis report										
4. Review & Revision										

[Table 2] Schedule for Recommendations of the Legal Framework, 2018

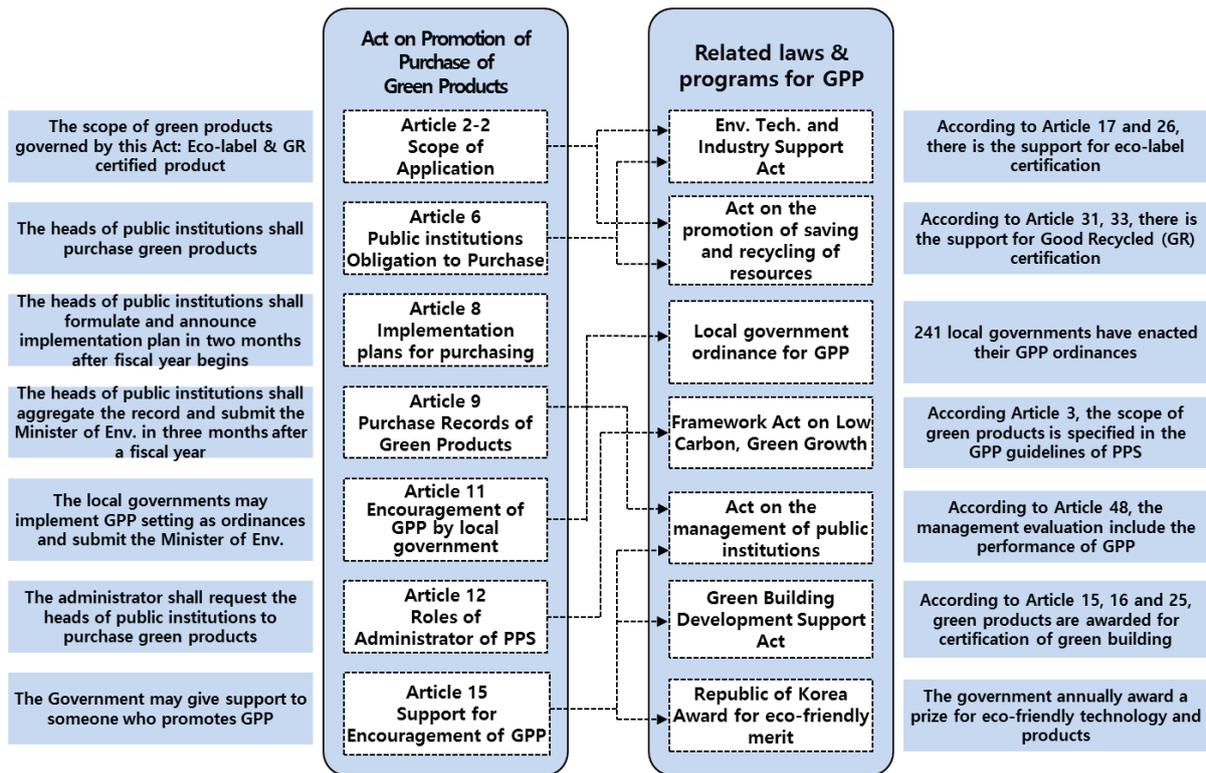
2.1.1 Analysis of the Legal Framework of Korea and Viet Nam

1) Korea's Legal Framework for GPP

(1) Overview

The GPP policy in Korea was introduced with Korea Eco-label system under the Act on Development and Support of Environmental Technology in 1994. GPP took a more concrete form when the government introduced the **Act on Promotion of Purchase of Green Products** (hereinafter the "**Green Purchasing Act**") in 2005.

The figure below briefly outlines the legal framework of Korean GPP. The left column, Green Purchasing Act, contains the main contents of GPP including the scope of application for GPP, establishment of implementation plans, and report of performance, etc. with the corresponding provisions on the side. The right column contains related laws and policies associated with each provision.



[Figure 5] Relationship between the laws related to GPP of Korea

For example, the Green Purchasing Act defines the scope of green product as Eco-label certified products under the Environmental Technology and Industry Support Act and Good Recycled (GR) certified products under Act on the Promotion of saving and Recycling of Resources, thus providing public agencies with an obligation to purchase these green products.

The Basic Plans for Encouraging Purchase of Green Products which has been established since 2006, contains the central government's comprehensive plan to encourage green consumption, as it provides various information, including performance and improvement measures of green purchasing, vision and strategies for the next five years, along with information on green products.⁶

In addition, the Green Purchasing Act requires the minister of Environment to establish 'Guidelines for the Purchase of Green Products' every five years and notify the heads of public agencies. The guidelines specify the requirements for public agencies to fulfil their obligations to purchase green products⁷. Each year, public institutions shall establish a purchasing implementation plan for green products in accordance with the guidelines and submit the purchase performance to the Environment Minister.

Article 11 of the Green Purchasing Act empowered the heads of local governments to establish their own ordinances to promote green purchasing, and Article 17 allowed the Minister of Environment or the

⁶ Ministry of Environment of Republic of Korea, 2015, "The 3rd Basic Plans for promotion of Green Purchase in Korea 2016~2020"

⁷ Ministry of Environment of Republic of Korea, 2017, "Guidelines for the Purchase of Green Products 2018"

heads of local governments to set up and operate Green Purchasing Support Centers. As of December 2016, the ordinance promoting green purchasing was enacted by 241 of 243 local governments nationwide, of which 13% have clauses on the installation and operation of Green Purchasing Support Centers.⁸ The GPP in Korea was able to be nationwide policy tailored to regional characteristics by giving local governments autonomy.

(2) Definition and Range of Green Products in Korea

As illustrated in Figure 5, Green Purchasing Act under the jurisdiction of the Ministry of Environment defines the scope of green product as Eco-labeled products and Good Recycled (GR) products. These products are summarized in Table 3.

Property	Korean Ecolabel product	Good Recycled (GR) product
Legal Ground	Environmental Technology and Industry Support Act	Act on the Promotion of saving and Recycling of Resources
Scope	165 product groups such as Office equipments, Construction materials, Daily necessities, etc	12 groups such as waste paper, waste glass, etc.
Certification Status	3,790 enterprises, 14,566 products (Nov. 2018)	192 enterprises, 219 products (Nov. 2018)
Managing organization	Korea Environmental Industry & Technology Institute (KEITI)	Resources Circulation Industry Promotion Association (RIPA)
Website	http://el.keiti.re.kr	http://www.buygr.or.kr
Mark		

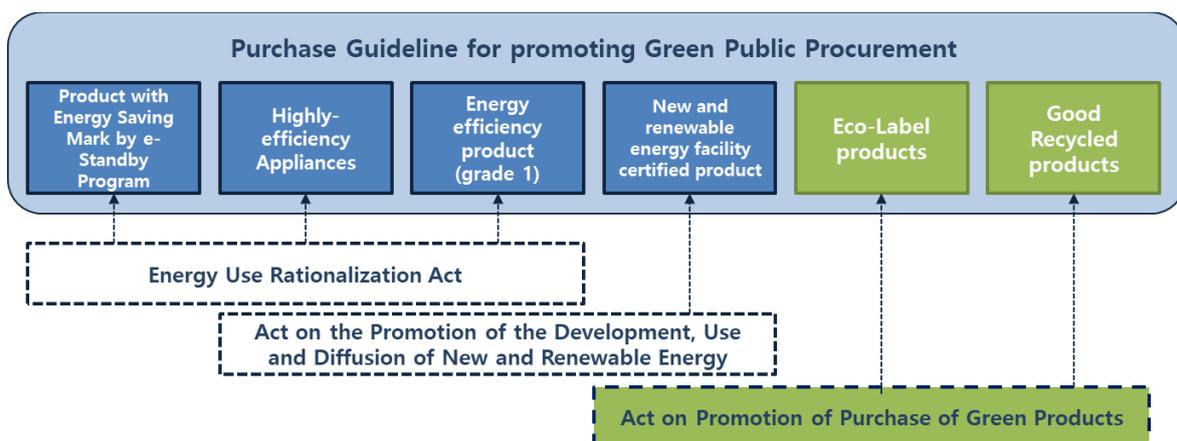
[Table 3] Target products of GPP in Korea⁹

Regarding the range of green products, the Administrator of the Public Procurement Service (PPS) of Korea is required to designate and publicly announce the items and procurement criteria for green products being procured by public institutions through Article 20 of the Decree of the Green Growth Act. The range of green products including Eco-labeled and GR marked product is designated in the ‘Method of Procurement for Promotion of Public Procurement of Green Product’ as Public Announcement No. 2016-45 by PPS in December 2016 as follows:

⁸ Bae Soon-young, 2016, "Status and Development Plan of Green Purchasing Support Center as a Green Consumption Area Base", Consumer Policy Trend of Korea Consumer Association No. 76
⁹ Green Product Information System, n.d., Retrieved 27 February, 2019, from, <http://www.greenproduct.go.kr/web/contents/cstmGreen.do>

- ▽ Eco-Label products according to Article 17 of the Environmental Technology and Environment Industry Support Act or its equivalent
- ▽ Products with GR mark according to Article 33 of the Act on the Promotion of Development, Saving and Recycling Resources or its equivalent
- ▽ Products with the Energy Efficiency Label grade 1 according to Article 15, products with energy saving mark by e-standby program according to Article 18 or certification of High-efficiency Appliance according to Article 22 of Energy Use Rationalization Act or its equivalent
- ▽ Certified new and renewable energy facility products according to Article 13 of the [Act on the Promotion of the Development, Use and Diffusion of New and Renewable Energy] or its equivalent
- ▽ Products manufactured by utilizing green technology that acquired green certification according to Clause 2 of Article 32 of the Framework Act on Low Carbon, Green Growth and Article 19 of the Enforcement Decree of the Framework Act on Low Carbon, Green Growth
- ▽ Minimum green standard products designated and publicly announced by the administrator of PPS according to Article 7 of the 'Method of Procurement for Promotion of Public Procurement of Green Product'
- ▽ Other products being supplied through the contract by the Administrator of PPS which utilize green technology under Clause 1 of Article 2 of the 'Method of Procurement for Promotion of Public Procurement of Green Product'

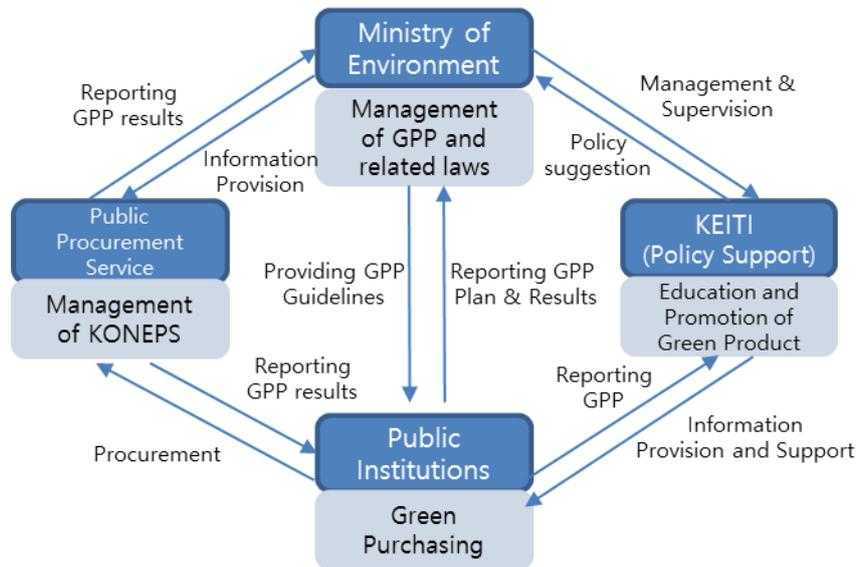
The figure 6 illustrates the range of green product and related laws for GPP. Within the Green Growth Act, the green boxes are the green products including Eco-labeled and Good Recycled products as defined by the act on promotion of purchase of green products under the jurisdiction of the Ministry of Environment.



[Figure 6] The range of green product

(3) GPP System in Korea

The Ministry of Environment conducts various actions in cooperation the Korea Environmental Industry and Technology Institute (KEITI) and the Public Procurement Service (PPS) to implement GPP successfully. In particular, the Ministry of Environment have developed Guidelines for the Purchase of Green Products and they provide information through the Green Product Information System (GPIS). The following Figure 7 illustrates GPP system in Korea suggested in the Guidelines for the Purchase of Green Products 2018.



[Figure 7] GPP system in Korea¹⁰

The Ministry of Environment has published ‘Basic Plans for Encouraging Purchase of Green Products’ every five years and issues annual ‘Guidelines for the Purchase of Green Products’ to support GPP, and evaluates the purchasing plans and performances. PPS operates Korea ON-line E-Procurement System (hereinafter, the “KONEPS”), to supply green products to public institutions and submit the purchasing performance to the Ministry of Environment and public institutions by compiling all relevant information for procurement process. Lastly, KEITI promotes environmental technology and industry in charge of the certification of Eco-labeled products, development of Eco-label criteria and environment-friendly technologies, and training for related professionals.

The “public organizations” referred to here are in accordance with Article 2, which include central and local government agencies and public institutions designated in accordance with the provisions of the Act on the Operation of Public Institutions. According to the Guidelines for the Purchase of Green Products 2018, 909 institutions are subject to mandatory purchasing. If affiliated institutions, such as public schools, are included, this number increases to about 30,000.

¹⁰ Ministry of Environment of Republic of Korea, 2017, “Guidelines for the Purchase of Green Products 2018”

PPS, established the KONEPS, which national institutions, local governments and public institutions can use in order to digitalize the business of public procurement. 23 public institutions, including the Defense Acquisition Program Administration and Korea Electric Power Corporation, are operating in-house procurement systems other than KONEPS. Although the procurement system can operate under both KONEPS and in-house procurement systems, procurement plans and performances are integrated and managed by Ministry of Environment in accordance with the Green Purchasing Act. Accordingly, it has been possible to overcome the limitations of the dual procurement systems.

(4) Support and Incentives for GPP in Korea

GPP in Korea could be highly activated from the enactment of the act on promotion of purchase of green products and the subsequent detailed regulations. Article 6 of the Act stipulates the obligation of public institutions to purchase green products. However, this obligation does not mean that the public sector must purchase green products unconditionally. There are some exceptions prescribed in the law, such as in cases where it is impossible to supply green products reliably or when purchasing is difficult due to reduced quality or urgent demands.

Quantitative objectives of GPP are set at the national level through 'Basic Plans for Encouraging Purchase of Green Products' every five years and each institution is required to set a voluntary target of GPP and submit it with its GPP implementation plan according to Article 8 and 9 of the Green Growth Act. The public institutions are obliged to report on their annual GPP plan and performance to the Minister of Environment every year. According to the Enforcement Decree of the act on promotion of purchase of green products, the Ministry of Environment entrusts the KEITI with the provision of green product information and the receipt of GPP performances. So the performances are gathered by KEITI and disclosed by the Ministry of Environment.

The GPP performances are reflected as one of the indicators to evaluate the annual performance of public institutions, thereby affecting financial bonuses provided. According to the results of the performance evaluation, financial bonuses are provided and excellent institutions and personnel can receive government awards for the promotion of eco-friendly technology and promotion of consumption by the President, Prime Minister, and Ministers every year.

Furthermore, the Green Growth Act encourages the purchase of green products in conjunction with other laws regulations including the Act on the Promotion of Recycling of Building Waste (hereinafter referred to as the "Construction Waste Law") and the Act for Promotion of Green Building (hereinafter referred to as the "Green Building Act"). Following the Construction Waste Law, the owner (public sector) of the construction contract is obligated to require the construction contractor to use recycled

aggregate which is Eco Labeled or GR marked products. Use of these products leads to the green building certification under the Green Building Act which stipulates the Green Building Certification System (G-SEED). Certified Green buildings can receive incentives such as subsidy payment, tax benefits, and reduction of the floor space rate. Buildings that exceed 3,000m² of floor space built by public organizations must now acquire green building certification.

In addition, procuring of green products with priority and use of products with energy saving mark by e-Standby Program, Energy Efficiency Label grade 1 and Highly-efficiency Appliances are encouraged in factories, businesses and apartment housing areas, etc. in accordance with Article 20 (Indication of energy saving mark, etc.) and Article 22 (Certification of Highly-efficiency Appliances, etc.) of the Energy Use Rationalization Act. Since penalties are levied in case of violations, it has led to practical promotion of procurement.

2) Vietnam's Legal Framework for GPP

While there is no law specifically on GPP in Viet Nam, there is already a relevant legal basis for preferential purchasing of environment-friendly products, arising from the Law on Environmental Protection and the Decree of the Law on Environmental Protection, which are managed by the Ministry of Natural Resource and Environment (MONRE). In order to achieve effective implementation of GPP in Viet Nam at the policy level, GPP elements should be inserted in the laws related to GPP so the links between the ministries that are subordinate to the laws should be made through inter-law linkage. In other words, MONRE needs to establish close correlation with the Ministry of Planning and Investment (MPI) in charge of bidding and procurement and the Ministry of Finance (MOF) in charge of national budget.

The United Nations Environment Programme (UNEP) project “Stimulating the Demand and Supply of Sustainable Products through Sustainable Public Procurement and Ecolabelling” (SPPEL) provided support for the development and implementation of GPP policies in Viet Nam. The goal of this project was to assess the legal framework for sustainable public procurement and eco-labeling in Viet Nam, and whether sustainability could be incorporated into the laws and regulations addressing public procurement in Viet Nam. Table 4 summarizes recommendations of a new Circular on Implementing Public Procurement of Eco-Labelled Products.

A New Circular on Implementing Public Procurement of Eco-Labelled Products from SPPEL project

In order to fulfill the requirements of the law on procurement and related laws on Environmental Protection, MONRE and MOF shall jointly publish and publicize the public procurement list of Eco-Label Products (ELP) to promote implementation of public procurement of and governmental ordinance 19/2015/ND-CP. This enforcement regulation will become a milestone for the advancement of sustainable public procurement policy in Viet Nam. According to this enforcement regulation, MOF and MONRE shall determine the range of preferential procurement in accordance with certified ELP by using a certification institution approved by the government. This "ELP list" will be developed in consideration of market maturity, progress towards in public procurement reformation, and the level of technical development for each product.

The Circular will require that government agencies at all levels give preferential consideration to ELPs in their public procurement, instead of procuring products hazardous to the environment and to human health. If the type of products to be purchased by the government is featured on the list, preference should be given to those listed products, provided that the performance, technology, service and other indexes are the same.

The MOF shall assume the lead responsibility for preparing the draft joint circular, and coordinate with the MONRE in elaborating and promulgating the joint circular on Implementing Public Procurement of Eco-Labelled Products.

[Table 4] A New Circular on Implementing Public Procurement of ecoabelled Products from SPPEL project¹¹

Based on the recommendations above, the MOF and MONRE are in the process of discussing on enacting rules for GPP. The UNEP also proposed amendments to the **State Budget Law** (No.55/2014/QH13) and the **Decree of the Bidding Law** (63/2014/ND-CP). On the basis of the GPP legal framework of Korea, the Implementing agency proposed a revision of the law for implementation of GPP in a direction that does not conflict with the proposed amendments of UNEP, and the UNEP's legal proposal was attached as a reference in the legal analysis below.

(1) National Green Growth Strategy

Viet Nam was the first developing country in the Asia-Pacific region to establish a national green growth strategy, a long-term plan for the environmental sector at the national level, and approved it as the Decision of Prime Minister in 2012. The Decision defines the national green growth strategy for 2011-

¹¹ Le Thi Huong, 2016, "Vietnam Legal review and proposal to foster SPP implementation and consider the integration of ecolabelling"

2020 period and the vision towards 2050.

Table 5 is a summary of the Decision of Prime Minister by emphasizing the section related to GPP. In Chapter 2, Greening of lifestyle and promotion of sustainable consumption is one of three strategic tasks. Seventeen (17) strategies for national green growth are presented in chapter III. The thirteenth strategy, 'to boost sustainable consumption and building of green lifestyle', focuses on the promotion of environment-friendly products certified by eco-labels and establishment of a system that enables GPP of certified products listed in the 2020 Roadmap. In addition, the implementation schedule in chapter IV calls for the establishment of a system and relevant policies for the implementation of the Roadmap by 2020. According to this plan, the institutional and administrative systems for GPP will be proposed by 2020.

Decision No. 1393/QD-TTg of September 25, 2012, approving the National green growth strategy
<p>THE PRIME MINISTER Pursuant to the December 25, 2001 Law on Organization of the Government; At the proposal of the Minister of Planning and Investment, DECIDES:</p> <p>Article 1. To approve the national strategy on green growth in the 2011-2020 period with a vision toward 2050, with the following principal contents:</p> <p>I. VIEWPOINTS AND OBJECTIVES OF THE STRATEGY 1. Viewpoint 2. Objectives</p> <p>II. STRATEGIC TASKS 1. To reduce the intensity of greenhouse gas emissions and promote the use of clean energy and renewable energy according to the following principal targets: 2. Production greening 3. <u>Greening of lifestyle and promotion of sustainable consumption</u></p> <p>III. IMPLEMENTATION SOLUTIONS 1.-12. Skip 13. <i>To boost sustainable consumption and building of green lifestyle</i> <i>a/ To boost eco-labeling and dissemination of information on environment-friendly products to all people. To set a roadmap toward 2020 for the application of green procurement of construction materials; food and foodstuffs; transport; energy; computers and office machines; textiles and garments; paper and printing; wood furniture, detergent; and medical equipment.</i> b/ Skip c/ To encourage sustainable consumption in the business sector: - To use economic and technical tools to encourage enterprises to conserve natural resources and limit waste of energy and natural resources. - <u>To build a system of certification and eco-labeling for green products. To establish and advertise the green product market.</u> d) Skip 14.-17. Skip</p> <p>IV. ORGANIZATION OF IMPLEMENTATION</p>

<p>1. Phasing of strategy implementation</p> <p>a/ 2011-2020 period</p> <ul style="list-style-type: none"> - Public information, awareness raising, human resource training and development. - <u>Formulation of mechanisms, policies and management apparatus to implement the strategy.</u> - Establishment of data and information systems and management tools, sets of indicators, standards and norms on green growth. - Identification of key projects on green/low-carbon growth, greening of production industries, a number of pilot projects on “green-growth oriented” socio-economic development master plans and plans of provincial level (attached Appendix I: List of priority programs and projects in the 2011-2015 period). <p>b/ 2021-2030 period</p> <ul style="list-style-type: none"> - Continued completion of green-growth institutions and policies, adjustment and scaling up of the implementation on the basis of periodical monitoring and evaluation. - Expansion of the experimentation scale and wide application of master plans and key programs and projects. - Expansion of training and development of human resources for the development of green economy. - Environmental audit at all levels (national, sectoral, local and enterprise) and green accounting in enterprises. - Stepping up of the economic restructuring after the green-economy model. <p>c/ 2031-2050 period: Skip</p> <p>2-3. Skip</p>
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[Table 5] Decision approving the National Green Growth Strategy (Abridged)¹²

(2) Relevant Laws of MONRE

① Law on Environmental Protection

The Law on Environmental Protection of Viet Nam (No. 55/2014/QH13) provides policies, measures and resources for environmental protection. It establishes the rights, obligations and responsibilities of agencies, organizations, households, and individuals on environmental protection. Clause 2 of Article 44, Environment-friendly production and consumption, stipulates that the head of agencies and units funded by the state budget shall prioritize the use of environment-friendly products and services which have been eco-labeled in accordance with law.

This law should be supplemented as follows.

The definition of ‘environment-friendly products’ is not provided in the interpretation of terms, although the term is mentioned several times. In addition, although contents on the environment-friendly technologies are included in Article 5, State policies on environmental protection, aspects on the promotion of production and consumption of environment-friendly products are missing from this section.

Although Article 44, Environment-friendly production and consumption, stipulates that the head of agencies and units funded by the state budget shall prioritize the use of environment-friendly products

¹² Decision No. 1393/QĐ-TTg, 2012, All the Vietnamese laws are from Vietnam Law & Legal Forum, who takes responsibility of official translation in English.

and services which have been eco-labeled in accordance with law, this clause failed to define the term “eco-label”, which could cause confusion for budget administrators.

This law only specifies the responsibility of the heads of public institutions to purchase environment-friendly products with priority without mentioning specific instructions for GPP performance management. Therefore, it could become a nominal provision.

Lastly, Article 151, incentives and supports for environmental protection activities, omits support for companies manufacturing environment-friendly products. It is necessary to add this aspect in order to further increase sustainable consumption.

② Decree of Law on Environmental Protection

Article 37 of the Decree No.19/2015/ND-CP, Principles of providing incentives and supports, of the Law on Environmental Protection, stipulates grounds for supporting the production and consumption of environment-friendly products in association with Article 151 of the Law on Environmental Protection. In particular, Annex 3 of the Decree specifically presents 15 types of environmental protection activities entitled to incentives and support. Among these, the twelfth item specifically enables incentives for the production of environment-friendly products certified with Vietnam Green Label, and products from waste recycling and treatment as certified by competent state agencies. Article 37 of the Decree stipulates that MPI provide support for the above products through cooperation with MONRE. Article 38 of the Decree provides the grounds for the support of scientific and technological development and transfer activities for environmental protection in accordance with the Law on Science and Technology, and Technology Transfer.

In addition, Article 45 of the Decree (Value-added tax incentives) states that the Prime Minister shall stipulate value-added tax incentives for a number of environmental protection products and services. For the environmental protection products and services that correspond to the 12th and 13th items of Annex 3, Article 46 enables price subsidies while Article 47 stipulates that public institutions shall prioritize public procurement of prescribed products. These obligations establish legal grounds for GPP in the Law on Public Procurement, and aid in the regulation of public procurement of environment-friendly products in cooperation with MONRE.

As the above contents indicate, Viet Nam has presented specific measures to support GPP within the Decree of The Law on Environmental Protection. However, there is no legal basis for GPP implementation, reporting, or management for a number of public institutions. This results in difficulties in achieving effective operation even if the system is implemented. Nevertheless, it is highly encouraging that various measures of financial support for the production and consumption of environment-friendly

products have been presented through the association between MPI and MOF.

The Decree under the Environmental Protection Law is presented in Table 6.

No. 19/2015/ND-CP DECREE of February 14, 2015 Detailing a number of articles of the Law on Environmental Protection
<p>Pursuant to the December 25, 2001 Law on Organization of Government; Pursuant to the June 23, 2014 Law on Environmental Protection; At the proposal of the Minister of Natural Resources and Environment, The Government promulgates the Decree detailing a number of articles of the Law on Environmental Protection</p>
Chapter VII. INCENTIVES AND SUPPORTS FOR ENVIRONMENTAL PROTECTION ACTIVITIES
Article 37. Principles of providing incentives and supports
<p><u>1. The State shall provide land- and capital-related incentives and supports; exempt and reduce taxes for environmental protection activities; subsidize prices and support sale of products created from environmental protection activities and provide other incentives and supports for environmental protection activities.</u></p> <p>2.-3. Skip</p> <p>4. In case a newly promulgated law or policy which prescribes higher incentives and supports than those already enjoyed by investors under this Decree, investors may enjoy incentives and supports under the new regulation. <u>The Ministry of Planning and Investment shall assume the prime responsibility for, and coordinate with the Ministry of Finance and the Ministry of Natural Resources and Environment in, guiding the order and procedures to appraise and approve incentives and supports for investment projects in accordance with this Decree.</u></p> <p>5. Skip</p>
Article 38. Beneficiaries of incentives and supports
<p><u>1. Beneficiaries of incentives and supports include organizations and individuals engaged in environmental protection work investment; and environmental protection production, business and service activities provided in Appendix III to this Decree.</u></p> <p>2.-3. Skip</p>
Section 2: CAPITAL AND TAX INCENTIVES AND SUPPORTS
Article 45. Value-added tax incentives
<p><u>1. Goods and services produced and traded from environmental protection activities are subject to the value-added tax policy under the law on value-added tax.</u></p> <p><u>2. The Prime Minister shall stipulate value-added tax incentives for a number of particular environmental protection products and services.</u></p>
Section 3: PRICE AND PRODUCT SALE SUPPORTS
Article 46. Price subsidy for environmental protection products and services
<p>Investors carrying out the following activities or supplying the following products that satisfy criteria of public-utility products and services are entitled to price subsidy in accordance with the law on production and supply of public-utility products and services:</p> <p>1. The activities specified in Clauses 2 and 9, Appendix III to this Decree, and background environmental monitoring activities specified in Clause 8, Appendix III to this Decree.</p> <p><u>2. Products from the environmental protection activities specified in Clauses 12 and 13, Appendix III to this Decree.</u></p>
Article 47. Product sale supports

1. Heads of state budget-funded agencies or units shall prioritize public procurement of the products specified in Clauses 12 and 13, Appendix III to this Decree upon their purchase of those products. The Ministry of Finance shall assume the prime responsibility for, and coordinate with the Ministry of Natural Resources and Environment in, developing the regulation on public procurement of environment-friendly products as prescribed in this Clause.
2. Organizations and individuals shall prioritize the procurement of environment-friendly products under the guidance of the Ministry of Natural Resources and Environment.

APPENDIX III

LIST OF ENVIRONMENTAL PROTECTION ACTIVITIES ENTITLED TO INCENTIVES AND SUPPORTS

(To the Government's Decree No. 19/2015/ND-CP of February 14, 2015)

1.-11. Skip

12. Production of environment-friendly products with Vietnam Green Labels issued by the Ministry of Natural Resources and Environment; products from waste recycling and treatment as certified by competent state agencies.

13. Production of petrol, diesel fuel and bio-fuel certified to be conformable with regulations; bio-coal; energy generated from wind power, sunlight, tide, geothermal heat and other forms of renewable energy.

14. Skip

15. Production, business and service activities of environment-friendly establishments eco-labeled by the Ministry of Natural Resources and Environment.

[Table 6] Decree under the Law on Environmental Protection (Abridged)¹³

(3) Relevant Laws of MOF

① Law on the State Budget

The Law on the State Budget No.83/2015/QH13 of Viet Nam falls under the jurisdiction of the MOF. This Law prescribes the formulation, implementation, audit, account finalization, and oversight of the State Budget. It also decrees tasks and powers of related agencies, organizations, units, and individuals regarding the State Budget. The references of the law to environmental protection are found largely in two sentences that mention the environment along with culture, education, sports, and science as subjects of annual repeated expenditures by the central and local governments. In this way, the situation in Viet Nam is similar to that in Korea.

② Decree of Law on the State Budget

The Decree of the Law on the State Budget (No. 163/2016/ND-CP), which more specifically stipulates the requisites presented under The Law on the State Budget of Viet Nam, contains specific details that address the annual budget expenditures for environmental protection. In particular, Articles 14 and 16 stipulate environmental protection among the spending tasks of the central and local budget. The Law on the State Budget under the governance of MPI of Viet Nam includes tax benefits and funding support related to environmental protection but does not have specific grounds for budgetary support.

¹³ Law on Environmental Protection No. 19/2015/ND-CP, 2015

Table 7 represents the revision of the State Budget Law presented by the UNEP's SPPEL project.

Revision of Law on the State Bueget by SPPEL project of UNEP
<p>There are many state and local government agencies that directly participate in the process of developing national budget estimations in accordance with the regulations on public procurement. If the government were to issue supplementary regulations on the development of budgets to incorporate environmental protection, eco-labeling, and social equality to procurement, it would help promote public procurement of social and environment-friendly products. Therefore, budget planning for 'sustainable expenditures' can be performed every year at all levels of government agencies through relevant support for legislation, guidance, and cooperation of MOF and MONRE.</p>

[Table 7] Revision of Law on the State Bueget by SPPEL project of UNEP¹⁴

(4) Laws under the jurisdiction of the MPI

① Bidding Law

The Bidding Law (No. 43/2013/QH13) of Viet Nam specifies issues involving the procedures and methods of bidding and the presentation of terminologies for preferences in contractor selection in Article 14. It stipulates that the contractors are entitled to preferences when participating in national bidding or international bidding for goods with domestic production costs representing 25% or more. For the provision of consultancy, non-consultancy and construction and installation services, the contractors are also entitled to preferences of small enterprises whose employees are comprised of 25% or greater women, war veterans, or people with disabilities. Clause 4 of Article 14 specifies the methods of preferences in contractor selection by adding points to the contractors entitled to preferences or adding money to the bid of contractors not entitled to preferences. That is, there is no requisite for the preferential treatment of environment-friendly products in the Bidding Law whatsoever. The Bidding Law is presented in Table 6below.

¹⁴ Le Thi Huong, 2016, "Vietnam Legal review and proposal to foster SPP implementation and consider the integration of ecolabelling"

Bidding Law (No. 43/2013/QH13)

Article 14. Preferences in contractor selection

1. Contractors are entitled to preferences when participating in national bidding or international bidding for provision of goods with domestic production costs representing 25% or more.
2. Entitled to preferences when participating in international bidding for provision of consultancy, non-consultancy and construction and installation services are:
a/ Domestic contractors participating in bidding with independent or partnership status;
b/ Foreign contractors entering into partnerships with domestic contractors to perform jobs representing 25% or more of the value of the bidding package.
3. Entitled to preferences when participating in national bidding for provision of consultancy, non-consultancy and construction and installation services are:
a/ Contractors with 25% or more of their employees being female;
b/ Contractors with 25% or more of their employees being war invalids and people with disabilities;
c/ Contractors that are small-sized enterprises.
4. Preferences are calculated in the course of evaluation of bid dossiers or dossiers of proposals for comparison and ranking of bid dossiers or dossiers of proposals by either of the following methods:
a/ Adding points to the evaluation scores of contractors that are entitled to preferences;
b/ Adding amounts of money to the bids or evaluation bids of contractors that are not entitled to preferences.
- 5.-6. Skip

[Table 8] Bidding Law (Abridged)¹⁵

② Decree of Bidding Law

The Decree of Bidding Law (No. 63/2014/ND-CP) of Viet Nam provides detailed explanations of the legal requisites described in the Bidding Law. Article 6 of the Decree contains detailed provisions of contracting requirements: contractors whose employee workforce consists of greater than 25 percent women, war veterans, or people with disabilities, or small-sized enterprises, are entitled to preferences under Clause 3, Article 14 of the Bidding Law. In addition, Article 12 stipulates criteria for capacity, experience and technical evaluation of bidding packages. The environmental impact of items are included as technical evaluation criteria, which include the characteristics and technical properties of goods, production and manufacturing standards, economic efficiency of technical solutions, degree of satisfaction of warranty and maintenance, and financial capabilities. It seems possible to include technical capabilities for environment-friendly products in their technical evaluation by applying this clause. However, since Article 14 of the Bidding Law and Article 6 of the Decree of Bidding Law do not stipulate environmental protection activities, it could be risky to interpret the clauses on 'Environmental impact and solution' too broadly.

UNEP proposed new provisions to Clause 3.b. of Article 12 in the Decree of Bidding Law (63/2014/ND-

¹⁵ Bidding Law No. 43/2013/QH13, 2013

CP), which is about certain ecolabel

[Table 9] Amendment of the Decree of Bidding Law by SPPEL project of UNEP	
①	Characteristics provided in Article 12, item 3.b through which the technical features and specifications may include environmental characteristics.
②	When the contracting authority lays down environmental characteristics in terms of technical requirements, it may use detailed specifications, national "eco-labels", or any other eco-label, provided that the following conditions are cumulatively met: - Specifications appropriately define the characteristics of the supplies or services addressed by the public procurement contract; - "Eco-labels" are adopted using a specific procedure that allows for the involvement of all interested parties - such as government agencies, consumers, producers, distributors and environmental organizations; - "Eco-labels" are accessible/available to all interested parties;
③	The contracting authority has the right to indicate, in the terms of reference, that the products and services bearing the "eco-label" are presumed to comply with the technical specifications stipulated in the bidding documents.

[Table 9] Amendment of the Decree of Bidding Law by SPPEL project of UNEP¹⁶

③ Law on Public Investment

The Law on Public Investment (No.49/2014/QH13) addresses the management and use of the capital budget for public investment; the state management of public investment; and the right, obligation and responsibility of agencies, organizations and individuals involved in public investment activities. This Law applies to agencies, organizations and individuals participating in public investment activities; it provides for the management of the capital budget for public investment. The investment items in public sectors under the law partially include non-specific reference to environmental items, which therefore cannot lead the consumption and production of environment-friendly products in Viet Nam.

2.1.2 Comparison and SWOT Analysis of Legal Frameworks of Korea and Viet Nam

The aforementioned legal systems of Korea and Viet Nam were compared in three major ways: operation of ecolabel system, definition and scope of environment-friendly products, operation and management of GPP as a functional part of the national policy to implement GPP. Based on the results of the comparative analysis, the SWOT analysis on the foundation of GPP in Viet Nam was developed and the result was reflected in the recommendation report for enactment and revision of the law. These

¹⁶ Le Thi Huong, 2016, "Vietnam Legal review and proposal to foster SPP implementation and consider the integration of ecolabelling"

outcomes of the SWOT analysis were widely utilized for all consulting items in Viet Nam.

1) Comparative Analysis of the legal frameworks of Both Countries

The legal framework of the two countries was compared in three major categories: operation of the ecolabel system, definition and scope of eco-friendly products, operation and management of GPP as part of the functional part of the national policy required to implement GPP. Based on the results of the comparative analysis between the two countries, SWOT analysis of GPP base of Vietnam's legal system was then reflected in the recommended report for enactment and revision of the Act. The results of the SWOT analysis were utilized across all of the consulting items in Vietnam, including the proposed enactment, revision of the legal system and roadmaps.

(1) Operation of Ecolabel System

There are two ecolabeling programs in Korea, Korean Eco-label and Good Recycled (GR) mark as the target product of GPP. Korea has a legal basis for certification of environment-friendly products and supports for the operation of the ecolabel system stipulated in Article 17 (Certification of Eco-Label) and Article 26 (Support for Development, etc. of Standards for Certification of Eco-Label) of the Environmental Technology and Environment Industry Support Act. So KEITI has been operating Korean Eco-label system since 1992 according to these legal grounds. The GR certification program is operated by RIPA based on Article 15 of the Act on the Promotion of Saving and Recycling of Resources, and Article 33 of the Industrial Technology Innovation Promotion Act.

In September 2012, Viet Nam enacted and disclosed the declaration of the encouragement of eco-labelling and dissemination of information on environment-friendly products to boost sustainable consumption and building of green lifestyle which is the 13th implementation solution in Chapter 3.

Vietnam Green Label is also cited as the 12th of 14 activities listed in Appendix 3 to the Enforcement Decree of the Environmental Protection Act, which provides a basis for incentives for the production of green products with green labels.

(2) Definition and Scope of Environment-friendly Products

The Green Purchasing Act stipulates the definition and scope of green products for GPP in Korea. According to the Green Purchasing Act, the scope of green product are defined by the Green Growth Act as Korean ecolabel product and Good Recycled products which minimize the use of energy and resources and the generation of greenhouse gases and pollutants.

In Viet Nam, the definition of environment-friendly products is not clear as the Decision No. 1393,

National Green Growth Strategy, use the term, 'environment-friendly products' and 'green products' interchangeably. The definition of green products is given in Appendix 2 of the Decision as 'Products which are non-hazardous and use energy and water efficiently and are not harmful to the environment'. However, there is no definition of 'environment-friendly products' as well as the relationship between the two terms. Meanwhile, the Law on Environmental Protection uses the term 'environmentally friendly products', and also doesn't give a definition of environment-friendly products

The definition and range of environmentally friendly product, Vietnam Green Label and ecolabel are not clearly provided in Vietnam's legal framework. Article 3, Clause 9, of the Decree under the Law on Environmental Protection stipulates that 'environment-friendly products' mean the products meeting criteria of eco-label criteria and eco-label certification but the definition of eco-label is not specified. Appendix 3 of the Decree, List of Environmental Protection Activities Entitled to Incentives and Supports, includes the twelfth activity, "production of environment-friendly products with Vietnam Green Labels issued by MONRE" and the fifteenth activity, "production, business and service activities of environment-friendly establishments eco-labeled by MONRE".

(3) Operation and Management of GPP

In particular, the Green Purchasing Act comprehensively contains the scope of GPP, procedures and methods, duties and roles of public agencies and PPS, planning and performance management of green purchase. Therefore, all the GPP related tasks are carried out by public institutions in accordance with the Green Purchasing Act.

Vietnam's legal framework has no specific regulations on the procedures and methods for GPP and performance management of green purchasing by public institutions. Under the Decree of the Law on Environmental Protection, the head of state budget-funded agencies or units shall prioritize public procurement of the products specified in Clauses 12, Appendix 3 to the Decree upon their purchase of those products. However, this provision is nonbinding due to lack of links between other related laws for procurement.

(4) Implications of Comparative Analysis

Korea and Viet Nam encourage the development and production of environment-friendly products and services through the operation of eco-labelling system and related laws. The targeted products for GPP are clearly presented in Korea in the Green Purchasing Act while those are not presented in laws in Viet Nam. There is no definite connection between Vietnam Green Label and environment friendly products in the legal framework.

GPP in Korea is managed by the Green Purchasing Act and it has a significant ripple effect throughout Korean economy as it requires mandatory purchase. In Viet Nam, the implementation of GPP is difficult because the preferential purchase of environment-friendly products within Decree under the Law on Environmental Protection does not correlate to the Bidding law and its Decree.

In order to ensure GPP in Viet Nam is implemented smoothly, the requisites for GPP must be defined accurately in the Law on Environmental Protection. GPP elements shall be inserted in the laws related to the national budget expenditure, such as bidding and public investment, to induce participation of related ministries for green purchasing.

2) SWOT Analysis of the Legal Framework in Viet Nam

Implementing agency conducted a SWOT analysis, namely an assessment of the strengths, weaknesses, opportunities and threats of GPP policy implementation in Viet Nam. This analysis will be based on Vietnam's legal setting and an analysis of Korea's GPP policies. Strengths and weaknesses will be identified from an analysis of internal factors, while opportunities and threats will be identified from an analysis of external factors

(1) Strengths

First, the greatest strength identified from this analysis was that Viet Nam has the room to pursue GPP through powerful top-down leadership as evidenced by the presentation of Green Growth Strategy (No. 1393/QD-TTg) by the Prime Minister. The Prime Minister has established the legal requisites for GPP through the enactment of Law on Environmental Protection. As a result of the SPPEL project, the awareness on the prerequisites for GPP in Viet Nam has been enhanced. The Vietnamese government is already aware of the prerequisites for GPP in Viet Nam. Additionally, the Vietnam Environment Administration (VEA), which operates the Vietnam Green Label Program, is sufficiently experienced to carry out further legal mandates. Such strengths will become a firm foundation for early stage settlement of GPP in Viet Nam.

(2) Weakness

The social environment in Viet Nam is not fully mature. The biggest weakness the country faces is a lack of harmonious relationship between the ministries related to GPP, resulting in the difficulty to establish a consensus on GPP policy. This disconnection may cause a lack of foundation on which to operate GPP effectively. In addition, there must be sufficient number of Green Label Certified products and certification criteria within Viet Nam, and it is necessary to expand and establish relevant infrastructures including companies and certification examiners to participate in the certification system for GPP. However, Viet Nam is limited in its infrastructure capacity. In other words, although MONRE has established legal grounds for implementation of GPP, it is not able to expand the infrastructure of

certification system due to insufficient budget and institutional support, and inadequate participation of companies. Since this gap can be sufficiently supplemented over short period of time through the provision of MONRE, there is a need to focus administrative capabilities on this aspect.

(3) Opportunities

The annual average economic growth of Viet Nam in recent years has been in the range of 7~8%, demonstrating rapid growth. One of the main contribution to the economic growth is that numerous global household appliance and textile companies from Korea and other countries have chosen Viet Nam as their forward base for export.¹⁷ Since these products are subject to global product environment regulations, it is anticipated that the trend of demanding GPP to cope with product environment regulations will increase gradually in Viet Nam. Moreover, the Bidding Law and Decree of Bidding Law of Viet Nam have required priority purchase for some of the corporations. Accordingly, if regulations to enable the priority purchase of environment-friendly products are to be inserted in the requirements, there may be opportunity to activate GPP in Vietnamese market.

(4) Threats

The biggest obstacle to success in GPP of Viet Nam is the lack of unification between the related ministries. If the introduction of GPP policy in Viet Nam were to fail, this could degrade the competitiveness of export products manufactured in Viet Nam. In particular, under the current status of increasing the proportion of exports from Viet Nam, if the Vietnamese government cannot effectively cope with the product environment regulations of advanced countries, the competitiveness of Vietnam's export industry may decrease.

(5) Conclusion of SWOT analysis

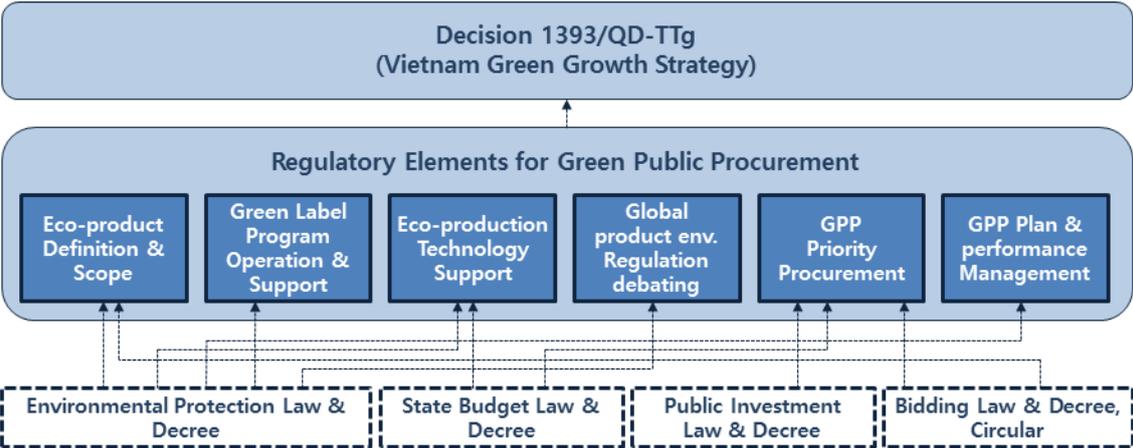
The organizational relationship among the related laws must be established in order for GPP policy to be implemented successfully. Korea established the Act on promotion of GPP to include all the relevant requisites; GPP was implemented by the close alignment to the policies through the Act. In this respect, since a separate Law for GPP has not yet been established in Viet Nam, it is necessary to incorporate GPP into the Law on Environmental Protection and the Decree to the fullest extent. Moreover, each ministry needs to adjust the detailed provisions of the law under their jurisdiction according to the requisites for GPP. To activate the legal basis for GPP in Viet Nam, it is important to link the relevant provisions of the Law on Environmental Protection, Bidding Law and Law on State Budget.

¹⁷ VietNamNet, 2018, "Korean investment flows set to rise further in Vietnam", Business, 4 September 2018, from <https://english.vietnamnet.vn/fms/business/207946/korean-investment-flows-set-to-rise-further-in-vietnam.html>

2.1.3 Legal Recommendations for GPP

1) Proposal for the Legal Framework

As the result of the SWOT analysis of Vietnam’s legal framework for GPP, it was determined that relationship between the provisions of the laws being governed, and the governing ministries, is very important for effective GPP. Consequently, the establishment of a mutual relationship among the laws of each ministry regarding GPP are proposed in Figure 8.



[Figure 8] Proposal of the co-relationship between GPP-related laws in Viet Nam

Several aspects of GPP must be established to support a legal framework, such as the definition and scope of environment-friendly products, grounds for operation and provision of support for Vietnam Green Label, support for manufacturing technology for environment-friendly products, means of addressing global product environment regulations, priority purchase of environment-friendly products in the public sector, and management of GPP performance of public institutions in comparison to their respective plans for GPP. Relevant provisions for all these issues need to be established within the Law on Environmental Protection and Decree of Law on Environmental Protection in detail.

In the Bidding Law and Decree of Bidding Law, definitive grounds reflecting the requisites for the priority purchase of environment-friendly products must be established. Similar to the Act on Promotion of Purchase of Green Products enacted by the Public Procurement Service of Korea, separate regulations for the priority purchase of environment-friendly products by public institutions in Viet Nam need to be established as lower statute of Decree. In addition, the Law on Public Investment, which contains information surrounding state management, obligations, responsibilities, and evaluations of public investment, should include elements of GPP especially for the purchase of environment-friendly product and services. This will expand government-led sustainable consumption and production activities in Viet Nam through public investment.

Lastly, grounds for the provision of the national budget for environmental protection activities must be

presented in the Law on the State Budget. Moreover, there is a need to include the production and consumption of environment-friendly products in the Decree of Law on the State Budget as specific examples of environmental protection activities.

2) Proposal for the Law

(1) Proposal for Revision of Law on Environmental Protection and its Decree

① Law on Environmental Protection (No. 55/2014/QH13)

The Law on Environmental Protection needs to suggest a basic framework for GPP that define environment-friendly products and services. it is also required to encourage sustainable production and consumption. To support GPP in detail, the obligation to purchase environment-friendly products is clearly stipulated in Article 44. The financial incentives, implementation plan and reports on performances are also added.

Current	Proposed draft	Reason for proposal
<p>Article 3. Interpretation of terms In this Law, the terms below are construed as follows: 1.~29.(skip)</p>	<p>Article 3. Interpretation of terms In this Law, the terms below are construed as follows: 1.~29.(skip) <u>30. Environment-friendly products and services refer to those that reduce resource and energy consumption and reduce environmental impacts throughout the entire life cycle of a product system as the products and services that received Vietnam Green Label certification.</u></p>	<p>Add the definition of environment-friendly products and services.</p>
<p>Article 5. State policies on environmental protection 1.~11.(skip)</p>	<p>Article 5. State policies on environmental protection 1.~11.(skip) <u>12. Encourage the production and consumption of environment-friendly products and services.</u></p>	<p>Add the environment-friendly production and consumption as a regular policy.</p>
<p>Article 44. Environment-friendly production and consumption 1. (Skip) 2. Heads of agencies and units funded by the state budget shall <u>prioritize the use of environment-friendly products and services which have been eco-labeled in accordance with law.</u></p>	<p>Article 44. Environment-friendly production and consumption 1. (Skip) 2. Heads of agencies and units funded by the state budget shall <u>prioritize the production and consumption of environment-friendly products and services</u> <u>a/ Heads of agencies and units funded by the state budget shall bear their responsibility to purchase environment-friendly products and services.</u> <u>b/ Heads of agencies and units funded by the state budget shall give financial</u></p>	<p>Add financial incentive as one of supporting items.</p>

	<p><u>incentives to eco- friendly products and services</u> <u>c/ Heads of agencies and units funded by the state budget shall plan the green public procurement for one year, disclose to the public and submit the plan to the Minister of National Resources and Environment by every October</u> <u>d/ Heads of agencies and units funded by the state budget shall submit the results of the green public procurement for one year to the Minister of National Resources and Environment by March of the next year, and the Minister of National Resources and Environment shall compile and disclose the results to the public.</u></p>	<p>Add management elements on plan and results of GPP policy.</p>
<p>Article 152. Development and application of environmental protection sciences and technologies 1.-2. a/~b/ Skip a/ Skip b/ Research into, transfer, development and application of environment-friendly technologies and technologies for exploitation and effective use of natural resources, energy conservation, and nature and biodiversity conservation;</p>	<p>Article 152. Development and application of environmental protection sciences and technologies 1.-2. a/~b/ Skip</p> <p><u>bb) Research, transfer, develop and apply environment-friendly technologies, products, raw materials and fuels;</u></p>	<p>Add R&D support for eco-labels in this article.</p>

[Table 10] Proposal for Law on Environmental Protection

② **Decree of Law on Environmental Protection (No. 19/2015/ND-CP)**

As mentioned above, Decree of Law on Environmental Protection already includes a diverse range of provisions, including the role of different departments in establishing financial incentives for GPP. As such, it is important to execute the current Decree thoroughly. In particular, it is necessary ensure that Green Label certified products are purchased with priority at the time of public procurement according to Law on the State Budget of MOF. Separate provisions need to be developed for public procurement of environment-friendly products for which MONRE directly executes public priority purchase and by MOF, stipulated in Article 47 (Support for consumption of products).

(2) Proposal for Revision of Bidding Law and its Decree

The Bidding Law and Decree of Bidding Law of Viet Nam address the procedures and requisites for bidding and preferential treatment conditions for bidders. This Law minimally address issues of public

procurement, including the central and direct purchase by public institution. Therefore, it is not easy to propose legal grounds for GPP by using Bidding Law. A proposal for the revision of the law was put forth to require additional sections for which environment-related requisites are omitted in the process of selecting bidders within the current Bidding Law.

① **Bidding Law (No. 43/2013/QH13)**

Current	Proposed draft	Reason for proposal
<p>Article 14. Preferences in contractor selection</p> <ol style="list-style-type: none"> 1. Skip 2. Skip 3. Entitled to preferences when participating in national bidding for provision of consultancy, non-consultancy and construction and installation services are: <ol style="list-style-type: none"> a/ Contractors with 25% or more of their employees being female; b/ Contractors with 25% or more of their employees being war invalids and people with disabilities; c/ Contractors that are small-sized enterprises. 4. Skip 5. Skip 6. Skip 	<p>Article 14. Preferences in contractor selection</p> <ol style="list-style-type: none"> 1. Skip 2. Skip 3. Skip a/ ~ c/ Skip <u>d) Tenderers with government-approved environment-friendly products and services</u> 4. Skip 5. Skip 6. Skip 	<p>Add environmental protection activities as one of elements on Preferential purchase.</p>

[Table 11] Proposal for Bidding Law

② **Decree of Bidding Law (No. 63/2014/ND)**

Current	Proposed draft	Reason for proposal
<p>Article 6. Preferences in national bidding</p> <ol style="list-style-type: none"> 1. Skip 2. In case bid dossiers and dossiers of proposals of contractors are ranked equal, bid dossiers and dossiers of proposals of contractors with a total number of female employees or employees being war invalids or people with disabilities working under labor contracts of at least 3 months accounting for 25% or more, and of contractors being small-sized enterprises entitled to preferences under Clause 3, Article 14 of the Bidding Law shall be ranked higher than those of contractors not entitled to any preferences. 	<p>Article 6. Preferences in national bidding</p> <ol style="list-style-type: none"> 1. Skip 2. In case bid dossiers and dossiers of proposals of contractors are ranked equal, bid dossiers and dossiers of proposals of contractors with a total number of female employees or employees being war invalids or people with disabilities working under labor contracts of at least 3 months accounting for 25% or more, and of contractors being small-sized enterprises <u>and who have governmental-approved environment-friendly products and services</u> entitled to preferences under Clause 3, Article 14 of the Bidding Law shall be ranked higher than those of 	<p>add environmental protection activities as one of elements on preferential purchase.</p>

<p>3.~4. Skip</p>	<p>contractors not entitled to any preferences. 3.~4. Skip</p>	
<p>Article 12. Making of bidding dossiers 1.~2. Skip 3. For bidding packages to procure goods, criteria for evaluation of bid dossiers include: a/ Criteria for capacity and experience evaluation b/ Technical evaluation criteria To use the pass-fail system or the method of point-rating according to a 100- or 1,000-point scale to develop technical evaluation criteria. In case of using the point-rating method, the minimum and maximum points for each general and specific criterion must be specified. Technical evaluation criteria shall be developed based on contractors' capacity to meet requirements on the quantity, quality and time of delivery of goods, goods transportation, installation and warranty as well as contractors' prestige expressed through their performance of similar contracts in the past, and other requirements stated in bidding dossiers. Based on each specific bidding package, when making a bidding dossier, the following items which serve as bases for technical evaluation must be concretized: - Characteristics and technical properties of goods, production standards, manufacturing standards and technologies; - Reasonability and economic efficiency of technical solutions and measures for goods supply and installation; - Degree of satisfaction of warranty and maintenance requirements; - Geographical and environmental adaptability; - Environmental impacts and remedies; - Financial capacity (if required); - Factors on commercial conditions, implementation time, training and technology transfer; - Goods supply schedule; - Contractors' prestige through their performance of similar contracts in the past; - Other necessary factors</p>	<p>Article 12. Making of bidding dossiers 1.~2. Skip 3. Skip a/ Skip b/ Technical evaluation criteria Skip - Skip - Skip - Skip - Skip - Skip - <u>Environment-friendly products approved by the government including Green Label</u> - Skip - Skip - Skip - Skip - Skip</p>	<p>Add environment-friendly products as one of the items for technical capability</p>

[Table 12] Proposal for Decree of Bidding Law

(3) Proposal for Revision of Law on the State Budget and its Decree

Article 47 of the Decree of Law on Environmental Protection stipulates that the head of institutions using the national budget must execute the public priority purchase of environment-friendly products. However, this provision is stipulated only under the Law on Environmental Protection; the Law on the National Budget and Decree of Law on the State Budget for managing of national budget do not include relevant regulations. Therefore, the Implementing Agency suggests development of a new circular fir GPP as recommended by UNEP.

Articles 31 and 33 of the Law on the State Budget include the term ‘environment’ as a regular spending item of the budget for the central government and local governments. In addition, Articles 3, 14 and 16 of the Decree of Law on the State Budget stipulate environmental protection as expenditure recurring expenditure. However, it is difficult to link allocation of budget for the public priority purchase of environment-friendly products under the Decree of Law on Environmental Protection because the stipulations under the Law on the State Budget and Decree of Law on the State Budget are not clear. Therefore, this study proposes a more detailed description of the regulated issues in the Decree of Law on the State Budget.

① Decree under Law on the State Budget (No. 163/2016/ND-CP)

Current	Proposed draft	Reason for proposal
<p>Article 3. State budget expenditures</p> <p>1. Development investment expenditures, including: a/~c/ Skip</p> <p>2. National reserve expenditures.</p> <p>3. Current expenditures for the following fields: a/ National defense; b/ Security and social order and safety; c/ Education-training and vocational training; d/ Science and technology; dd/ Health care, population and family; e/ Culture and information; g/ Radio and television broadcasting and news; h/ Physical training and sports; i/ Environmental protection;</p> <p>k/ Economic activities; l/~n/ Skip 4.~9. Skip</p>	<p>Article 3. State budget expenditures</p> <p>1. Development investment expenditures, including: a/~c/ Skip</p> <p>2. National reserve expenditures.</p> <p>3. Current expenditures for the following fields: a/ National defense; b/ Security and social order and safety; c/ Education-training and vocational training; d/ Science and technology; dd/ Health care, population and family; e/ Culture and information; g/ Radio and television broadcasting and news; h/ Physical training and sports; i/ Environmental protection; <u>ii/ Environment-friendly products and services</u> k/ Economic activities; l/~n/ Skip 4.~9. Skip</p>	<p>Identify expenditure items of environmental protection.</p>
<p>Article 14. Spending tasks of the central budget</p>	<p>Article 14. Spending tasks of the central budget</p>	

<p>1. Development investment expenditures; 2. National reserve expenditures. 3. Current expenditures of ministries, ministerial-level agencies, government-attached agencies and other central state agencies as assigned in the following fields: a/~h/ Skip i/ Environmental protection; k/~o/ Skip</p>	<p>1. Development investment expenditures; 2. National reserve expenditures. 3. Current expenditures of ministries, ministerial-level agencies, government-attached agencies and other central state agencies as assigned in the following fields: a/~h/ Skip i/ Environmental protection; <u>ii/ Environment-friendly products and services</u> k/~o/ Skip</p>	<p>Identify expenditure items of environmental protection.</p>
<p>Article 16. Spending tasks of local budgets 1. Development investment expenditures: a/~c/ Skip 2. Current expenditures of local agencies and units as assigned in the following fields: a/~g/ Skip h/ Environmental protection; i/~n/ Skip</p>	<p>Article 16. Spending tasks of local budgets 1. Development investment expenditures: a/~c/ Skip 2. Current expenditures of local agencies and units as assigned in the following fields: a/~g/ Skip h/ Environmental protection; <u>hh/ Environment-friendly products and services</u> i/~n/ Skip</p>	<p>Identify expenditure items of environmental protection.</p>

[Table 13] Proposal on the Decree under Law on the State Budget

(4) Proposal for revision of Public Investment Law

Guidance on the GPP of environment-friendly products and services approved by the Government appear in part of Articles 5 and 21, 34, 35, 36 and 47 of the requirements for public investment. The government aims to lay the foundations for spreading environment-friendly production and consumption through public investment.

Current Document	Revised Document	Reason for proposal
<p>Article 5. Investment in public sectors 1. Investment in socio-economic infrastructure programs and projects. 2. Investment in ancillary facilities for regulatory agencies, public service providers, political institutions and socio-political organizations. 3. Investment and assistance in public product and service supply activities. 4. Governmental investment in projects to be executed in the form of a public-private partnership.</p>	<p>Article 5. Investment in public sectors 1.-2. Skip 3. Investment and assistance in public product and service supply activities. <u>a) Especially, public products and services supply activities for green public procurement</u> 4. Skip</p>	<p>Insert GPP elements as one of the investment items.</p>
<p>Article 34. Contents of the decision on investment intentions on public investment programs</p>	<p>Article 34. Contents of the decision on investment intentions on public investment programs</p>	<p>Insert GPP elements in regulated</p>

Major contents of the decision on investment intentions on public investment programs include: 1.~ 8. Skip	Major contents of the decision on investment intentions on public investment programs include: 1.~ 8. Skip <u>9. Production and consumption of nationally approved environment-friendly products and services.</u>	processes and contents.
Article 35. Contents of pre-feasibility study report for national important projects and Group-A projects 1. Skip 2. Major contents of pre-feasibility study report for national important projects and Group-A non-construction projects are not the integral part must include: a)~n) Skip	Article 35. Contents of pre-feasibility study report for national important projects and Group-A projects 1. Skip 2. Skip a)~n) Skip <u>o) Production and consumption of nationally approved environment-friendly products and services.</u>	Insert GPP element in the contents of the decision on investment intentions.
Article 36. Contents of the report on investment intentions for Group-B and Group-C investment projects Major contents of the report on investment intentions for Group-B and Group-C investment projects include: 1.~8. Skip	Article 36. Contents of the report on investment intentions for Group-B and Group-C investment projects Skip 1.~8. Skip <u>9. Production and consumption of nationally approved environment-friendly products and services.</u>	Insert GPP elements in contents of pre-feasibility study report for national important projects.
Article 47. Contents of feasibility study reports on programs and projects 1. A feasibility study report on the public investment program must include: a)~l) Skip 2. A feasibility study report on non-construction projects must include: a)~n) Skip	Article 47. Contents of feasibility study reports on programs and projects 1. Skip a)~l) Skip <u>m) Green public procurement of nationally approved environment-friendly products and services.</u> 2. A feasibility study report on non-construction projects must include: a)~n) Skip <u>o) Green public procurement of nationally approved environment-friendly products and services.</u>	Insert GPP elements in contents of pre-feasibility study report for national important projects.
Article 21. Regulated processes and contents of the inspection and verification of investment intentions for national target programs and national important projects 1. Skip 2. Contents of investigation and verification tasks include: a) ~ h) Skip.	Article 21. Skip 1. Skip 2. Contents of investigation and verification tasks include: a) ~ h) Skip. <u>j) Green public procurement of nationally approved environment-friendly products and services.</u>	Insert GPP elements in contents of feasibility study reports on programs and projects.

[Table 14] Proposal for Public Investment Law

3) Conclusion of Legal Recommendations

In order for the successful implementation of the GPP policy, it is necessary for Viet Nam to provide a variety of high-quality, eco-labelled products and incentives for companies that produce environment-friendly products. This will require fundamental changes in relevant laws at the government level and national support for GPP.

As the National Green Growth Strategy suggests, Viet Nam is very much in favor of the GPP, however, it is difficult for Viet Nam's public institutions which include government agencies and state enterprises to proactively participate in the GPP due to the lack of links between related laws and completion of Green Label certification system. Thus, the legal recommendations focus primarily on strengthening the basis of operation of the GPP system by ensuring linkages between the relevant laws, therefore providing clear legal basis and support for green products and green label certification.

The following effects are expected when the laws related to the GPP are successfully amended in accordance with the legal recommendations:

- ▽ By providing the basis for supporting the Vietnamese Green Label under the Decree of the Law on Environmental Protection, VEA can secure the necessary budget to operate Vietnam Green Label Program, thereby expanding the participation of companies for certification.
- ▽ The demand for Vietnam Green Label certification will be increased with the clear basis for priority purchase of environment-friendly products. These increased demands for environment-friendly products will increase the Vietnam's environment-friendly market exponentially.
- ▽ As the environmental quality of products produced by companies entering the Vietnamese GPP market increases, Viet Nam will be able to produce its own GPP products, thereby generating the availability of exporting these products, creating a sustainable market flow for their own economy. The exports can be also increased by securing international export competitiveness.
- ▽ The private green purchase market centered on green consumers in Viet Nam can be expanded by actively promoting the effects of increased market sales and the environmental protection by green purchases on various media platforms.

The implementation of the legal recommendations is essential for Vietnam's GPP to settle down and needs to be preceded to operate GPP. The efforts to spread the effect of GPP such guidelines, education, and expansion of ecolabelling will be necessary along with the legal amendments.

2.2 Assist in the Establishment and Revision of GPP criteria

As a necessary prerequisite for implementation of GPP in Viet Nam, additional certified environmentally-friendly products need to be identified and added to the bidding process. For this purpose, this consulting item supported the development of eco-label criteria for new product categories in Viet Nam. The Focal Point agreed that establishing an eco-label in Viet Nam is a necessary step towards implementing GPP.

The formal name of the eco-label in Viet Nam is the Vietnam Green Label. It has been active since 2009 and encourages the production of environmentally-friendly consumer goods through national certification and evaluation. The Vietnam Environment Administration (VEA), under the Ministry of Natural Resource and Environment (MONRE), directly operates the corresponding program through the Vietnam Green Label Office.

The Implementing Agency developed Vietnam Green Label criteria in association with the Viet Nam Environment Administration (VEA) following the procedures shown in Figure 9 below. Since development process exceeded the project duration due to various factors including MONRE committee's evaluation, the Implementing Agency and Focal Point agreed that project would result in proposed criteria, as drafts of Vietnam Green Label.

The Focal Point identified the most frequently-purchased product groups in the public procurement market, and those with a substantial environmental impact in Viet Nam. The Focal Point selected wooden furniture, computer monitors, and air conditioners as the three product categories to develop criteria. Eco-label criteria for these three product groups have already been enacted in Korea, so the procedure for establishing GPP criteria in Viet Nam referenced procedures carried out in Korea. This procedure is described in detail in the Figure 9 below.

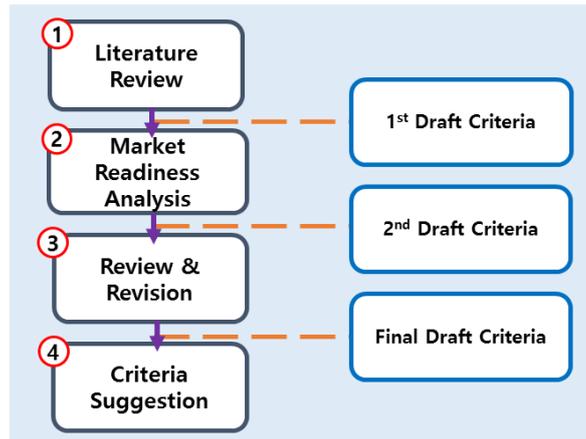
The product groups for criteria development were selected by the Focal Point in Year One to complete the consulting item in Year Two. In the UNEP SPPEL project, LEDs and notebook computers were selected after comprehensively considering the procurement frequency, environmental impact, and the number of companies in the market. For this Project, an agreement has been made to derive the prioritized products also based on this previously established data.

Discussions are being made with the focal point by proposing items other than the above two product groups, which are as follows.

- ▽ Wooden office table
- ▽ Wooden office chair
- ▽ Printer

- ▽ Monitor
- ▽ Air-conditioner

Wooden furniture was selected as wooden office tables and chairs were integrated, and computer monitors and air-conditioner were also requested because of their high demand in public institutions. The procedure for establishing GPP criteria in Viet Nam referenced procedures carried out in Korea¹⁸. The procedures described in detail in the Figure 9 below.



[Figure 9] Procedures for Establishing GPP Criteria

The schedule for the key activities is shown in Table 15.

Key activities	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
1. Literature Review										
1. Market Readiness Analysis										
2. Draft GPP Criteria										
3. Collecting opinions from interested parties										
4. Review & Revision										

[Table 15] Schedule for the Establishment of GPP Criteria, 2018

¹⁸ Korea Eco-Mark, n.d., "Proposal of New Products", in Korean, Retrieved 25 February, 2019, from <http://el.keiti.re.kr/service/page.do?mMenu=2&sMenu=2>.

2.2.1 Literature Review

1) Current status and analysis of Green Label criteria in Viet Nam



Vietnam Green Label criteria have been developed for a total of 17 product groups as of the end of 2017.

¹⁹ Vietnam Green Label Office have also developed ecolabel criteria for office paper, notebooks, and fluorescent lights as a part of SPPEL project of UNEP.

Office Paper, Laptop, Batteries, Printer, Ceramic building materials, Hair care products, Solid soap, Architectural coating products, Powder laundry detergent, Hand dishwashing detergent, Biodegradable plastic shopping bag, Synthetic paper food packaging, Fluorescent lamp, Toner cartridge, Copier, LED and LED modules

There are few Vietnam Green Label-certified products in the Vietnamese market currently. A total of 54 products that have received the certification until 2017. As of 2018, there are two battery products for which the certification validity period has not expired. A summary of the current status of certified products is given in Table 16 below.

No	Certificated items	Company	Certification Code	Valid Dates	Validity
1	Tide Laundry Detergent (1 type)	Procter & Gamble. Co	No.52/QDTCMT-2011	18/01/2011 - 01/18/2014	Expired
2	- Compact fluorescent light bulbs (33 types) - Straight tube fluorescent bulbs (10 types) - Double wing bulbs (3 types)	DienQuang Lamp Joint Stock Company	No.1228/QD-TCMT2014	10/10/2014 - 10/10/2017	Expired
3	Coating used for construction (2 types): - Majestic Pearl Silk - Jotashield	Jotun Paint Vietnam Co, Ltd	No.83/QDTCMT-2014	20/2/2014 - 20/2/2017	Expired

¹⁹ Vietnam Environment Administration, N.D., Retrieved 27 February, 2019, from <http://vea.gov.vn/vn/khoahoccongnghenhanxanh/Pages/trangchu.aspx>

4	Printers: (2 types) - Fuji Xerox DocuPrint P355d - Fuji Xerox DocuPrint P355db.	Fuji Xerox Asia Pacific Pte Ltd Office	No.512/QĐ- TCMT2014	29/5/2014 - 29/5/2017	Expired
5	Coating used for construction (2 types): Majestic True Beauty Sheen	Jotun Paint Vietnam Co, Ltd	No. 599/QĐ- TCMT2014	20/6/2014 - 20/6/2017	Expired
6	Battery GS, Battery Yuasa (1 type)	GS Battery Vietnam	1634 / QĐ- TCMT-2016	01/11/2016 - 01/11/2019	Valid

[Table 16] Current Status of the certified items in Viet Nam

Prior to the development of criteria appropriate for the current market status of Viet Nam, three items (copiers, toner cartridges, and powder-laundry detergent) were selected for a comparative analysis with the Korean ecolabel criteria to accurately assess the current situation in Viet Nam. A comparison of the Korean and Vietnamese ecolabel criteria is provided in Tables 17, 18 and 19 for Copiers, Toner Cartridges and Powder Detergents respectively.

Categories	Korea	Viet Nam	Comparison
Prohibited Substances	Lead (Pb), Cadmium (Cd), Mercury (Hg) and their compounds, hexavalent chromium (Cr6+) compounds, PBBs, PBDEs and Short Chained chlorinated paraffin (SCCP (C=10~13)) with chlorine concentration of more than 50%		Same
Hazardous Elements of Components (ppm)	Lead (Pb): Less than 1,000 Cadmium (Cd): Less than 100 Mercury (Hg): Less than 1,000 hexavalent chromium(Cr6+): Less than 1,000		Same
Photo-conductor Drum	Prohibition of use of lead (Pb), cadmium (Cd), mercury (Hg), selenium (Se) and their compounds in photoreceptors		Same
Pollutant Emission (mg/h)	Dust – Black and white mode; Less than 4.0 / Color mode: Less than 4.0, etc.		Same
Noise (dB(A))	Sound pressure level – Atmospheric state Black and white mode; Less than 4.0 / Color mode: Less than 4.0, etc.		Same
Packaging	Prohibition of use of halogen range of synthetic resin such as polyvinyl chloride (PVC), et., for packaging materials Packaging buffer material manufactured by using more than 50% of waste synthetic resin in terms of mass %		Same

[Table 17] Comparison of the criteria between Korean and Viet Nam (Copiers)

Categories	Korea	Viet Nam	Comparison
Hazardous Elements of Components (ppm)	Lead (Pb), Cadmium (Cd), Mercury (Hg) and their compounds, hexavalent chromium (Cr6+) compounds, PBBs, PBDEs and Short Chained chlorinated paraffin (SCCP (C=10~13)) with chlorine concentration of more than 50% Azo compound that can be disintegrated into arylamine range stipulated under the EU Directive 2002/61/EC, etc.		Same
Photo-conductor Drum	Prohibition of use of lead (Pb), cadmium (Cd), mercury (Hg), selenium (Se) and their compounds in photoreceptor of drum		Same
Carcinogenic Chemicals	Substance that corresponds to the 'Group 1', 'Group 2A' and 'Group 2B' as the carcinogenicity classification signs of the International Agency for Research of Cancer (IARC). However, exclude carbon black and titanium dioxide (TiO2)		Same
Recyclability	If the mass is more than 25g, labeling according to the classification standards for materials in each of the sections that are segregated for the synthetic resin with area of flat portion of more than 200mm ²		Same
Packaging	Use those that do not contain Lead (Pb) compounds or Cadmium (Cd) compounds		Partially different

[Table 18] Comparison of the criteria between Korean and Viet Nam (Toner Cartridges)

Categories	Korea	Viet Nam	Comparison
Prohibited Substances	The sum of Lead (Pb), Cadmium (Cd), Mercury (Hg) and their compounds, and hexavalent chromium (Cr6 +) compounds needs to be less than 100ppm. Alkyl phenol ethoxylates (APEOs), APDs, and alkylphenol derivatives, phosphates and boric acid, chemicals falling within the H-code classification according to the UN GHS for chemical classifications and labeling	The sum of Lead (Pb), Cadmium (Cd), Mercury (Hg) and their compounds, and hexavalent chromium (Cr6 +) compounds needs to be less than 250ppm. Chemical substances registered in the list of chemical substance prohibited from exporting, importing, use and distribution in accordance with the currently implemented regulations: Carcinogenic chemical substances are those included in the IARC categories 1 and 2A, reactive chlorine compounds	Partially different

[Table 19] Comparison of the criteria between Korean and Viet Nam (Powder Detergents)

After comparing the three sets of criteria to their Korean counterparts, standards for electronic products were found to be almost identical between Korea and Viet Nam, since these products were imported from countries such as the USA, Korea, and Japan. The standards of Korea and Viet Nam were the same for all the items listed under the category of electronic products (copiers) (prohibited substances,

Prohibited Elements of Individual Components, Photo-conductor Drum and noise, etc.).

For toner cartridges, the Korean criteria for the packaging items were slightly stricter. With the exception of packaging, standards for the majority of the items were confirmed to be the same.

The criteria for powdered detergent in Viet Nam were less stringent than those of Korea. The maximum total weight of heavy metals included in the packaging material for each unit is 100ppm in Korea and 250ppm in Viet Nam; additionally, Korea does not allow phosphates to be included in the detergent while Viet Nam allows for a phosphate content of up to 5% of the volume of the detergent.

Even companies that have already been certified are reluctant to re-approve certification due to the high standards of criteria compared to their local technological capabilities, and the lack of incentives to get certified.²⁰ When developing Vietnam Green Label criteria for GPP, the criteria must be appropriate for technical abilities of the local market in order for Vietnamese companies to agree to certification. If few manufacturers are capable of manufacturing products that satisfy the criteria, it is possible to consider lowering the level of specific criteria. However, such actions must not impede the quality of products and must ensure differentiation in the level of environmental standards of the products.

2) Selection of Product Groups and Identification of the First Criteria Proposal

(1) Benchmarking of Criteria of Surrounding Countries

Since Viet Nam has not set ecolabels for the selected product groups, the criteria of surrounding countries were comprehensively benchmarked to inform the criteria development. The ecolabel criteria of the countries with income levels similar to that of Viet Nam, including Korea were compared and analyzed for the following three product groups:

- ▽ Korea, Thailand, Taiwan and EU for wooden furniture;
- ▽ Korea, Philippines, Hong Kong, Taiwan and Europe for computer monitors;
- ▽ Korea, Thailand and China for air conditioners.

The Focal Point emphasized the need to conduct a market readiness survey to ensure that there are enough companies to participate in the bidding for the selected product groups. Wood and wooden furniture industry in Viet Nam are well developed, and the furniture manufactured by local companies is mainly consumed and procured. Therefore, the level of criteria for wooden furniture was benchmarked to ease into the local market. For example, formaldehyde emission was included representatively from Indoor air pollutants while Volatile Organic Chemical Compound (VOCs) was excluded with a reference to the criteria of Thailand and Taiwan.

²⁰ Panel Discussion in the 2nd workshop in HCMC, September 2018

For computer monitors and air-conditioners, one of the typical international environmental regulations of electrical appliances is Restriction of the use of certain Hazardous Substances (RoHS) and Waste Electrical and Electronic Equipment (WEEE) by EU. Korean Eco-label criteria was developed in accordance with these environmental regulations²¹ so those of computer monitors and air conditioners are aggressively borrowed.

The numerical standards listed in the criteria such as formaldehyde emission, median values were used because of the small differences between countries, while other standards were applied in accordance with Korea's criteria. Since the standards in Korea are less stringent than those of other countries, they can be more easily integrated with the system of Viet Nam.

Table 20, 21, and 22 provides for a complete list of national criteria comparisons;

²¹ Ministry of Environment of Republic of Korea, 2003, "Products and certification standards revised and notified", Retrieved 27 February, 2019, from <http://www.me.go.kr/home/web/board/read.do;jsessionid=Geh4plwf5LBXB75mbiYZbxqw.mehome2?pagerOffset=11480&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=286&orgCd=&boardId=82002&boardMasterId=1&boardCategoryId=39&decorator=>

① **Wooden Furniture**

Type	Korea	Thailand	Taiwan	EU	1 st draft of criteria
Recycling rate	70% or more as a mass fraction	70% or more as a mass fraction	-	-	70% or more as a mass fraction
Hazardous Substances	-	Do not use ozone layer-depleting substance, Pb, Cd, Hg, Cr ⁶⁺ ※ the concentration of heavy metals shall not exceed 5 ppm in case of impurities.	[Surface Material] Pb, Cd, Hg, ≤ 2ppm Triphenyltin ≤ 2ppm Cr ⁶⁺ , Arsenic ≤ 3ppm Antimony ≤ 5ppm Halogenated solvents ≤ 15ppm	Do not use Pb, Cd, Hg, Cr ⁶⁺ and the components of those	Do not use Pb, Cd, Hg, Cr ⁶⁺ and the components of those
Indoor Air pollutants	Formaldehyde emission shall not exceed 0.5ppm by desiccator method and 0.12mg/m ² ·h by small chamber method	Formaldehyde content shall not exceed 80ppm Formaldehyde emission shall not exceed 1.5ppm	Formaldehyde emission shall not exceed 0.3ppm	Formaldehyde emission shall not exceed 0.05ppm	Formaldehyde emission shall not exceed 1.0ppm
	VOCs emission shall not exceed 0.4mg/m ² ·h	Pentachlorophenol shall not exceed 5ppm in case of impurities	-	VOCs emission shall not exceed 5mg/m ³	-
	Toluene emission shall not exceed 0.080mg/m ² ·h	-	-	-	-
FSC certification	Use FSC certified materials (FSC 100%/Mix/Recycled)	Use FSC certified materials	Use FSC certified materials	Use FSC certified materials	Use FSC certified materials (FSC 100%/Mix/Recycled)

[Table 20] Comparison of National Ecolabel Criteria: Wooden Furniture

② Computer Monitors

Type	Korea	Philippines	Hong Kong	Taiwan	1st draft of criteria
Synthetic Resin	Do not use halogenated synthetic resin in the parts composing housing over 25g ※ organic fluoric additive is allowed under 0.5% as a mass fraction	-	Packaging materials shall not contain chlorine-based plastic	-	Do not use halogen-based synthetic resin.
Recycling rate	65% or more as a mass fraction	validated retrieval or take back system equivalent to not less than 10% of its total units sold.	-	-	-
Anti-shock materials	The Ozon Deplet Potential (ODP) Value of blowing agent shall be zero.	-	-	-	-
Energy Efficiency	Power consumption of power-saving mode and off-mode are followed by Standby Power program or International Energy Star program	-	-	-	Vietnam Energy Star or International Energy Star product
Prohibited Substances	Pb, Cd, Hg and compounds thereof, Cr6 + compound	-	Pb, Cd	-	Pb, Cd, Hg and compounds thereof, Cr6 + compound
	PBBs, PBDEs, short-chain chlorinated paraffins (SCCP) over 50% chlorine concentration (C=10~13)		PBBs, PBDEs, short-chain chlorinated paraffins (SCCP) over 50% chlorine concentration (C=10~13)		PBBs, PBDEs, short-chain chlorinated paraffins (SCCP) over 50% chlorine concentration (C=10~13)

Hazardous Substances	<p>Pb, Hg, Cr6+ ≤ 1000ppm</p> <p>Cd ≤ 100ppm</p>	<p>Mercury is allowed only in the illumination lamps of LCD displays at no more than 5 grams.</p>	-	<p>[Built-in battery]</p> <p>Pb ≤ 15ppm</p> <p>Cd ≤ 5ppm</p> <p>Hg ≤ 0.25ppm</p> <p>[Plastic]</p> <p>Pb, Cd, Hg ≤ 2ppm</p> <p>Cr6+ ≤ 3ppm</p> <p>PBBs, PBDEs, chlorinated paraffins ≤ 10ppm</p>	<p>Pb, Hg, Cr6+ ≤ 1000ppm</p> <p>Cd ≤ 100ppm</p>
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[Table 21] Comparison of National Ecolabel Criteria: Computer Monitors

③ Air Conditioner

Type	Korea	Thailand	Taiwan	China	1 st draft of criteria
Synthetic Resin	Do not use halogenated synthetic resin in the parts composing housing over 25g ※ organic fluoric additive is allowed under 0.5% as a mass fraction		-	-	Do not use halogen-based synthetic resin.
Packaging and Anti-shock materials	Anti-shock material should be 50% or more of a waste synthetic resin as a mass fraction; Paper packaging shall be recycled paper or pulp	Paints or pigments used for printing are permitted to have the sum of concentrations of Hg, Pb, Cd and Cr6+ due to impurities not exceeding 0.01% (100 ppm) by weight. Paper packaging shall be made from 100% recycled pulp in which using corrugating medium paper and shall be made from at least 85% recycled pulp in which using Kraft liner board	-	Pb, Cd, Hg, Cr6+ ≤ 100ppm	The packaging damping materials, paints or pigments prepared by using more than 50% of the waste synthetic resin as a mass fraction are considered to have impurities and pollutants ≤0.01% (100 ppm)
Energy efficiency	Energy efficiency Level 1 by 「Regulation on Energy Efficiency Labeling and Standards」	-	-	energy consumption is zero when the product is not connected with input power supply.	International Energy Star or Vietnam Energy Star product
Refrigerant	ODP = 0, GWP ≤ 2,500	ODP = 0, GWP ≤ 2,500	-	ODP = 0	ODP = 0, GWP ≤ 2,500
Recycling rate	80% or more as a mass fraction	80% or more as a mass fraction	-	-	80% or more as a mass fraction

Prohibited substances	Pb, Cd, Hg and compounds thereof, Cr6 + compound; PBBs, PBDEs, SCCP (C=10~13) with a chlorine concentration of 50% or more	Flame retardants for each plastic component which weighs more than 25g Plastic component which weighs more than 25g			Flame retardants for each plastic component which weighs more than 25g PBB, PBDE ≤ 1000ppm
		PBB, PBDE ≤ 1000ppm	Pb, Cd, Hg < 2ppm, Cr6 + < 3ppm PBBs, PBDEs, chlorinated paraffin < 10ppm	organic chlorides and organic bromides.	Pb, Cd, Hg and compounds thereof, Cr6 + compound; PBBs, PBDEs, SCCP (C=10~13) with a chlorine concentration of 50% or more
Hazardous substances	Pb, Hg, Cr6+ ≤ 1000ppm Cd ≤ 100ppm	Pb, Hg, Cr6+ ≤ 1000ppm Cd ≤ 100ppm	Cd, Pb ≤ 2ppm	Benzoepylene ≤ 20ppm. The 18 PAHs listed in Annex B ≤ 200 ppm	Pb, Hg, Cr6+ ≤ 1000ppm Cd ≤ 100ppm
Noise (Unit: [dB(A)])	[Single Pack] All cooling capacity Indoors: ≤ 55 Outdoors: ≤ 60	[Single Pack] All cooling capacity Indoors: ≤ 55 Outdoors: ≤ 60	[Single Pack] Cooling capacity 2.2~4.0 kW; Indoors: ≤ 53 Outdoors: ≤ 57 Cooling capacity above 4.0; Indoors: ≤ 58 Outdoors: ≤ 62	[Single Pack] Cooling capacity 4.5~7.1; Indoors: ≤ 44 Outdoors: ≤ 56 Cooling capacity above 7.1; Indoors: ≤ 48 Outdoors: ≤ 59	[Single Pack] All cooling capacity Indoors: ≤ 55 Outdoors: ≤ 60
	[Split] Rated cooling capacity 10~35kW; Indoors: ≤ 55 Outdoors: ≤ 65 Rated cooling capacity ≤ 35kW; Indoors: ≤ 55 Outdoors: ≤ 70	[Split] Cooling capacity ≤ 8kW; Indoors: ≤ 50 Outdoors: ≤ 57 Cooling capacity < 12kW; Indoors: ≤ 57 Outdoors: ≤ 63	[Split] Cooling capacity 4.0~7.1kW; Indoors: ≤ 45 Outdoors: ≤ 56 Cooling capacity > 7.1kW; Indoors: ≤ 52 Outdoors: ≤ 61	[Split] Cooling capacity 4.0~7.1kW; Indoors: ≤ 43 Outdoors: ≤ 56 Cooling capacity > 7.1kW; Indoors: ≤ 47 Outdoors: ≤ 59	[Split] Rated cooling capacity 10~35kW; Indoors: ≤ 55 Outdoors: ≤ 65 Rated cooling capacity ≤ 35kW; Indoors: ≤ 55 Outdoors: ≤ 70

[Table 22] Comparison of National Ecolabel Criteria: Air Conditioner

(2) The First Criteria Proposal

The first set of draft criteria was submitted for consultation by the Focal Point and the Vietnam Green Label Office, and it referred to all information considered in establishing the criteria. The draft criteria for the three categories are shown in Tables 23, 24, and 25.

① The first criteria proposal for wooden furniture

Criteria	Standard suggestion
Amount of wood waste	70% or more as a mass fraction
Hazardous Substances	Prohibited Use of Hazardous Substances
Indoor air pollutants	Formaldehyde Emission ≤ 1.0 ppm
FSC certification	Use FSC certified materials (FSC 100% / FSC Mix / FSC Recycled)

[Table 23] The first criteria proposal for wooden furniture

② The first criteria proposal for computer monitors

Criteria	Standard suggestion
Synthetic resin	Do not use halogen-based synthetic resin.
Power Consumption	International Energy Star or Vietnam Energy Star
Prohibited substance	Pb, Cd, Hg and compounds thereof, Cr6 + compound
	PBBs, PBDEs, SCCP (C=10~13) with a chlorine concentration 50% or more
Hazardous Substances	Pb: ≤ 1000 ppm; Cd: ≤ 100 ppm; Hg: ≤ 1000 ppm; Cr6+: ≤ 1000 ppm

[Table 24] The first criteria proposal for computer monitors

③ The first criteria proposal for air conditioners

Criteria	Standard suggestion
Synthetic resin	Do not use halogen-based synthetic resin.
Packing and package cushioning materials	The packing and packaging materials are produced from environmental friendly material (recycled, FSC cardboard, non-halogen based resin)
Energy consumption efficiency	Vietnam Energy Star
Refrigerant	The refrigerant has an ODP of 0, a GWP of 2,500 or less
Recycling rate	80% or more as a mass fraction
Prohibited substance	Flame retardants for each plastic component of an air conditioner which weighs more than 25g PBB: ≤ 1000 ppm PBDE: ≤ 1000 ppm
Hazardous Substances	Pb: ≤ 1000 ppm; Cd: ≤ 100 ppm; Hg: ≤ 1000 ppm; Cr6+: ≤ 1000 ppm
Noise [dB (A)]	Indoor Unit Indoors: ≤ 55 Outdoors: ≤ 60

	Outdoor Unit	Rated cooling capacity 10 ~ 35kW	Indoor side: 55 or less Outdoor side: 65 or less
		Rated cooling capacity ≥35kW	Indoor side: 55 or less Outside: 70 or less

[Table 25] The first criteria proposal for air conditioners

2.2.2 Market Readiness Analysis

A market readiness analysis was conducted to develop criteria appropriate for the market situations in Viet Nam, and to survey the possibility of meeting the first draft of criteria. While searching for data related to Vietnam’s criteria through the aforementioned criteria analysis, the Implementing Agency found that there were limitations in accessing documents in Vietnamese. They also anticipated difficulties in contacting Vietnamese local companies from their location in Korea.

Therefore, the Implementing Agency utilized the services of a Support Agency PEAPROS, a specialized research institution based in Viet Nam. The Implementing Agency and Support Agency identified the following focal issues during the market readiness analysis:

- ▽ Overall current status of market and procurement in Viet Nam.
- ▽ Manufacturers for the product categories for criteria development and their products in the Vietnamese market.
- ▽ Acceptability of the first criteria proposal and the desire to obtain Vietnam Green Label by the Vietnamese market.

The Support Agency researched the three product categories, gathering information on sub-categories, key manufacturers, products, and respective environmental impacts. They described the market structure, key brands and product characteristics in detail, and briefly described the process of government procurement for each product category in Viet Nam. The research informed the development of criteria for each category, enabling the Implementing Agency to understand the procurement trends for these three categories.

Using the results of a literature review conducted by the Implementing Agency, the Support Agency investigated the feasibility of the Vietnamese Market adopting the first criteria proposal. The Support Agency also surveyed companies on their intent to acquire the Vietnam Green Label under the new criteria. The survey was conducted over the phone and through in person interviews.

The Support Agency included manufacturers, distributors, and retailers as subjects of the survey since distributors and retailers also participate in public procurement. Annex 1 provides the list of manufacturers who completed the survey. The answers from the distributors and retailers were excluded

from the analysis, as the Implementing Agency found that the distributors and retailers were not able to answer questions on their willingness to acquire ecolabels in the future or on the detailed technical aspects of the criteria. The contents of the Market Readiness Analysis for each product category are summarized and analyzed as follows.

1) Market Readiness Analysis Summary: Wooden Furniture

(1) Characteristics and environmental impact of the products

The products subject to Korea's eco-label, EL 172, are furniture products that mainly use wood or metal materials for indoor use in homes, offices, and schools. Wooden furniture is defined as those with a great proportion of wooden materials (such as MDF, plywood, bamboo, rattan and solid wood). Engineered wood, which is manufactured by binding or fixing the strands, particles, fibers, or boards of wood, is the most common type of wood used for wooden furniture. Types of engineered wood include plywood, laminated wood, fiberboard, polyurethane wood and particle board. Harmful VOCs (Volatile Organic Compounds) such as formaldehyde can be detected in the adhesives and preservatives used in engineered wood, and is often of concern for environmental and health reasons.

The environmental standards used for the process of wooden furniture manufacturing include: the Forest Stewardship Council (FSC) standard for used timber, the proportion of use of wood waste, and harmful elements of exterior material such as paints and finishes. FSC is a system aimed at expanding sustainable forest management. It encourages the consumers to seek out responsibly harvested wood by certifying wood products harvested using with sustainable management techniques and providing eco-labels to wood and wood products produced in those forests.

Illegal logging is one of the main reasons of deforestation and it results in the destruction of biodiversity and erosion of soil²². Certifying that the timber used in furniture production has been secured in a legal and sustainable manner is helpful in preserving biodiversity.

It is also important to reduce energy and water consumption in the manufacturing process of wooden furniture. Moreover, it is necessary for wooden furniture to be manufactured with spare parts that can be substituted so that furniture can be repaired with minimal waste.

(2) Market Conditions: Wooden Furniture

There are many local companies that manufacture wooden furniture in Viet Nam. Table 23 describes the key manufacturers and the environment standards they have achieved.

²² EU Environment, n.d., Retrieved 27 February, 2019, from http://ec.europa.eu/environment/forests/illegal_logging.htm

No.	Company	Achieved Environmental Standards
1	Xuan Hoa 	Xuan Hoa (1980) JSC/ ISO 9001: 2000 ISO 14001:2004
2	Hoa Phat 	Hoa Phat (1995) JSC/ ISO 9001: 2000 ISO 14001:2004
3	Fami 	Fami Furniture Company (2001)/ ISO 14001:2015
4	190 	190 Furniture JSC (2006)/ ISO 9001:2008

[Table 26] Key Manufacturers of wooden furniture in Viet Nam

The companies listed in Table 26 have acquired Quality Management System ISO 9001:2000 and Environmental Management System ISO 14001:2004, international performance standards. They are the leading companies in the market, and have received numerous awards in Viet Nam, including Vietnam Gold Star and High Quality Product and Outstanding Brand Awards.

According to data published by the Asia Economic Research Institute of Japan International Promotion Agency²³, Product-related Environmental Regulations on Chemicals (PRERCs) are helping Vietnamese companies improve their product management. The chemical substance regulations of Europe and direct foreign investment have reduced the negative effects of Vietnamese industries on the environment, and encouraged adoption of international standards including ISO 9001 and ISO 14001.

Public procurement procedures for wooden furniture are composed of two stages. In the first stage, designations of the types and quantities of products to be procured and the budget are prepared and submitted to the relevant government authority. In the second stage, the proposal is approved and submitted to the Ministry of Finance. The department then acquires the furniture by searching for suppliers, preparing a purchase contract, and evaluating price options.

²³ Iguchi, H., Arimura, T. H., & Michida, E., 2015, "Adoption of ISO9001 through supply chain in Vietnam: Impacts of FDI and product-related environmental regulation (No. 497)", Institute of Developing Economies, Japan External Trade Organization (JETRO).

Public institutions in Viet Nam mostly purchase wooden furniture through an open bidding and restricted bidding in accordance with the Bidding Law. If bidding is announced on the national public procurement platform or other public information platforms, both manufacturers and retailers can also participate as bidders.

Wooden office furniture is commonly procured by public institutions, and includes computer desks, filing cabinet, meeting tables, and podium. Despite wooden furniture accounting for only a minor portion of remodeling, the procurement in this category can be substantial given the large numbers of public institutions building new buildings, or remodeling older buildings. The Table 27 is the list of general office furniture manufactured by Hoa Phat and their respective prices on the Vietnamese market.

No.	Type	Picture	Price (USD)	Wooden Material
1	Computer desk		55.00	MFC(Melamine Faced Chipboard): As the common material of office furniture, LPM(Low Pressure Melamine) is attached to particle board or MDF on both sides with appropriate heat, pressure and time, and it is usually adorned with adhesive paper to protect the product surface with color and pattern.
2	Filing cabinet		142.61	Laminate Wood: multi-layer synthetic flooring product fused together with a lamination process, mainly used for flooring.
3	Meeting table		164.73	PU wood: Engineered wood covered with PU, which is decorated with a wooden texture and painted with a layer of varnish (made from hard polyurethane) for the glossy and eye-catching colors
4	Podium		111.08	

[Table 27] Representative office furniture in Viet Nam²⁴

(3) Potential Compliance of Draft Criteria by manufacturer

Table 28 provides the results from a survey of 25 furniture manufacturers’ concerning their potential compliance with draft criteria proposed for wooden furniture.

²⁴ Hoa Phat Group, Retrived June 17 2018, from <http://noithathoaphat.com.vn>

Criteria	Criteria Suggestion	Not Satisfy	Satisfy	Willing to certificate
		%		
Amount of wood waste	70% or more as a mass fraction	0	100	100
Hazardous Substances	Prohibited use of heavy metals	0	100	100
Indoor air pollutants	Formaldehyde emission ≤ 1.0 ppm	0	100	100
FSC certification	Use FSC certified materials (FSC 100% / FSC Mix / FSC Recycled)	60	40	100

[Table 28] Potential Compliance to draft criteria from manufacturers of Wooden Furniture

The manufacturers completing the survey found the draft criteria to be reasonable; and indicated that products in the Vietnamese market can sufficiently satisfy the proposed criteria. In addition, the local furniture manufacturers were well aware of the environmental standards within the proposed criteria. All 25 companies subject to the survey expressed intentions to participate in the certification of environment-friendly products.

All 25 companies participating in survey indicated that they could satisfy all the criteria presented in terms of use of waste wood, use of harmful substances, and indoor air quality. There are several different methods of recycling furniture in Viet Nam depending on the level of damages. Options include reuse (after infestation treatment), and lower quality wood panels may be recycled as pulp or sawdust. The industry association representative of 190 furniture manufacturers stated that although companies are capable of recycling or reusing high quality wooden products, they are frequently thrown into landfills or used as firewood because consumers do not recycle them. In addition, furniture manufacturers in Viet Nam do not have recall policies for aged or broken products.

In addition, although 15 of the 25 manufacturers knew of FSC, they do not record information on the sources of their raw materials, since customers did not demand this information. The key furniture manufacturers in Viet Nam used FSC certified timber.

Representatives of some small business and private timber companies mentioned that they do not use FSC certified timber due to cost concerns. The representative of Fami responded that although the company offers a diverse range of products manufactured by using FSC certified timber, Vietnamese customers are typically not aware of such criteria and do not require it or ask for information about FSC sourcing.

2) Market Readiness Analysis Summary: Computer monitor

(1) Characteristics and Environmental Impact of the Products

According to the definition provided in the Korean eco-label standard EL147, computer monitors are output devices that display visual information through a connection with a personal computer. In addition to monitor functions, the definition also includes products that combine TV reception functions or sound output devices. Types of monitors are categorized as CRT, LCD and OLED depending on their emission or transmission material. Among these, the most common type of screen found in the global market are LCDs.

Environmental criteria vary with the characteristics of electronic devices. They can be divided into three critical impact areas; Chemicals, Energy, and Resource Consumption.²⁵ The environmental criteria for electronic devices are classified by the Korean ecolabel as follows:

- ▽ Production: Management of hazardous chemicals, Eco design
- ▽ Distribution and Consumption: Power consumption, Power saving mode
- ▽ Disposal: Free of harmful substances, Recycling systems
- ▽ Recycle: Synthetic Resins, Package Cushioning Materials, Recycling rates

The design and manufacturing phase should consider the entire life-cycle of the product and take into account resources and energy savings, emissions of contaminants, use of recycled materials, repair through replacement of parts.

Manufacturers of computer monitors should avoid the use of hazardous materials in the manufacturing process. Heavy metals such as lead and mercury can be released into the environment during the disposal process, potentially harming human and environmental health. Phthalates are used as a plasticizer in PVC products, and brominated flame retardants are included in the plastic material that forms the casing of electronic products. Phthalates and brominated flame retardants are well known for their persistence, biological concentration, and toxic effects on the endocrine system. Because these substances are not stable in chemical bonds²⁶, they may adversely affect the environment when released into the atmosphere.

Electronics should be energy efficient to be considered environmentally friendly because they can reduce power consumption, which indirectly mitigates environmental pollution and climate change problems.²⁷ To achieve high energy efficiency, Computer monitors should support power-saving mode

²⁵ Greenpeace, 2017, "Guide to Greener Electronics 2017"

²⁶ Gore, Andrea C., et al. "Introduction to Endocrine Disrupting Chemicals (EDCs)." A Guide for Public Interest Organizations and Policy-Makers; Endocrine Society: Washington, DC, USA (2014).

²⁷ Bose, BIMAL K. "Energy, environment and importance of power electronics." Proc. IEEE Powering Conf. 2007.

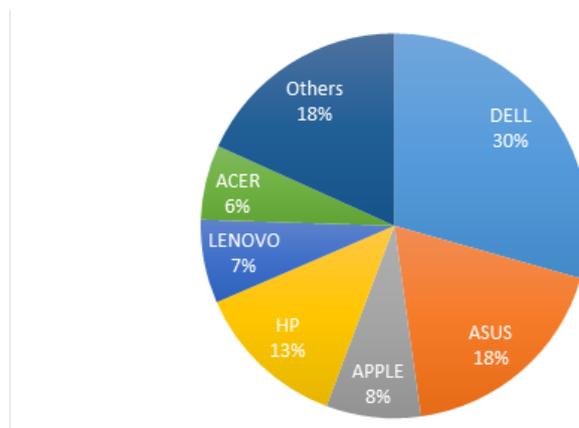
and brightness reduction to reduce unnecessary energy consumption while in use and when not in use.

In Viet Nam, electronic waste is collected through unofficial channels by scrap dealers or unregistered units which provide waste to craft villages for recycling. In 2015, the Prime Minister released Decision No. 16 stipulating that manufacturers and importers of electronic products must take responsibility to collect their product waste. However, e-waste is still not controlled because there is not yet a legal document that guides the implementation of the decision.²⁸

(2) Market Conditions: Computer Monitors

Computer monitors are usually purchased as a set. A desktop computer including a case (containing the motherboard and processor), a monitor, a keyboard, and a mouse. The market share of computer monitors was replaced by that of computers because there is no specific data for computer monitors in Viet Nam.

Viet Nam does not have any domestic companies that manufacture monitors; all the monitors consumed were imported from overseas companies. Representative overseas manufacturers selling products in Viet Nam include Dell, Asus, HP, Lenovo, Acer and Samsung. Figure 12 illustrates the market share of the key computer brands in Viet Nam in the first half of 2017.



[Figure 12] The market share of key computer brands in Viet Nam in the first half of 2017²⁹

In general, public institutions purchase computers and computer monitors together. Monitors can also be procured separately, for example, to replace broken components. A computer set includes the hardware, case, monitor, and other accessories. The price of computer monitors in the Vietnamese market range from USD 130-1,300. The most widely-used computer monitors selected by consumers

²⁸ VietNamNet, 2018, "Vietnam needs policy to encourage recycling of e-waste", Environment, 13 November 2018, from <https://english.vietnamnet.vn/fms/environment/211557/vietnam-needs-policy-to-encourage-recycling-of-e-waste.html>

²⁹ Mobile Content Social Network, N.D., Retrieved 25 February, 2019, <https://appvn.net/thi-truong-pc-viet-nam-nua-dau-2017-thiet-bi-cua-apple-tang-truong-dot-bien/>

are priced at about USD 170 for general use, and USD 550 for professional graphic functions. The price range of computer set which Vietnamese government procure for general use is USD 600-700.³⁰

The main distribution channel for the computer monitor market in Viet Nam is divided largely into offline outlets such as the household appliance outlets, and online shopping malls. Since computer monitors are generally purchased along with computer desktops, there is no separate market data. According to the GfK report³¹ from the first half of 2017, more than 352,000 units of desktops and notebooks were sold in Viet Nam, with total sales revenue dropping by 16.7% from the same period in the previous year. According to Gartner’s market research³², a US based research company, this decline is an international trend in the desktop PC market. The demands have decreased due to competition with smartphones, smart TVs, tablets, and notebook PCs. A majority of competing products have incorporated integrated display types, thereby reducing the demand for desktop PCs and computer monitors. However, the use of desktop PCs and computer monitors in public institutions and companies is still common, due to the unique functions of the PC. Therefore, the demand for computer monitors from public institutions is expected to remain steady.

(3) Potential Compliance of Draft Criteria by manufacturer

Three companies were surveyed about their ability to meet the proposed draft criteria: Dell Samsung and AOC. Table 29 shows that all three company satisfy with the draft ecolabel criteria. RQD0301 and 0QA-2049 in the bracket refer to the company’s environmental management code that meet the criteria. AOC announced that their product satisfied all criteria for prohibited substances through USA’s EPEAT Silver certification.

Criteria	Standard Suggestion	Dell	Samsung	AOC
Synthetic resin	Do not use halogen-based synthetic resin.	Satisfy (RQD0301)	Satisfy (0QA-2049)	Satisfy
Power Consumption	International Energy Star or Vietnam Energy Star	Satisfy	Satisfy	Satisfy
Prohibited substance	Pb, Cd, Hg and compounds thereof, Cr6 + compound	Satisfy (RQD0301)	Satisfy (0QA-2049)	Satisfy (EPEAT silver)
	SCCP (PBBs, PBDEs, chlorine concentration 50% or more)	Satisfy (RQD0301)	Satisfy (0QA-2049)	Satisfy (EPEAT silver)

³⁰ Vietnamese government, 2017, Framework agreement No. 04/TTK-TTĐG

³¹ GfK TEMAX, 2017, “Vietnam report Q1/2017”

³² Van der Meulen, R., and J. Rivera., 2015, "Gartner says worldwide traditional PC, tablet, ultramobile and mobile phone shipments on pace to grow 7.6 percent in 2014."

	(C=10~13)			
Hazardous Substances	Pb: ≤1000 ppm Cd: ≤100ppm Hg: ≤1000ppm Cr6+: ≤1000ppm	Satisfy (RQD0301)	Satisfy (0QA-2049)	Satisfy (EPEAT silver)

[Table 29] Potential Compliance to draft criteria from manufacturers of Computer Monitors

Computer monitors can fully satisfy the draft criteria because the global computer brands manufacture electronics in accordance with the international environmental regulations such as RoHS (Directive on the Restriction of the Use of Certain Hazardous Substances in Electric and Electronic Equipment) by EU.

3) Market Readiness Analysis Summary: Air conditioner

(1) Characteristics and Environmental Impact of the Products

Air conditioners are defined as systems or machines that process the air in enclosed spaces for the purpose of indoor heating and cooling. From a functional perspective, air conditioners can be categorized as unilateral air conditioners dedicated for cooling, or a bidirectional air conditioners capable of both heating and cooling. Given the tropical and subtropical climate of Viet Nam, air conditioners that function solely as heaters were excluded from the study, however bidirectional air conditioners capable of both heating and cooling were included.

Air conditioners can be classified into three categories: wall-mounted, ceiling-mounted, and standing. Since the wall-mounted air conditioner can be utilized in a diverse range of spaces, it is most preferred by public institutions.

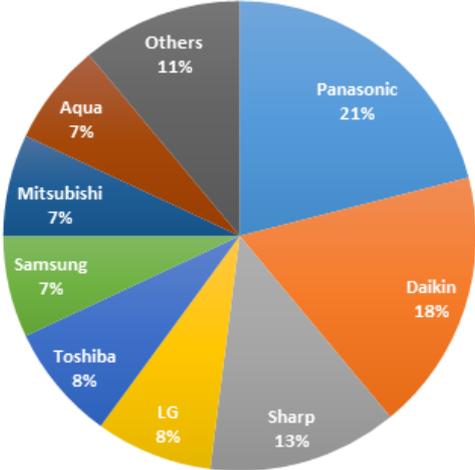
Environmental impacts associated with air conditioners include impacts associated with energy-use, air emissions associated with the use of refrigerants for cooling, harmful chemicals, noise, recyclability of the materials, and waste from packaging materials. The Vietnam Energy Star and energy efficiency standards, and quantities resources consumed in the production stage, are also often referenced in environmental criteria for air conditioners.

Refrigerants are an easy-to-evaporative working fluid in the freezer that takes heat from the low-temperature part of the product and transports it to the high-temperature part. Refrigerants used in air conditioners can contribute to destruction of the ozone layer and to global warming. CFC-affiliated refrigerants with a high ozone depletion potential are regulated internationally, and the increased concern about global warming is raising the need to develop eco-friendly refrigerants with a low global

warming potential (GWP).

(2) Market Conditions: Air Conditioners

According to a survey conducted by Dream Incubator Marketing, the reported market shares of air conditioner brands in Viet Nam is shown in Figure 13.



[Figure 13] Market Share of Air Conditioner in Viet Nam, 2016³³

The eight companies that hold a total of 89% of the market share in Viet Nam are global corporations based in USA, Japan, and Korea. As such, most of the air conditioners used in the Vietnamese market are imported products. The few domestic manufacturers of air conditioners include Hoa Phat Refrigeration Co., Ltd., Hoa Binh Refrigeration, and Hoa Binh Refrigeration and Trading Co., Ltd. Funiki was the first manufacturer to open a local air conditioner factory, beginning operations in 2018.

The names and prices of eight latest models of the three most popular brands (Panasonic, Daikin and Sharp) are displayed in the Table 30. Viet Nam uses HP rather than kW as the unit of electrical power; products below have two power output models, 1HP and 1.5HP. All six products acquired the Level 5 Vietnam Energy Star rating, with prices ranging from USD 400 to USD 500.

No.	Brand	Name of Product	Product’s model number	Price (USD)
1	Panasonic	Inverter 1 HP Air conditioner	CU/CS-PU9UKH-8	453.66
2	Panasonic	Inverter 1.5 HP Air conditioner	CU/CS-PU12UKH-8	543.62
3	DAIKIN	Inverter 1 HP Air conditioner	FTKQ25SVMV	453.66
4	DAIKIN	Inverter 1.5 HP Air conditioner	FTKQ35SVMV	552.19

³³ Dream Incubator Marketing, 2016, “Study about Air-conditioner Market In Vietnam “

5	SHARP	Inverter 1 HP Air conditioner	AH-X9VEW	333.71
6	SHARP	Inverter 1.5 HP Air conditioner	AH-X12VEW	427.96

[Table 30] The newest air conditioner in 2018 in Vietnamese market ³⁴

Public institutions in Viet Nam procure air conditioners through methods including open bidding and competitive offers. Similar to computer monitors, manufacturers, distributors, and retailers can all participate in bidding. Air conditioners can be purchased as individual units, or as part of a larger order for office buildings or building remodels.

Procurement officers typically visit retail stores and purchase air conditioner units directly. However, if government agencies construct new facilities or remodel existing ones, they need to procure large quantities of the product. Accordingly, the procurement personnel must comply with the specific centralized procurement protocol designed for national assets. In such case, importers and official suppliers of global air conditioner brands, rather than the household appliance distributors, become the participants in the bidding process.

(3) Potential Compliance of Draft Criteria by manufacturer

A survey was conducted to gain input on proposed criteria from manufacturers and their potential to meet such criteria. LG, Samsung, and Daikin's responses to the survey are shown in Table 31 below. The contents in brackets refers to reference figures or materials used for products manufactured by the corresponding company.

Criteria	Standard suggestion	LG	Samsung	Daikin	Casper
Synthetic resin	Do not use halogen-based synthetic resin.	Satisfy			
	Flame retardants for each plastic component of an air conditioner which weighs more than 25g PBB: ≤ 1000 ppm PBDE: ≤ 1000 ppm	N/A	Satisfy (900ppm)	N/A	N/A
Packing and packaging materials	The packing and packaging materials are produced from environmental friendly material (recycled, FSC cardboard, non-halogen based resin)	Satisfy(cardboard)			
Energy consumption efficiency	Vietnam Energy Star	Satisfy			
Refrigerant	The refrigerant has an ODP of 0, a GWP of 2,500 or less	Satisfy (R410A)	Satisfy (R410A)	Satisfy (R32)	Satisfy (R32)
Recycling rate	80% or more as a mass fraction	Satisfy (80%)	Satisfy (95%)	N/A	N/A
Hazardous	Pb: ≤ 1000 ppm	Satisfy	Satisfy	Satisfy	N/A

³⁴ The largest consumer electronics retailer, Điện Máy Xanh, Retrieved June 2018, from <https://www.dienmayxanh.com/>

Substances	Cd: ≤ 100 ppm Hg: ≤ 1000 ppm Cr6+: ≤ 100 ppm			(80ppm)		
Noise [dB (A)]	Single Pack	Indoors: ≤ 55 Outdoors: ≤ 60	Satisfy (maximum noise level is 50 dB)	Satisfy (Indoor: 44 dB, outdoor: 59 dB)	Satisfy (Max 35 dB)	Satisfy (Max 40 dB)

[Table 31] Potential Compliance to draft criteria from manufacturers of Air Conditioner

The air conditioner manufacturers generally satisfied the draft criteria. Samsung satisfied all the criteria and LG satisfied all the criteria except for the flame retardants of synthetic resins. Daikin and Casper did not provide specific data on synthetic resin and recycling rate. Casper replied that they do not know whether their products meet the criteria for prohibited substances.

Like computer monitors, global electric manufacturers produce their products in compliance with the international environmental regulations such as RoHS by EU. Few manufactures do not have a necessary data corresponding to the criteria, but the change of criteria is not required to consider the total result.

(4) Conclusions to the Market Readiness Analysis

The survey of local manufacturers' expected compliance to draft criteria found that manufacturers were generally satisfied with the proposed environmental criteria.

Wooden furniture manufacturers expected to meet all proposed criteria except FSC-certification. Manufacturers do not need to dramatically adjust their production standards to meet the criteria, but would potentially need to update their wood sourcing practices to ensure FSC certified timber is used. The cost burden of FSC certification will be ease if the mass fraction of wood with FSC certification is limited. The other criteria do not need large adjustments of the level.

Manufacturers of computer monitors and air conditioners expect to mostly satisfy the proposed criteria. Many have already established their own internal environmental product standards to comply with international environmental regulations and standards, and manage environmental hazardous materials accordingly. Some air conditioner manufacturers were unaware of the quantity of harmful substances in the flame-retardants in plastic parts. Manufacturers were also not aware of recycling rates; which are informed by Vietnam's recycling system. It may be necessary to also establish a relevant policy when establishing the Green Label in Viet Nam to address the current recycling system.

Many manufacturers indicated in the survey that they do not promote environment-friendly products because the demand is still insufficient due to a lack of awareness. If the Vietnam Green Label is

established for the product groups and a priority purchase policy for the certified product is implemented, the manufacturers replied that they would be fully willing to obtain the certification.

2.2.3 Review by Stakeholders and Revision of criteria

1) Second Criteria Proposal and Test Method for Each Subject Item

Following the market readiness analysis, the first draft criteria was regarded as applicable and supplemented with the testing methods. New and refined criteria were developed by determining their feasibility within the Vietnamese market. The test methods were used on the basis of the methods of the original countries in which the criteria had been adopted. The test method was adjusted after expert consultation. Each is shown in Table 32.

Product	Type	Criteria	Testing Methods
Wood Furniture	Amount of wood waste	70% or more as a mass fraction	Check the submission
	Indoor air pollutants	Formaldehyde emission shall be less than 0.5 ppm	Desiccator method
	FSC certification	10% of the mass fraction shall be produced in accordance with FSC certification	Check the submission
Computer Monitors	Synthetic resin	Do not use halogen-based synthetic resin.	Check the submission
	Power Consumption	International Energy Star or Vietnam Energy Star	Check the submission
	Prohibited Substance	Pb, Cd, Hg and compounds thereof, Cr6 + compound, PBBs, PBDEs, SCCP (C=10~13) with a chlorine concentration 50% or more	Check the submission
	Harmful substances of components	Pb ≤1000 ppm, Cd ≤100 ppm, Hg ≤1000 ppm, Cr6+ ≤1000 ppm	KS C IEC 62321-5 KS C IEC 62321-4
Air Conditioner	Synthetic resin	Do not use halogen-based synthetic resin.	Check the submission
		Contents of the flame retardant contained in the plastic materials exceeding 25g; PBB: ≤ 1000 ppm PBDE: ≤ 1000 ppm	IEC 62321:2008
	Package and package cushioning materials	Package cushioning materials made of waste synthetic resin with mass fraction of 50% or more	Check the submission
	Power Consumption	International Energy Star or Vietnam Energy Star	Check the submission
	Refrigerant	The refrigerant has an ODP of 0, a GWP of 2,500 or less	Check the submission
	Recycling Rate	80% or more as a mass fraction	Check the submission
	Prohibited Substance	Pb, Cd, Hg and compounds thereof, Cr6 + compound, PBBs, PBDEs, SCCP (C=10~13) with a chlorine concentration 50% or more	Check the submission

	Contents of the harmful substances	Pb: ≤ 1000 ppm, Cd: ≤ 100 ppm, Hg: ≤ 1000 ppm, Cr6+: ≤ 100 ppm		Check the submission or KS C IEC 62321-5 KS C IEC 62321-4	
	Noise [dB (A)]	Single Pack	Indoors: ≤ 55; Outdoors: ≤ 60		JIS C 9612 KS C 9306
		Separate Pack	Rated cooling capacity 10 ~ 35kW	indoor side: ≤ 55; Outdoor side ≤ 65	
			Rated cooling capacity ≥ 35kW	Indoor side: ≤ 55 Outside: ≤ 70	

[Table 32] Environmental criteria proposal and the test methods for the product groups

2) Consultation of Korean companies

Korean companies were also consulted to gain insight on the validity and feasibility of meeting the second draft criteria. Samsung Electronics consulted on the computer monitor and air conditioner product groups, and the Federation of the Korean Furniture Industry Cooperative was consulted regarding wooden furniture. Results are summarized below.

(1) Feedback on Second Draft Wooden Furniture Criteria from the Korean Perspective

The managing director of Federation of the Korean Furniture Industry Cooperative consulted on the second draft criteria presented by the Implementing Agency. They confirmed the necessary considerations to be made prior to a domestic furniture company's expansion into the overseas market. Unlike other countries with criteria for wooden products or furniture, the environmental criteria for furniture in Korea are diversely segmented into wooden products, chairs, furniture, and office partitions. Although there were differences in the types of criteria adopted in Korea for each product group, the environmental criteria for wooden furniture in Korea were found to be broadly similar.

The results of this consultation show that wooden furniture from Viet Nam can adequately comply with the commonly-used KS criteria rather than the Korean Eco-label criteria because the Korean Eco-label criteria and the test method is rather stringent for Vietnamese companies. In addition, it would be reasonable to propose including only the quantity of formaldehyde discharge and the recycling rate among the Korean Eco-label criteria.

(2) Feedback on Second Draft Air Conditioner and Computer Monitor Criteria from Samsung

Samsung confirmed that it applies the same environmental criteria for all products sold throughout the world in accordance with their in-house criteria. All exported products comply with the same in-house criteria, with the exception of differences that stem from voltage characteristics of each country.

Samsung Electronics has not received Viet Nam's ecolabel certification until now because of a lack of perceived demand within the market. If consumer awareness in Viet Nam on ecolabels increases and a priority purchasing policy for Vietnam Green Label is executed in the procurement market, Samsung is expressed a willingness to adopt this certification.

Samsung did not propose any revisions to their criteria to address an expansion into the Vietnamese market, although they recommended that several evaluation items should be made more specific. Accordingly, these changes were reflected in the criteria for computer monitors and air conditioners.

(3) Consultation of Korean experts in charge of the Korean Eco-label on the Second Draft Criteria

Because the draft criteria for wooden furniture were initially developed based on Korean criteria for wooden products, rather than furniture, the draft criteria for wooden furniture were not fully adopted. The criteria were revised by the Implementing Agency to incorporate the detection of heavy metals due to adhesives, paints, and sheets used in the production of wooden furniture.

For computer monitors and air conditioners, it was difficult to define recycling and reuse rates since Viet Nam does not have a mature electronics recycling system. Nevertheless, a criteria related to packaging materials was needed, so the Korean criteria were used for them. Among the criteria proposed, the criteria for packing materials using substances with zero ozone depletion potential were considered unacceptable by Vietnamese stakeholders consulted.

An expert from the Korean ecolabel program suggested that the standards for hazardous materials and heavy metal contents be set in accordance with the international standards in order for Vietnamese companies to improve their environmental technology levels. This recommendation was adopted to the finalized criteria

(4) Consultation of Vietnamese Expert on the Second Draft Criteria

A consultation on the second draft criteria was carried out on the feasibility of the criteria proposal and test methods in Viet Nam. With the recommendation from the Focal Point, a national expert in Viet Nam participated in the consultation for the development of the criteria.

The national expert confirmed that there are almost no experimental laboratories in Viet Nam that can test heavy metal content and VOC emissions of products. A majority of companies applying for Vietnam Green Label Certification instead send samples to the experimental labs of TÜV Rheinland Vietnam Co., Ltd. and Quality Assurance Testing Centre (QUATEST) in Ho Chi Minh City. As such, there are very

few companies that can acquire the Vietnam Green Label certification at the moment due to the high cost of required testing. Therefore, the national expert expects that in order to encourage the participation of the companies, the number of testing criteria may need to be reconsidered. Some of the criteria could be suggested as recommendations and evaluated from the documents the companies submit autonomously.

After collecting opinions from the stakeholders and experts on the second draft criteria, the final criteria were completed. These criteria can be found in Annex 4, and are presented in accordance with the Vietnamese Green Label format.

2.2.4 Conclusions

The criteria were adjusted to be applicable into Vietnamese market after consultations with Vietnamese and Korean experts and stakeholders. Table 33 is a list of finalized criteria for three product groups. These criteria can be also found in Annex 4 and are presented in accordance with the Vietnam Green Label format.

Product	Type	Criteria	Testing Methods
Wood Furniture	Amount of wood waste	70% or more as a mass fraction	Check the submission
	Indoor air pollutants	Formaldehyde emission shall be less than 0.5mg / L	Desiccator method (ISO 12460-4:2016)
	Sustainable forest resources	10% of the mass fraction shall be produced in accordance with FSC certification	Check the submission
	Prohibited substances	Pb, Cd, Hg and compounds thereof, Cr6 + compound	IEC 62321:2008
	Hazardous substances	The sum of Pb, Cd, Hg, and Cr6+ in the paint or sheet shall be not more than 0.1% by mass fraction	IEC 62321:2008
Computer Monitors	Synthetic resin	Do not use halogen-based synthetic resin.	Check the submission
	Energy efficiency	International Energy Star or Vietnam Energy Star	Check the submission
	Prohibited Substance	Pb, Cd, Hg and compounds thereof, Cr6 + compound, PBBs, PBDEs, SCCP (C=10-13) with a chlorine concentration 50% or more	IEC 62321:2008
	Harmful substances of components	Pb ≤1000 ppm Cd ≤100 ppm Hg ≤1000 ppm Cr6+ ≤1000 ppm	IEC 62321:2008
	Packing and package cushioning materials	Packing cushion made of waste synthetic resin with mass fraction of 50% or more; Packing cushion of 100% recycled paper or pulp material such as pulp mold	Check the submission

	Recycling system	a take-back system for E-waste products in accordance to Decision No.16/2015/QD-TTg		Check the submission
Air Conditioner	Synthetic resin	Do not use halogen-based synthetic resin.		Check the submission
		Contents of the flame retardant contained in the plastic materials exceeding 25g; PBB: ≤ 1000 ppm PBDE: ≤ 1000 ppm		IEC 62321:2008
	Packing and package cushioning materials	Packing cushion made of waste synthetic resin with mass fraction of 50% or more; Packing cushion of 100% recycled paper or pulp material such as pulp mold		Check the submission
	Recycling system	a take-back system for E-waste products in accordance to Decision No.16/2015/QD-TTg		Check the submission
	Power Consumption	International Energy Star or Vietnam Energy Star		Check the submission
	Refrigerant	The refrigerant has an ODP of 0, a GWP of 2,500 or less		Check the submission
	Harmful substances of components	Pb: ≤ 1000 ppm Cd: ≤ 100 ppm Hg: ≤ 1000 ppm Cr6+: ≤ 100 ppm		Check the submission or KS C IEC 62321-5 KS C IEC 62321-4
	Noise [dB (A)]	Single Pack		Indoors: ≤ 55 ; Outdoors: ≤ 60
	Noise [dB (A)]	Single Pack	Indoors: ≤ 55 ; Outdoors: ≤ 60	
Separate Pack		Rated cooling capacity 10 ~ 35kW	indoor side: ≤ 55 ; Outdoor side ≤ 65	
		Rated cooling capacity ≥ 35 kW	Indoor side: ≤ 55 Outside: ≤ 70	

[Table 33] Draft Criteria for Vietnam Green Label

2.3 Develop GPP Guidelines

Although Viet Nam does not currently systematically implement GPP, according to the national strategy on green growth, mechanisms, policies and management apparatus for GPP needs to be formulated by 2020 to support and guide the implementation. Based on the political requirements, through generating the roadmap, the following guidelines were developed, offering a practical methodology for GPP and by which the stakeholders to the bidding process can consider environment-friendly products and comply with the existing procurement procedure.

The objective of the guidelines is to help procurement officers understand GPP and to strengthen their capacity by proposing procurement procedures and methods for purchasing environment-friendly products approved by the government. The procurement procedures of Korea and Viet Nam were analyzed by the Implementing Agency, and the guidelines from Korean and other countries were benchmarked. Although the guidelines were prepared on the basis of the current procurement procedures, emphasis was placed on the sections that require revision or addition when the new Decree is adopted in the future. The following sections describe each of these steps in turn.

Key activities	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
1. Research procurement process										
2. Benchmark domestic and overseas guidelines										
1. Prepare guidelines										
2. Verify and revise guidelines										

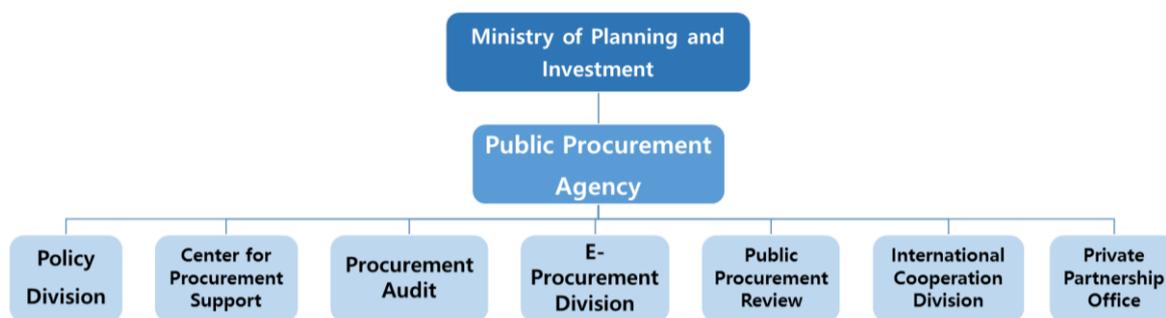
[Table 34] Schedule for developing the GPP guidelines, 2018

2.3.1 Analysis of Public Procurement Procedures in Korea and Viet Nam

1) Public Procurement Procedures in Viet Nam

(1) Introduction

The procurement system in Viet Nam is highly decentralized, that the central and local governments procure individually according to the bidding law revised in 2013. The Ministry of Planning and Investment (MPI) is in overall charge of the public procurement functions with the Public Procurement Agency (PPA) under MPI supervising the practical public procurement. Figure 14 provides background on the Public Procurement Agency in Viet Nam.



[Figure 14] Public Procurement Agency in Viet Nam

The PPA currently operates seven departments and one center, and is responsible for the related laws and regulations, training, program operation, audit, and electronic procurement system. In the case of a large-scale project, the Minister of the PPA makes plans and decisions related to overall procurement, while for smaller projects, the Directors of related departments make decisions.³⁵ The PPA provides guidelines and management of procurement by operating a national e-procurement website and publishing a procurement newspaper. Public institutions can also give public notice of tender by themselves. Table 35 lists such institutions that can administer a public notice of tender and their respective major industries and websites.

Industry	Institution	Websites for public tender notices
Electricity	Vietnam Electricity Cooperation	http://www.dauthau.evn.com.vn
	PetroVietnam Power	http://www.pv-power.vn
Oil & Gas	Vietnam National Oil & Gas Group – PVN	http://www.pvn.vn
	Petrovietnam Exploration production corporation	http://pvpe.com.v
Chemistry	Vietnam National Chemical Group – Vinachem	http://vinachem.com.vn
Mechanics & Manufacture	Ministry of Industry and Trade	http://www.moit.gov.vn
Construction & Environment	Ministry of Construction	http://moc.gov.vn
	Ministry of Finance	http://www.mof.gov.vn
	Magazine of Ministry of Transport	http://giaothongvantai.com.vn
	Petrovietnam Construction Joint Stock Corporation(PVC)	http://www.pvc.vn
	Vietnam Water And Environment Investment Corporation	http://viwaseen.com.vn
	VINACONEX	http://www.vinaconex.com.vn
Jewelry Industry	Saigon Jewelry Company (Gold & gems)	http://www.sjc.com.vn

[Table 35] Public bidding institutions by major industry and website links³⁶

³⁵ Korea Institute of Procurement ,2015, "Survey on the Procurement Market Status in Two Asian Countries"

³⁶ KOTRA, 2016, "Southeast Asian Public Procurement Market Status and Entry Strategy"

(2) The Type and Process of Bidding in Public Procurement

The scope of application of the general procurement system according to the Bidding Law 2013 is as follows.³⁷ Contractors are selected for the goods, consultation services, non-consultation services and construction works in the following projects:

- a. Development investment projects funded with state capital of state agencies, political organizations, socio-political organizations, socio-politic-professional organizations, socio-professional organizations, social organizations, people's armed forces units or public non-business units.
- b. Development investment projects of state enterprises;
- c. Projects other than those specified at Points a and b of this Clause, with capital of the state or state enterprises accounting for 30% or more of their total investment capital, or accounting for less than 30% but exceeding VND 500 billion;
- d. Procurement funded with state capital to maintain routine operations of national institutions and public services;
- e. Purchase of national reserve goods with state capital;
- f. Purchase of medicines and medical supplies with state capital, health insurance fund, revenues from medical examination and treatment services, and other lawful revenue sources of public health establishments;
- g. Selection of investors to implement investment projects in the form of public-private partnership (PPP) or land-using investment projects
- f. Selection of contractors in the field of petroleum, except the selection of contractors to provide petroleum services directly related to petroleum exploration, field development and petroleum exploitation in accordance with the petroleum law.

The types of procurement are shown in Table 36.³⁸ The most common types of procurement processes used in Viet Nam are open bidding, restricted bidding and contractor appointment.

³⁷ Article 1 of the Bidding Law No. 20/2013/L-CTN

³⁸ Article 20~26 of the Bidding Law No. 20/2013/L-CTN

Type	Key contents
Open bidding	It is proceeded openly and there is no restrictions on the number of participating contractors or investors - Open bidding is the principle unless it is a special case
Restricted bidding	Restricted bidding applies to bidding packages having high technical requirements or involving special techniques which can be satisfied by some contractors (generally within 5 companies) → Company that offer the lowest price and fulfill 70~80% of technical requirements will win the bid
Contractor appointment	In the following situations, bidding can proceed by designating specific companies (similar to private contract in Korea) - Project for emergency: Project to overcome disasters, national confidentiality supplementation project, and project for purchasing of medical equipment and drugs for quarantine measures, etc. - Project for protection of the national sovereignty - consultation and non-consultation services, and provisions of goods related to the existing project: Requirement for concordance with technological capabilities with those of the existing project, existence of issue of copyright, and research and testing purposes, etc.
Competitive offer	It is executed in the case of bidding for projects with budget corresponding to the limit of funds stipulated for the government (less than 2 Billion VND) and is used mostly for the following types of biddings - Simple non-consultation bidding - Bidding for provision of general goods (standard specifications) - Bidding for simple construction works with approved construction drawings In most cases, more than 3 offers are received and the bid with the lowest price will be selected
Direct procurement	It is utilized in the event of having to increase the quantity of purchasing of similar goods within the range of not exceeding the contracted value for the project for which additional purchase is needed or being progressed for the project completed within the last 1 year - Winners of the bidding for the project in progress are the key subjects - Contents and nature of the project must be similar to the previous project, and must not exceed 130% of the existing project size - The reference date for the approval of the outcomes of direct purchase must not exceed 12 months from the date of implementation of the previous contract
Self-execution	If the institution in charge of the project sufficiently fulfills the requirements including capabilities, technology, financing and experiences, such institution can directly execute the project on its own
Special purchase	In special cases that are not appropriate for any of the aforementioned selection, the corresponding institution can submit plans to the Prime Minister directly and enforce special bidding after having acquired approval (undergo discussions with MPI).

[Table 36] Types of public procurement in Viet Nam

The procurement process of Viet Nam is described in Table 37.

Types	Process
Open bidding / Restricted bidding / Direct procurement	Preparation for selection of bidders (development of selection criteria and establishment of committee for evaluation) – Selection of bidders – Agreement on bidding documents, evaluation and contract – Proceed with examination of bids – Submit settlement of decision and notification of successful bid – Conclusion of contract
Contractor appointment	Forward draft contract to the bidders – Complete agreement and contract – Submit settlement of decision – Conclusion of contract
Competitive offer	Request quotation to the bidders – Submit quotations – Agree on quotation evaluation, and terms and conditions of contract – Submit settlement of decision and notification of successful bid – Conclusion of contract

[Table 37] Procurement processes in Viet Nam

To prepare contractor selection, the purchaser can publicly announce dossier of invitation according to Article 7 of the Bidding Law if the following conditions are satisfied:

- ▽ Approval of plans for the selection of bidders within 5 days of having received the report on the bidder selection plan.
- ▽ Forms and proposals must include, and be approved: bidding procedure, bidding data, evaluation criteria, bidding participation sample, table of quantity to purchase, schedule, technology and quality related requirements, detailed conditions and contract sample, etc.
- ▽ In the case of contractor appointment or competitive offer, a notification for bidding invitation or list of selected participants in the bidding is also necessary along with a clear indication of the source of the funds (institution implementing the project and budget, and project scale).

Examination items	Evaluation criteria	Results
1. Appropriateness of the conditions according to the Bidding Law	Appropriate on the basis of the Bidding Law	Pass
	Inappropriate on the basis of the Bidding Law	Fail
2. Reception of the proposal documents of bidders	Appropriate	Pass
	Inappropriate	Fail
3. Number of proposal documents	1 copy of the documents	Pass
	Inappropriate	Fail
4. In the event of signing the bidding participation application through entrustment because the representative of the company is not able to sign, it must be accompanied by consignment form.	Appropriate	Pass
	Inappropriate	Fail
5. The effectiveness of the proposal	≥ 45 days	Pass

document must be maintained for a minimum of 45 days from the cutoff date for submission of bidding.	< 45 days	Fail
6. Business registration certificate	Original or notarized copy of valid business registration certificate	Pass
	No business registration certificate or the validity date of the existing certificate has expired	Fail
7. Sample for participation in bidding (competitive offer)	All the samples are submitted	Pass
	Insufficient or no sample submitted	Fail
Final results	Satisfy all of the above 7 conditions	Pass
	Failed to satisfy any one of the above conditions	Fail

[Table 38] Criteria for examination of appropriateness in bidding participation

3) Preferences in Bidding

The Bidding Law in Viet Nam includes various policies for expressing preferences for domestic products, small-sized enterprises, the employment of the disadvantaged workers, and companies with high level of expenditures for domestic demand.³⁹ These preferences are described in Table 39 below.

Targets	Description of preference
Companies with high level of expenditures for domestic demands	<ul style="list-style-type: none"> Application area: Consulting, construction, purchasing and EPC Application standards: Apply if the ranking of the bidding document and submitted documents are the same Application conditions: Higher level of expenditures for domestic demands or employment of larger local manpower (compute wage value)
Domestically produced goods	<ul style="list-style-type: none"> Application area: national bidding or international bidding for provision of goods Application conditions: proposing with domestic costs of more than 25% of the product values
Employment of female, war invalids and disabilities	<ul style="list-style-type: none"> Application area: national bidding for provision of consultancy, non-consultancy and construction and installation services Application conditions: small businesses with proportion of female, war invalids and disabilities exceeding 25% of the total number of workers.
Small-sized enterprises	<ul style="list-style-type: none"> Application area: national bidding for provision of consultancy, non-consultancy and construction and installation services Application standards: Capital of less than 20 Billion VND and minimum number of employees in the range of 10~200 Application conditions: If the scale of bidding for construction project valued at less than 500 Million VND, only small sized companies will be selected for the project.

[Table 39] Types of preferences in contractor selection

2) GPP Procedure in Korea

(1) Introduction

Public institutions in Korea are obliged to purchase green products, this includes national institutions,

³⁹ Korea Institute of Procurement ,2015, "Survey on the Procurement Market Status in Two Asian Countries"

and local governments. In addition green products must be purchased by public institutions designated by the 'Law on the operation of public institution', local corporations established according to the 'Local public enterprises Act', institutions-invested or-funded according to the 'Act on the Operation of Local Government-invested or -funded Institutions', local medical centers according to the 'Law on establishment and operation of local medical centers' and local government-invested research centers according to the 'Act on the Establishment and Operation of Local Government-invested Research Institutes'.

The certification criteria for products subjected to mandatory green purchasing are composed of environmental standards that consider the environmental impact of the product through its' entire life cycle, including manufacturing, distribution, use and disposal. Quality standards are also stipulated to satisfy Korea industrial standards and criteria. If there are green products for the items that public institutions wish to purchase, it they must prioritize the purchase of these green products. Public purchasers therefore check whether the goods and items to be purchased are subjected to mandatory green purchasing requirements when requesting a purchase, and also check whether the actual certified products are being manufactured.

This mandatory purchasing of green products applies to purchasing products directly and to products purchased through service contracts. it also applies to company supplied materials in construction projects.



[Figure 15] Korean GPP implementation system in 2018

The Figure 15 illustrates the 2018 GPP implementation system. The Minister of Environment shall establish the GPP guidelines for the following year to notify the head of the public institution to support the GPP of the public institution. The GPP guidelines specifically support the implementation of the mandatory purchase of green products by public institutions by stipulating what is necessary for them to fulfill their obligation to purchase green products.

The head of public institution shall submit to the Minister of Environment its GPP plan for each agency within two months after the beginning of each fiscal year. The submission of GPP records according to the plan shall be aggregated by the end of March after each fiscal year, and submitted to the Minister of Environment. The Minister of Environment shall collect and publish the GPP performance.

The GPP plan and performance are utilized as basic data to develop policies and promote the supply of green products. The two data are submitted online through Green Desk⁴⁰ to ensure transparency and effectiveness of the procurement service and to identify the purchase status by agency and item. In addition, the public institutions can check and evaluate purchase plans on their own and reflect the results in the GPP plan next year. The result of purchase serves as an important basis for promoting GPPs as they are used as data for the assessment of the work of public institutions after publication and submission.

(2) The Type and Process of Bidding in Public Procurement

The subjects of contracts are the manufacturing and purchasing of goods, services and construction works for facilities. The types of contracts used are either competitive bidding, or private contract.

Competitive bidding contracts are further classified into: general competition, restricted competition, and designated competition. General competitive bidding is implemented in principle to all bids, with different contract methods applied only in consideration of the purpose, nature, and scale of the contract. General competitive bidding is a method of enabling all those with the minimum qualifications to participate in the bidding, while restricted competitive bidding restricts the qualification for participation under prescribed standards for accomplishment of policy goals such as securing of quality and supporting small and medium businesses, etc. Designated competitive bidding refers to designation of more than five companies with capability to fulfill the contract in order to secure reliability in implementation of the contract. Private contract is a method of selecting and entering into contract with specific company/person in order to support small contract, new products, and a disability organization, etc.

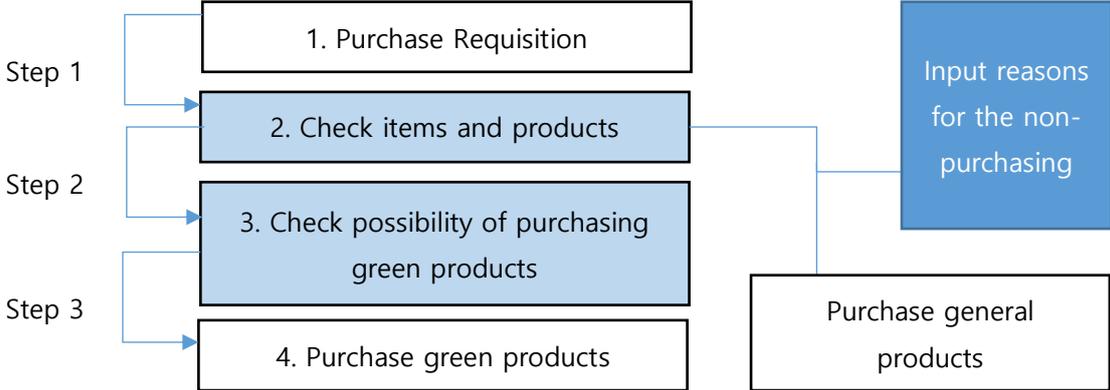
In terms of the method of selecting the winning bid, bidders must in principle pass a qualification test by demonstrating their ability to fulfill the contract. . The qualification test is aimed at determining the ability of the bidders to fulfill the contract and decides the winning bid which proposed the lowest price among the bidders who passed the examination. In exceptional cases, classifications are made into the contract through negotiation, two-stage competitive bidding, and/or via competitive bidding for the desired quantity of products. The final contract is negotiated and awarded once the selection of the bidder determined to be most beneficial for the country has been evaluated and prices considered. In Two-

⁴⁰ gd.greenproduct.go.kr

stage competitive bidding, winning bids are selected by opening the price bids submitted by those who are appropriate for the given specifications after they have submitted a specification and price bidding documents. Competitive bidding for the desired quantity determines the winning bid by selecting the bidders who submitted price below the anticipated price by having the bidders specify the quantity they are willing to supply, starting with the bidder who submitted the lowest price, until the total quantity required is reached.

① Direct purchasing of goods

The procedure of GPP in the direct purchasing of goods is shown in Figure 16.

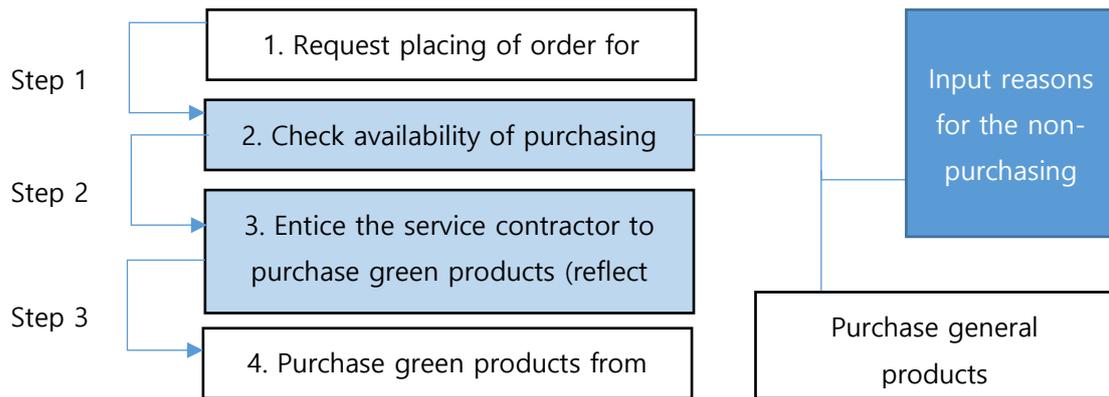


[Figure 16] Green product purchase procedure 1 – direct purchasing of goods

The first stage of direct purchasing of goods in the purchase procedure of green product is to check the items and products that are the subjects of GPP. The basic classification code is UN SPSC code and, on the basis of this code, goods are checked according to G2B classification code designed for Korea. In the second stage, the availability of green products must be checked. In the third and final stage, green products are purchased from the shops such as: KONEPS of PPS, Green market place, and Green product information system.

② The purchasing of goods through service contract

The key steps taken to purchase green products through a service contract are shown in Figure 17.

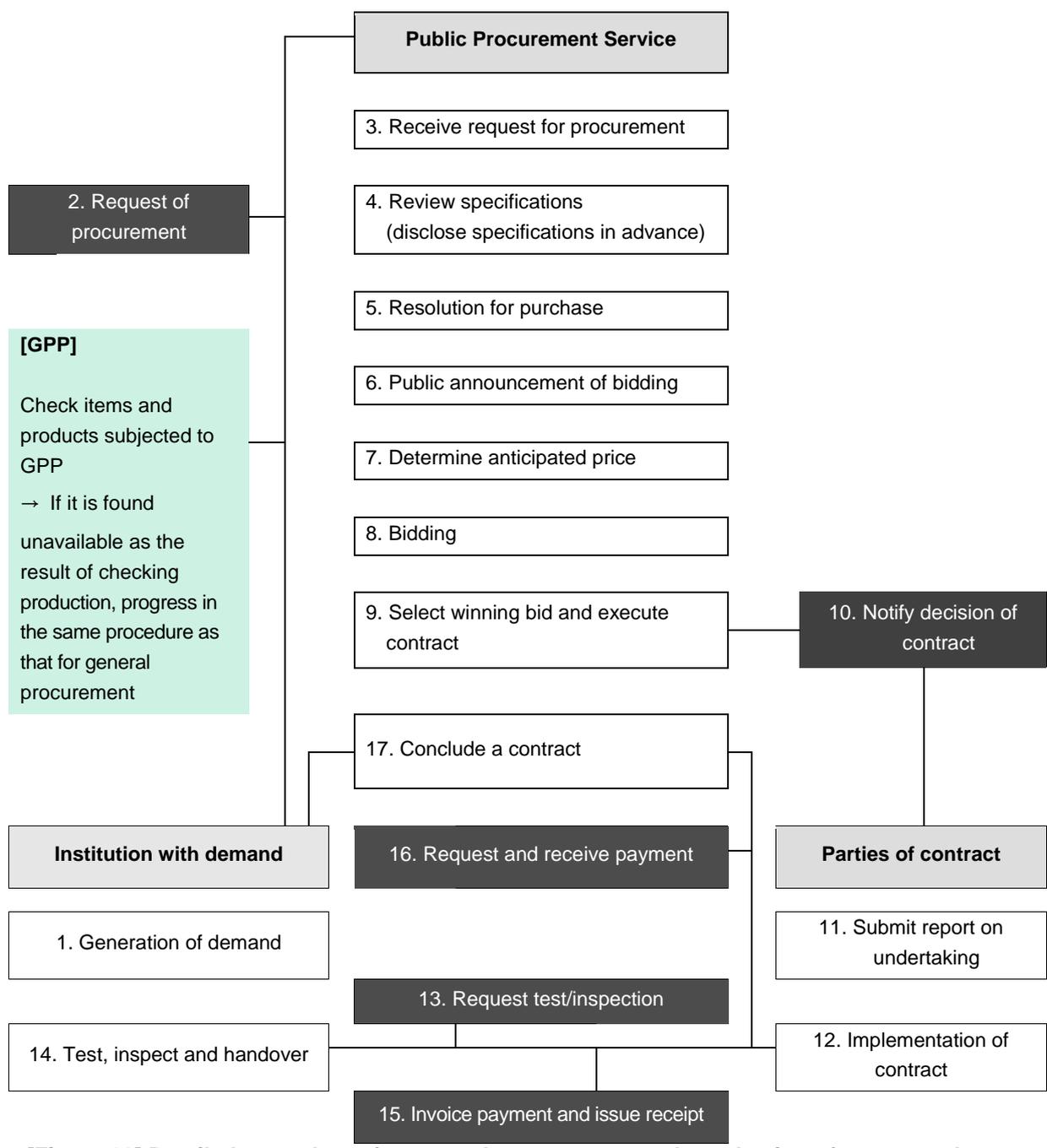


[Figure 17] Green product purchase procedure 2: purchasing goods through service contracts

The first stage of purchasing goods through service contract is to determine whether GPP criteria can be applied and if green products are available. Procurers can check whether green products can be purchased through the contract for services, or through a service contract by reviewing information on target items and certified products subjected to GPP.

In the second stage, the service contractor should be mandated to purchase green products. If there are green products available, government contractors should take measures to ensure that the green products are purchased, and should also specify the use of green products and report the use of such products in the service contract conditions.

In the third stage, the service contractor purchases corresponding green products. The service contractor, after having made final confirmation on whether the products to be purchased is available by reviewing the exceptions in the obligatory purchasing of green products, shall make the purchase by referencing the information on green products. The public institution (as the client) will request the service contractor to prepare and submit the list of green products purchased and documents to evidence the purchase following the completion of the contract and in settling the account. Personnel in charge of contract of the public institution should check whether the service contractor has actually purchased and used the green products with these records.



[Figure 18] Detailed procedures for general procurement and purchasing of green products

3) Support for green growth by PPS

Article 12 of the Act on Encouragement of Purchase of Green Products stipulates that the Director of the Ministry of Environment or related ministries can request PPS to take necessary measures such as designating green products as good procurement items. In fact, the PPS provides various incentives to increase the number of environment-friendly products that can be purchased in the market. The current status of support for GPP in the PPS is illustrated in Table 40.

Categories	Action Items
------------	--------------

Support for expansion of public demand for green products	<ul style="list-style-type: none"> ■ Establish GPP guidelines ■ Designate and operate the minimum green standards products for public procurement ■ Establish an integrated information network for GPP
Support entry of green products into public market	<ul style="list-style-type: none"> ■ Easing of requirements for entry into for public market and preferential treatment ■ Designate and supply outstanding green technology products as good procurement goods ■ Introduction of bidding methods for the environment such as energy efficiency standards, etc.
Dissemination of green design and construction of public buildings	<ul style="list-style-type: none"> ■ Strengthen the requirements of green design for public buildings ■ provide preferential treatment for green construction companies in the bidding process ■ Expansion of the purchase and use of environment-friendly and energy-saving materials

[Table 40] Current status of support for green growth by PPS⁴¹

■ **Support for expansion of public demand for green products**

In order to build an infrastructure to expand GPP, the ‘Purchasing Tips for procuring Green Products’ established by PPS regulates the scope of purchasing of green products and the minimum green standard that reflects environment-related factors in the product’s specification. However, the range of green products defined in the Purchasing Guidelines for Promoting Public Procurement of Green Products, which is published by the PPS under the Framework Act, is different from the range specified through the Green Purchasing Act.

The minimum green standard, which was established by PPS in accordance with the Framework Act, only allows those that satisfy environmental standards to enter the procurement market. Products that meet the standards can be supplied to public organizations through the Online Shopping Mall of the KONEPS.

PPS also prescribes public purchasing of green products and provides comprehensive information on the GPP of Korea by establishing and operating an integrated information network for GPP. The GPP network offers all the information for GPP such as green products, purchasing procedures, certification, relevant laws and regulations, thus providing convenience to whom participate in GPP.

■ **Support entry of green products into public market**

PPS provides a variety of preferential treatment when examining the performance of the contract in the bidding process in order to support the entry of green products into the public market. A company that

⁴¹ PPS, 2018, "Public Procurement Green Growth Support Status", 2018 Green Purchasing Activation Workshop Presentation Materials.

produces eco-friendly products or has a green technology certificate, it can achieve additional points, or be exempted from the eligibility evaluation in the Multiple Award Schedule (MAS). MAS is a contract system where two or more suppliers are made available to demand agencies to select goods that are identical or similar in quality, performance and efficiency.

Companies producing GR marked products are entitled to preferential treatment when being reviewed for their ability to fulfill contracts during the bidding procedures for government procurement. This examination includes the bidder's supply performance, business condition, technical level, and credit rating. Additional points are given to companies producing eco-friendly products under the credit rating category.

In addition, green products with excellent technology and quality can be designated as Excellent Procurement Goods, and additional scores can be obtained from the quality examination. Excellent Procurement Goods represents a scheme that supplies demand agencies through the Korea Online E-Procurement System with goods that demonstrate exceptional performance, technology or quality.

■ Dissemination of green design and construction of public buildings

In 2012, the Green Building Act was enacted under the Green Growth Act. As a result, the Green Building Certification System (G-SEED) was officially launched and has been operating since.

Mandatory green building certification of public institutions was introduced in 2010. According to the Guidelines for the Rationalization of Energy Use by Public Organizations promulgated at the time, buildings of over 10,000m² in size constructed by public organizations are required to obtain the certification of eco-friendly buildings. Since the implementation of the Green Building Law in 2013, the standards have been significantly strengthened, and buildings that exceed 3,000m² of floor space built by public organizations must now acquire green building certification.

in the process of construction by a public organization and acquiring the green building certification, purchasing and using products certified by the Eco Mark and GR Mark will earn points for the relevant field and accumulate GPP results at the same time. Considering the general scale of construction work and the amount of materials consumed, it is clear why construction materials account for the most significant part of the green procurement results of public organizations.

2.3.2 Benchmarking Domestic and Overseas GPP Guidelines

The Implementing Agency benchmarked not only Korean GPP guidelines but also the overseas GPP guidelines from Japan and EU. Annex 2 provides a summary of GPP systems between Korean, Japan and European Union and general procurement systems between Korea, Japan, and Viet Nam. The current status of GPP in Japan and EU is described in brief as follows.

1) Current status of GPP in Japan

Japan's announces its national procurement policy includes specific procurement items every year, and the head of each relevant institution prepares their respective procurement policy on the basis of the aforementioned policy accordingly. In addition to the specific procurement items, the types and goals of the environmental products for which procurement is pursued are set. A green purchasing committee is also established with personnel in charge of each department as the members, and the manager of accounting of other government office as the presiding officer.

In order to recommend green procurement, information on green products are shared with information such as the Eco-Label for which scientific and international appropriateness has been acknowledged. Information is provided by the manufacturers and Eco-Label organizations of corresponding products to a central database, which is then provided to both central and local government agencies. On the basis of the information provided for the green products, procurement with total value over a prescribed amount is carried out in the manner same as those of general procurement, and conditions for environment-friendly products are presented for the bidding conditions. Procurement contracts subjected to the GPP are executed according to the procedure for procurement contract according to the purchasing of products or services as determined through their value, or through the government procurement agreement. Whether GPP criteria apply can differ between the central government, local government and other institutions.

2) Current status of GPP in EU

In Europe, GPP is a component of a broader sustainable procurement concept, and is applied broadly to goods and services. The European Commission (EC) is the institution in charge of green purchasing in the EU. The EC establishes green procurement policies, regulations, and guidance to manage and encourage GPP implementation in each member country. GPP is being operated flexibly by establishing close relationship among various other regulations including public procurement guidelines, relevant environmental criteria, international agreements, development strategy at the level of EU, and regulations of each member country centered-around the green procurement policy. The policy of green purchasing of EU was initially a recommendation. However, after 2004, application of environmental criteria was integrated into public procurement regulation in the EU, including application of environmental technology, the verification of environmental management systems, and the EU Eco-

Label. As such, it has become obligatory for each member country to comply with this guidance, though compliance varies.

The EC establishes specific green procurement criteria, and also operates a green procurement education and implementation supervision system. Green procurement criteria are applied by the personnel in charge of contract, are the specific environmental criteria included in the bidding documents. Each member country is expected to report on their performance on GPP implementation every 5-years.

Procurement proceeds through competition, and companies in the member countries of EU can all participate in bidding. International bidding is compulsorily announced through TED (Tenders Electronic Daily)⁴², which is the official on-line procurement gazette of the EU. For contracts in which the procurement policies do not apply, public announcement will be made in daily newspaper, professional magazine of the relevant business industry, or in printed medium that is dedicated announcement of bidding published within the corresponding country. The procurement procedures used in the EU are similar to those of Korea. Green procurement can be carried out through restricted competitive bidding by confirming the corresponding environmental criteria through the green procurement standards, or through open competition with presentation of conditions and criteria.

⁴² <http://ted.europa.eu/TED/main/HomePage.do>

2.3.3 Development of guidelines for GPP in Viet Nam

As stated above, the guidelines for GPP were developed under the premise that public green purchasing is being implemented in Viet Nam, but that it is not yet formally integrated into procurement procedures. The purpose of these guidelines is to provide GPP procedures and methods in the procurement market in Viet Nam, and to help the public organizations understand green purchasing and to use them as a comprehensive guidebook when purchasing environment-friendly products.

For the contents of each detailed procedure, reference was made to the list of GPP guidelines developed in Korea, Japan and EU and to the specific GPP guidelines of Korea. The Implementing Agency developed the guidelines based on the factors that should be considered for GPP at each stage of procurement by benchmarking Korean GPP guidelines.

The guidelines describe the factors that should be considered for green purchasing at each stage of the procurement process. First, the grounds for the necessity for green procurement must be presented accurately as well as the definition and range of environment-friendly products. In order to promote GPP, the guidelines should also include the setting of targets and monitoring of performance of the targeted institutions.

The GPP implementation plan and performance management are not only for aggregation of data but also for reflection of performance evaluation of public institutions, which encourages green purchasing of Korean public sector. The Ministry of Economy and Finance and the Ministry of Interior and Security evaluate the performance of public institutions, local governments and local public enterprises. In this process, the annual GPP records are assessed and linked with the provision of bonuses or requirement to take corrective actions. The role of these evaluations as an incentive mechanism appears to effective. The government establishes these indicators and evaluates local governments to ensure that national policies can be driven forward at the local level.

During the process of verifying and revising the guidelines, it was necessary to review the guidelines in order to confirm whether the guidelines are in conflict with the bidding law and the bidding process in Viet Nam. The consultation with the Korea Institute of Procurement helped those verifications. In order to confirm the applicability of the guidelines, final draft of guidelines was completed after having undergone consultation with interested parties of bidding in Viet Nam. The GPP Implementation Plan and the report of the performance were also written in accordance with the amendment of the aforementioned Legal Recommendation Report.

Details on the Guidelines can be seen in the following document.

Green Public Procurement Guideline for Viet Nam

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2.1 Introduction

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3.2 Reporting Procurement Results

Annex 1. Lists of Green Labeled Products

Annex 2. Laws & Decrees related to GPP

1. Introduction

1.1 Background Information

Countries in the world adopted 17 goals for the purposes of eradication of poverty, protection of earth and prosperity as a part of the agenda for new sustained growth in September 2015. These Sustainable Development Goals (SDGs) contained specific goals to be achieved in the next 15 years. For this purpose, governments, private sectors and civic society organizations of the countries in the world need to execute their respective roles.

The 12th SDG is ‘Responsible Consumption and Production’. Sustainable consumption and production focuses on sustainable resources and energy efficiency, establishes sustainable infrastructure, provides basic services and environment-friendly and appropriate jobs, and offers better quality of life to everyone. As such, this goal is aimed at improving the quality of life of mankind, and enhancing the welfare benefits through economic activities.

In order to achieve sustainable consumption and production, private companies and public sectors need to establish the structure of promoting production of environment-friendly products by companies through expansion of consumption of environment-friendly products. However, environmentally-friendly products can be somewhat more expensive than conventional products at first cost, and it may not be easy to purchase environmentally-friendly products due to limited supply. Accordingly, there is a need for transition into the pattern of the entire society purchasing environmentally-friendly products by having the public sectors to increase consumption of environmentally-friendly products first and having the effects of using environmentally-friendly products be known widely by the general public and private companies. Therefore, in order to promote sustainable consumption and production, it is important to assertively introduce Green Public Procurement (GPP) policy and systematically implementing and managing it.

Viet Nam decided to establish roadmap for pursuing of GPP in the public market in Viet Nam by 2020. First Viet Nam will activate the Green Label Certification system, helping to promote the production and consumption of environmentally-friendly products throughout society. Doing so promotes sustainable consumption and generates green lifestyles, as supported by the national strategy on green growth approved by the Decision of Prime Minister. In addition, The Article 44 of the Decree of Law on Environmental Protection gives specific requirements to promote GPP in accordance with the Decision of Prime Minister. Upon this policy foundation, these guidelines were established to support the practical implementation of GPP in Viet Nam.



Figure 1 Sustainable Development Goals

1.2. Scope

The guidelines present procedures and methods of purchasing only environmentally-friendly products approved by the government in the Vietnamese public market. Viet Nam, through the revision of Bidding Law in 2013, is adopting the format of decentralized procurement in which the central government and local governments are procuring separately. Therefore, the guidelines are developed to apply to both central government and local governments. In addition, guidance is provided for application of GPP to all bidding formats in accordance with the procedures and methods stipulated in Articles 20 ~ 26 of the Bidding Law. In the process that explains other bidding procedures, the guidelines were prepared to enable bidding by utilizing e-bidding and the bidding newspaper as the primary methods of announcement.

1.3. Principles of GPP

The basic principles of implementation of GPP include: ensuring of fairness, transparency, economic efficiency and environmental protection, as presented in Article 3 of the Bidding Law:

- **Fairness:** Participation of all bidders on equal footing must be guaranteed.
- **Transparency:** All bidding processes must be carried out in accordance with the Bidding Law and be transparently disclosed.
- **Economic efficiency:** In the process of selecting the winning bid, economic efficiency must be considered with the exception of specific issues such as safety.
- **Environmental protection:** Environmental protection activities must be proven for the products purchased through GPP.

1.4. Target Product Categories for GPP

Ten product categories presented in the ‘III Solutions’ of the Decision: Approval of the national strategy on green growth adopted in September 2012 will be the subject items of GPP in Viet Nam. In addition, acquisition of energy saving label presented as environment-friendly products by the Decision of Prime Minister, along with the Vietnam Green Label, will be included in the additional subject items. The ten categories are:

1. Foods and foodstuff
2. Transportation
3. Energy
4. Computers and office equipment
5. Textiles and garments
6. Papers and printing
7. Wood products
8. Detergents
9. Medical equipment
10. Energy-saving products

1.5. Target Organizations for GPP

The institutions to implement GPP includes the following, as presented in ‘IV. Organization for Implementation, 3. 3. Assignments for the implementation of the strategy’ of No.1393-QD-TTg:

- The Ministry of Planning and Investment
- The Ministry of Finance
- The Ministry of Natural Resources and Environment
- The ministries, ministerial-level agencies, agencies attached to the Government
- The People’s Committees of provinces and centrally managed cities

1.6. GPP Criteria

Environmental performances of the target product categories for GPP shall comply with the Green Label certification criteria. Information on the certification items and certification criteria is published in the website of Green Label Office⁴³

⁴³ <http://vea.gov.vn/vn/khoahoccongnghenhanxanh/nhomsp/Pages/trangchu.aspx>

2. The Procurement Process

2.1. Introduction

The procedure for purchasing of environmentally-friendly products through public procurement is illustrated in Figure 2. Detailed procedures and methods for each stage shall comply with the requisites presented in the Bidding Law. Here, only the procedures and methods of purchasing environmentally-friendly products are explained, see the Bidding Law for other procedures. In addition, the presented procedure will be applied in the same manner to green procurement of construction materials used in public construction works.

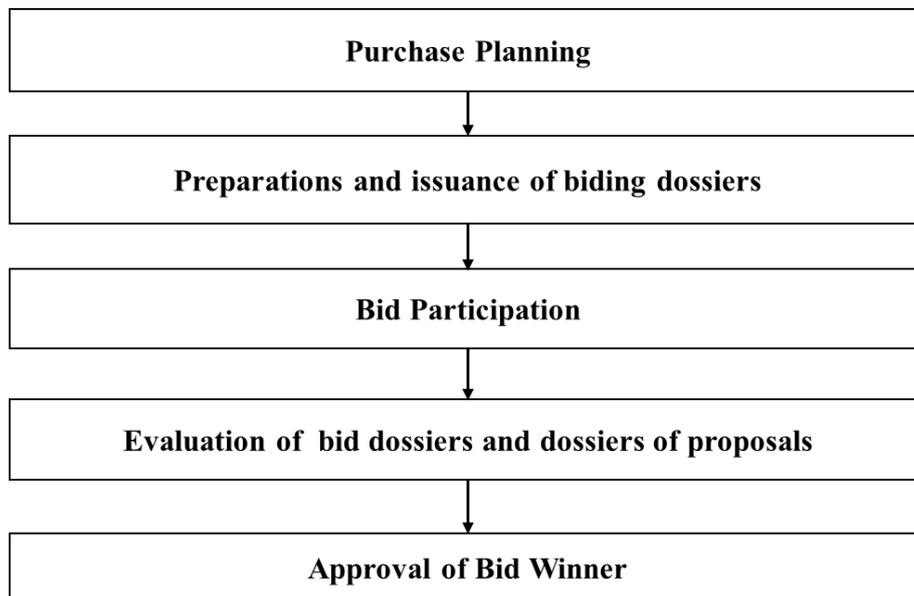


Figure 2 <Procedures of GPP>

2.1. GPP Process

1) Purchase Planning

Institutions implementing GPP need to establish GPP plans for the following year until the end of October every year. When establishing the purchasing plan, institutions should obtain certification list for Green Label certified products and products with energy efficiency rating of 5 stars from the Green Label Office, and reflect it in the plan.

2) Preparation and Announcement of Bid

Personnel shall announce bidding through e-procurement site and procurement newspapers after having confirmed the following contents according to the purchase plan (established every month in advance):

- Check for any omission in the goods purchase request documents.
- Check whether the subject items are subjected to GPP through the website of Green Label Office (GLO).
- After having checked the specifications of goods being requested by personnel, check whether the specifications are in compliance with the specifications of the same category of items listed in GLO.
- If the specifications of items listed in GLO is different from the specifications that the personnel requesting purchase is requesting, the personnel making invitation for bidding shall notify the personnel requesting purchase, and check whether the specification can be adjusted.
- Once the preparation is completed, announce the bidding through e-procurement site and procurement newspaper per the Bidding Law.

3) Bid Participation

Those wishing to participate in bidding shall prepare the following documents and submit them to personnel making invitation for bidding:

- All bidding documents specified in the bidding announcement.
- Green Label Certificate with remaining period of validity for the items that are the subjects of bidding.
- Document to prove that the bidder complies with the criteria for qualification to participate in the bidding.
- Specifications of the products.

4) Evaluation of Proposals

The personnel making the invitation for bidding shall evaluate bids in accordance with the following procedures once all the documents have been received:

- Review whether there is any omission in the documents submitted.
- Review the qualification of the bidder to participate in the bidding.
- In the case of products with Green Label Certification, review whether the bidder's product has Green Label Certification.
- Examination of other bidding conditions such as quality, price, and performance.

In the process of reviewing qualification to participate, it must be reviewed whether the products of the bidder have the Green Label certificate in case of that the products are subject items of GPP. Moreover, it must be checked whether the certificate is still valid. In addition, it must be reviewed whether the bidder satisfies the qualifications stipulated under the Bidding Law. According to the Circular for GPP, Preferences in price or preferential points will be added to the products with Vietnam Green Label certification as follows.

- In case of lowest bid method or evaluation bid method, contractors' bid will be added with an amount of money equal to 7.5% of their bids for goods which are not entitled to preferences after error correction and deviation adjustment for comparison and ranking;
- In case of the method of combined techniques and bids, the total point of goods with Vietnam Green Label certificate will be added with preferential points by the following formula:

Preferential point = $0.075 \times (\text{price of goods with the certificate} / \text{bidding package price}) \times \text{total point}$

In the process of determining the winning bid, existence of Green Label Certification must be an essential requirement. However, this requirement can be excluded in the following cases:

- If no items in the category have gained Green Label Certification.
- If the price of the product that acquired certificate is more expensive by more than 10% after preferential treatment in comparison to the comparable products in the same category.
- If the quality of the certified products is substantially lower than the quality of the general products in the same category.
- If the company manufacturing the certified product is not able to supply the product, or has difficulty in providing follow-up services for the products due to a poor financial situation.
- Other situations acknowledged and documented by the interested parties of procurement.

(5) Consideration and Approval of Bid Winners

The personnel making the invitation for bidding shall make the final winning bid criteria by reviewing composite factors as illustrated in Figure 3.

- If the product is subjected to GPP, personnel should first check the existence of Green Label Certification before deciding the winning bid criteria and after having reviewed various requisites in the order of price, quality and other such requirements.

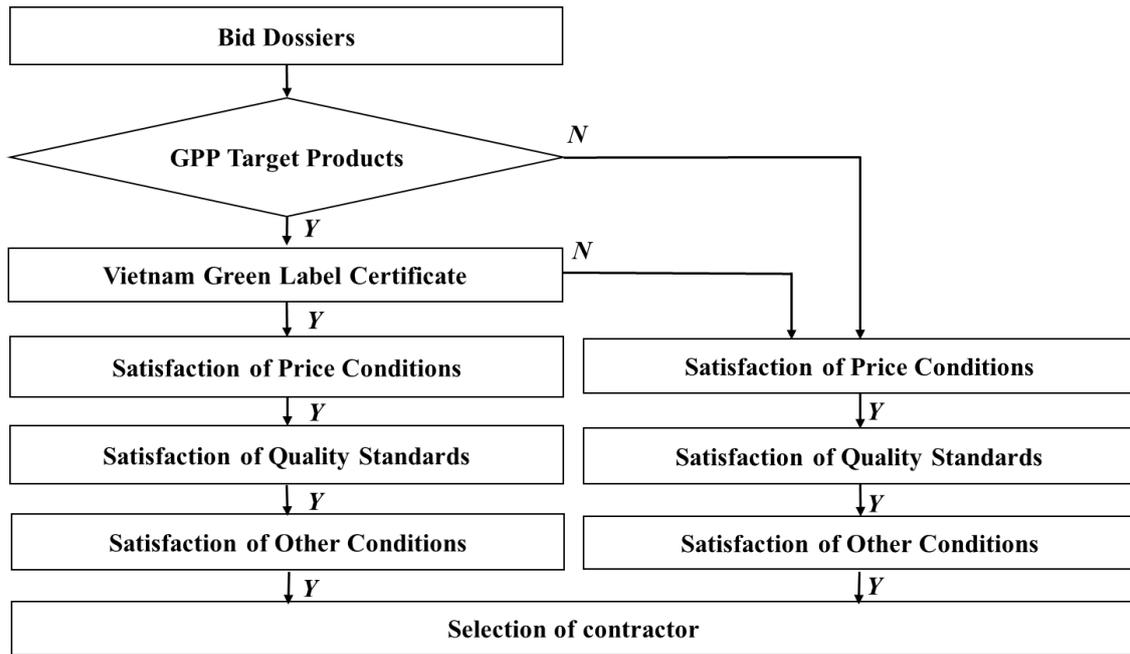


Figure 3 Selection of Bid Winner

- In the case of the product that is not subjected to GPP (including the absence of Green Label Certification items), the winning bid will be determined after having reviewed various requisites in the order of price, quality, and other criteria.

Once the winning bid is determined, the contract will be executed in accordance with the procedures stipulated under the Bidding Law, and the goods supplied. Suppliers must comply with the requisites under the Bidding Law, as are the procedures and methods related to follow-up services for the goods and services supplied.

Evaluation Examples

1) The lowest bid method or evaluation bid method

In case of the lowest bid method or evaluation bid method, a bidder with the lowest bid shall be ranked first after prequalification. If there are products A and B which have the same specifications except the Vietnam Green Label certification, an amount of money equal to 7.5% of the bid for product B without the certificate. The bid of product A can be selected as a contractor because it is the lowest bid.

Evaluation Standard	Bid Evaluation	
	Product A	Product B
Price (VND)	1 Million	
Vietnam Green Label	Certified	Not certified
Final bidding price (VND)	1 Million	107.5 Million

2) The method of combined techniques and bids

This method shall be applied when the lowest bid method and evaluation bid method cannot be applied. The criteria for evaluation which include capacity, price and technology vary depending on the basis of combination of techniques and bids. If there are products A and B which have the same specifications except the Vietnam Green Label certification, the contractor of A with the certificate will have their total points added with 7.5% of such points for comparison and ranking. The preferential points can be calculated as follows.

$$\begin{aligned} \text{Preferential point} &= 0.075 \times (\text{price of goods with the certificate} / \text{bidding package price}) \times \text{total point} \\ &= 0.075 \times (1 \text{ million VND} / 1 \text{ million VND}) \times 100 \end{aligned}$$

Evaluation Standard	Evaluation Score	
	Product A	Product B
Price	30	
Technology	30	
Others	30	
Preferential point from VGL certification	7.5	0
Final score (VND)	97.5	90

3. Report for Procurement Plan and Results

3.1. Reporting GPP Procurement Plan

Institutions subjected to GPP shall establish plans for GPP for the following year by the end of November every year, and submit the plan to the Minister of MONRE. The purchasing plan must include the following information:

- GPP items and anticipated purchase price for each of the items.
- List of subject items expected to be included in the following year.

Once the purchase plan is received from the subject institution, the Minister of MONRE shall aggregate the plans to compute the anticipated total scale of purchase, and anticipated scale of purchase for each item for the following year, and report the anticipated outcomes to the Prime Minister.

3.2. Reporting GPP Procurement Results

Each year, the head of each public institution shall also prepare a report on their institution's performance in the execution of their purchasing plan. This report should be to the Minister of MONRE by the end of March, reporting on results from the year prior.

The Minister of MONRE shall then aggregate the reports with results, and report on the outcomes to the Prime Minister, including:

- GPP performance in the previous year and trends for each year.
- Current status of purchase performance in comparison to the purchase plan submitted by each public institution in the previous year.
- If the GPP performances are poor, measures planned to improve on results.

Annex 1. Lists of Green Labeled Products

No	Certificated items	Company	Certification Code	Valid Dates
1	Tide Laundry Detergent (1 type)	Procter & Gamble. Co	No.52/QDTCMT-2011	18/01/2011 - 01/18/2014
2	- Compact fluorescent light bulbs (33 types) - Straight tube fluorescent bulbs (10 types) - Double wing bulbs (3 types)	DienQuang Lamp Joint Stock Company	No.1228/QD-TCMT2014	10/10/2014 - 10/10/2017
3	Coating used for construction (2 types): - Majestic Pearl Silk - Jotashield	Jotun Paint Vietnam Co, Ltd	No.83/QDTCMT-2014	20/2/2014 - 20/2/2017
4	Printers: (2 types) - Fuji Xerox DocuPrint P355d - Fuji Xerox DocuPrint P355db.	Fuji Xerox Asia Pacific Pte Ltd Office	No.512/QĐ-TCMT2014	29/5/2014 - 29/5/2017
5	Coating used for construction (2 types): Majestic True Beauty Sheen	Jotun Paint Vietnam Co, Ltd	No. 599/QĐ-TCMT2014	20/6/2014 - 20/6/2017
6	Battery GS, Battery Yuasa (1 type)	GS Battery Vietnam	1634 / QD-TCMT-2016	01/11/2016 - 01/11/2019

Annex 2. Laws & Decrees Related to GPP

Decision No. 1393/QD-TTg of September 25, 2012, approving the national strategy on green growth

Article 1. To approve the national strategy on green growth in the 2011-2020 period with a vision toward 2050, with the following principal contents:

I. VIEWPOINTS AND OBJECTIVES OF THE STRATEGY

1. Viewpoint
2. Objectives

II. STRATEGIC TASKS

1. To reduce the intensity of greenhouse gas emissions and promote the use of clean energy and renewable energy according to the following principal targets:
2. Production greening
3. Greening of lifestyle and promotion of sustainable consumption

III. IMPLEMENTATION SOLUTIONS

1.-12. Skip

13. To boost sustainable consumption and building of green lifestyle

a/ To boost eco-labeling and dissemination of information on environment-friendly products to all people. To set a roadmap toward 2020 for the application of green procurement of construction materials; food and foodstuffs; transport; energy; computers and office machines; textiles and garments; paper and printing; wood furniture, detergent; and medical equipment.

b/ Skip

c/ To encourage sustainable consumption in the business sector:

- To use economic and technical tools to encourage enterprises to conserve natural resources and limit waste of energy and natural resources.
- To build a system of certification and eco-labeling for green products. To establish and advertise the green product market.

d) Skip

IV. ORGANIZATION OF IMPLEMENTATION

1. Phasing of strategy implementation

a/ 2011-2020 period

- Public information, awareness raising, human resource training and development.
- Formulation of mechanisms, policies and management apparatus to implement the strategy.
- Establishment of data and information systems and management tools, sets of indicators, standards and norms on green growth.
- Identification of key projects on green/low-carbon growth, greening of production industries, a number of pilot projects on "green-growth oriented" socio-economic development master plans and plans of provincial level

(attached Appendix I: List of priority programs and projects in the 2011-2015 period).

b/ 2021-2030 period

- Continued completion of green-growth institutions and policies, adjustment and scaling up of the implementation on the basis of periodical monitoring and evaluation.
- Expansion of the experimentation scale and wide application of master plans and key programs and projects.
- Expansion of training and development of human resources for the development of green economy.
- Environmental audit at all levels (national, sectoral, local and enterprise) and green accounting in enterprises.
- Stepping up of the economic restructuring after the green-economy model.

c/ 2031-2050 period: Based on the results of implementation of the green-growth strategy in the 2012- 2030 period and the national socio-economic development situation as well as international context to identify specific objectives and tasks.

2~3. Skip

No. 19/2015/ND-CP DECREE of February 14, 2015

Detailing a number of articles of the Law on Environmental Protection

Chapter VII. INCENTIVES AND SUPPORTS FOR ENVIRONMENTAL PROTECTION ACTIVITIES

Article 37. Principles of providing incentives and supports

1. The State shall provide land- and capital-related incentives and supports; exempt and reduce taxes for environmental protection activities; subsidize prices and support sale of products created from environmental protection activities and provide other incentives and supports for environmental protection activities.

2.~3. Skip

4. In case a newly promulgated law or policy which prescribes higher incentives and supports than those already enjoyed by investors under this Decree, investors may enjoy incentives and supports under the new regulation. The Ministry of Planning and Investment shall assume the prime responsibility for, and coordinate with the Ministry of Finance and the Ministry of Natural Resources and Environment in, guiding the order and procedures to appraise and approve incentives and supports for investment projects in accordance with this Decree.

5. Skip

Article 38. Beneficiaries of incentives and supports

1. Beneficiaries of incentives and supports include organizations and individuals engaged in environmental protection work investment; and environmental protection production, business and service activities provided in Appendix III to this Decree.

2.~3. Skip

Article 45. Value-added tax incentives

1. Goods and services produced and traded from environmental protection activities are subject to the value-added tax policy under the law on value-added tax.

2. The Prime Minister shall stipulate value-added tax incentives for a number of particular environmental protection products and services.

Section 3: PRICE AND PRODUCT SALE SUPPORTS

Article 46. Price subsidy for environmental protection products and services

Investors carrying out the following activities or supplying the following products that satisfy criteria of public-utility products and services are entitled to price subsidy in accordance with the law on production and supply of public-utility products and services:

1. The activities specified in Clauses 2 and 9, Appendix III to this Decree, and background environmental monitoring activities specified in Clause 8, Appendix III to this Decree.
2. Products from the environmental protection activities specified in Clauses 12 and 13, Appendix III to this Decree.

Article 47. Product sale supports

1. Heads of state budget-funded agencies or units shall prioritize public procurement of the products specified in Clauses 12 and 13, Appendix III to this Decree upon their purchase of those products. The Ministry of Finance shall assume the prime responsibility for, and coordinate with the Ministry of Natural Resources and Environment in, developing the regulation on public procurement of environment-friendly products as prescribed in this Clause.
2. Organizations and individuals shall prioritize the procurement of environment-friendly products under the guidance of the Ministry of Natural Resources and Environment.

APPENDIX III

LIST OF ENVIRONMENTAL PROTECTION ACTIVITIES ENTITLED TO INCENTIVES AND SUPPORTS

(To the Government's Decree No. 19/2015/ND-CP of February 14, 2015)

1.-11. Skip

12. Production of environment-friendly products with Vietnamese green labels issued by the Ministry of Natural Resources and Environment; products from waste recycling and treatment as certified by competent state agencies.

13. Production of petrol, diesel fuel and bio-fuel certified to be conformable with regulations; bio-coal; energy generated from wind power, sunlight, tide, geothermal heat and other forms of renewable energy.

14. Skip

15. Production, business and service activities of environment-friendly establishments eco-labeled by the Ministry of Natural Resources and Environment.

2.4 Present a GPP Roadmap

The Implementing Agency planned pilot implementation of GPP but also prepared a GPP Roadmap as an alternative item because the implementation depended on the legislation and enactment of related laws. The legal enforcement for GPP had not yet been established by the first half of 2018. Therefore, this consulting item was modified to be a Roadmap for the pilot implementation of GPP, rather than pilot implementation itself.

UNEP proposed a total of 32 SPP action plans in the SPPEL project for the short-term period from 2018 to 2021 and the long-term period from 2021-3030. The short-term action plans have already started. However, the SPP action plans have not been implemented smoothly within the Vietnamese government due to a lack of detailed procedures and methodology. To provide further support, the Implementing Agency proposed a roadmap based on Korea's experience with GPP, which can be applied immediately at the pilot implementation stage. In the process of developing the roadmap, the detailed implementation plans from Korea's 'Basic Plan for Purchase Promotion of Green Product' were selected as key tasks. The status of implementation in Viet Nam was analyzed and the procedures and methods of short-term activities were presented in detail.

In order to promote the pilot implementation of GPP, the relevant ministries involved in procurement must cooperate with each other and the ministry in charge of the environment. To foster cooperation among the various parties, the Focal Point used the roadmap to recommend GPP to the related ministries and private sector audiences who intend to participate in GPP in the future.

The key activities and schedules for the consulting item are given in Table 41.

Key activities	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
1. Literature search and analysis of situations										
2. Prepare benchmark										
3. Collect opinions of interested parties										
4. Verify and revise roadmap										

[Table 41] Schedule for the presentation of GPP Roadmap, 2018

2.4.1 The Development Process of the Roadmap

The procedure of establishing the roadmap for GPP in Viet Nam were summarized in five steps as follows in Table 42.

Establishment procedure
<p style="text-align: center;">1. Feasibility Analysis of Korean Basic Plan for Green Purchase in Viet Nam</p> <ul style="list-style-type: none"> • Analysis of systemic, legal and social circumstances • Analysis of the GPP performance in Korea and feasibility in Viet Nam • Assertive use of local supporting agencies for analysis of social circumstances in Viet Nam
<p style="text-align: center;">2. SWOT analysis on the implementation of GPP in Viet Nam</p> <ul style="list-style-type: none"> • SWOT analysis for GPP in Viet Nam through comparison with the conditions of GPP in Korea • Presentation of Strengths, Weaknesses, Opportunities and Threats • Analysis that considers systemic, legal and social perspectives
<p style="text-align: center;">3. Establishment of Vision, Goals And Strategies for GPP in Viet Nam</p> <ul style="list-style-type: none"> • Reference to the results of the SPP Action Plan • Establishment of Strategy and Goals by distinguishing them into systemic, legal and social perspectives • Sufficient collection of opinions from Vietnamese stakeholders
<p style="text-align: center;">4. Specification of a roadmap for GPP in Viet Nam</p> <ul style="list-style-type: none"> • Classification of the core activities into short, mid and long-term timespans • Specification of the implementing plan for the short-term activities • Specification of necessary step-by-step procedures and methods for short-term implementing plan
<p style="text-align: center;">5. Reflection on feedbacks from related ministries and stakeholders</p> <ul style="list-style-type: none"> • Consultation with Vietnamese ministries and stakeholders involved with GPP in Viet Nam • Adjustment of the period of introduction

[Table 42] Framework of GPP Roadmap

1) Step 1: Feasibility Analysis of the Korean Basic Plan for Green Purchasing in Viet Nam

The actions carried out to promote GPP in Korea were analyzed for their feasibility and applicability to Viet Nam. According to Article 4 of [Act on Promotion of Purchase of Green Products], the Korean government has published a ‘Basic Plan for promotion of Green Purchase’ every five years since 2006. In the three Basic plans, policy directives and subsequent activities were presented to promote Green Purchasing.



<The 1st Basic Plan>
(2006~2010)

< The 2nd Basic Plan >
(2011~2015)

< The 3rd Basic Plan >
(2016~2020)

[Figure 19] The Basic Plans for promotion of Green Purchase in Korea

The form in Table 43 was used for each activity to analyze the performance of GPP in Korea and its feasibility in Viet Nam. The feasibility analysis included legal and institutional contents, as well as an analysis of the social conditions of companies and consumers who intend to implement GPP. Based on the result of the analysis, an introductory period for GPP adoption in Viet Nam was also suggested.

Activity Title	
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> () : Phase I (2006~2010) () : Phase II (2011~2015) () : Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> () : To build a foundation for preferential procurement of eco-products () : To improve eco-product certification system () : To support the participation of companies and consumers
Performance	
Feasibility Analysis in Viet Nam	
Result of Analysis	
Appropriate period of introduction	<ul style="list-style-type: none"> () : Short-term (2019~2023) () : Mid-term (2024~2028) () : Long-term (2029~2033)

[Table 43] The table form of feasibility analysis

2) Step 2: SWOT Analysis on the Implementation of GPP in Viet Nam

The Implementing Agency analyzed the strengths, weaknesses, opportunities and threats regarding GPP implementation in Viet Nam. The strengths and weaknesses were analyzed based on the internal situation in Viet Nam; the opportunities and threats were analyzed based on situations outside of Viet Nam. The SWOT analysis had previously been carried out during the analysis of the legal framework; key takeaways are summarized in this document.

Vietnam's biggest strength for GPP implementation is its green growth strategy under the Vietnamese Prime Minister's mandate. This mandate laid the groundwork for the implementation of GPP. As a result of this directive, related laws and regulations can be amended in related ministries, such as the Ministry of Natural Resource and Environment, the Ministry of Planning and Investment, and the Ministry of Finance, to operate GPP at a national level.

A weakness Viet Nam faces regarding GPP is that the relevant regulations are not mandatory. As a result, participation among public institutions is not as high as it can be. In addition, due to the lack of criteria and certificated products required for the operation of Vietnam Green Label program, there are few green products for public institutions to purchase through GPP. Low awareness of GPP among public officials and the public is a major obstacle to the successful introduction of the system.

In introducing GPP, the Vietnamese government has an opportunity to proactively respond to global environmental regulations, as it is a major production hub for global companies, and a key player in Asia's emerging economic development. If the introduction of GPP is delayed, global companies can respond with their own global advanced regulations. Nevertheless, Vietnamese companies might fail to respond to these regulations, thus increasing the gap in environmental quality between Vietnamese and other countries' exports, and lowering the overall competitiveness of their exports.

3) Step 3: Establishment of Vision, Goals and Strategies for GPP in Viet Nam

Based on the results of the SWOT analysis, the Implementing Agency presented a vision, goals and strategies for GPP in Viet Nam by 2033. In consideration of the feasibility of implementation, the core tasks are separated for the short, medium and long term. For the short term, the goal is to produce at least 300 eco-friendly products to be sold in the Vietnamese market. In order to achieve this, it is positively necessary to offer incentives to the participating companies and simplify the Vietnam Green Label certification system. In the medium-term, Viet Nam will need to establish a complete legal and institutional framework in which GPP can operate. Finally, the long-term goal is to lay the groundwork for expanding green purchases beyond public purchases to private consumption.

4) Step 4: Specification of a Roadmap for GPP in Viet Nam

Based on the results of the feasibility analysis, the Implementing Agency developed a roadmap that arranged an implementation period for each task based on a short, medium or long time frame. Especially for the tasks required in the short-term period, detailed implementation plans were presented; each plan stated the need for implementation, procedure of implementation, and methods for each phase of implementation.

The list of short-term detailed action plans is presented as follows:

- Expand green-label certified products
- Simplify certification system
- Operate eco-label information system

5) Step 5: Reflection on Feedback from Related Ministries and Stakeholders

The final step is to gather opinions from relevant Vietnamese ministries and stakeholders, including Focal Points, on the draft of roadmap. The participants of the advisory panel included the Ministry of Natural Resource and Environment, the Ministry of Finance, the Ministry of Industry and Trade, Asian Institute of Technology Center in Vietnam (AITCV), and Vietnamese Chamber of Commerce (VCCI); these agencies were involved in the policy making process for GPP in Viet Nam. To reflect these opinions, the analysis of social and political conditions was supplemented, and the timing of task introductions was adjusted.

2.4.2 The GPP Roadmap

The GPP roadmap developed from the aforementioned procedures is presented as follows.

Green Public Procurement Roadmap for Viet Nam

CONTENTS

1. Introduction

1.1 Overview

1.2. Korean Policies for Green Public Procurement

1.3. Feasibility Analysis of Each activity for GPP

2. GPP Roadmap for Viet Nam

2.1 Setting Vision, Goals, and Strategies

2.2 Setting Roadmap

2.3. Short-term Implementation Plan

2.3.1 Expansion of Vietnam Green Label certified products

2.3.2 Simplification of certification system

2.3.3 Operation of eco-label information system

3. Conclusions

1. Introduction

1.1. Overview

Green purchasing refers to the procurement of environment-friendly products and services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. There are largely three types of consumer groups capable of green purchasing. The first group is the general consumers, who commonly purchase final complete products. The second group is the intermediate consumers, who commonly purchase intermediate products for the manufacture of complete products. However, they also purchase final complete products for use in offices and other spaces. The last group is the public consumers, who manufacture intermediate products for infrastructure construction works at the national level, or final complete products for other applications.

These three types of green purchasing formats are referred to as B2C green purchasing, B2B green purchasing and B2G green purchasing, respectively. Among these, general consumers and corporate consumers can be very sensitive to price and quality, making it quite difficult for them to start green purchasing. However, public consumers can implement Green Public Procurement (GPP) in order for society to undergo a transition towards environment-friendly consumption even if the price and quality competitiveness of the products being procured are less competitive. Advanced countries including Korea, Japan and the EU have already begun implementing GPP at the national level since the mid-2000s.

In order to ensure that GPP is implemented smoothly, it is important to for the three major consumer groups to share roles, as illustrated in Figure 1. A roadmap was prepared by analyzing the circumstances for GPP introduction in Viet Nam for each of the GPP activities of Korea that has been successfully introduced and implemented thus far.

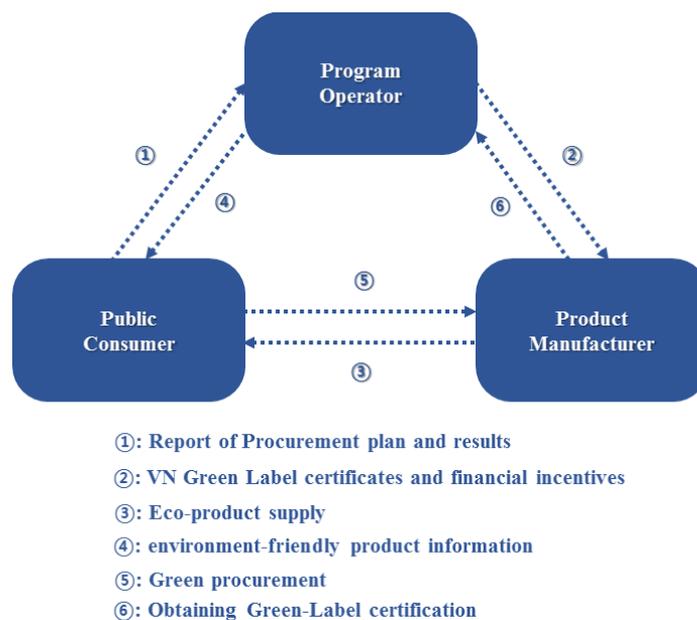


Figure 1 Three Major principals of GPP operation

1.2. Korean Policies for Green Public Procurement

In order for the successful implementation of GPP in Viet Nam, Korea's strategy of introducing and implementing GPP was analyzed. Then, a detailed roadmap for application over a short period of 5 years was proposed through the analysis of feasibility in Viet Nam for each of the proposed activities, on the basis of the outcome of the Korea case study.

Korea enacted the Act on the Encouragement of Purchase of Green Products in 2005, and established and implemented the first basic plan for the promotion of purchasing environment-friendly products over a period of five years from 2006 to 2010. The second basic plan for the promotion of purchasing green products was established and implemented from 2011 to 2015. In addition, the third basic plan for the promotion of purchasing green products was established for the period from 2016 to 2020 and is being implemented at the moment.

In the process of establishing this roadmap, the policies presented in the aforementioned three basic GPP plans that Korea established, introduced and implemented were analyzed in order to determine the feasibility of the roadmap in Viet Nam. Figure 2 illustrates the policies or systems implemented in Korea through the three basic plans for promotion of purchasing green products.

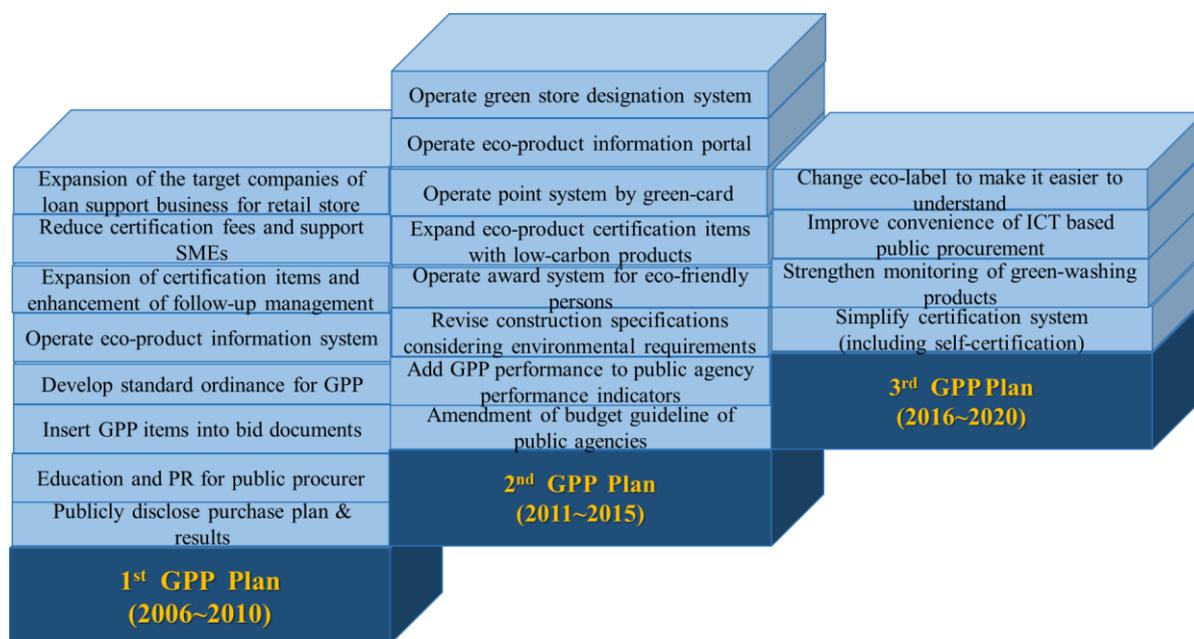


Figure 2 The policies and institutions of Korea to promote GPP

1.3. Feasibility Analysis of Each GPP Activity

Activity No.	①
Activity Title	Publicly disclose purchase plan & results
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (○): Phase I (2006~2010) • (): Phase II (2011~2015) • (): Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (○): To build a foundation for the preferential procurement of eco-products • (): To improve the eco-product certification system • (): To support the participation of companies and consumers
Performance	<p>Since Korea has implemented obligatory purchasing rather than preferential procurement for environment-friendly products, it is possible to legalize the obligatory submission of purchasing plans and performances. The web-based aggregation system of purchasing performances and plans is currently in operation. The G2B identification number management system was established and implemented for the consistent and accurate aggregation of purchasing performance.</p> <p>The GPP performance of public institutions subjected to government evaluation are continuously increasing. As the grounds for imposing regulations on the institutions that failed to submit purchasing performances are inadequate, it is necessary to establish additional supplementary measures.</p>
Feasibility analysis in Viet Nam	
Result of Analysis	<p>Viet Nam, unlike Korea, is more likely to opt for priority purchasing rather than obligatory purchasing for the green products under the Bidding Law. If so, it may be difficult to require obligatory submission of the purchasing plan in advance. In the case of priority purchasing, it is not possible to enforce disclosure of purchasing performances to the public as with obligatory purchasing. However, it is possible to disclose the purchasing performances jointly with other priority purchasing products.</p> <p>Since the Law on Environmental Protection does not specify the public institutions subjected to priority purchasing of environment-friendly products or require disclosure of priority purchasing performance, it could be very difficult to add the relevant provision to the said Law. The disclosure of the information on the range of the institutions subjected to priority purchasing and its purchasing performances must be accomplished in order to achieve success in GPP. This activity can proceed after securing the number of certified products following the revision of the relevant law.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (): Short-term (2019~2023) • (○): Mid-term (2024~2028) • (): Long-term (2029~2033)

Activity No.	②
Activity Title	Education and PR for public procurers
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (○): Phase I (2006~2010) • () : Phase II (2011~2015) • () : Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (○): To build a foundation for the preferential procurement of eco-products • () : To improve the eco-product certification system • () : To support the participation of companies and consumers
Performance	<p>Each year, procurement personnel are trained, and information is gathered on the difficulties they faced in implementing GPP. Separate catalogues for environment-friendly products are distributed to the personnel in charge of purchasing at public institutions, and information systems utilizing intuitive websites were established.</p> <p>Training on GPP is currently conducted for the technology experts in charge of establishing specifications for environment-friendly construction materials in order to draw attention to the environment-friendly related requisites in the specifications.</p>
Feasibility analysis in Viet Nam	
Result of Analysis	<p>There are a relatively low number of public servants who are aware of the need for green purchasing in Viet Nam. In Korea, with the commencement of environmental product regulations in EU in the early 2000's, the export industry would have faced serious adverse impacts if they did not cope with these regulations. As such, the government promoted awareness on the need to establish such a system for manufacturing and managing environment-friendly products by domestic companies.</p> <p>While not an urgent issue, it is prudent to start training personnel in charge of purchasing regarding the priority purchase of environment-friendly products. The training for the personnel in charge of purchasing should be provided through the entire period.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (○): Short-term (2019~2023) • (○): Mid-term (2024~2028) • (○): Long-term (2029~2033)

Activity No.	③
Activity Title	Insert GPP elements into bid documents
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (○): Phase I (2006~2010) • (): Phase II (2011~2015) • (): Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (○): To build a foundation for the preferential procurement of eco-products • (): To improve the eco-product certification system • (): To support the participation of companies and consumers
Performance	<p>In Korea, since the administrator of Public Procurement Service (PPS) has established the need to promote the purchase of green products under the [Act on Promotion of Purchase of Green Products], the availability of environment-friendly products should be checked in the bidding documents.</p> <p>Each of the stages of purchasing contains standards regarding environment-friendly products that reflect GPP guidelines and the training of procurement personnel.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>Through this project, a draft of GPP guidelines was developed and provided to Viet Nam. The guidelines explain how to procedurally consider the requisites for environment-friendly products under the existing procurement system in Viet Nam. Since GPP guidelines are essential for the pilot implementation and formal implementation of GPP, they must be established most urgently through discussions with interested parties of procurement.</p> <p>It is necessary to review how to give preference to the environment-friendly products in the existing bidding documents. GPP guidelines can be implemented only when the Bidding Law is appropriately revised.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (): Short-term (2019~2023) • (○): Mid-term (2024~2028) • (): Long-term (2029~2033)

Activity No.	④
Activity Title	Develop standard ordinance for GPP in local government
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (○): Phase I (2006~2010) • (): Phase II (2011~2015) • (): Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (○): To build a foundation for the preferential procurement of eco-products • (): To improve the eco-product certification system • (): To support the participation of companies and consumers
Performance	<p>The requirements for enacting and implementing the ordinance on the promotion of purchasing of green products are stipulated under [Act on Promotion of Purchase of Green Products]. The Ministry of Environment of Korea developed and provided a standard model for enactment of ordinances to promote GPP by public institutions that are subject to the ordinance, and conducted training on such provisions enacted.</p> <p>In Korea, 243 local governments, corresponding to 99.2% of the 245 total local governments, have enacted and are implementing ordinances for promotion of purchasing of green products.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>As Viet Nam operates decentralized procurement, it is possible to enact the ordinances provided that the preferential procurement is extended to the local governments.</p> <p>It is not easy to spread GPP to all local governments under strong local authority. The standard of ordinance bill should be prepared as it is possible to set the ordinance on a trial basis for some local governments This should also be carried out after the bidding law is amended.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (): Short-term (2019~2023) • (): Mid-term (2024~2028) • (○): Long-term (2029~2033)

Activity No.	⑤
Activity Title	Operate eco-products information systems
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (○): Phase I (2006~2010) • (): Phase II (2011~2015) • (): Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (○): To build a foundation for the preferential procurement of eco-products • (): To improve the eco-product certification system • (○): To support the participation of companies and consumers
Performance	<p>Korea has established web-based information systems for eco-products. It has also published a catalogue of environment-friendly products for public institutions.</p> <p>This information system is being operated as a separate center, thereby mobilizing equipment and manpower to process an enormous quantity of data.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>It is inevitable that utilization would be low in Viet Nam even if an information system is established due to the scarce number of certifications available for environment-friendly products at the moment. Rather than establishing a separate information system, it would be more effective to upgrade the existing website currently being operated by the Vietnam Green Label Office in order to provide easily accessible and diversified information on certified products.</p> <p>In order to apply the system to some of the local governments on trial basis, it is essential to establish an information system in the future. The Vietnam Green Label Office website must first be restructured, since the establishment of a separate information system to address GPP is difficult to implement within the next 5 years.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (○): Short-term (2019~2023) • (): Mid-term (2024~2028) • (): Long-term (2029~2033)

Activity No.	⑥
Activity Title	Expansion of Eco-Label certification items
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (○): Phase I (2006~2010) • () : Phase II (2011~2015) • () : Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • () : To build a foundation for the preferential procurement of eco-products • (○): To improve the eco-product certification system • () : To support the participation of companies and consumers
Performance	<p>Currently, there are 165 Korean eco-label certification criteria. The number of product group exceeds 300 with the inclusion of Good Recycled products(GR Products). The total number of certifications issued is approximately 15,000 when Eco-Labels and GR products are included.</p> <p>The follow-up management of eco-label certification is being fortified; without systematic quality control, consumer trust of the certification system may degrade rapidly. Follow-up management is being conducted for companies with more than a prescribed proportion of certified products every year. Moreover, concurrent monitoring of environmental performances at the time of certification is conducted by purchasing the products in the market using a separate budget for this purpose.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>Viet Nam has only 13 criteria for the Vietnam Green Label certification and the number of certified products is even smaller than this. Therefore, the minimum requirement for the implementation of GPP has yet to be fulfilled fundamentally. Efforts at policy level need to be placed concurrently in order to substantially increase the number of certified products over the next 3 years. For example, it can include support for corporations to simplify the evaluation for certification.</p> <p>If the government were to officially announce the position that preferential procurement will be pursued for environment-friendly products in the near future, many companies will want to acquire necessary certification. It will be necessary to develop certification criteria for items subjected to GPP in the next 3 years. If the GPP criteria are established by benchmarking the criteria of advanced countries such as Korea, it could hinder the participation of local companies in Viet Nam. As such, it is important to determine the level of criteria by considering the trends in advanced countries and the corresponding possibility of local companies in achieving certification.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (○): Short-term (2019~2023) • () : Mid-term (2024~2028) • () : Long-term (2029~2033)

Activity No.	⑦
Activity Title	Reduce certification fees and support SMEs
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (○): Phase I (2006~2010) • () : Phase II (2011~2015) • () : Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • () : To build a foundation for the preferential procurement of eco-products • (○): To improve the eco-product certification system • (○): To support the participation of companies and consumers
Performance	<p>KEITI, the institution responsible for Eco-Label certification, simplified the procedures of certification of the derivative products and exempted the certification fee by a maximum of 90% in order to support the acquisition of environment-friendly product certification by small and medium enterprises (SMEs).</p> <ul style="list-style-type: none"> - Company with annual sales less than 500 Million Won (90% deduction) - Company with annual sales in the range of 500 Million ~ 1 Billion (70% deduction) - Company with annual sales in the range of 1 ~ 2 Billion (50% deduction) - Company with annual sales in the range of 2 ~ 3 Billion Won (30% deduction) <p>An Environmental Analysis Center was established within the certification institution to provide testing and analysis services at 30~50% costs for SMEs.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>Viet Nam does not charge fees for its Green Label Certification. It is very easy for the small and medium businesses to acquire this certification. On the other hand, there is substantial cost involved with testing and analyzing products in process of acquiring the certification. The cost of testing and analysis could impart a cost burden on the company applying for certification due to an absence of government financial support.</p> <p>In order to overcome this difficulty, it is possible to lower the cost of testing by using a national testing and analysis center. Moreover, the support for SMEs needs to be implemented promptly in order to increase the number of Vietnam Green Label certified products substantially in short term.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (○): Short-term (2019~2023) • () : Mid-term (2024~2028) • () : Long-term (2029~2033)

Activity No.	⑧
Activity Title	Expansion of retail stores for green purchasing
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (○): Phase I (2006~2010) • (): Phase II (2011~2015) • (): Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (): To build a foundation for the preferential procurement of eco-products • (): To improve the eco-product certification system • (○): To support the participation of companies and consumers
Performance	<p>In Korea, the number of green consumers interested in purchasing environment-friendly products has increased due to a rapid expansion of the trends for wellbeing and Lifestyles of Health and Sustainability (LOHAS). In addition, green stores that specialize in the sales of government-approved environment-friendly products have expanded. The [Act on Promotion of Purchase of Green Products] was revised to have large scale supermarkets above the prescribed sizes install separate locations for sales of green products.</p> <p>The Ministry of Environment is separately operating a system to designate green stores in order to expand the number of stores that specialize in exclusively green products, including food and construction materials.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>The installation of specialized green outlets in Viet Nam is very important for proliferation of green consumption culture among consumers in Viet Nam.</p> <p>However, the circumstances are not appropriate to establish such outlets due to an inadequate number of products certified as green products. As such, although this is an essential step, it is not easy to have such outlets installed on short notice. Furthermore, the expansion of a campaign to improve public awareness of environment-friendly products such as well-being and LOHAS is a prerequisite for the implementation of Green Procurement in Vietnamese market.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (): Short-term (2019~2023) • (): Mid-term (2024~2028) • (○): Long-term (2029~2033)

Activity No.	⑨
Activity Title	Amendment of budget guidelines of public agencies
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • () : Phase I (2006~2010) • (○) : Phase II (2011~2015) • () : Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (○) : To build a foundation for the preferential procurement of eco-products • () : To improve the eco-product certification system • () : To support the participation of companies and consumers
Performance	<p>The guidelines on the execution of the government budget by the Ministry of Economy and Finance stipulate that purchases of environment-friendly products need to comply with the legal requirements, and must utilize products manufactured by SMEs and disabled employers. This has become an important factor in the evaluation of public institutions. In addition, the guidelines on the execution of budget by Ministry of Interior and Safety have newly established provisions on compliance with the legal mandatory purchasing system.</p> <p>As illustrated above, green procurement in the public sector is completed with the consideration of whether the obligatory requisites for green products have been implemented in the relevant laws and guidelines on the in-house budgets of PPS for government institution.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>Although the Decree of Law on Environmental Protection of MONRE has legal requisites that enable priority purchase of environment-friendly products, the Bidding Law or Law on the State budget do not have the relevant requisites.</p> <p>Moreover, priority should be placed on enabling preferential purchasing of green products by utilizing the Bidding Law as stipulated under the Decree of Law on Environmental Protection. It is typically more effective to proceed by establishing relevant regulations in the Law, and afterwards integrating them into State budgets. Therefore, it would be difficult to pursue activities for such enactment in the short or mid-term.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • () : Short-term (2019~2023) • () : Mid-term (2024~2028) • (○) : Long-term (2029~2033)

Activity No.	⑩
Activity Title	Amendment of public agency evaluation guide
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • () : Phase I (2006~2010) • (○) : Phase II (2011~2015) • () : Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (○) : To build a foundation for the preferential procurement of eco-products • () : To improve the eco-product certification system • () : To support the participation of companies and consumers
Performance	<p>The Ministry of Economy and Finance is conducting an evaluation of all public institutions. A new indicator for the evaluation was added: implementation of environment-friendly policies, which measures performance of GPP. In accordance with the relevant law, the reports on purchasing plans and performances were substantially fortified. This led to the public institutions elevating their efforts to improve their purchasing performances, thereby achieving the effect of practical system operation.</p> <p>Currently, public institutions including the local governments, public corporations, quasi-government institutions, and regional public corporations manage their performances of green procurement as an index for evaluation of the institutions.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>Laws or policies related to the evaluation of public institutions in Viet Nam have not been confirmed yet. If Viet Nam has relevant policies, it should include GPP performances as an index of the evaluation of public institutions.</p> <p>However, it is necessary to make additional decisions on how to reflect this performance at the time of evaluation as GPP is being implemented on a preferential rather than mandatory basis. Accordingly, the policy should be applied to a longer time span, as further revisions of the related laws are necessary.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • () : Short-term (2019~2023) • () : Mid-term (2024~2028) • (○) : Long-term (2029~2033)

Activity No.	⑪
Activity Title	Revise construction specifications considering environmental requirements
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • () : Phase I (2006~2010) • (○) : Phase II (2011~2015) • () : Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (○) : To build a foundation for the preferential procurement of eco-products • () : To improve the eco-product certification system • (○) : To support the participation of companies and consumers
Performance	<p>The relevant regulations were revised to enforce the use of environment-friendly construction materials within the standard specifications of government-ordered construction materials and specialized specifications of local governments. This provides a basis for the construction companies to use environment-friendly construction materials.</p> <p>Requirements for the specification of green construction materials were added to the regulations in 2014, with over 50 types of specifications added. Public institutions' inclusion and use of these specifications can be tracked to identify the use of environment-friendly materials.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>The presence of regulations regarding the procurement of construction materials in the Bidding Law has resulted in increased public bids for green construction materials in Viet Nam. Therefore, the Vietnamese government could develop GPP based on the Vietnam Green Label criteria for construction materials, and establish regulations for provision of incentives at the time of preferential purchasing for manufacturers of construction material by.</p> <p>Although it would be effective to develop green specifications after 2024, it is necessary to expand the certifications of construction materials within the next 5 years.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (○) : Short-term (2019~2023) • (○) : Mid-term (2024~2028) • () : Long-term (2029~2033)

Activity No.	⑫
Activity Title	Operate award system for environment-friendly persons
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (): Phase I (2006~2010) • (○): Phase II (2011~2015) • (): Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (): To build a foundation for the preferential procurement of eco-products • (): To improve the eco-product certification system • (○): To support the participation of companies and consumers
Performance	<p>Under the Act on Promotion of Purchase of Green Products, the Korean government holds an annual award ceremony to discover and reward individuals or organizations who have contributed to the development of green technology, distribution of green products, and development of environmental industries.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>In order for GPP to be successfully implemented in Viet Nam, a policy to recognize individuals or organizations engaged in environment-friendly activities with awards may have great impacts on the country's GPP landscape.</p> <p>However, this should be pursued at around the time of settlement of GPP in Viet Nam. Therefore, it would be more effective to implement such programs after 2025.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (): Short-term (2019~2023) • (): Mid-term (2024~2028) • (○): Long-term (2029~2033)

Activity No.	⑬
Activity Title	Operate green-card system
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • (): Phase I (2006~2010) • (○): Phase II (2011~2015) • (): Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • (○): To build a foundation for the preferential procurement of eco-products • (): To improve the eco-product certification system • (○): To support the participation of companies and consumers
Performance	<p>Green Card was launched in July 2011 and 15 million cards were issued within 6 years. There are 20 banks that issue the Green Card, with sales volumes exceeding 11 trillion Won. Moreover, the value of accumulated points through the use of the Card exceeds 9.1 billion Won. If environment-friendly products are purchased with the Green Card, 3~24% of the purchase value is provided as incentive points. These points can be used for payment of local taxes or as a donation, and exchanged for gift vouchers at retail stores.</p> <p>During the 23rd United Nations Framework Convention on Climate Change in 2017, this policy was selected as an outstanding case in the area of ICT Solution for its innovative nature and ease of proliferation into other countries..</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>The policy of offering incentive points when purchasing eco-friendly products using credit cards will be very effective in most developing countries, including Viet Nam. Credit card use has become quite common in Korea, and there are already various benefits associated with it. Thus, providing points for green card use is not a big incentive for Korean consumers, but may be the case in Viet Nam.</p> <p>It is not easy to introduce this policy over a short period of time because it is uncertain who will provide the card points. It is also difficult to adopt this policy without increasing the number of environment-friendly products that can be purchased with credit cards, so it is necessary to introduce them over a long period of time.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (): Short-term (2019~2023) • (): Mid-term (2024~2028) • (○): Long-term (2029~2033)

Activity No.	⑭
Activity Title	Simplify certification system (including self-certification)
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • () : Phase I (2006~2010) • () : Phase II (2011~2015) • (○) : Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • () : To build a foundation for the preferential procurement of eco-products • () : To improve the eco-product certification system • (○) : To support the participation of companies and consumers
Performance	<p>By establishing and operating a one-stop online authentication system, the time taken to complete the steps of the certification was effectively reduced.</p> <p>Companies that have the ability to conduct their own evaluations of eco-label certifications using the self-certification system have benefited from the reduction of time for certification audit and reduction of certification fee. By simplifying the certification system, the duration of the certification process was reduced to seven days, and corporations reduced their costs for travel, inspection, and testing.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>Self-certification should be adopted in Viet Nam in the future; companies can be incentivized to participate in the Vietnam Green Label Certification System through simplified certification procedures and a reduction in certification fees. It is recommended that such advanced systems be introduced and implemented from the early stage of GPP, as they can contribute to the rapid expansion of Vietnam Green Label certified items.</p> <p>On the other hand, online certification systems require trust between companies applying for certification and certification authorities, and a large number of competent and experienced examiners within Viet Nam.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • (○) : Short-term (2019~2023) • () : Mid-term (2024~2028) • () : Long-term (2029~2033)

Activity No.	⑮
Activity Title	Change eco-label marks to make it easier to understand
Korea Experience and Performance	
Implementation Period	<ul style="list-style-type: none"> • () : Phase I (2006~2010) • () : Phase II (2011~2015) • (○) : Phase III (2016~2020)
Implementation Purpose	<ul style="list-style-type: none"> • () : To build a foundation for the preferential procurement of eco-products • (○) : To improve the eco-product certification system • (○) : To support the participation of companies and consumers
Performance	<p>The unification of a diverse range of relevant marks and labels within environment-friendly certification of the Ministry of Environment was conducted as well as through simplification of their contents.</p> <p>his has the effect of elevating the reliability and recognition of the certification mark system by consumers, which is currently being managed in a disorganized manner. Moreover, unification of a diverse range of mark designs can achieve unified policy effects within the Ministry of Environment. Through assertive publicity in the media on the modified and integrated logo, there has been a continued trend of increased recognition from consumers.</p>
Feasibility Analysis in Viet Nam	
Result of Analysis	<p>The modification of the Vietnam Green Label mark is not appropriate under the current situation. On the contrary, it is more important to elevate the level of recognition of the mark by more assertively publicizing the current certification system.</p> <p>It is necessary to pursue modification of the design if there are changes in the nature or concept of the certification system in the future.</p>
Appropriate period of introduction	<ul style="list-style-type: none"> • () : Short-term (2019~2023) • (○) : Mid-term (2024~2028) • () : Long-term (2029~2033)

2. Setting Vision and Roadmap for GPP in Viet Nam

2.1 Setting Vision and Goal, Strategy

A feasibility analysis was conducted for Viet Nam on numerous policies, which were pursued to increase GPP adoption in Korea. The results of the analysis – the three major strategies, main tasks by each strategy, and goals and vision to be accomplished through these strategies – are presented in Figure 3.

The three major strategies include the establishment of a foundation for preferential purchasing, advancement of a certification system for environment-friendly products, and support for green corporations and green consumers. In addition, a goal was set to certify 300 environment-friendly products by setting up a legal and institutional system for GPP. The ultimate vision to be accomplished through these goals is to build the infrastructure of GPP in Viet Nam.

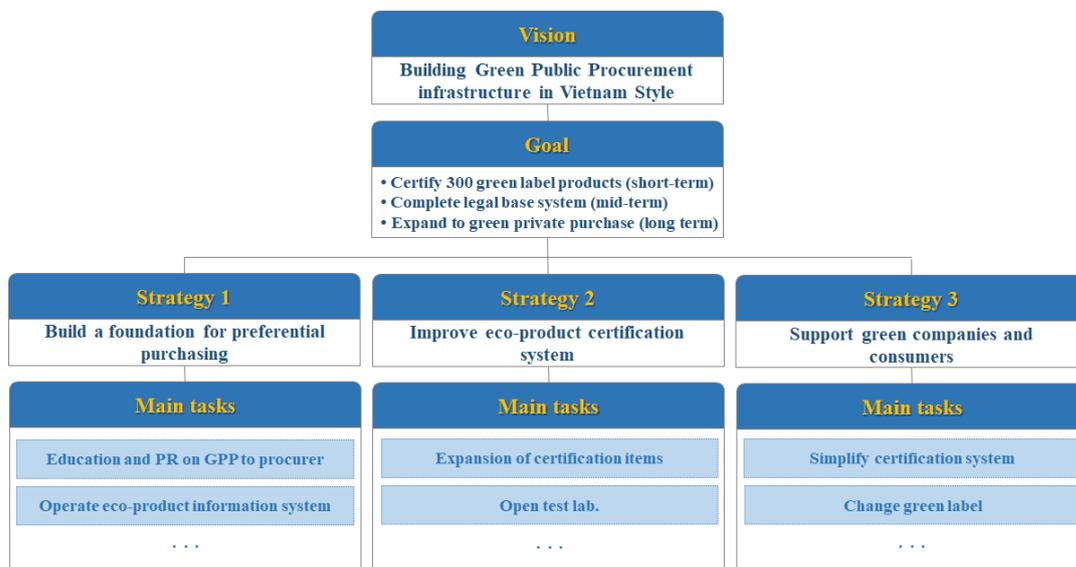


Figure 3 Vision, Goals, and Main tasks of Three Strategies for GPP in Viet Nam

2.2 Setting Roadmap

The following is a roadmap for GPP in Viet Nam over the next 15 years. The three strategies mentioned above are presented on the left side of the table and the main tasks for each strategy were placed in the short, medium and long term time spans. In the roadmap, the individual tasks were presented so that they were interlinked within a larger category of strategies.

The two most important foundations for GPP implementation are the education and public relations of GPP for public officials, companies, and consumers and the expansion of green-label certified products. These two tasks needs to be pursued throughout entire period.

In addition to two main tasks mentioned earlier, the other tasks for the short-term period are simplifying certification system and operating eco-product information system. The implementing plans for short-term period are described in detail in Section 2.3.

For the mid-term period, the related laws will be revised for disclosure of purchasing plans and performances and the GPP requisites will be inserted in the bid documents while the short-term plans will be continued. Various ecolabel mark can be unified to increase its awareness and reliability.

For the long-term period, GPP policy can spread throughout the country by developing standard ordinances of local governments for GPP. GPP requisites can be considered in their budget establishment and evaluation processes. In addition, green-card and environmental construction system will encourage the performances of green purchasing by general consumers and public institutions.

	Short-term (2019~2023)	Mid-term (2024~2028)	Long-term (2029~2033)
Build a foundation for preferential purchasing		Revise related law: including disclose purchase plan & results	Develop standard ordinance for GPP
	Education and PR on GPP to producer, consumer and public procurer		
		Insert GPP items to bid documents	Amendment of budget guide of public agencies
	Operate eco-product information system		Amendment of public agency evaluation guide
Improve eco-product certification system	Expansion of green-label certified products, including building material + support SMEs		
	Open test laboratory		
Support companies and consumers	Simplify certification system	Change of Green Label mark	Operation of green-card program
			Develop env. construction specifications
			Expansion of related retail stores

Figure 4 The GPP roadmap for Viet Nam

2.3. Short-term Implementing Plans for Each Activity

The following short-term implementation plans were presented by selecting the most urgent or important tasks among the main tasks by each strategy presented in the roadmap. It is expected that the foundation for GPP will be established in Viet Nam by implementing the presented short-term plans.

The government should support to increase the number of products with Vietnam Green Label to promote the green product market and industry. It will lead to an increase of environment-friendly products available in Vietnamese market.

It is also necessary to support small and medium sized enterprises (SMEs) for certification and simplify the certification system to achieve the goal. Information on Green Label certified products and certification process will be provided to procurement personnel and companies through eco-product information system. The information system will improve the awareness of GPP and encourage green purchasing to the stakeholders and public.

2.3.1 Expansion of Green-Label Certified Products

(1) Need

In order to implement GPP in Viet Nam, it is most important to have environment-friendly products available to be purchased. However, there are only 13 Vietnam Green Label criteria and about 50 certified products at the moment. Moreover, the validity periods of majority of these products have already expired.

The reasons for the lack of certified products include lack of demand within the Vietnamese market, insufficient assertive publicizing of the system by the certification institution, and lack of benefits associated with acquiring certification. Therefore, the most urgent task is to expand the number of certification criteria and certified products and establish benefits of acquiring certification through the establishment of relevant legal grounds.

(2) Implementation Procedures

- Enumeration of demands for certification, development of criteria, and pursuit of certification in accordance with 4-stage procedure.
- Since the system is in its early stages, secure a budget by assertively highlighting the need for government support.

<p>1. Request government support</p>	<ul style="list-style-type: none"> · Request government support funds for the expansion of environment-friendly products according to Article 44 of the Law on Environmental Protection (excavation and development of demands for certification criteria, and certification consulting) · Encourage enactment of Circular according to the Bidding Law (establish grounds for provision of incentives)
<p>2. Enumerate demands for development of certification criteria</p>	<ul style="list-style-type: none"> · Enumerate demands for certification for the items presented in VGGS (development of 150 cases at an annual rate of 10 cases for 15 years) · Enumerate demand in association with Vietnam Green Building Certification System (LOTUS)
<p>3. Develop certification criteria</p>	<ul style="list-style-type: none"> · Develop criteria for export products at the level of the advanced countries in order to both meet the regulations of advanced countries and achieve Vietnam Green Label Certification. · For the domestically consumed products, develop criteria that consider the technical capabilities of Viet Nam.
<p>4. Conduct certification consulting</p>	<ul style="list-style-type: none"> · Cultivate a domestic consulting market in Viet Nam by supporting certification consulting with government funds. · Train examiners through operation of an educational program.

Figure 5 Procedure for Expansion of Vietnam Green Label

(3) Phased Implementation Method

① Request for Government Support

The government should emphasize the importance of eco-labeling in accordance with ISO 14024 to achieve environment-friendly production consumption in accordance with Article 44, of the Law on Environmental Protection. Supporting items for Vietnam Green Label are as follows.

Areas	Content
Develop certification system	<ul style="list-style-type: none"> · Development of certification manual according to ISO 14024 · Development and operation of educational program to recruit and train certification examiners
Develop certification criteria	<ul style="list-style-type: none"> · Achieve a total of 150 cases over the long-term plan period through development of 10 certification criteria per year · Establish testing and analysis methods necessary for certification
Certification support consulting	<ul style="list-style-type: none"> · Support certification consultation for the products of small and medium businesses subject to certification · Consultation support for development of environment-friendly strategy for products subject to certification
Management of website	<ul style="list-style-type: none"> · Fully restructure the existing Green Label website to highlight introduction of the system, promotion of certified products and provision of information on certification criteria, etc.

Table 1 Supports for Vietnam Green Label

② Excavation of Demands for GPP Criteria

- Assess the list of the local Vietnamese companies that manufacture the 10 product groups presented in the Vietnam Green Growth Strategy.
- Establish relevant demands by holding a seminar on Vietnam Green Label for local companies and global corporations expanding business into Viet Nam
- Select and develop representative product groups in order to encourage the participation of the people of Viet Nam

<ul style="list-style-type: none"> • Foods and Foodstuff • Transportation • Energy • Computers and Office equipment • Textiles and garments 	<ul style="list-style-type: none"> • Papers and Printing • Wood Products • Detergents • Medical Equipment • Energy saving Products
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Table 2 Ten product groups presented in Vietnam Green Growth Strategy

③ Development of Certification Criteria

- Development of certification criteria with considerations for selectivity

Certification criteria should be established by benchmarking overseas certification criteria for the subject products selected, in consideration of the technical level of the local companies of Viet Nam. The relevant technical levels and selectivity of the Vietnam Green Label will be determined by holding a consultation meeting with experts in the relevant fields in advance.

Ecolabel System	Korea Eco-label	Blue Angel	EU Flower	Nordic Swan	Terra Choice	Green Seal
Implementing country	Korea	Germany	EU	Northern Europe	Canada	USA
Year of establishment	1992	1977	1992	1989	1988	1989
Selectivity	30%	20~30%	5~30%	20~30%	20%	15~20%

Table 3 International eco-label systems

- Development and operation of an educational program for recruitment and training of certification examiners

Educational program will be developed by benchmarking for training of examiners with those of countries that operate advanced eco-label certification systems, such as Korea.

No.	Lecture title	Contents of lecture
1	Trends in global environment policy on products	- Global environmental issues and sustainable growth - Trends in global environment regulations of products and activities of corporations to address such regulations
2	ISO 14000 and environmental management	- Environmental management and ISO 14000 system - Interpretation of the requisites of ISO 14020 and ISO 14024
3	Interpretation of certification criteria	- Introduction to the methods of developing Green Label certification criteria - Interpretation of Green Label certification criteria for each subject product
4	Interpretation on certification procedures	- Introduction to Green Label Certification procedures - Interpretation on examination guide for each examination procedure
5	Finding inappropriate issues	- Introduction of the sample examination report - Examination of virtual groups and presentation of inappropriate issues

Table 4 Example of Educational program

- Development of examination procedures for system operation

The examination procedures and method for each examination procedure will be developed in accordance with ISO 14020 and ISO 14024

④ Consultation to Support Certification

- Conduct certification consulting (300 certified products for 5 years)

Year	Product Group	No. of criteria	No. of certified products
2019	Energy (ex. renewable energy)	6	60
2020	Papers and Printing	6	60
2021	Detergents	6	60
2022	Computers and Office equipment	6	60
2023	Foods and Foodstuff	6	60

Table 5 Example of objectives for Vietnam Green Label certification

- Recruitment of participating companies and certification consulting companies

■ Recruitment of participating companies

- Recruit companies participating in Vietnam Green Label Certification for each product for which GPP criteria have been developed
- Select appropriate companies in accordance with in-house standards

■ Recruitment of certification consulting companies and execution of consultation

- Select appropriate consulting companies in accordance with in-house selection criteria
- Carry out consultation with selected companies by allocating subject companies/products

■ Conduct certification evaluation and deliberation

- Conduct certification examination by utilizing in-house trained certification examiners
- Determine whether to certify by holding Deliberation Committee at the Green Label Office

2.3.2 Simplification of Certification System

(1) Need

Acquiring eco-labels is becoming a burden to companies due to excessive certification costs and duration in comparison to the existing environmental management system certification (ISO 14001), a representative environmental certification. Fundamentally, ISO 14001 Certification applies to the company unit, while Eco-Labels apply to the product unit. Eco-labels consider the entire process of the product system with no benefits of acquiring certification in comparison to ISO 14001. Accordingly, from the perspective of companies, they are reluctant to acquire this certification.

Therefore, it is very important to reduce the time taken to acquire the certification by simplifying the procedures and methods of certification. Advanced countries such as Europe and Japan have already established means of simplification of the certification system under the names of System Certification (Japan) and Product Group Certification (Sweden).

In particular, this method is more appropriate for large corporations than small and medium businesses since it can be implemented on a large scale with diversified item groups subject to certification.

(2) Implementation Procedures

- In accordance with the following four stages below:

1. Benchmark similar system	- Benchmark System Certification of Japan - Benchmark product group certification of Sweden
2. System design	- Establish system design committee comprised of experts in environmental management system (EMS) and Vietnam Green Label - Establish system design proposal that links EMS and Eco-Label
3. Conduct Pilot project	- Recruit and select companies to be subject to pilot application - Conduct pilot application on selected companies
4. Develop operating regulations	- Establish issues to be supplemented with the system through pilot application. - Establish operating regulations regarding the supplementary issues

Figure 6 Procedure of simplification of Vietnam Green Label System

- First stage: Conduct analysis of guidelines for certification examination by reflecting the ecolabel procedures onto the EMS implemented in Sweden and Japan.
- Second stage: Develop system design proposal appropriate for the situations in Viet Nam (EMS requisites + EL requisites)

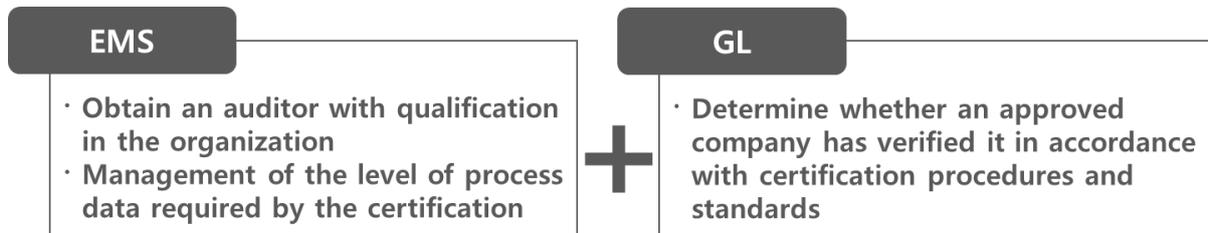


Figure 7 Considerations of the requisites of EMS and EL

- Third stage: Conduct pilot certification on selected companies in accordance with the system design procedures and requisites
- Fourth stage: Establish final version of operation regulations by incorporating the problems established through pilot certification

(3) Phased Implementation Method

① Benchmarking of Similar System

- Analysis of significance

There are subtle differences in the significance of the certification systems of Japan and Sweden. The certification system of Japan can be applied more effectively at the company level.

System	Significance of the system
System certification of Japan	<ul style="list-style-type: none"> · To what extent is the environmental management system of the company systemically reflecting and managing the factors necessary for the Eco-Label Certification? · Companies that manage the Eco-Label Certification factors through environmental management systems are qualified to certify the Eco-Label for their own products.
Product group certification of Sweden	<ul style="list-style-type: none"> · Is the level of data management for the products of the companies that manufacture diversified products appropriate for the requisites demanded by the Eco-Label certification criteria? · If the data management methods are appropriate for the requisites of certification criteria, the corresponding company may verify the Eco-Label on its own.

Figure 8 EL certification system of Japan and Sweden

- Differences between certification procedures and effects
 - Procedural differences: The system certification first prioritizes acquiring guidance from the certification institution on whether system examination is possible. Next, the certification is approved after the company has executed examination on its own.
 - Effects: For the products to be certified by the company, examination is conducted as quickly and appropriately as possible by utilizing an in-house certification examiner, thereby reducing the cost of examination.

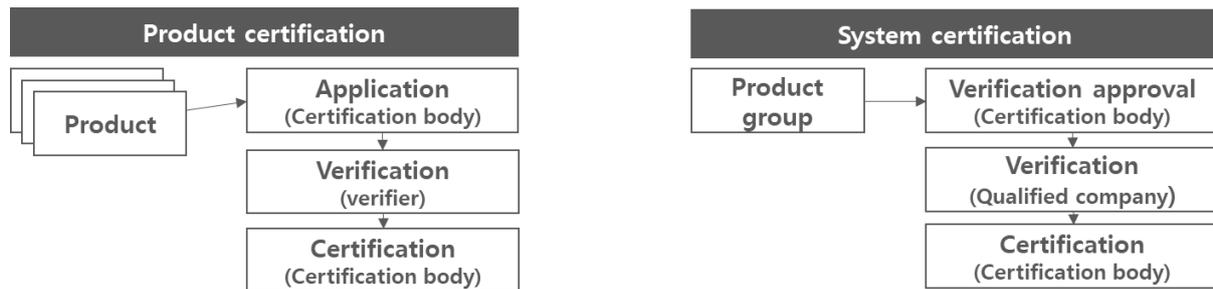


Figure 9 Comparison between product certification and system certification

② System Design

- Establish system design proposal conducted in the second stage, namely, corporate examination (first stage) and in-house product examination, and present documents necessary for each stage.



Figure 10 Example of System Design Proposal

③ Implementation of Pilot Project

- Select five companies that manufacture different product groups as the subjects of the Pilot project

1. Establish plan for Pilot project	<ul style="list-style-type: none">· Present the five product groups targeted for the project· Establish Pilot project period and incentives
2. Recruit and select companies to participate in Pilot project	<ul style="list-style-type: none">· Announce recruitment of participating companies through website· Select participating companies in accordance with the in-house examination criteria
3. Conduct Pilot project for each participating company	<ul style="list-style-type: none">· Consultation and assessment of the current status of each company· Consultant conducts pilot system certification
4. Register the results of certification	<ul style="list-style-type: none">· Conduct and approve certification for each product on the basis of system certification· Register the results of approval on the website of the certification institution

Figure 11 Implementation stage of Pilot project

④ Development of Operating Regulations

- Enact operating regulations that reflect the results of the Pilot project
 - Develop a corporate examination manual that reflects the examination procedures and requisites of EMS
 - Develop a product examination manual that reflects the procedures and requisites of ISO 14024
- Reflect the system certification requisites onto Decree of Law on Environmental Protection
 - Insert the grounds for EMS-based Eco-Label certification into '1e)' of Article 27 of Decree (Contents of environmental management system) of above Law

2.3.3 Operation of Eco-Label Information System

(1) Need

To ensure the successful implementation of the eco-Label system, accurate information on the environment-friendly products must be conveyed to consumers. Although information should be provided through online and offline media simultaneously in order to ensure that information is conveyed to consumers promptly and accurately, it is not easy to locate the website for Vietnam Green Label since it exists within the website of the Viet Nam Environmental Agency (VEA) and not as a separate website.

In particular, even if certification information is found through search engines, it is located not through the Green Label website, but rather through the websites of certification companies in most cases. Therefore, it is important to establish a system that allows for the search of unified information regarding the Green Label on the Internet.

(2) Implementation Procedures

- Establish an information system for the operation of the GPP system in accordance with the following four-stage procedure for the pursuit:
 - Establish information system by dividing it into system establishment and management components;
 - Operate website using an independent website address rather linking it to the VEA website;
 - Establish a system that allows for easy search in the global search engine;
 - Invigorate the information system through ongoing management

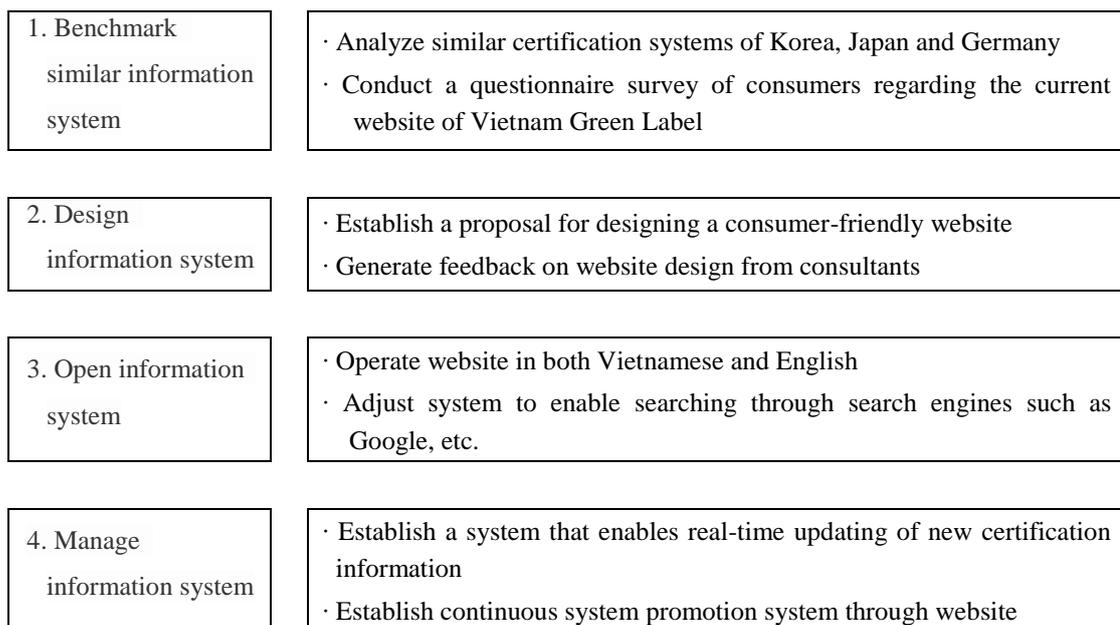


Figure 12 Procedures for the Establishment of Information System

(3) Phased Implementation Method

① Benchmark Similar Information Systems

The benchmarking elements of similar systems are the composition of certification website and information system administrator, data provision format and update interval, and communication with consumers (Q&A, etc.).

For the Vietnam Green Label information system, there are following issues to be supplemented:

- Website composition and information delivery format
- Regular information update and method of communication with customers
- Preparation of budget for the establishment and management of the system

The means of information system build-up and operation should be established in each time period:

- Short-term (2019~2023): Fortify Green Label Certification information provision and customer communication function by using website
- Mid-term (2024~2028): Open integrated information network for environment-friendly products, and provide detailed information on environment-friendly products for public procurement through the network
- Long-term (2029~2033): Open online shopping mall for environment-friendly products (for expansion to private sector purchasing)

② Design and Open Short-term Information System

The information system needs independent website address (example: greenlabel.vea.vn).

In the process of development and opening the website, the elements to be considered are as follows:

- Distinguish between use for PCs and smartphones in alignment with the era of 4th industrial revolution
- Design website in languages including Vietnamese and English at the minimum
- Register the relevant website on search engines such as Google, etc.
- Compose customer-friendly contents and interface
- Enable links with websites of corresponding companies by clicking on the certified products presented in the website

③ Management of Short-term Information System

Manpower resources need to be supplemented for periodical information system and customer management. It is required to update information on certified products and companies by utilizing new certification information and results of follow-up management. The improvements will be progressed with real time response to customer questions.

3. Conclusions

GPP is one of the most important means of achieving sustainable growth, and plays a large role in helping transition our society into a system of sustainable consumption and production. Countries such as Korea, Japan and member countries of EU have already institutionalized GPP in an effort to establish sustainable consumption and production systems. Viet Nam recognizes the need for legal and institutional reorganization in order to achieve the successful introduction of GPP for sustainable development.

The GPP policy recommended for Viet Nam was divided into short, mid- and long-term policies on the basis of the successful case of GPP in Korea since 2005. Based on the feasibility analysis of the activities, the strategies, goals and vision for GPP were newly presented for Viet Nam. Three main tasks: ‘Expansion of Vietnam Green Label certified products’, ‘Simplification of the certification system’, ‘Operation of an eco-label information system’ were selected as short-term main tasks, which are to be introduced imminently for five years from 2019 to 2023. The implementation plans for the three tasks were also specified.

The roadmap for the introduction of GPP in Viet Nam was supplemented through consultation with relevant Vietnamese ministries and national experts to ensure that these were the methods appropriate for the current situation of Viet Nam. The short, mid- and long-term action plans presented here can be achieved only if there is assertive assistance, cooperation, and support from different parties, including the central government, local authorities, private sector, civil organizations, and consumers. For this purpose, the administrative authority of Viet Nam needs to promote the effects and importance of GPP in order to foster assertive cooperation from interested parties.

2.5 Assist the Capacity-building and Awareness-raising on GPP

This consulting item involves transferring knowledge of GPP in Korea to various stakeholders in Viet Nam, including policymakers, government procurers, and local companies, to strengthen their capacities and improve awareness of GPP. The first workshop for capacity-building and awareness-raising was held in Ha Noi in April 2018. This workshop aimed to inform the Vietnamese government stakeholders of the successful implementation of GPP in Korea and to enhance awareness of the need to implement GPP in Viet Nam.

The second workshop was held in September 2018 in Ho Chi Minh City to introduce and promote GPP to a more diverse audience, including the private sector in Viet Nam. The second workshop therefore targeted a wider range of participants than did the first workshop. Unlike the first workshop which was carried out in Ha Noi, the administrative capital of Viet Nam, the second workshop was held in Ho Chi Minh City, the economic center of Viet Nam. Members of universities, private corporations, and government officials based in Ho Chi Minh City all participated in this workshop. The schedule for the first workshop is presented below, in Table 44.

Key activities		Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
1 st	Propose detailed agendas										
	Invite experts and prepare materials										
	Invite participants and prepare holding of event										
	Hold event										
2 nd	Propose detailed agendas										
	Invite experts and prepare materials										
	Invite participants and prepare holding of event										
	Hold event										

[Table 44] Schedule for the Awareness-raising Workshop, 2018

2.5.1. First Awareness-raising Workshop

The first workshop was held to raise awareness and build policymaking capacity of the relevant ministries for the introduction of GPP in Viet Nam. At this workshop, the current status of implementation, and performance of GPP in Korea, were presented. Korea’s GPP landscape was presented as a model for the future advancement of GPP in Viet Nam, in addition to the consulting items under the Project.

The first awareness-raising workshop was held jointly by VEA, KEITI and the UN Environment at Novotel Suites Hotel, Ha Noi, on April 5th, 2018. The agenda for the first workshop is shown in Table 45.

Time	Contents	Remarks
09:00-9:30	Registration	
09:30-9:40	Opening Remarks	Hoang Van Thuc (VEA) Kim, Yong Jin (KEITI)
09:40-10:20	Korea's experiences on the implementation of Green Public Procurement	Lee, Dong Wook (KEITI)
10:20-10:40	Coffee Break	
10:40-11:00	Environmental and economic benefits of Korea's GPP:	Noh, Jae Seong (BISD)
11:00-11:40	Introduction of Green Public Procurement in Thailand:	Jarinporn Tippamongkol (PCD)
11:40-12:10	Introduction of Green Public Procurement in Viet Nam	Nguyen Minh Cuong (VEA)
12:10-12:20	Group photography session	
12:20-13:50	Lunch	
13:50-14:10	Introduction of Asia Pacific Green Public Procurement Partnership Project	Woo, Seung Min (SMaRT ECO)
14:10-16:00	(Panel discussion) Proposal for direction of advancement and pursuing of project GPP in Viet Nam	Chair: Kim Ik (SMaRT ECO) Panelists: Lee Hyeon Joo (KEITI), Nguyen Minh Cuong (VEA), Le Thi Thanh Nga (MOF), Le Manh Thang (MPI), Tran Nam Binh (PEAPROS)

[Table 45] Agenda for the First Workshop

The contents of the workshop can be summarized as follows. The workshop first focused on the implementation and current status of GPP in Korea; presenters used this example to emphasize the importance of introducing GPP to Viet Nam.

First, Mr. Dong Wook Lee, director general of the Sustainable Lifestyle Department of the KEITI, discussed the GPP policies of Korea. He emphasized that it was possible to implement and operate GPP in Korea successfully due to the establishment of a clear legal basis, the successful operation of an online public procurement system, and a financial reward system based on public procurement records.

Dr. Jae Seong Noh, a research fellow of the Business Institute for Sustainable Development, presented on the environmental benefits and ripple effects in industries impacted by GPP policies adopted in Korea. This presentation stressed that GPP is a requirement, rather than an option to address international environmental regulations and protect the environment. Dr. Noh also explained that as the global

environment-friendly product market grew, awareness among Korea's small and medium-sized enterprises of this type of product also grew; from there, technology improved rapidly.

Ms. Jarinporn Tippamongkol, senior professional level environmentalist at the Pollution Control Department of Thailand, presented on the current status of GPP implementation in Thailand. Thailand has well-established guidelines for GPP, with support from the Ministry of Finance, and has thereby experienced a smooth implementation of GPP per the policies stipulated by the government. Thailand plans to strengthen its efforts regarding the improvement of the monitoring and evaluation system, and aims to support the private sector in green purchasing and diversification of environment-friendly products within the market.

Mr. Nguyen Minh Cuong, Deputy Director, Department of Science Technology and International Cooperation, VEA, presented on the current status of GPP in Viet Nam and explained the problems that have occurred in this process. The foremost problem is that although there some national plans, strategies, and regulations directing the implementation of GPP in Viet Nam, they are ineffective as a whole due to the lack of relationship among the implementing bodies. He further commented that there are difficulties in coordinating with other ministries and agencies, which lead to restrictions on the integration of environmental criteria into the existing procurement procedures.

During the afternoon session, Ms. Seung Min Woo, senior researcher at SMaRT ECO, introduced the implementation status and plans for the Project. A panel discussion followed this presentation, with the topic of 'Proposal for the direction of progress in and the pursuit of the project for GPP in Viet Nam.' Dr. Ik Kim of SMaRT ECO chaired the discussion; Ms. Hyun Ju Lee, senior researcher of the KEITI; Mr. Nguyen Minh Cuong; Mr. Le Manh Thang, official of the MPI; Ms. Le Thi Thanh Nga, official of the MOF; and Mr. Tran Nam Binh, chairman of PEAPROS participated as panelists. A summary of the key contents from the panel discussion sorted by each consulting item is given below.

Regarding the legal framework, the panelists agreed that priority should be placed on the revision of the bidding law rather than the pilot implementation, since the regulations on GPP had not been enacted properly. Additionally, there have not yet been clear preferential regulations related to the procurement of the environment-friendly products. Panelists expressed the opinion that the pilot implementation should be implemented first, followed by a reflection of the outcomes prior to establishing law since it would be difficult to immediately enact or revise laws without strong evidence of their effectiveness.

Since there are currently few certified environment-friendly products in the Vietnamese market, and because many products holding the certification are either imported or produced by foreign companies, panelists argued that the Vietnam Green Label criteria should be established by fully taking into account the domestic technology level. There was a suggestion that a roadmap should be established for the purpose of strengthening the competence of the certification body at the same time.

The UNEP's SPPEL project also tried to draw similar guidelines, but was hindered by the lack of a legal basis. Therefore, UNEP suggested that a plan should be prepared in advance to create effective guidelines even without proper legislation. For capacity building and awareness-raising activities, the audience should be expanded to include the private sector as well as the general public, if needed.

The panel discussion illustrated some differences of opinion between the relevant ministries, thereby implying difficulties in the immediate implementation of GPP. It confirmed the need for the prompt establishment of a legal basis for GPP in Viet Nam through coordination with the relevant ministries. In addition, it was noted that when the government designates products subject to GPP and develops Green Label criteria for certification, attention should be paid to Vietnam's current technology level and ability of local companies to meet the criteria.

To help overcome some of these barriers, the Implementing Agency decided to prepare a short-term roadmap for pilot implementation, taking into account the relationship among the existing laws and regulations. The Implementing Agency also produced a recommendation report regarding the establishment of a legal basis via consultation with the relevant ministries. In the process of developing the new Green Label criteria, we also sought to verify whether the requirements of the proposed environmental criteria and the testing methods were appropriate for the local level of technology development based on the opinions of Vietnamese companies and experts.



Group photograph

Presentation

Panel discussion

Whole view of workshop

[Table 46] First Awareness-raising Workshop (Photos)

There were a total of 50 participants at the first workshop, including government officials from the Ministry of Natural Resources and Environment, Ministry of Home Affairs, Ministry of Industry and Trade, as well as personnel from specialized institutions such as Vietnam Power Group (EVN), Natural Resources and Environment Magazine, and Asian Institute of Technology Centre in Vietnam (AITCV). After the workshop, a questionnaire survey was sent to the participants. The results are summarized in Table 47.

Categories	Very satisfied	Satisfied	Average	Dissatisfied	Highly dissatisfied
Sense of accomplishment on the workshop goals	56%	39%	5%	0%	0%
Usefulness of information	44%	50%	6%	0%	0%
Level of understanding	50%	33%	17%	0%	0%
Appropriateness of time allocation	33%	67%	0%	0%	0%
Appropriateness of allocation of time	44%	56%	0%	0%	0%
Usefulness of presentations	61%	33%	6%	0%	0%
Level of satisfaction on panel discussion	28%	72%	0%	0%	0%

[Table 47] Results of the Questionnaire Survey on the First Workshop

Overall, the level of satisfaction at the first workshop was considerably high, and the participants found the contents of presentations to be very helpful. However, the survey found that the contents of the workshop were somewhat difficult to understand, and due attention should be paid in this regard at the second workshop considering the target audience. For the panel discussion, which was less satisfactory than other items, survey respondents wished for more time to listen to the opinions of the audience, and for discussion questions more relevant to the participants' backgrounds than the panelists.

Participants also expressed a desire to learn more about Korea and other countries' experience with multi-stakeholder cooperation on GPP implementation. Accordingly, the Implementing Agency intended to request presenters for the second workshop who were able to provide more explanation on this specific topic.

2.5.2. Second Awareness-raising Workshop

The second workshop for awareness-raising was held at the Novotel Saigon Centre Hotel, in Ho Chi Minh City, Viet Nam on September 18 2018. Convened by the Focal Point, a broader range of audiences were invited to the workshop, including stakeholders from universities, public and private corporations, and government officials from relevant ministries.

The objective of the second workshop was to introduce GPP by presenting the experience of Korea, and to emphasize the necessity of GPP by promoting its social and economic ripple-effects. As such,

the workshop focused on leading the stakeholders of the Vietnamese government and private sector to examine the prerequisite conditions, problems, and solutions for the introduction of GPP in Viet Nam in order to establish a foundation for its implementation.

The morning session introduced the international trends of the environmental regulations on products. Presenters raised awareness about GPP by sharing cases of opportunities created for the private sector through green purchasing. In the afternoon, presenters discussed the current status of GPP and Green Label scheme of Viet Nam, followed by a panel discussion around the barriers to introducing GPP and solutions thereof. The Agenda for the event can be seen in Table 48.

Time	Contents	Remarks
09:00~09:30	Registration	
09:30~09:50	Opening address and group photography session	Nguyen Minh Cuong (VEA)
09:50~10:30	International trend and market changes on environmental regulation products	Kim Ik, CEO (SMaRT ECO)
10:30~11:00	Recess	
11:00~11:30	Expansion of business opportunities for GPP: Corporate cases	Chang, Hyeon Sook (KITA)
11:30~12:00	Green procurement in private sectors	Nguyen Thi Bich Hoa (AITCV)
12:00~13:15	Lunch	
13:15~13:45	Current status and outlook for the green purchase system in Viet Nam	Nguyen Thanh Nga (VEA)
13:45~14:15	Introduction of green label system in Viet Nam	Nguyen Thi Thu Ha (VGLO)
14:15~14:45	Introduction to and accounts of the pursuit of the green purchase system project in Asia Pacific	Yoon Young Woon (SMaRT ECO)
14:45~15:15	Recess	
15:15~16:30	(Panel discussion) Means of activation of the green purchase system and creation of synergic effects among interested parties in Viet Nam	Chair: Kim Ik (SMaRT ECO) Panelists: Nguyen Thi Bich Hoa (AITCV) Chang Hyeon Sook (KITA) Nguyen Minh Cuong (VEA) Ngo Viet Hung (MOF)
16:30~17:00	Conclusion	

[Table 48] Agendas for the Second workshop for improvement of awareness

To begin the Second Workshop, Dr. IK Kim of SMaRT ECO discussed international trends of sustainable consumption and production, and the impact of ensuing environmental regulations on the manufacture of products. He addressed the need to advance the environmentally-friendly product market and GPP in Viet Nam by sharing the global environmental certification criteria and market trends of environmentally-friendly products.

Dr. Hyun Suk Chang, research committee member of the Korea International Trade Association, emphasized the need for the Vietnamese companies to promptly implement GPP within the green product market by sharing cases of crisis and the creation of opportunities experienced by the Korean companies. Ms. Nguyen Thi Bich Hoa, Vice President of the AITCV, discussed how sustainable public procurement can advance the private sector in Viet Nam by presenting cases from Thailand, Japan, and Chile. She also suggested the possibility of GPP uptake by the private sector in Viet Nam through the introduction of eco-label programs from various countries.

In the afternoon session, Ms. Nguyen Thanh Nga, an official of VEA, presented on the government ministries and procurement system related to GPP in Viet Nam and explained the economic effects resulting from the introduction of GPP. This presentation was followed by Ms. Nguyen Thi Thu Ha, Deputy Director of Department of Legal Affairs, VEA, who discussed the history, objectives, and plans of the Vietnam Green Label program.

Dr. Ik Kim of SMaRT ECO chaired the discussion under the theme of "what is needed to implement GPP in Viet Nam and how to create a synergy effect among the stakeholders?" Dr. Hyun Suk Chang, Ms. Nguyen Thi Bich Hoa, Mr. Nguyen Minh Cuong, and Mr. Ngo Viet Hung of the Ministry of Finance, participated as panelists.

Questions by the chair focused on the barriers the panelists experienced in the process of introducing GPP to their organizations. The top barriers cited were inadequacies in education among government officials and the general public, a lack of specific implementation rules and guidelines, and the absence of benefits for the companies producing environmentally-friendly products.

All of the panelists pointed out that the greatest difficulty experienced in implementing GPP was the lack of education and promotion. Participants shared the opinion that nationwide education among the general public on eco-friendly products, led by the Ministry of Education, is necessary. The panelists also agreed that it was most important to improve the awareness of the government officials and corporations participating in tendering by distributing guidelines on GPP. The Vietnam Green Label Office also indicated that GPP would be promoted through the establishment of regional offices since small and medium-sized enterprises participating in green production and local governments would not be able to obtain relevant information.

Companies participating in the event held the opinion that green products were not being manufactured due to a lack of practical benefits and incentives provided to the companies that acquired the Green Label Certification. However, the Vietnamese government does provide support for products manufactured within Viet Nam or manufactured by women-led or rural companies. They desired that the Vietnamese government designate incentives for acquiring the Viet Nam Green Label, particularly for small and medium-sized enterprises interested in making an investment into environmentally-friendly research and development.

The foremost prerequisites for introduction of GPP in Viet Nam include: the establishment of a legal foundation and nationwide education and promotion to the general public, local governments, and corporations. GPP can only be implemented widely when a high level of awareness among the general public, including corporations and government officials that participate in the bidding processes, is established.

It is also urgent to revise the relevant procurement laws, including the laws on bidding and the state budget. To achieve this, the relevant ministries, including the Ministry of Planning and Investment, Ministry of Finance and Ministry of Natural Resources and Environment, must collaborate on policymaking. Regarding the need to improve procurement procedures, separate procedures for GPP should be established promptly in the process of introducing centralized tendering procedures, and such procedures should be implemented through the internet in order to ensure transparency and openness.

The result of these discussions proved that the consulting items that are being conducted through this project by the Implementing Agency and the Focal Point are properly selected and implemented according to local circumstances and needs. In addition, based on feedback from the workshop, a follow-up project on education and training was proposed by the Implementing Agency in Chapter 3.





[Table 49] Photographs of the 2nd workshop

There were a total of 38 participants in the second workshop, including personnel from relevant ministries such as the Ministry of Natural Resources and Environment, Ministry of Finance, Ministry of Planning and Investment, Ministry of Construction, and specialized organizations such as Environmental Technology Centre (ENTEC) and Investment & Trade Promotion Centre (ITPC). Additionally, various environmentally-oriented private research institutions, universities, and public corporations who were identified in the planning stage participated in the workshop.

Workshop participants were surveyed on their overall level of satisfaction, as well as the extent of improvement of their intent to participate in GPP and the Green Label program. The results of this survey are summarized in Table 50.

Categories	Very satisfied	Satisfied	Average	Dissatisfied	Highly dissatisfied
Sense of accomplishment of workshop goals	36%	64%	0%	0%	0%
Usefulness of information	32%	68%	0%	0%	0%
Level of understanding	23%	77%	0%	0%	0%
Appropriateness of time allocation	9%	59%	32%	0%	0%
Level of satisfaction on panel discussion	28%	72%	0%	0%	0%
Overall level of satisfaction	27%	73%	0%	0%	0%

[Table 50] Results of the questionnaire survey on the 2nd workshop

The overall satisfaction rate in the second workshop was 100%. The workshop agenda was organized for the participating companies to be interested, thus leading to higher level of understanding than that of the first workshop. In view of the opinions from the participants in the first workshop, Korea and other countries' experience with multi-stakeholder cooperation on GPP implementation was shared during the morning sessions.

However, some workshop participants indicated a potential opportunity for future improvement, and identified a need for additional communication between presenters and audiences in order to increase engagement. Therefore, when planning a follow-up event, it will be necessary to encourage communication between the participants and the presenter by giving proper Q&A time at the end of each presentation.

Another survey was conducted to measure the degree of improvement in awareness before and after the workshop through participants' subjective judgment. Before the workshop, participants' average awareness of GPP was 2.23 (out of 10), but it was estimated to have improved significantly to 6.87 after the workshop. Awareness on the Green Label and the intention to participate in GPP also improved from 2.39 and 2.54, to 7.42 and 7.38, respectively.

2.5.3 Conclusions

The two workshops held in Ha Noi and Ho Chi Minh City were aimed at various sectors such as the Vietnamese government, enterprises, universities and research institutes. The purpose of the workshops was to raise awareness of GPP in Viet Nam and to inform them of the necessity of GPP. As a result of the survey to measure the improvement of attendees' awareness in the second workshop, awareness of GPP and intention to participate in Vietnam Green Label and GPP were greatly improved from insufficient level through the workshop.

Participants showed great interest in GPP in Korea and the cooperation of various stakeholders through GPP. In the Q & A session after the panel discussion, various and specific questions were raised about the experiences of GPP in Korea and other countries. This shows that Vietnamese stakeholders have the interest and desire of in GPP to introduce the system.

There was a delay in receiving the contents because the simultaneous interpretation was carried out in the workshop. The ability of the simultaneous interpreter was so influential that the speed of presentation, the correspondence between the presentation materials and the presentation contents were very important for understanding. The presentation materials were written in English so that participants in both Viet Nam and Korea could understand it but most Vietnamese participants was hard to understand the English materials, which caused the lack of concentration of the participants.

Presenters and attendees pointed out that the lack of education, publicity and the legal basis on GPP are the biggest problems in introducing it in Viet Nam. The two workshops were held for one day, and the effect of the workshops could be limited and not continuous. The education and promotion of GPP should be regularly and continuously conducted before and after the introduction of GPP, and a consensus should be formed on the necessity of GPP against a broader variety of classes.

3. Conclusions

3.1 Consulting Outcomes and Limitations

Progress and Performance

The Vietnamese government is planning to spread sustainable consumption and production through the national green growth strategy, which is the prime minister's decision, and to implement GPP by 2020. Given his goal, the Implementing Agency was in consensus with the Focal Point on the need to establish a foundation for introducing a stable system of GPP.

To introduce GPP in Viet Nam, the first consulting item selected was to strengthen the legal framework for GPP. While it is difficult for the Implementing Agency to directly participate in the legislative process due to limits on our time and authority, the Vietnam Environment Administration (VEA) aims to publicize GPP legislation in 2019 after deliberation and announce it in 2020.

To activate Vietnam's eco-label, Vietnam Green Label, The Implementing Agency developed the Vietnam Green Label criteria for items that are frequently purchased in the public procurement market, and provided the detailed methodologies and guidelines on how GPP can be applied during the procurement process in Viet Nam. Based on the developed guidelines, the Implementing Agency planed pilot implementation of GPP but also prepared a GPP Roadmap as an alternative item because the implementation depended on the legislation and enactment of related laws. Since the related regulations did not come into effect in the first half of 2018, this was shifted to a GPP roadmap proposal which was an alternative item previously prepared.

In addition to the legal framework recommendations for implementing GPP in Viet Nam, the Implementing Agency benchmarked GPP criteria, guidelines, and roadmaps of Korea and other countries. Benchmarking research and analysis focused on supporting smooth implementation in Vietnam's procurement process.

In addition, the Implementing Agency supported capacity building and awareness-raising activities through two workshops. The workshops were held in Ha Noi, the capital of Viet Nam, and Ho Chi Minh City, the economic hub. The workshops were attended by approximately 100 government officials, environmental and economic research institutes, associations, and corporations. In the workshops, experiences and knowledge related to GPP from Korea were shared and policy makers, procurement officers and companies were encouraged to participate in GPP. The workshops promoting the rapid introduction of GPP system in Viet Nam, and promoted networking between government ministries and local companies.

All consulting items were completed with the cooperation of the Focal Point VEA and the two local

Supporting Agency, PEAPROS and SHOMEE by investigating and considering the local market and procurement procedure of Viet Nam, and by gathering of expert opinions of Korean and Vietnamese experts and stakeholders.

In addition, the legislative amendments, guidelines and roadmap for the implementation of GPP in Viet Nam were developed by collecting opinions from the Ministry of Natural Resources and Environment, the Ministry of Finance, the Ministry of Industry and Trade, and the Ministry of Planning and Investment, including the Focal Point VEA, through cooperation between related ministries.

In the final workshop of the project in Ha Noi, VEA expressed great satisfaction with the project outcomes and announced that they will use the outcomes for successful implementation of GPP through building the cooperation network between other relevant ministries and stakeholders.

It is expected that the draft proposals of GPP criteria will be further reviewed without major adjustment by the Vietnam Green Label Program Consulting Council of MONRE because they were developed on the basis of the development procedure of Vietnam Green Label such as literature analysis, market readiness analysis, and stakeholder opinion consultation.

Risk Management and Limitations in implementation of Projects

Based on the developed criteria and guidelines, the Implementing Agency planed pilot implementation of GPP. Consulting items were carried out in accordance with the second year implementation plan which was derived from the first year project under the agreement with the Focal Point. However, this consulting item was modified to be a Roadmap for the pilot implementation of GPP which was an alternative item previously prepared in the first year as the enactment period of related legislation and circular was delayed during the project duration.

In addition, delays in project work occurred due to delays in email communication with Viet Nam stakeholders. Cultural differences in the project planning process also surfaced. These delays and differences were resolved through five visits in the second year and by frequent communication with stakeholders.

PEAPROS, SHOMEE, and Vietnam-Korea Environmental Cooperation Center (VKECC), were used as local contacts to confirm and adjust to the local situation and work schedule. The Focal Point was able to proceed because it actively responded to the need for additional consultation and local opinions during the project implementation period.

The Implementing Agency strived to provide ample time for work with the Focal Point and other stakeholders. Official (and unofficial interruptions (such as holidays, business trips, audits, restructuring,

etc.) were shared and planned around. The Implementing Agency also visited the site to check the progress of the consulting items in addition to the scheduled two workshops and two face-to-face meetings in consideration of the local schedule.

Proliferation of Project Performances

Information on consulting items and two workshops held in Viet Nam was published on the UN Environment website,⁴⁴ and the final report for Year One is also shared through the One Planet platform.⁴⁵ The Focal Point contributed to the dissemination of the results by publishing the results of the two workshops held through a magazine published by VEA and Vietnam Bidding Newspaper. These publications are shown below in Figure 20.



[Figure 20] Vietnam Environment Administration Magazine and Bidding newspaper (Abridged)

The Implementing Agency reviewed the opinions of major ministries related to GPP in Viet Nam (MONRE, VEA, VGLO, MOF, MPI, MOIT) to develop the legal amendment proposal, Vietnam Green Label criteria, GPP guidelines and roadmap. These outcomes will be translated into Vietnamese, designed and produced as an individual publication, and will be provided to the Focal Point for dissemination. In addition, the Implementing Agency will publish the final report in both Korean and English, including all the results for use in other countries and regions.

Considering the schedule and budget of the Pilot project in the second year, it is difficult to reflect all of the results of the consulting items directly in Viet Nam during the project period. Therefore, the committee for establishing legal amendment and Vietnam Green Label should be carried out afterwards in close cooperation with Vietnamese government ministries and stakeholders related to GPP. Networking between the related ministries and stakeholders was promoted through the two workshops.

Because the two workshops held in Ha Noi and Ho Chi Minh City are one-time events and their effects

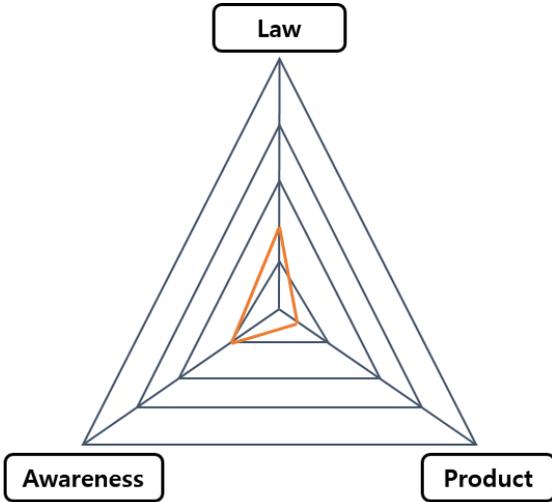
⁴⁴ <https://www.unenvironment.org/events/workshop/asia-pacific-green-public-procurement-partnership-project-final-workshop-viet-nam>
⁴⁵ <http://www.oneplanetnetwork.org/initiative/asia-pacific-green-public-procurement-partnership-project>

may be limited to the short-term, an intensive training program on GPP for Vietnamese procurement officers and policy makers was proposed. The Implementing Agency proposed this training as a follow-up project using Korea's GPP experience as a baseline, so that project performance can be continuously applied and developed in the partner countries. A consensus on the necessity of GPP can be formed through the training, increasing demand from the partner countries and helping to diffuse GPP and its effectiveness.

3.2 Proposal for Follow-up Project

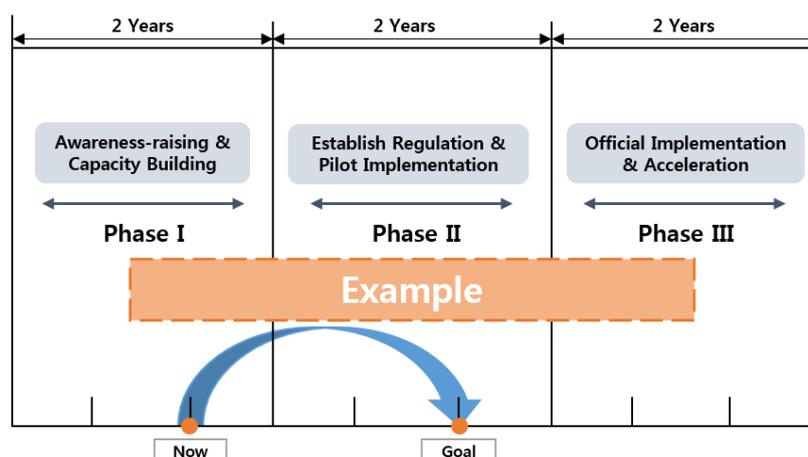
The Implementing Agency proposed the following follow-up project on the basis of the experiences of having designed and implemented the Pilot project.

When selecting a new partner country through the preliminary study, more objective indices are needed to assess the foundation for implementation of GPP, and to determine the areas of possible cooperation and expected outcomes of the project in the partner country. When selecting countries, for the successful introduction and implementation of GPP, the appropriate legal basis, stakeholder awareness of GPP, and availability of green products should be considered, as shown in Figure 21 below. Through a review of these three factors, project partners can also deduce the level of appropriate support for GPP in the country.



[Figure 21] Level of GPP in Viet Nam (Example)

A stepwise approach can be taken to support the introduction and implementation of GPP. To set goals, parties should agree to pursue the project on the basis of the results of preliminary study. Assuming that there are three stages to introducing and implementing GPP (as illustrated in Figure 22 below), a balance between advancing the legal basis, stakeholder awareness, and supply of green products should be made, with no single factor dominating.



[Figure 22] GPP Development Phase and Project Goal-Setting (Example)

It would be very helpful to assess the level of maturity in GPP the partner country is currently before work begins. Following this assessment, the consulting items of the project should be selected, and based on the estimated time-frame needed to execute each of the items. Project goals should also be set together with the partner country, and used as the basis for evaluating project outcomes. To this end, a systematic rating and evaluation system to measure outputs and outcomes should also be established.

In future projects, KEITI should carefully consider and then select the Focal Point organization, as this role directly affects the implementation of the project. As mentioned previously, it is essential to have active involvement from government departments such as the Ministry of Finance or Office of the Prime Minister, particularly in the country wishing to introduce and implement GPP for the first time. The selection of the Focal Point can be made through UNEP or via other diplomatic channels. It is essential to determine the intention of such Focal Points to actively participate in the project in order to ensure efficiency and to enhance the project's wider impact.

It is preferable to strengthen the capacities of the partner country to pursue further work on GPP rather than directly intervening with the three pre-requisites for GPP (legal basis, stakeholder awareness and supply of green products). Focus should be placed on providing support for the following two areas: the cultivation of experts through training, and support for eco-labelling certification for local companies. Each is described below.

① Cultivation of Experts Through Intensive Training

Rather than developing and providing legal or policy documents directly, the cultivation of experts and strengthening of their capacities to design the system themselves may be preferable and more feasible in the time frame allowed. The existing awareness-raising workshop has limited effects as a one-off event to introduce the need to implement GPP. In the future, trained experts would take a leading role in carrying out education and training for the general public, government officials, and

companies/industrial associations.

Curriculum for the experts needs to be carefully designed and developed. Time and resources should be invested to make sure that the transfer of knowledge from Korea is combined with the experts' existing knowledge of the partner country. This training should be long-term (more than several weeks), and would include training for around 30 people per partner country. Additional considerations will include the educational period (short or long-term), location (Korea or partner country), participating country (singly or jointly), invitation format and so on, and will need to be fit within the project budget, timeline, and protocols. Some of the curriculum could be designed in association with relevant training programs related to GIZ project of Germany or SWITCH ASIA project of the European Commission. The method of cooperation on developing training can be decided through discussions between the relevant parties.

② Support for Eco-labeling Certification of Local Companies

Providing support for eco-labeling and/or GPP certification for local companies will help to increase the number of environmentally-friendly products in the local market. If no criteria for the product groups for which the companies want support are available, the project could potentially help to support criteria development. To further support companies in gaining the relevant certifications, project partners could help to negotiate with the testing laboratories - which companies generally find burdensome.

Finally, additional support is needed for deepening and extending the consulting items implemented through this Pilot project in Thailand and Viet Nam.

Annex 1. Companies subjected to Market Readiness Questionnaire

Local companies subjected to the draft criteria compliance			
No.	Wooden Furniture	Computer Monitors	Air conditioners
1	Fami Furniture Company	Dell	LG
2	190 Furniture JSC	Samsung	Samsung
3	Xuan Hoa JSC	AOC	Daikin
4	Hoa Phat JSC		Casper
5	An Hung Ltd		
6	Home Group Interior		
7	Phu Gia Furniture		
8	Huong Ngan Furniture		
9	Green Furniture		
10	Duc Thinh Interior		
11	My A Furniture		
12	Ngoc Tu Superior Furniture		
13	Tung Thuy Furniture		
14	Minh Khoi Interior Décor		
15	Dai Thanh Interior		
16	Khanh Chung Furniture		
17	Thinh Phat Furniture		
18	Dai Nghia Furniture		
19	Hung Phat Interior		
20	Kim Anh Sai Gon		
21	Vien Dong Interior		
22	Sai Gon Xanh		
23	Dong Sai Gon		
24	TAV Office Furniture		
25	Unique Décor		

Annex 2. Comparison of GPP and procurement system by country

Green Public Procurement				
Categories	Korea	Japan	EU	Comparison
procurement system	Central procurement system	Decentralized procurement system	N/A – member countries each have their own system	Central system for Korea, decentralized for Japan, EU have their own systems, which vary.
Announcement institution	Public Procurement Service	JETRO, Ministry of Interior and Communications	TED (Tenders Electronic Daily)	Korea and EU has each central announcement institution while Japan announce biddings from each department.
Application range	Products that received Eco-Label in 165 product groups including office devices, household appliance, leisure products and furniture, etc., or products that are appropriate for equivalent standards, and products that received good recycled certification in 15 areas including waste paper and waste metal, etc. or products that are appropriate for equivalent standards	Products that have satisfied environmental technical conditions or received environmental certification for 270 items, products and services in a total of 21 areas including printing and copy paper, copier, printer, fax, toilet paper, personal PC, lighting equipment, automobile, accommodation services, office devices and air conditioner, etc.	Products that satisfy environmental standards or received environmental certification such as EU Eco-Label or 3 rd party certification such as Nordic Swan for products and services in 22 areas including furniture, indoor lighting, horticulture tools, medical equipment and electronic equipment, etc.	Korea applies only to products; while Japan and EU apply to services as well
Subjects of application	Public institution, school, institution for which the local governments has invested lead capital, institutions for which local government has funded and corporations established according to special law for public benefits	Central government institutions and local government institutions (All the provinces, cities and municipalities, and cities designated by the government procurement agreement)	Central government institution and local government institution according to the standards stipulated by each member country	Korea specifies the subject in detail while Japan and EU apply to central and local government institutions.
Method of confirming green products	Check products that are subjected to obligatory purchase and Eco-Label products in the website in which conformation of green products is possible (Comprehensive Shopping Mall of the Korea Online E-Procurement System, green market place and green product information system)	Green Purchasing Network (GPN) supplies GPP guidelines corresponding to the 19 categories of products and services to the central government and local governments.	Available to check product catalogue in the website of EU Eco-Label (If member country is issuing its own environmental certification, it can be checked in the corresponding label website)	It is possible to confirm green products in the procurement websites

Categories	Korea	Japan	EU	Comparison
Purchasing procedure	Disclosure of specifications in advance – Resolution for purchasing – Public announcement of bidding – Determine anticipated price - Bidding - Bidding document evaluation (environmental standard evaluation) – Select winning bid – Execute contract	Public announcement in official gazette and precinct newsletter – Submit bid to the prescribed location on set date (ministry purchase can be made through e-procurement) – Specify the conditions for environmental technology – Participate in bidding - Bidding document evaluation (environmental standard evaluation) – Price competition – Select winning bid – Execute contract	(Restricted competitive bidding) Public announcement in official EU language in TED – Specify Environmental technology conditions – Participate in bidding - Bidding document evaluation (environmental standard evaluation) – Announce winning bid winning bid – Select monitoring method	The GPP procedures for Korea, Japan, and EU are similar as Announcement-Bidding-Document evaluation (including environmental standard)-Selection
Standards establishment unit	Establish guidelines for purchasing of green products every year	The Minister of Environment proclaims procurement policies including specific procurement items every year and prepare and proclaim procurement policies for each institution - Set the goals of procurement of particular procurement items, and types and goals of green products for which procurement is pursued, etc. for each department every year	Detailed guidelines for each country	Japan announces separate guidelines for each institution, as well as at the national level
Exception standards	<ul style="list-style-type: none"> - There is no green products for the items to be purchased - The stable supply of green products is not possible - Purchasing of green products is difficult due to substantially low quality, etc. - In the event of implementing preferential procurement regulation according to other laws such as Law on welfare for disabled persons, etc. - In the event of determination that purchasing of green products is difficult due to unavoidable reasons such as occurrence of urgent demand, etc. 	<ul style="list-style-type: none"> - There is very little procurement by the country - The products that satisfy the environmental standards have been sufficiently popularized 	Detailed guidelines for each country	Korea presents more specific standards for exceptions

Comparison of public procurement of Japan, Korea and Viet Nam			
Categories	Japan	Korea	Viet Nam
Relevant laws	Government's procurement agreement	Procurement business act	Bidding Law
Procurement channel	<p>Medium for public announcement of government procurement (official gazette and precinct newsletter)</p> <p>→ Although information on procurement were provided through the websites of each ministry in the past, currently, bidding / opening of bid system (Ministry of Interior and Communications) is being used</p>	Public Procurement Service (KONEPS)	<p>PPA e-procurement site</p> <p>+ There are institutions for public announcement and presentation of bidding for each industry</p>
Procurement system	Decentralized procurement	Centralized procurement	Decentralized procurement
Scope of the subjects of public procurement	Corresponds to the products, services, technical services and construction services procured by central government institution and local government institutions (all the provinces, cities and municipalities in Japan, and cities designated by the government's procurement agreement)	Public institution, school, institution for which the local governments has invested lead capital, institutions for which local government has funded and corporations established according to special law for public benefits	<p>Scope of application of procurement system under the Bidding Law is divided into project units:</p> <ul style="list-style-type: none"> - Project for purchasing of goods necessary for maintenance of operation of national institutions and public services, Project of state-run corporations, Project for purchasing of medical equipment and drugs by public medical institutions, and Development Project that uses national budget of national institutions / government institutions / Ministry of National Defense and subsidiary institutions.

Comparison of public procurement of Japan, Korea and Viet Nam			
Categories	Japan	Korea	Viet Nam
Purchasing procedure	Public announcement in official gazette and precinct newsletter – Submit bid to the prescribed location on set date (purchase from ministries can be made through e-procurement) – Advance payment of security deposit (excluded in the case of competitive contract) - Bidding document evaluation – Select winning bid – Execute contract	Disclosure of specifications in advance – Resolution for purchasing – Public announcement of bidding – Determine anticipated price - Bidding - Bidding document evaluation – Select winning bid – Execute contract	Preparation for selection of bidders (develop selection criteria and establish evaluation consultation committee) –selection of bidders – Bidding document evaluation and agreement on the contract –Examination – Submit approval and notify the winning bid – Execute contract
Features	Provide bidding information, key trends and regulations by publishing ‘Government procurement white paper’ every year	It can be used simply and conveniently since it is possible to search green products at once in the KONEPS	Since there is no advantage in using e-procurement site, users tend to rely on the existing procurement sites

Annex 3. Drafts of Vietnam Green Label

① Wooden Furniture

I. Objectives and scope of application

1. Definitions:

“Wooden furniture” refers to stand-alone or built-in furniture consisting of more than 25% of wooden materials, such as MDF, plywood, processed wood and natural wood.

2. Environmental impacts of wooden furniture:

Environmental impacts of wood furniture are likely to be caused by waste and toxic chemicals such as adhesives and energy such as fuel and electricity used in the whole life cycle of wooden furniture, including logging, manufacturing wooden products and its disposal.

3. Objectives:

a) Encourage sustainable production and consumption; strengthen the competitiveness of the products certified with Vietnam Green Label on the markets;

b) Reduce impacts on forest ecosystems due to exploitation of natural forests for wooden furniture production;

c) Reduce air and water pollutions caused by emissions of toxic chemicals and nutrients into the atmospheric and aquatic environment from wooden furniture production processes;

d) Save natural resources through increase of recycling and reusing wooden products.

4. Scope of application:

The criteria shall apply to wooden furniture mentioned as prescribed in this section.

II. Interpretation of terms

1. FSC certification (Forest Stewardship Council) is granted to wood and forests which satisfy specific environmental, community, social, and economic criteria. This kind of certification is offered by FSC accredited certification agencies.

2. The Forest Principles is the informal name given to the Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests (1992), a document produced at the United Nation Conference on Environment and Development (UNCED), informally known as the Earth Summit.

III. Criteria

1. The following items shall be followed at the raw material production stage.

1.1 At least 70% of the waste wood shall be used as the mass fraction in wood-based materials of wooden furniture.

1.2 Wood (including logs, plywood) constituting more than 10% of the mass fraction shall be produced in accordance with FSC certification or the Forest Principles adopted at the United Nations Conference on Environment and Development (UNCED)

2. The following items shall be followed at the wooden furniture manufacturing stage.

2.1. The lumber material or wood constituting the wooden furniture shall be tested under the desiccator method (ISO 12460-4:2016, Wood-based panels – Determination of formaldehyde release – Part 4: Desiccator method) and the formaldehyde emission shall be less than 0.5mg / L.

2.2 During the manufacturing process of wood furniture, lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr⁶⁺) and mixtures thereof shall not be used in the manufacturing processes.

2.3 When paint or sheet is used on the surface of wooden furniture, the sum of lead (Pb), cadmium (Cd), mercury (Hg), and hexavalent chromium (Cr⁶⁺) in the paint or sheet shall be not more than 0.1% by mass fraction.

IV. Test Method

1. The criteria for determining compliance with 2.2 and 2.3 shall be in accordance with IEC 62321:2008 (Electrotechnical products - Determination of levels of six regulated substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers) or other equivalent methods.

APPENDIX

**REPORT ON COMPLIANCE WITH CRITERIA OF THE VIETNAM GREEN LABEL
FOR WOODEN FURNITURE**

A. General information of product and company

Name of the Company:

Address:.....

PIC:.....

Tel:.....Fax:.....email:.....

Registered products for labelling:.....

Brand name:.....

Output: (units per year).....

Year One	Year 2	Year 3	Year 4	Year 5

Note:

Year One: The output of the previous year compared to the year of reporting.

Year 2: Estimated output in the year of reporting.

Year 3, 4, 5: Estimated output in the next 3 year compared to the year of reporting.

B. General information of product

1. Report on the satisfaction of the criteria as stated in section III of the criteria

Submit the copy of conformity declaration to demonstrate the satisfaction of all requirements as stated in the section III of this criteria.

2. Report on manufacture process and criteria fulfilling

2.1. Description of manufacture processes and the technologies applied

The description should be very concise and attached with the production flow diagram

2.2. List of chemical and material inputs

No.	Chemical name	CAS Number	Consumed amount (per product unit)	Hazard statement (in accordance to international standards) if any	Listed in groups 1 and 2A by IARC or not
	substance (1)				
				

	Substance (i)				
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Note : The applicant should declare all the chemicals used for entire manufacturing process, including those that are not contained in the final product.

2.3. Energy consumption

No	Items	Unit	Total consumption amount estimated as per product unit				
			Year One	Year 2	Year 3	Year 4	Year 5
1	Electricity	kWh					
2	Gas	kWh					
3	Other fossil fuels (coals, fuel oils)	kg					
4	Total cost of energy consumption	Million VND					

Note:

Year One: The output of the previous year compared to the year of reporting.

Year 2: Estimated output in the year of reporting.

Year 3, 4, 5: Estimated output in the next 3 year compared to the year of reporting.

3. Marketing, sale and consumption

3.1 Packing.

- Materials used for packaging.
- The volume of packaging over the total volume of packed products.
- The total content of heavy metal in one kilogram of packaging.
- The ability to recycle or reuse packaging after consumption.
- The percentage of recycled pulp used in paper packaging.

3.2. Enterprises' interests for disposal of products

- Any instruction on the packaging for disposal of packaging after use?

1. Yes

2. No

- Any plan or idea to limit the amount of waste generated? Any method to collect and dispose waste generated after use?

1. Yes

2. No

If yes, please describe the methods or ideas applied.

② Computer Monitors

I. Objectives and scope of application

1. Definitions:

A “Computer monitor” is a flat-panel color monitor, which is mainly connected to a personal computer, and includes a combination of TV reception function or an audio output device.

2. Environmental impacts of computer monitors :

Environmental impacts of computer monitors are likely to be caused by waste and harmful substances generated by the materials and energy used in the entire life cycle of computer monitors, material production and manufacture, use and disposal.

3. Objectives:

a) Encourage sustainable production and consumption; strengthen the competitiveness of the products certified with Vietnam Green Label on the markets;

b) Reduce impacts on ecosystems due to harmful substances contained in computer monitors;

c) Save energy consumed in the manufacture and use of computer monitors;

d) Save natural resources through increase of recycling and reusing synthetic resins parts and so on.

4. Scope of application:

The criteria shall apply to computer monitors mentioned as prescribed in this section. However, CRT monitors are excluded.

II. Interpretation of terms

1. “Sleep mode” is a low-power mode that automatically transitions when there is no input signal for a certain period of time

2. “Off mode” means that the power is turned off by using the soft switch on the front of the product when there are more than two power switches

III. Criteria

1. The following items shall be followed at the manufacturing stage.

1.1 During the manufacturing process of computer monitors, lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr⁶⁺) and mixtures thereof, and polybrominated biphenyls (PBBs), polybromodiphenyl ethers (PBDEs) shall not be used in the manufacturing processes.

1.2 The contents of the harmful substances contained in the components of monitors

shall comply with the following requirements.

Items	Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	hexavalent chromium (Cr ⁶⁺)
Content (mg/kg)	≤ 1000	≤ 1000	≤ 1000	≤ 1000

1.3 Synthetic resin parts having a mass of 25 g or more constituting the housing of computer monitors should not use halogenated synthetic resins such as PVC and should not contain halogen components. However, organic fluorine additives with a mass fraction of 0.5% or less are permissible.

2. The following items shall be followed at the use stage.

The power consumption in the power sleep mode and the off mode shall meet the criteria of the Vietnam energy efficiency class applied at the time of application for certification.

3. The following items shall be followed at the end of life stage.

3.1 Packing cushioning materials shall meet one of the following criteria.

- a) Packing cushion made of waste synthetic resin with mass fraction of 50% or more
- b) Packing cushion of 100% recycled paper or pulp material such as pulp mold

3.2. The applicant shall implement a take-back system for E-waste products in accordance to Decision No.16/2015/QĐ-TTg dated May 22, 2015 and ensure that the recovery and disposal of the discarded products is fully compliant with the current legislation in Vietnam.

IV. Test Method

1. The criteria for determining compliance with 1.1, 1.2 shall be in accordance with IEC 62321:2008 (Electrotechnical products - Determination of levels of six regulated substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers) or other equivalent methods.

2. Measurements of energy efficiency at the use stage follow the guidelines of the Vietnam energy efficiency rating system.

APPENDIX

REPORT ON COMPLIANCE WITH CRITERIA OF THE VIETNAM GREEN LABEL FOR COMPUTER MONITORS

A. General information of product and company

Name of the Company:

Address:.....

PIC:.....

Tel:.....Fax:.....email:.....

Registered products for labelling:.....

Brand name:.....

Output: (units per year).....

Year One	Year 2	Year 3	Year 4	Year 5

Note:

Year One: The output of the previous year compared to the year of reporting.

Year 2: Estimated output in the year of reporting.

Year 3, 4, 5: Estimated output in the next 3 year compared to the year of reporting.

B. General information of product

1. Report on the satisfaction of the criteria as stated in section III of the criteria

Submit the copy of conformity declaration to demonstrate the satisfaction of all requirements as stated in the section III of this criteria.

2. Report on manufacture process

2.1. Description of manufacture processes and the technologies applied

The description should be very concise and attached with the production flow diagram

2.2. List of chemical and material inputs

No.	Chemical name	CAS Number	Consumed amount (kg/tonne of product)	Hazard statement (in accordance with international standard) if any	Listed in Groups 1 and 2A by IARC or not
	substance (1)				
				

	substance (i)				
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Note : The applicant should declare all the chemicals used for entire manufacturing process, including those that are not contained in the final product.

2.3. Energy consumption

No	Items	Unit	Total consumption amount estimated as per product unit				
			Year 1	Year 2	Year 3	Year 4	Year 5
1	Electricity	kWh					
2	Gas	kWh					
3	Other fossil fuels (coals, fuel oils)	kg					
4	Total cost of energy consumption	Million VND					

Note:

Year One: The output of the previous year compared to the year of reporting.

Year 2: Estimated output in the year of reporting.

Year 3, 4, 5: Estimated output in the next 3 year compared to the year of reporting.

3. Marketing, sale and consumption

3.1. Packing.

- Materials used for packaging.
- The volume of packaging over the total volume of packed products.
- The total content of heavy metal in one kilogram of packaging.
- The ability to recycle or reuse packaging after consumption.
- The percentage of recycled pulp used in paper packaging.

3.2. Enterprises' interests for disposal of products

- Any instruction on the packaging for disposal of packaging after use?

1. Yes

2. No

- Any plan or idea to limit the amount of waste generated? Any method to collect and dispose waste generated after use?

1. Yes

2. No

If yes, please describe the methods or ideas applied.

③ Air Conditioners

I. Objectives and scope of application

1. Definitions:

An “Air conditioner” is a home appliance mainly used for cooling and heating of homes and/or offices with electricity as a power source.

2. Environmental impacts of air conditioners:

Environmental impacts of air conditioner are likely to be caused by waste and harmful substances generated by the materials and energy used in the entire life cycle of air conditioner, material production and air conditioner manufacturing, use and disposal.

3. Objectives:

a) Encourage sustainable production and consumption; strengthen the competitiveness of the products certified with Vietnam Green Label on the markets;

b) Reduce impacts on ecosystems due to harmful substances contained in air conditioner;

c) Reduce energy consumed in the manufacture and use of air conditioner;

d) Save natural resources through increase of recycling and reusing synthetic resins parts and so on.

4. Scope of application:

The criteria shall apply to air conditioner mentioned as prescribed in this section.

II. Interpretation of terms

1. “One-piece type” air conditioner is the product with key components such as compressors, blowers, heat exchangers in one cabinet

2. “Separate type” air conditioner is the product with key components such as compressors, blowers, heat exchangers, etc. in two or more cabinets

III. Criteria

1. The following items shall be followed at the manufacturing stage.

1.1 During the manufacture of air conditioner, lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr⁶⁺) and mixtures thereof, and polybrominated biphenyls (PBBs), polybromodiphenyl ethers (PBDEs) shall not be used in the manufacturing processes.

1.2 The contents of the flame retardant contained in the synthetic resin materials exceeding 25g in the air conditioner shall comply with the following requirements.

Items	PBBs	PBDEs
Content (mg/kg)	≤ 1000	≤ 1000

1.3 Synthetic resin parts having a mass of 25 g or more constituting the housing of air conditioner should not use halogenated synthetic resins such as PVC and should not contain halogen components. However, organic fluorine additives with a mass fraction of 0.5% or less are permissible.

2. The following items shall be followed at the use stage.

2.1 The power consumption shall meet the criteria of the Vietnam energy efficiency class applied at the time of application for certification.

2.2 The noise standards during the operation of the air conditioner shall comply with the following requirements.

		Noise standard (dB(A))	
		Indoor	Outdoor
One-piece type		≤ 55	≤ 60
Separate type	Cooling capacity (10~35kW)	≤ 55	≤ 65
	Cooling capacity (35kW~)	≤ 55	≤ 70

3. The following items shall be followed at the end of life stage.

3.1 Packing cushioning materials shall meet one of the following criteria.

- a) Packing cushion made of waste synthetic resin with mass fraction of 50% or more
- b) Packing cushion of 100% recycled paper or pulp material such as pulp mold

3.2. The applicant shall implement a take-back system for E-waste products in accordance to Decision No.16/2015/QD-TTg dated May 22, 2015 and ensure that the recovery and disposal of the discarded products is fully compliant with the current legislation in Vietnam.

IV. Test Method

1. The criteria for determining compliance with 1.1, 1.2 and 1.3 shall be in accordance with IEC 62321:2008 (Electrotechnical products - Determination of levels of six regulated substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers) or other equivalent methods.

2. Measurements of energy efficiency at the use stage follow the guidelines of the Vietnam energy efficiency rating system.

3. Noise measurements during the use of air conditioners are subject to the requirements of IEC 61672-1:2013 (Electroacoustics – Sound level meters – Part 1: Specifications) or other equivalent methods.

APPENDIX

ON MAKING REPORT MEETING CRITERIA OF VIETNAM GREEN LABEL FOR AIR CONDITIONERS

A. General information of product and company

Name of the Company:

Address:.....

PIC:.....

Tel:.....Fax:..... email:.....

Registered products for label:.....

Brand name:.....

Output: (unit per year).....

Year One	Year 2	Year 3	Year 4	Year 5

Note:

Year One: The output of the previous year compared to the year of reporting.

Year 2: Estimated output in the year of reporting.

Year 3, 4, 5: Estimated output in the next 3 year compared to the year of reporting.

B. General information of product

1. Report on the satisfaction of the criteria as stated in section III of the criteria

Submit the copy of conformity declaration to demonstrate the satisfaction of all requirements as stated in the section III of this criteria.

2. Report on manufacture process

2.1. Description of manufacture processes and the technologies applied

The description should be very concise and attached with the production flow diagram

2.2. List of chemical and material inputs

No.	Chemical name	CAS Number	Consumed amount (kg/tonne of product)	Hazard statement (in accordance with international standard) if any	Listed in Groups 1 and 2A by IARC or not
	substance (1)				
				

	substance (i)				
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Note : The applicant should declare all the chemicals used for entire manufacturing process, including those that are not contained in the final product.

2.3. Energy consumption

No	Items	Unit	Total consumption amount estimated as per product unit				
			Year 1	Year 2	Year 3	Year 4	Year 5
1	Electricity	kWh					
2	Gas	kWh					
3	Other fossil fuels (coals, fuel oils)	kg					
4	Total cost of energy consumption	Million VND					

Note:

Year One: The output of the previous year compared to the year of reporting.

Year 2: Estimated output in the year of reporting.

Year 3, 4, 5: Estimated output in the next 3 year compared to the year of reporting.

3. Marketing, sale and consumption

3.1. Packing.

- Materials used for packaging.
- The volume of packaging over the total volume of packed products.
- The total content of heavy metal in one kilogram of packaging.
- The ability to recycle or reuse packaging after consumption.
- The percentage of recycled pulp used in paper packaging.

3.2. Enterprises' interests for disposal of products

- Any instruction on the packaging for disposal of packaging after use?

1. Yes

2. No

- Any plan or idea to limit the amount of waste generated? Any method to collect and dispose waste generated after use?

1. Yes

2. No

If yes, please describe the methods or ideas applied.