



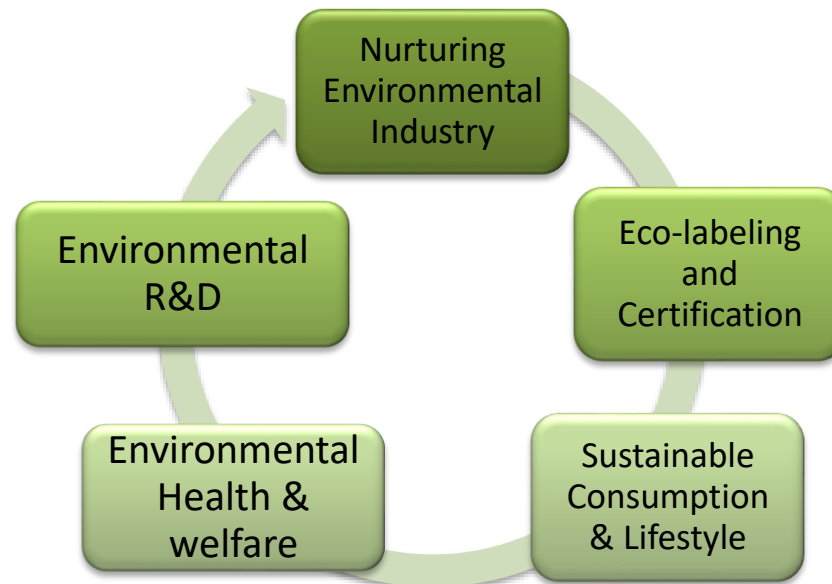
Korea's Green Public Procurement System and Asia Pacific GPP Network

December 11, 2019.

Korea Environmental Industry & Technology Institute

- 🌿 **KEITI** is a quasi-government organization affiliated with the Korean Ministry of Environment
- 🌿 **Our Mission** is to contribute to sustainable development through developing eco-technology, nurturing environmental industry, safeguarding environmental health, and promoting eco-friendly consumption and lifestyle

🌿 Work Areas



🌿 International Cooperation



Sustainable
Public Procurement
PROGRAMME

Advisory Member

Part 1

Korea's Green Public Procurement System

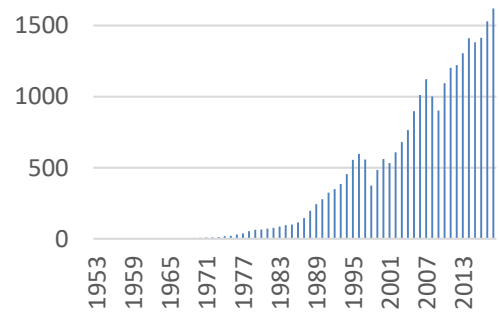


Move toward Sustainable Consumption & Production

Global Context



Local Context



GDP growth
(unit : billion USD)



Move toward Sustainable Consumption & Production



GOVERNMENT'S ROLE is Vital.

Sustainable Consumption Policy

- ✓ Green Public Procurement
- ✓ Green Store
- ✓ Green Credit Card

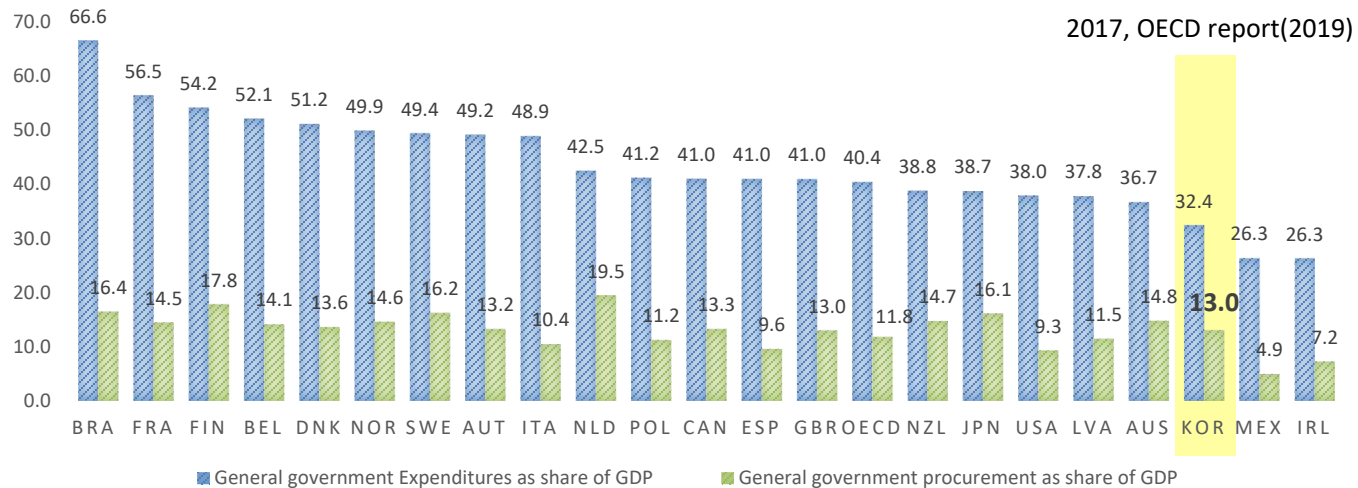


Sustainable Production Policy

- ✓ Green Company
- ✓ Green-Up Program
- ✓ Eco Design Program



Rationale for Green Public Procurement Policy



Government procurement accounts for approximately **12%** of national GDP.

With its purchasing power,
the government can create demands on green products,
further **DRIVE** the transformation of the sustainable market.

History of GPP policies in Korea

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- Launched **Korean Eco-label programme in 1992**



- Initiated by MoE, based on Regulations on operation of Eco-labelling programme

- Enforced the **Acts on Development of and Support for Environmental Technology by MoE in 1994**

- Recommends public institutions to **preferentially purchase green products** (products awarded EL or GR mark)

- Enforced the **Act on Encouragement of Purchase of Environment-friendly Products in 2005** (Renamed as the Act on Promotion of Purchase of Green Product in 2012)

- Obliges public institutions to **mandatorily purchase green products; develop and submit GPP plans and performance records**
- Provides a legal ground to **establish Korea Eco-product Institute (former KEITI)**



Act on Promotion of Purchase of Green Products

- **Public institutions'**(approx. 30,000) **obligation**

- Purchase green products
- Submit and publish an implementation plan for GPP with self-defined targets and performance records on an annual basis
- Definition of Green Products




- **Ministry of Environment and KEITI are in charge of**

- **Collating GPP plan and records, monitor and evaluate the GPP results**
- **Formulating a master plan for GPP every five years**
- **Annually establishing and notifying guidelines for GPP for the following year**
- **Requesting Public Procurement Service to take measures necessary for encouraging GPP**

Integrated Approach of GPP and EL

Green Products defined by the Act on Promotion of Green Product Purchase

- Certified or Meet the criteria set either by [the Korea Eco-Label](#) or the [GR Mark](#)
- Meet other environmental standards set by MOE in consultation with the relevant ministries

	 Korea Eco-Label	 Good Recycled Mark
Product groups	165 categories including office equipment, construction materials	11 categories including waste paper, glass
Number of Products	4,210 companies, 16,130 products (As of October 2019)	191 companies, 220 products (As of October 2019)
Certification Authority	Ministry of Environment	Ministry of Trade, Industry and Energy
Website	http://greenproduct.go.kr	http://buygr.or.kr

Non-exhaustive list of Green Products



Office Equipment



Label paper



Document file



Copying paper



Toner cartridge



Writing materials



TV



Air Conditioner



Projector



DVD player



Computer



Toilet paper



Detergent



Cleanser



Garbage bag



Disposable product


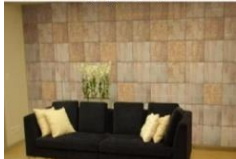



Non-exhaustive list of Green Products



Office furniture	Chair	Chair table	Water-saving device	Drainage pipe
				

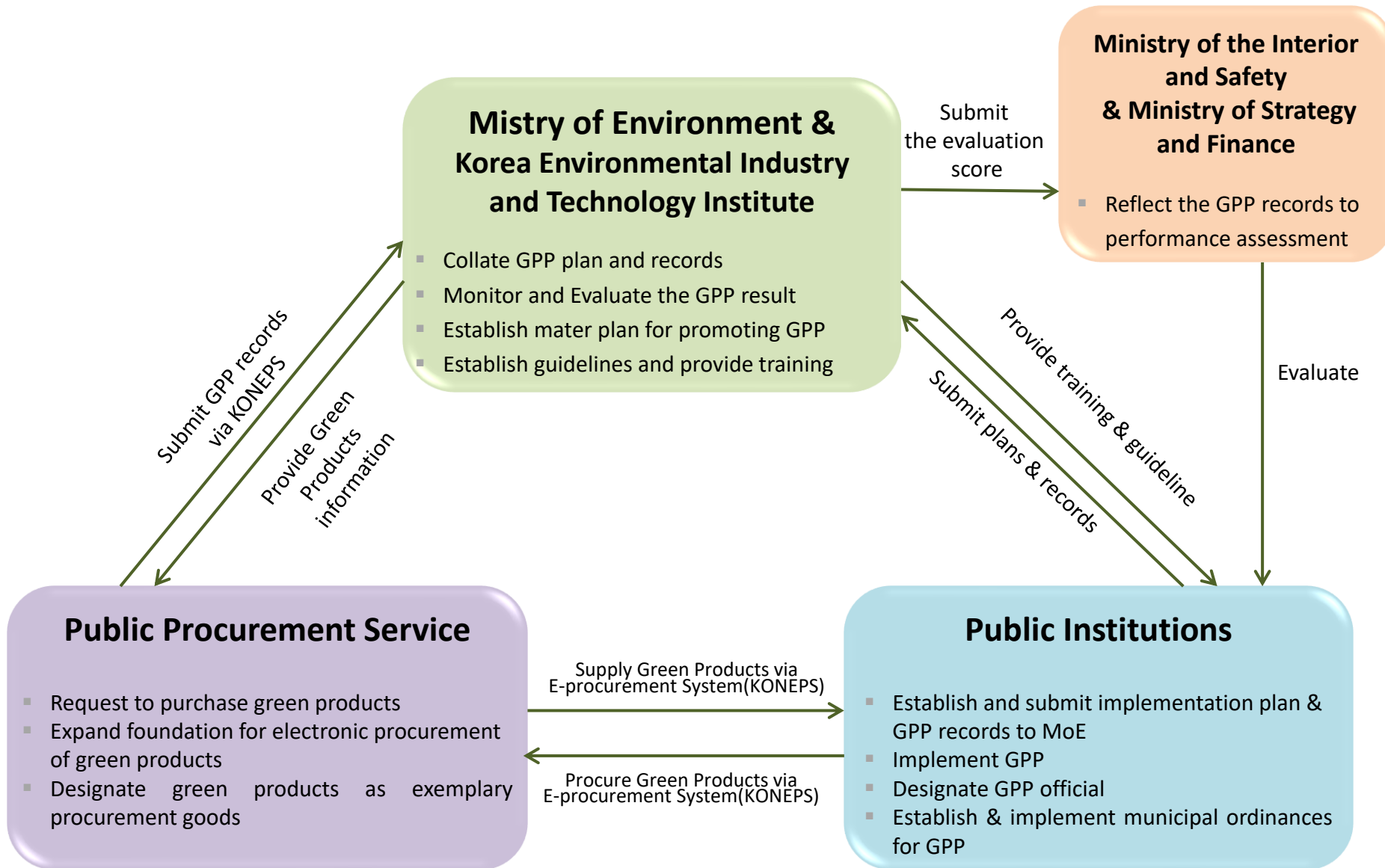


Block	Paper wallpaper	Wall finishes	Aluminum doors and windows	Aggregate
				



Flooring	Paint	Insulation	Adhesive	Soundproofing products
				

Working mechanism of GPP in Korea



How to Procure Green Products

Online procurement of green products is possible at PPS shopping mall and Green Market



<Online Shopping mall run by PPS>
<http://shopping.g2b.go.kr>



<Online Shopping mall run by private company>
<http://shop.greenproduct.go.kr>

How to monitor GPP



<Green Public Procurement Information System>
<http://gd.greenproduct.go.kr>



<Korea On-line E-Procurement System>
<http://www.g2b.go.kr>

- Collate and monitor the implementation plan and record for GPP, relating with Korea Online e-Procurement System(KONEPS)
- Analyze the reason why public entities didn't purchase the green products
- Public institutions should justify if the green purchase record has increased from the previous year by $\geq 50\%$ or decreased by $\leq 30\%$

GPP Support Measures

Green Products Information Platform

- Main source of information for GPP in Korea
- Catalogue of green products updated every month
- GPP guidelines, Best practices, and GPP results reports
- Website : <http://www.greenproduct.go.kr/>



Sharing Best Practices

- Annual workshops to exchange best practices

GPP Guidelines and Training

- (Guidelines) Purpose, legal basis, target org., working mechanism of GPP
- Standard Ordinance for local and provincial government(2006)→ 99% of local and provincial gov. follow
- Annual nationwide training offered from November to December/ March every year

Financial Incentives

- GPP as a part of performance indicators of local gov., (local) public enterprise and public org.
- Based on the annual GPP records
- KEITI evaluates based on Percentage of green purchases

Outcomes and Evaluation

Outcomes



International Recognition

“Korea’s well-established GPP system is recognized as **an example of best practice** among OECD countries. GPP in Korea, which relies on a **strong eco-label foundation**, received a **boost in 2005 when the Act made it obligatory**. Reporting data are **centralized online** . . . **linked with the PPS’s e-procurement system**,”

- OECD(2017), *OECD Environmental Performance Review of Korea*



Success Factors

Concrete legal basis for mandatory GPP

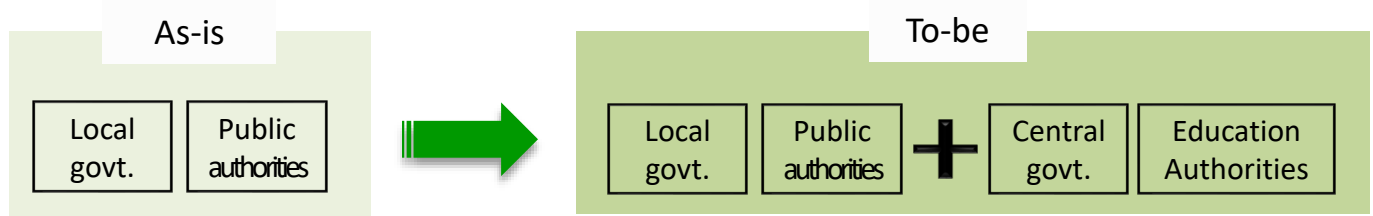
Link with well-established eco-labelling programs

Efficient monitoring system with e-procurement platform

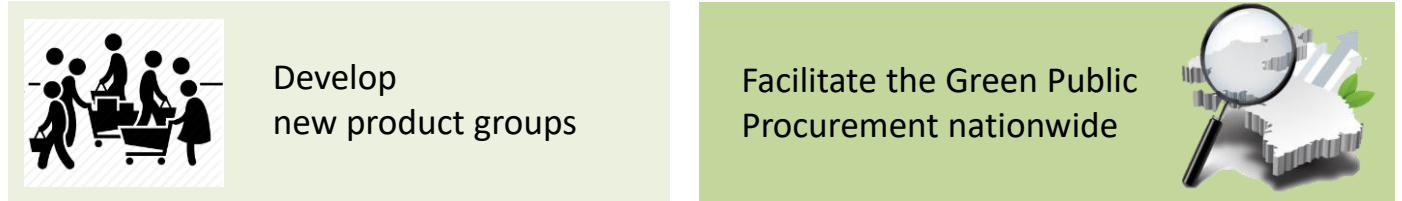
Areas for Improvement



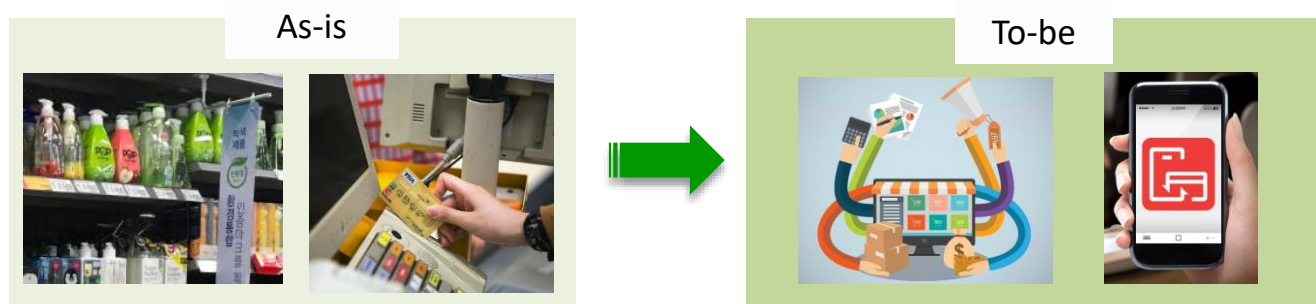
Expand the number of public authorities evaluated by GPP records



Expand the green product market



Promote sustainable consumption via online platform



Part 2

Asia Pacific Green Public Procurement Network





- **Board (2013-2017)**
- **Coordination Desk of Sustainable Public Procurement Program(2014-2018)**



- **GPP Plus Project(2017-2018 Thailand & Viet Nam, 2019-2020 Thailand)**
 - **(Purpose)** Transfer knowhow of GPP implementation to developing countries
 - **(Outcome)** Korea's evaluation system was transferred and to the Thai government
- **Asia Pacific GPP Network(2020 -)**
 - **(Purpose)** Establish a network among countries to exchange experience and knowledge on GPP

2013

2017

Asia Pacific Green Public Procurement Network

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Objectives

1. Exchange knowledge and experiences on GPP in connection with 10YFP SPP Programme
2. Increase awareness and build capacity for policy makers and practitioners
3. Join forces among countries to create market for green products



Establish AP GPP Network



Monitor the Progress
By releasing
country factsheet on GPP



Organize training
workshops every 1.5
years



Identify Partner Countries
For GPP Plus Project 2021

Next Steps

1. Call for application will be launched by UNEP early 2020
2. Vision and the work plan of the network will be developed in cooperation with partners
3. Network will be officially launched on the sidelines of the 4th Forum of Ministers and Environment Authorities of Asia Pacific in Sep. 2020 (tentative)



REPUBLIC OF KOREA¹



PROCUREMENT IN THE NATIONAL GOVERNMENT²

Estimated total procurement expenditure (2014 – Includes only goods not services or works) Central government: USD 15 050 billion State-owned companies: USD 41 844 billion In total for the National Government: USD 56 894m	Estimated % as part of the overall government's expenditure: Central government: 5 % State-owned companies: 8 % In total for the National Government: 7 %
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SPP POLICY FRAMEWORK

- SPP provisions in overarching and/or thematic national policies: Yes
- Prime Minister's instruction on Support for Profit Business of the Korea Veterans Welfare and Healthcare Corporation and Support for Persons, etc. of Distinguished Services to the State, 1981, by Patriots and Veterans Affairs, preferential purchase of products veterans produce.
 - Act on the Promotion of Environment-friendly Agriculture and Fisheries and the Management and Support for Organic Foods*, etc. 1997, by the Ministry of Agriculture, Food and Rural Affairs and the Minister of Oceans and Fisheries, Article 55, preferential purchase of eco-friendly agriculture products.*
 - Act on Support for Female-owned Business*, 1999, by the Small and Medium Business Administration, Article 9, preferential purchase of products manufactured and supplied directly by female-owned business.*
 - Act on Promotion of Disabled Persons' Enterprise Activities*, 2005, by the Small and Medium Business Administration, Article 9-2, preferential purchase of goods that disabled enterprises produce.*
 - Act on Promotion of Purchase of Green Products*, 2005, by the Ministry of Environment, Article 6, mandatory purchase of eco-labelled products.*
 - Act on Social Enterprise Promotion*, 2007, by the Ministry of Employment and Labour, Article 12, preferential purchase of goods or services produced by social enterprises.*
 - Act on Facilitation of Purchase of Small and Medium Enterprise-manufactured Products and Support for Development of their Markets*, 2009, by the Small and Medium Business Administration, Article 4 and 13, preferential purchase of small and medium enterprise-manufactured products.*
 - Framework Act on Low-Carbon Green Growth*, 2009, by the Office for Government Policy Coordination, Article 32.*
 - Regulations on Energy Use Rationalization of Public Organizations*, 2011, by Ministry of Trade, Industry and Energy, mandatory establishment of renewable energy generation facility and use of energy efficient equipment in buildings, high-efficiency energy machinery, LED, and eco-friendly vehicles.*
 - Framework Act on Cooperatives*, 2012, by Ministry of Strategy and Finance, Article 95-2, preferential purchase of goods and services produced by a social cooperative.*

- SPP provisions in existing procurement regulations: Yes
- Announcement on procurement guideline for promotion of public purchase of green products*, 2010, by the Public Procurement Service.*

¹ <https://www.unep.org/procurement/procurement/asia-pacific-green-public-procurement-network>

Thank You very much!

Hyunju Lee

Senior Researcher

Sustainable Lifestyle Office

Korea Environmental Industry & Technology Institute



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Korea Environmental
Industry & Technology Institute

Making the case for SPP/GPP

Ex-ante evaluation of impact

Isa-Maria Bergman, Motiva Oy, Finland

Competence centre for Sustainable and Innovative Public Procurement, KEINO

The presentation is based on a guide published by the Competence centre : *Opas julkisten hankintojen vaikutusten ja vaikuttavuuden ennakoarviointiin ja mittaamiseen* , Kulju, M., Merisalo, M., Tonteri, A., Röykkä, M., Alahuhta, P., Alhola, K., Koivusalo, S., Oksanen, J., Valovirta, V.2019

Who am I and what do I represent

- Director of Circular Economy and Sustainable procurement at Motiva
- Motiva is a sustainable development company of the Finnish government
- Motiva is the co-ordinator of the Competence Centre of Sustainable and Innovative Public Procurement, KEINO, in Finland

www.motiva.fi/en



23.3.2020

Isa-Maria Bergman

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»» hankintakeino.fi

- KEINO is a **competence centre** formed by a strategic partnership between eight organizations working as a network towards joint objectives, such as increasing the number of **strategic, sustainable** and **innovative** procurements carried out.
- The Centre is **funded** by **The Ministry of Economic Affairs and Employment** and jointly **steered by** a conclave of **six ministries**.

www.hankintakeino.fi/en

The presentation

- Introduction
 - Why, when and how to conduct impact assessment ?
- The process for ex-ante impact assessment
 - Phase 1: The need for impact assessment
 - Phase 2: Defining the objectives and impact categories
 - Phase 3: Indicators for impact assessment
 - Phase 4: The tendering process
- A practical example

Why, when and how to do ex ante impact assessment

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Why?

- An ex-ante impact assessment answers the following questions: :
 - What strategic objectives are promoted by the procurement?
 - What need does the procurement solve?
 - How achievable are the objectives?
 - What are the concrete changes that are expected?
 - What other consequences may occur for the organisation or for society?

The role of impact assessment for the tendering process

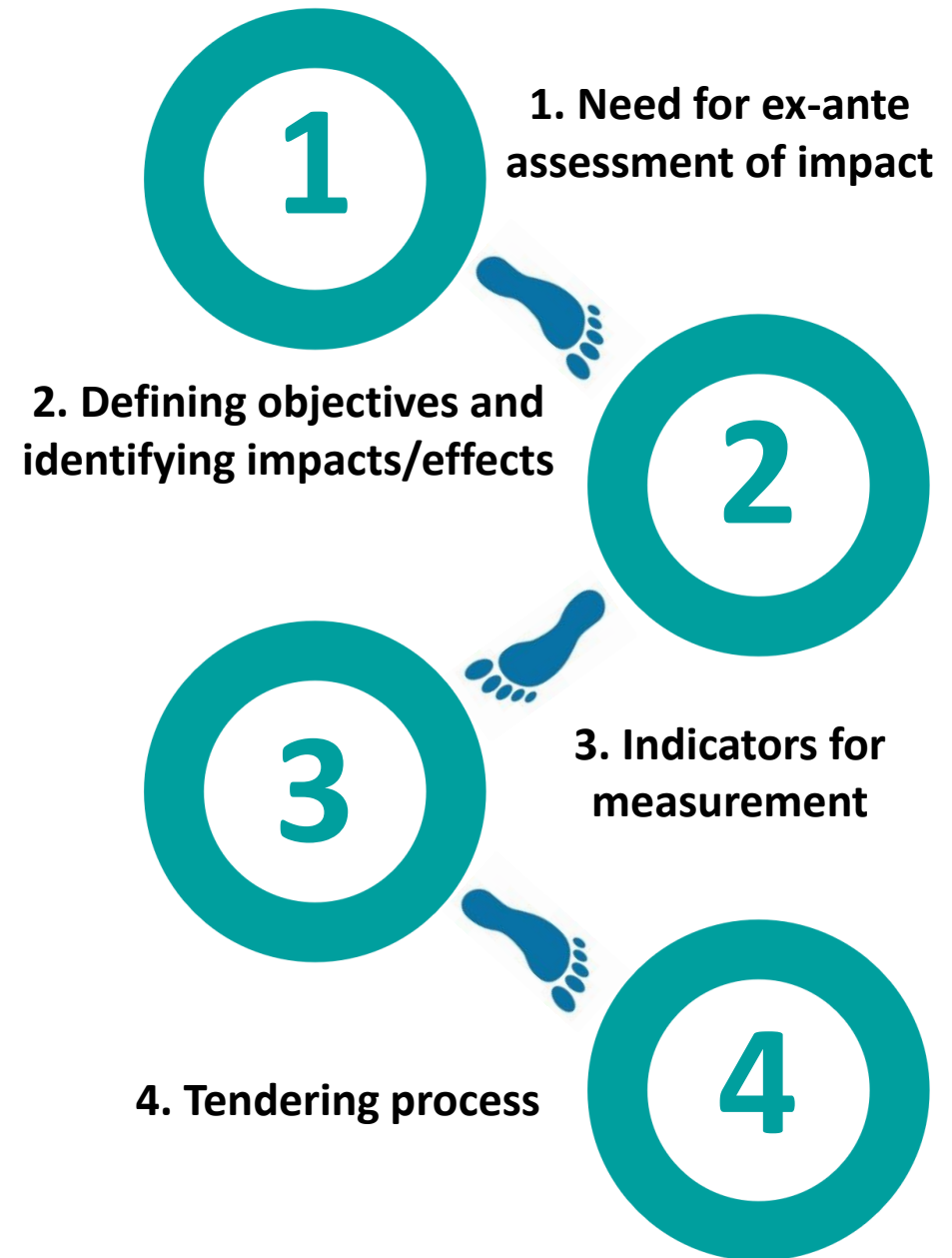
- The connection between the procurement and the organisation's strategy
- Pros and cons with different procurement options
 - How to conduct the procurement, what procedure, is a procurement needed
- Different impact categories (economic, social and environmental)
 - Short- and long-term
- How to measure the achievement of the objectives

When?

- Impact assessment can be done in different stages of the procurement process (before, during, after)
- Assessment before procurement aims at structuring and clarifying the planning phase as well as decision making- eg categorisation of procurement according to impact

How?

- Four phases.
- Not necessarily a linear flow: phases may overlap



Phase 1: The need for impact assessment

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Phase 1: The need for impact assessment

- The possible impacts of a procurement should be evaluated always when preparing an important or strategic procurement.
- Sometimes a legal requirement (eg. Environmental impact assessment for investments)
- Important to assess potential risks and unwanted side-effects in the preparation phase.
- An impact assessment is supported if the organisations has identified and prioritized those procurements that are most important for achieveing the strategic objectives of the organisation.

Potential impact categories

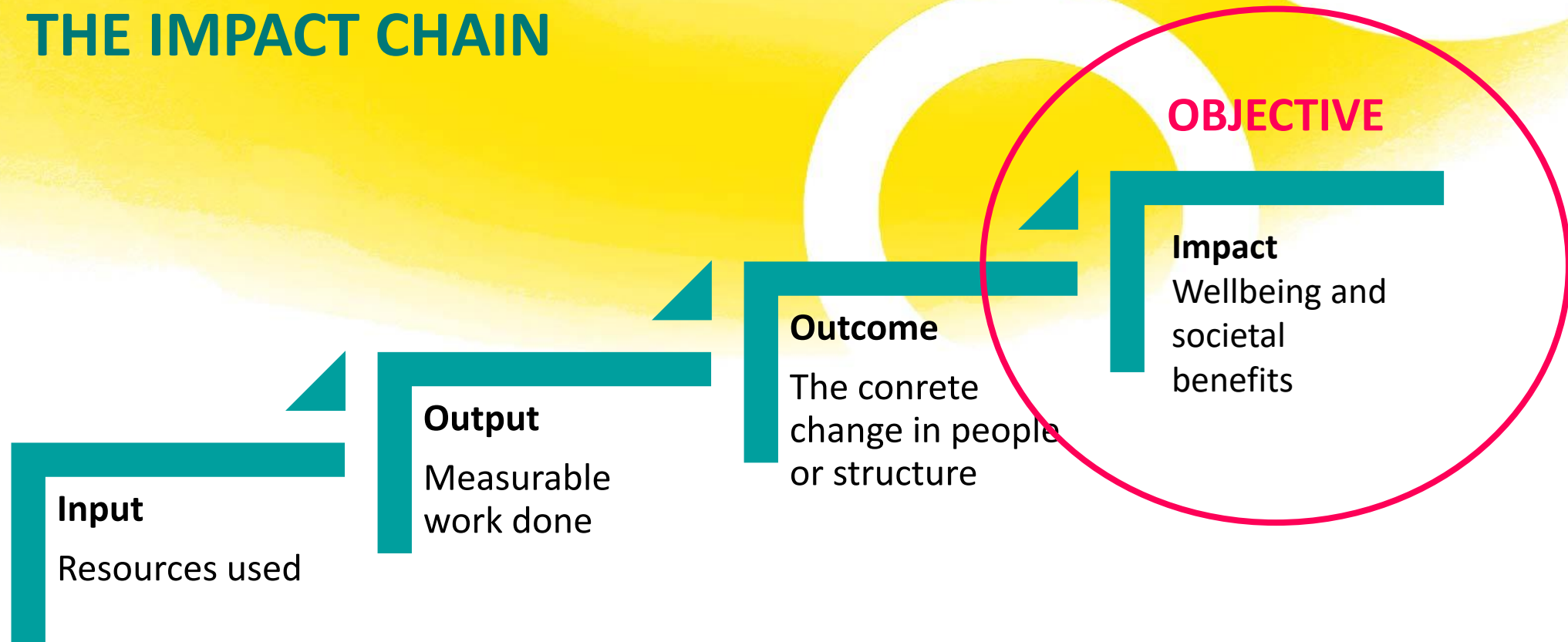
Potential impacts for procuring authority and client			
Productivity- /savings	Small	Moderate	Big
Improvement of service quality	Small	Moderate	Big
Environmental impact	Small	Moderate	Big
Social impact	Small	Moderate	Big
Impact on internal co-operation	Small	Moderate	Big
Impact on external co-operation (eg. Regional procurement bodies)	Small	Moderate	Big
Business activity and competitiveness			
Market readiness to meet the needs of the public sector	No solutions ready	Testing required	Solutions available on the market
The scalability of the solution	Small	Moderate	Big
Innovation potential for companies	Small	Moderate	Big
Growth potential for companies	Small	Moderate	Big

Phase 2: Defining the objectives and identifying the impacts to be assessed

Phase 2: Defining the objectives and identifying the impacts to be assessed

- Start by defining the objectives of the procurement, i.e. the concrete, positive outcomes that are wanted.
- Focus on those strategic objectives that the procurement in question can help achieve and that are possible to measure.
- Important to identify the impact potential of the procurement and where procedures or organisational culture need to change in order to achieve the objectives.
- The procurement object can be defined as a wanted outcome instead of a specific way of implementation. This way, the allocated resources are more easily understood as an investment for the societal goals, and not merely as an expense item.

THE IMPACT CHAIN



Phase 3: Development of indicators for measurement

Phase 3: Development of indicators for measurement

- When impact objectives for the procurement have been defined suitable indicators are needed to follow up and assess the achievement.
- Also, the means of collecting, managing and analysing data are defined.
- The objectives chosen must be measurable. Thus a crucial factor in determining the impact objectives is the measurability and the availability and quality of data.

Phase 3: Development of indicators for measurement

- Measuring the effects should be based on a lifecycle model and done on both short- and long- term.
- If the objectives of the procurement will be measured towards the situation before the procurement, the availability of data is essential.
- All objectives are not necessarily measurable. Factors outside the influence of the supplier should be identified.
- Examples of measurable impact is utilisation, energy savings and cost savings.

Phase 3: Development of indicators for measurement

Examples of indicators	
Objective	Indicator
Promotion of occupational health	Number of absences, results of annual questionnaires.
Promotion of the wellbeing of children, youth, families.	Numer of unemployed youth, number of school dropouts, the psychosocial wellebing of
Environmentally friendly and energy efficient building	Energy consumption, CO2 emissions from energy use, amount of construction material of renewable sources.
Low emission public transport	Fuel consumption, the amount ef fuel from renewable energy sources, emissions of exhaust gases
Energy efficient lighting	Energy use during the life cycle, light output during lifecycle
Resource efficient waste management	Recycling rate for different waste fractions, amount of waste to landfill, client satisfaction

Phase 3: Development of indicators for measurement

- The indicators chosen play a crucial role as decisions are made based on them
- Indicators should be unambiguous for all parties involved and they should be easy to report.
- Indicators can be quantitative or qualitative, thus give different kind of information on the impact..

Phase 3: Development of indicators for measurement

- The data needs to be verifiable according to accepted methods in the sector. This is crucial of the indicator is used in the evaluation of tenders. In an ex ante assessment phase, a “promise” of the achievable impact is enough.
- There needs to be an agreement between the procuring authority and the supplier on the responsibility to report data.
- It is also possible to draw up different scenarios of impact achievement: objectives achieved totally, partially or not at all.

Learnings from cases

- Impact assessment often requires the introduction of new tools if data collection has not previously been conducted for this purpose
- Trustworthy indicators exist, but data is not necessarily collected systematically.
- Data should be available during the whole procurement process, including contract period. This should be noted when choosing indicators.

Phase 4: The tendering process and procurement documents

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Phase 4: The tendering process and procurement documents

- The impact objectives and indicators developed are included in the procurement documents.
- The aim of the tendering process is to find the suppliers and solutions able to match up to the objectives. Tenderers are given the possibility to offer different solutions.
- The indicators can be used as quality evaluation criteria, eg. energy efficiency. This requires, however, that they are objectively assessable.

Phase 4: The tendering process and procurement documents

- Market analysis and dialogue are an essential part of the procurement planning process. The procuring authority should sort out how the market can respond to the objectives chosen.
- The market dialogue is a valuable platform to get information on aspects related to measuring. Thus, the draft requirements on contract clauses on data collection should be discussed with potential suppliers.



Phase 4: The tendering process and procurement documents

- Special attention should be given to drafting the contract clauses and their unambiguity.
- The contract should include all impact objectives, how and when they are measured during the contract period
- Assessment should be done during the contract period
 - This is required especially in procurements, where the supplier is paid according to achieved results/impact.
 - The contract should also include incentives and sanctions linked to the objectives.

Case example

Energy savings contracting

- Purchasing **energy services** with guaranteed energy savings is an example of **outcomes based contracting** promoting **environmental aspects**.
- Energy Performance Contracting (EPC) means provision of energy services with guaranteed energy savings.
- All energy saving measures are implemented by an Energy Service Company (ESCO) and **financed from the resulting savings with no additional cost** (or only a small additional cost) to the contracting entity as energy savings are contractually agreed.
- The use of such a model can help to **modernize** public buildings, **reduce** energy consumption and reduce CO² emissions.
- The trend is towards bundling several buildings into one contract

Success factors for establishing new service concept: long-term political commitment and resources

- The city of Vantaa is committed to saving 7,5 % energy until 2025.
- In their ESCO procurement the objective was to achieve > 20 % energy savings as compared to the situation at the time in the chosen buildings. Under the defined 15 year lifecycle this meant savings up to 4,7 million euros and an annual reduction of CO2 up to a 1 317 tons
- The energy savings from the City of Vantaa's award-winning ESCO project are 30 000 MWh in heat and electricity, worth more than €200,000 every year.
 - Costs are covered by the energy savings
- More information (in Finnish)

https://www.motiva.fi/ratkaisut/energiatehokkuus- ja_esco-palvelut

In conclusion

- Identify the strategic objectives and prioritise the procurement most essential to achieve the objectives
- Define the impact objectives and identify the role of procurement. Identify changes needed in internal procedures and culture.
- Develop suitable measurable indicators, make sure that data is available and collectable during the contract period.
- Conduct a market dialogue on the impact objectives, indicators and data collection and measurement
- Based on the market dialogue results, draw up the procurement documents. Pay special attention to contract clauses.

Thank you for your attention!

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Sustainable/Green Public Procurement

Assessment Review and Prioritization of Sectors

MUSHTAQ AHMED MEMON, PhD

Designing Survey – Identification of Focal Point

Country:	
Organisation/ Institution:	
Name:	
Position:	
Contact details:	Email: Telephone:

Designing Survey – Current Status of GPP

- 1) Are GPP provisions included in overarching and/or thematic national polities? (e.g. sustainable development strategy, energy efficiency directive, etc. if yes, please state the name of the policy(s), year of adoption, and web-links for their download)
- 2) Are GPP provisions included in existing procurement regulations? (if yes, please provide the name of the legislation, year of adoption, web-link for its adoption, and a short description on where are the GPP provisions included)
- 3) Has a dedicated GPP policy(s) for the whole national government or selected governments?
- 4) What ministry(s) and/or agency(s) lead the development and deployment of GPP policies and what additional ministries/agencies are involved in the process?
- 5) If you have a dedicated national government GPP policy(s), please answer to the following questions.
 - What sustainability aspects does the current GPP policy(s) cover? Select from following table

Air pollution	Biodiversity preservation	Climate Change Mitigation	Clean technology and Eco-innovation
Energy conservation	Hazardous substances	Health quality	Local environmental conditions
Ozone depletion	Protection of national resources	Resource efficiency	Soil Protection
Waste minimization	Water conservation	Water pollution	other environmental aspect, please specify:

Designing Survey – Current Status of GPP

How and which organization is in charge of defining green products/services subject to GPP? Is there a linkage between ecolabel and GPP?

Does the current policy(s) set any targets or goals for GPP in the national government? (If yes, please summarize the target and the year by which it should be reached if defined, e.g. X % of GPP by 2020, all targeted authorities published an annual GPP plan, 95% of all contracts include green criteria, the expenditure on prioritised green products and services has to be of X % by 2020, X % GHG emissions reductions through GPP, etc.)

What levels of public authorities are covered by the GPP policy(s)? Select from following table

All national, state/regional, and local public authorities
All national and state/regional public authorities
Only national government public authorities
Some national public authorities
Others, please specify:

Is the GPP policy(s) mandatory, voluntary or a mix depending on the covered authorities?

Are categories of products, services or works prioritised for SPP implementation across the national governments?

If yes, what are the primary criteria for their prioritization?

What are the categories prioritized in the national GPP policy(s) across the national government? Please indicate the names of the categories subject to GPP policy(s)

How many annual human and economic resources are allocated for the promotion and implementation of the GPP policy(s)? (please provide an estimate of the annual budget allocated to the deployment of the GPP policy(s) and the number of employees per year working in the implementation of GPP)

Designing Survey – Current Status of GPP

- 1) Are GPP provisions included in overarching and/or thematic national polities? (e.g. sustainable development strategy, energy efficiency directive, etc. if yes, please state the name of the policy(s), year of adoption, and web-links for their download)
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Ozone depletion	Protection of national resources	Resource efficiency	Soil Protection
Waste minimization	Water conservation	Water pollution	other environmental aspect, please specify:

Designing Survey – Needs Assessment

1) Please indicate the five major barriers hampering the deployment and the promotion of GPP in your country.

Select from following tables

Lack of mandatory GPP rules/legislation
Lack of policy commitments/goals/action plans
Lack of Inter-agency cooperation
Lack of expertise in GPP implementation
Insufficient monitoring, evaluation and enforcement of GPP policies
Lack of incentives on GPP at organization/personal level
Lack of training of procurement staff in GPP
Competing procurement priorities
Perception that green products and/or services are more expensive
Perception that green products and/or services are of less quality
Lack of green products and/or services to procure
Lack of relevant GPP criteria and specifications
Lack of measurement of environmental and/or economic outcomes of GPP implementation
Others, please specify:

2) Please indicate the five economic, environmental, and social issues that should be a priority for green public procurement in your country.

Air pollution
Biodiversity conservation
Climate Change mitigation
Energy conservation
Hazardous substances
Health quality
Local environmental conditions
Resource efficiency
Waste minimization
Water conservation
Water pollution
Eco-innovation and green technology development
Protection of micro, small and medium enterprises
Nurturing of green products/services industry
Others, please specify:

3) Please indicate the five product/service categories that should be a priority for green public procurement in your country.

Building equipment (air-conditioners, elevators, lighting, etc.)
Building materials (windows, floor-covers, wall panels)
Building design and construction
Diverse chemical products(lubricant oils, paints, fire extinguishers, etc)
Execution of work contracts
Furniture
Office IT equipment (computers, screens, printers, etc)
Infrastructure design and construction (road, etc.)
Vehicles
Office paper and stationary
Others, please specify:

4) Please indicate gaps in capacity for implementation of green public procurement and eco-labelling requiring technical support from UN Environment – KEITI (choose all that apply)

Development and/or revision of GPP policy/legislation
Development of GPP action plan
Development and revision of criteria for priority groups
Development of GPP guide book for priority sectors
Transfer of knowhow on implementation of GPP in priority sectors such as building/construction, ICTs, etc.
Supplier engagement in priority sectors
Development of incentives/evaluation framework for the promotion of GPP
Establishment of monitoring system for GPP
Establishment of coordination mechanism with line ministries
Peer learning opportunities for public procurers between Korea and partner countries
Support for access to financial and technical resources to strengthen green production
Others, please specify:

6) Please indicate the previous and current projects (including under discussions) to establish and implement green public procurement and eco-labelling in your country.

Analysis and identification of Priorities

Evaluation criteria	Cambodia	Vietnam	Thailand
Green Public Procurement policy framework developed and implemented at the national level	No measures currently in place. However, the Green Growth Policy and Strategic plan paves the way for the inclusion of GPP initiatives and policy development processes.	No measures in place. Requirements in National Strategy on Green Growth to (i) develop roadmap on green procurement within 2020 and ii) develop regulations on green public procurement	Measures in place. GPPEL regulatory measures in place through the 12th National Economic and Social Development Plan (2017-2021), Environmental Quality Management Plan (2017-2021) and draft Thailand SCP Road Map 2017-2027
Eco-labelling policy framework and regulatory measures implemented to assess and define green products (e.g. Eco-labelling scheme)	No measures in place.	No measures in place. Some sustainable criteria developed but there is no obligation for public procurers to integrate them into the public procurement procedures.	Measures in place. See comment above
Mandate and ownership for Green Public Procurement and Eco-labelling (GPPEL) has been assign to a designated ministry, and/or government agency	Responsibility not been assigned to an agency. However, the National Council for Sustainable Development (NCSD) and Ministry of Environment are in the lead for policy development related to green growth. As such it is foreseen that a future responsibility for GPPEL will lie NCSD and the Ministry of Environment.	Responsibility been assigned to an agency. Ministry of Finance leads in collaboration with Ministry of Natural Resources and Environment and Ministry of Planning and Investment	Responsibility has been assigned. The Ministry of Natural Resources and Environment (MNRE) by Pollution Control Department (PCD) is tasked with operationalizing GPP. Other ministries and agencies involved include the Ministry of Finance and Ministry of Industry
Overall readiness for the inclusion of GPPEL into national policies and regulatory frameworks	Low readiness. No plans in pipeline for the development of GPPEL initiatives.	Medium readiness. Plans in place include GPPEL into socio-economic development plans and regulations. A few voluntary sustainability criteria's are already in place. However, this is not mandatory and the criteria's are usually neglected by procurers within the agencies	High readiness. GPPEL included in existing policies and regulatory framework.

Outlining the Focus for GPP

Support Policy Development and Enhancement

Propose to Revise or Modify the Legal Framework

- Propose legal review and revision for implementation of GPP

Assist Establishment of GPP Criteria

- Support establishment of criteria for GPP products

Support Establishment of Policy Implementation Basis

Develop GPP Guidelines

- Develop guidelines incorporating green procurement into existing public procurement procedures

Capacity-Building & Awareness-raising

- Hold workshops for policy-makers, procurers and companies

Support Policy Implementation

Propose GPP Roadmap

- Suggest short-term roadmap for transferring know-how and supporting implementation of GPP

Proliferate Outcomes and Develop Follow-up Project

Outcomes and Follow-up Project

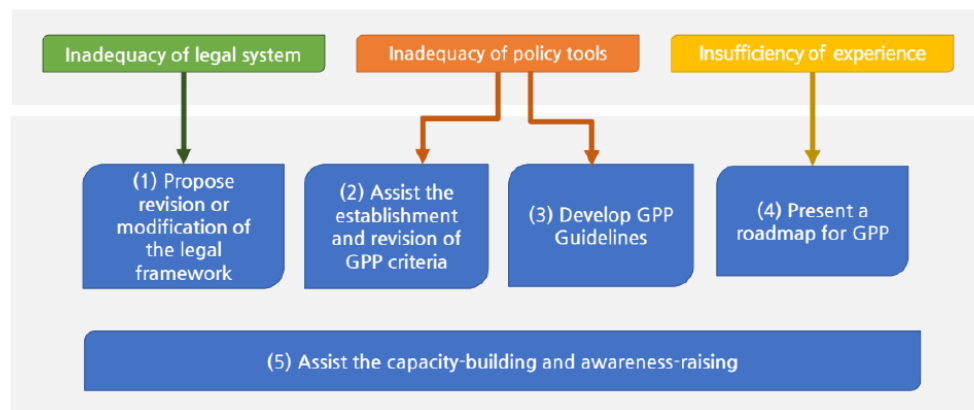
- Proliferation of outcomes and propose measures to cooperate with other similar projects
- Development of follow-up project after completion of pilot project

VIETNAM

THAILAND

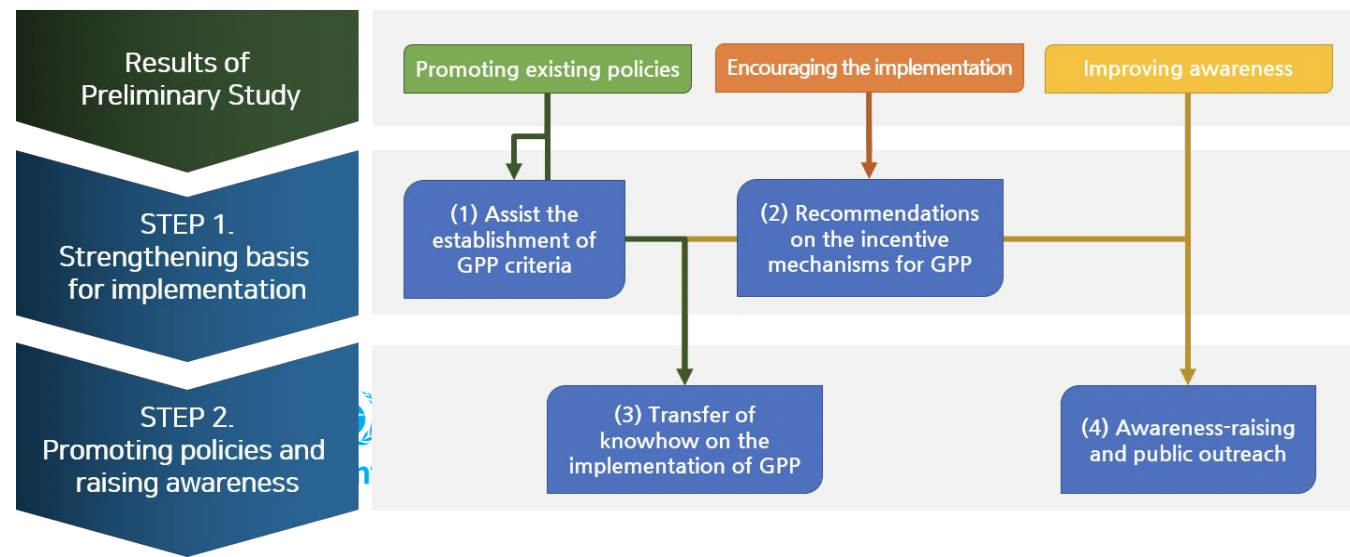
Concept for Outlining GPP – Viet Nam case study

- ① Green Public Procurement related laws of Viet Nam will be reviewed for organizing the legal foundations for GPP and present recommendations for the enactment and revision of these legal documents by benchmarking the legal system of Korea.
- ② Support development of criteria to support the selection of environment-friendly products within the market in the public procurement process.
- ③ Provide methodology for GPP and develop guidelines for strengthening of the capacities of government procurers.
- ④ Propose short-term roadmap for transfer of know-how of Korea and support for pilot implementation related to GPP.
- ⑤ Support capacity-building and awareness-raising for GPP stakeholders including policy-makers, procurers and manufacturers



Concept for Outlining GPP – Thailand case study

- ⑥ Establish foundation for green procurement by developing the criteria for the construction and building materials.
- ⑦ Present incentive mechanism recommendations appropriate for Thailand for promotion of GPP by benchmarking other countries including Korea.
- ⑧ Transfer of know-how of Korea in operation through establishment and activation of networks of experts in green construction between Korea and Thailand.
- ⑨ Support activities for awareness-raising on and promotion of GPP in the construction sector for a diverse range of stakeholders including procurers, experts and manufacturers.



Groupwork

- Discuss the reasons for priority sector(s) and relate those sectors with SDGs and NDCs
- Deep dive in the priority sector(s) to identify to priority products, services, utilities and works to develop detailed SPP/GPP processes
- Identify main differences from conventional public procurement to sustainable/green public procurement for the goods, services, utilities and works
- Suggest policy changes (if any) including implementation of policies
- Suggest the change in the practices including full landscape of public procurement for that particular product, service, utility or works



Thank you!

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<https://www.unenvironment.org/regions/asia-and-pacific>



Sustainable/Green Public Procurement for SDGs

Overview of Progress and Next Steps

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SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



SUSTAINABLE DEVELOPMENT GOALS

SDG 12 Indicators

12.3 - By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

12.3.1 - Global food loss index

12.4 - By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

12.4.1 - Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement

12.4.2 - Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment

12.5 - By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

12.5.1 - National recycling rate, tons of material recycled

SDG 12 Indicators

12.6. Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

Indicator 12.6.1: Number of companies publishing sustainability reports

12.7. Promote public procurement practices that are sustainable, in accordance with national policies and priorities

Indicator 12.7.1: Number of countries implementing sustainable public procurement policies and action plans

12.8. By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

Indicator 12.8.1: Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

12.a. Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production

Indicator 12.a.1: Amount of support to developing countries on research and development for sustainable consumption and production and environmentally sound technologies

12.b. Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

Indicator 12.b.1: Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools

12.c. Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities

Indicator 12.c.1: Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as proportion of total national expenditure on fossil fuels

NATIONAL, REGIONAL AND GLOBAL DISCUSSIONS



The 10YFP / One Planet is a multi-stakeholder network that is building the global movement for sustainable consumption and production through 6 Programmes:



Basis for GPP

Green public procurement improves the quality, access and impact of as various objectives of sustainable development could be incorporated to procure:

- goods (equipment, consumer goods, etc.),
- services (catering, waste management, etc.),
- works (infrastructure, installations, etc.) and
- utilities (water supply, electricity)

Green public procurement helps to:

- Save both money and resources - life-cycle costing and contributes to a circular economy that will also lead to innovation
- Increase awareness of environmental issues and establishing norms and procedures for private procurement

CHANGING SCENARIO....

Asia and the Pacific



Growing population
from 7 billion today
to 9 billion by 2050



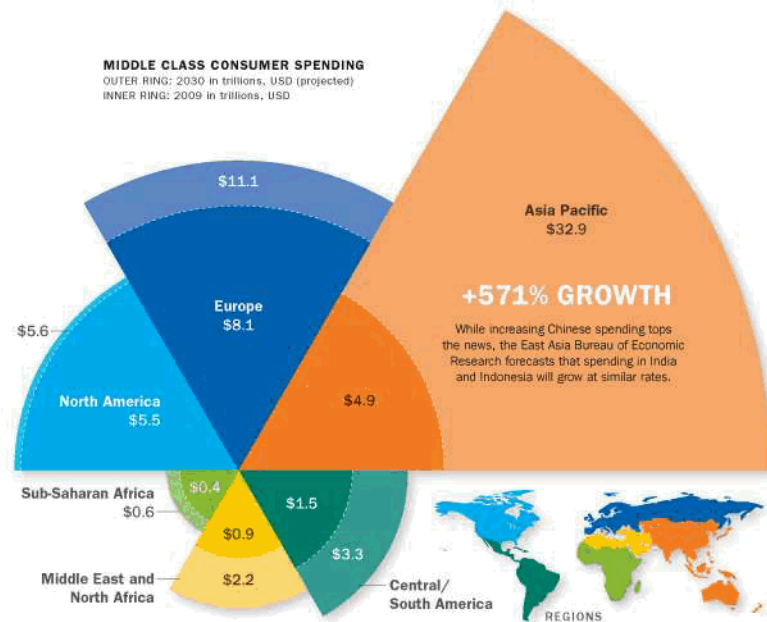
**Economic develop-
ment** and increasing
global trade



Growing middle-class
with **changing con-
sumption patterns**



Increasing
consumption
of biomass



WHAT IS HAPPENING IN ASIA!

80 billion tonnes

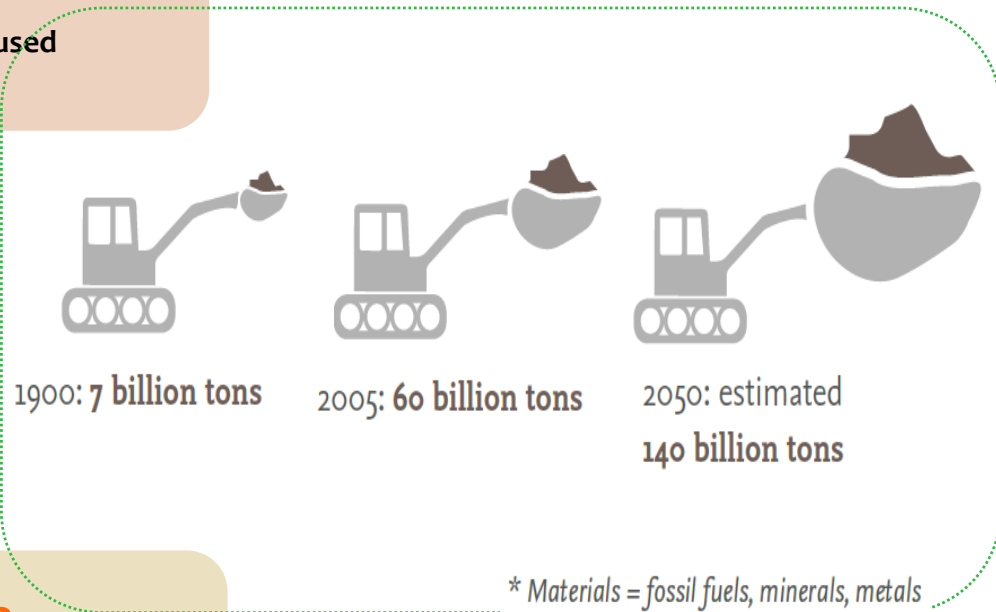
of global extraction of natural resources if consumption stays at current developed country rates.

60% of ecosystems damaged or being used unsustainably



Two-thirds of the global middle class will be residents in Asia-Pacific by 2030

3°C or more rise in Temperature by the end of the century, due to doubling of GHG Emissions by 2050 (BAU)

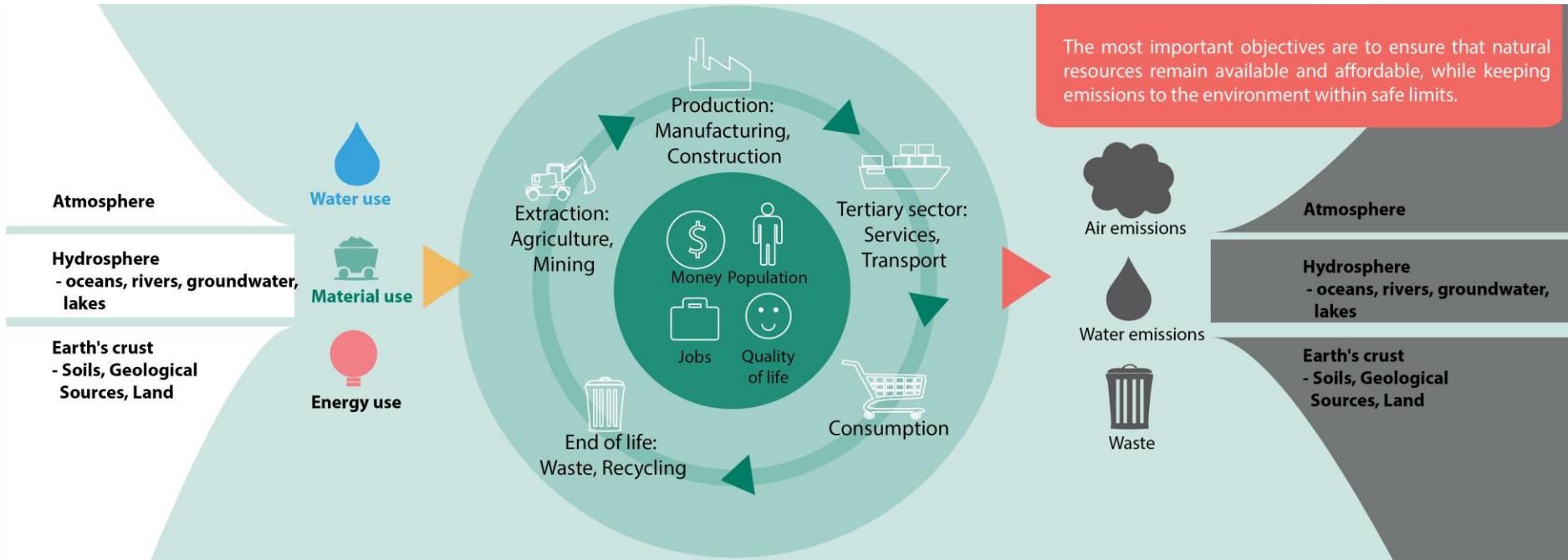


SDGs & NDCs IN SIGHT?

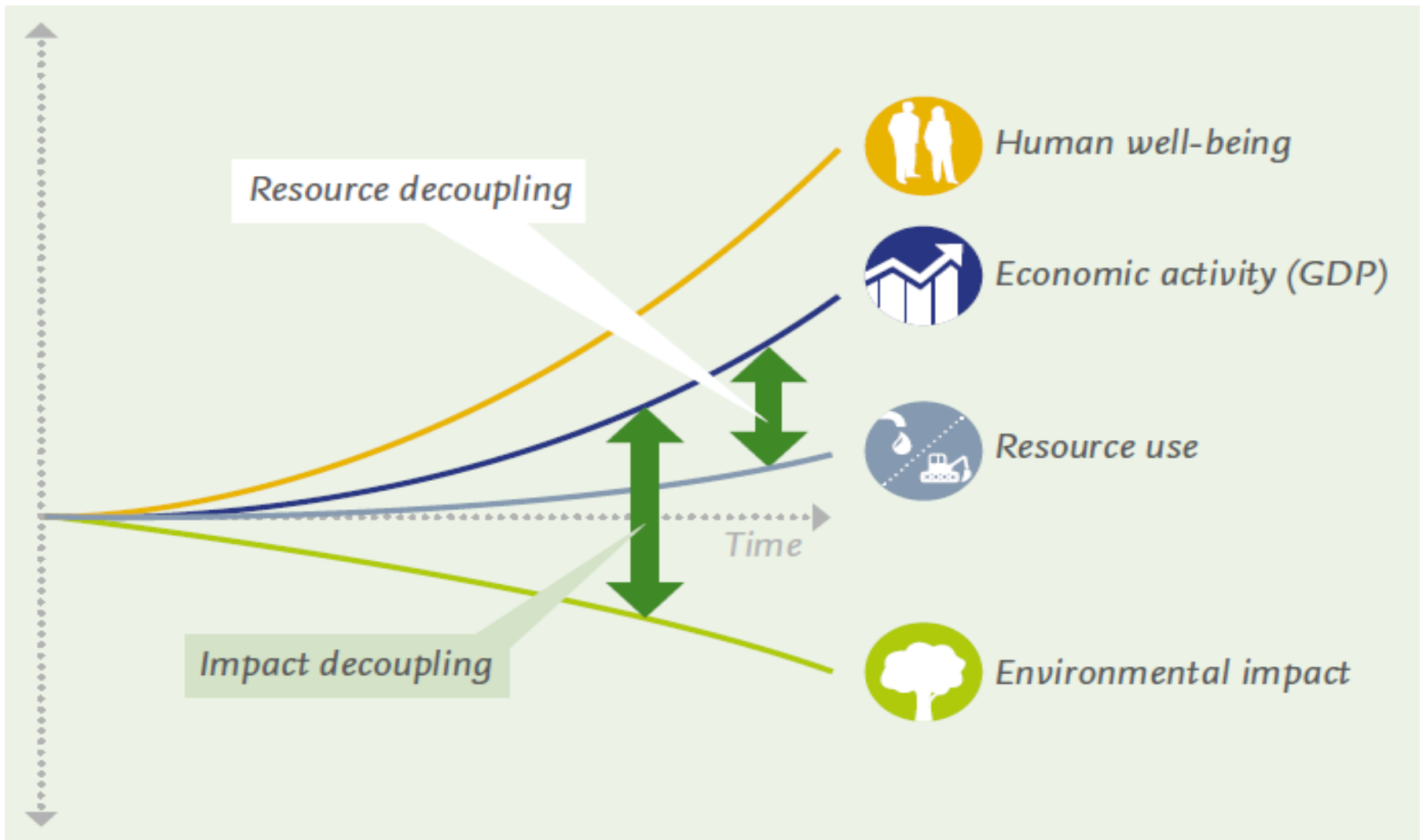
Asia Pacific home to
16 of 28 megacities

Asia Pacific home to
< 4.2 billion people

The region's share of global gross domestic product (at purchasing power parity) rose from 30.1% in 2000 to 42.6% in 2017,

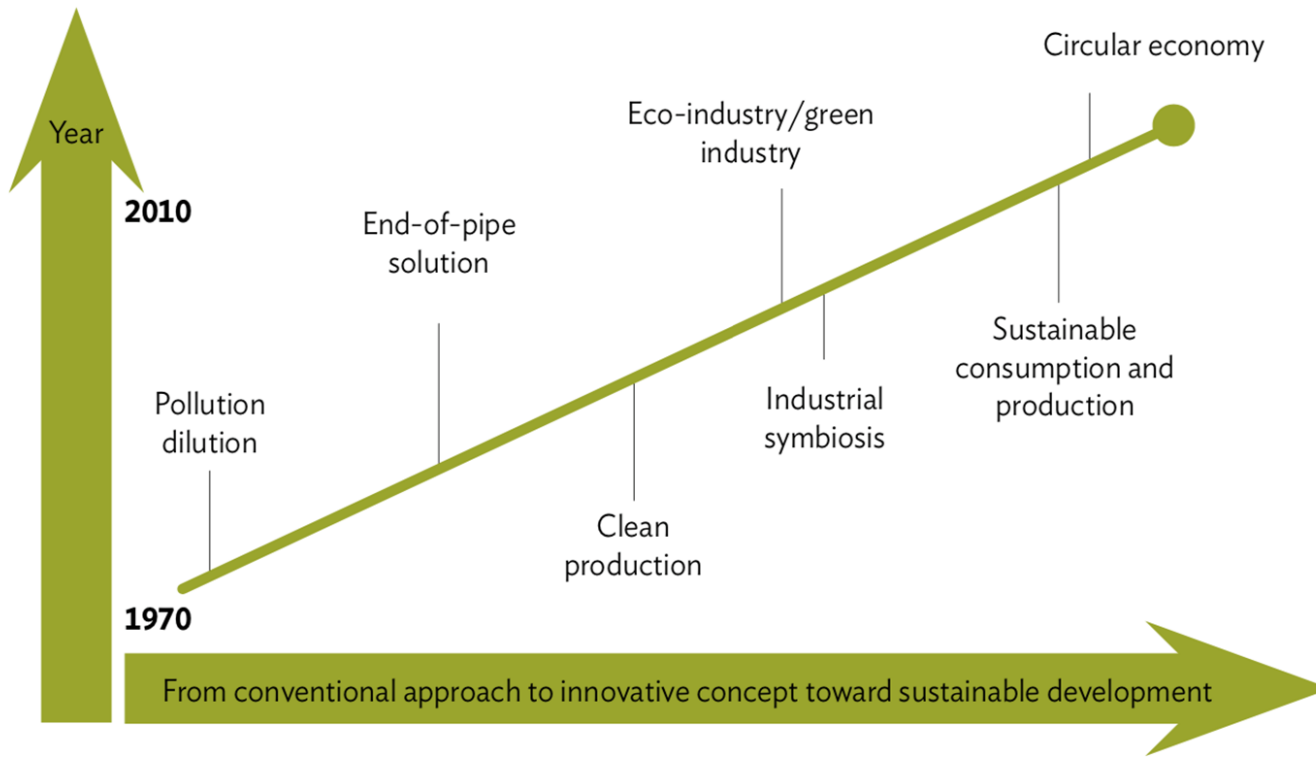


DECOUPLING & CIRCULAR ECONOMY



JOURNEY FROM POLLUTION MANAGEMENT TO CIRCULAR ECONOMY 2.0

Figure 5. Development of Environmental and Resource Management Approach by Industrial Sector



SUSTAINABLE PUBLIC PROCUREMENT (SPP)

12.7. Promote public procurement practices that are sustainable, in accordance with national policies and priorities
Indicator

12.7.1: Number of countries implementing sustainable public procurement policies and action plans

(UNEP 2012)

Sustainable development, requires governments and organisations to consider the social, economic and environmental aspects of their operations, with no single aspect dominating. Applying the concept of sustainable development to public procurement, ‘sustainable procurement’ is defined as:

“A process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment.”

Source: Procuring the Future – the report of the UK Sustainable Procurement Task Force, June 2006.

Definition adopted by the Marrakech Task Force on Sustainable Public Procurement. The footnote to the definition reads:

Sustainable Procurement should consider the environmental, social and economic consequences of: Design; non-renewable material use; manufacture and production methods; logistics; service delivery; use; operation; maintenance; reuse; recycling options; disposal; and suppliers’ capabilities to address these consequences throughout the supply chain.

GREEN PUBLIC PROCUREMENT (GPP)

GPP is *“a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured”*

GPP can affect environmental impact:

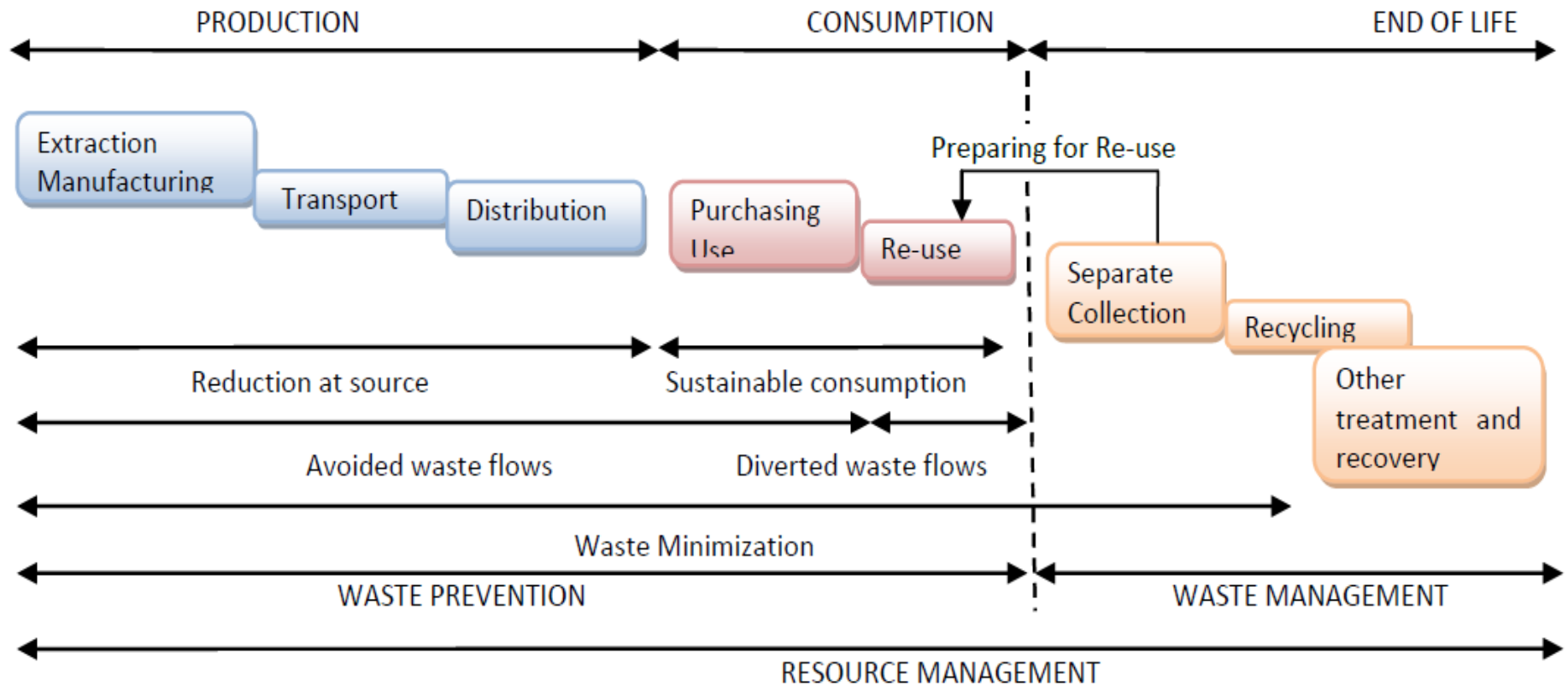
- **Directly** – through improved environmental performance of goods, services and works bought
- **Indirectly** – through using this market leverage to encourage companies to invest in cleaner products and services

Source: European Union

Current challenges for SPP and GPP

1. Theoretical debate
2. Some governments use both and also having separate departments and ministries to look after SPP and GPP respectively – including for reporting purpose (e.g. SDG 12 reporting)
3. Slowing down the process for designing and implementation of SPP/GPP

LIFE CYCLE APPROACH (LCA) AND LIFE CYCLE COSTING (LCC) FOR CIRCULAR ECONOMY



UNEP through the EU and KEITI support

Institutionalization of green public procurement requires various measures, capacity and partnerships. UN Environment is working with donors, member states and stakeholders including private sector on:

- Awareness raising and capacity building products,
- National, regional and global discussions,
- National policies and processes and
- Training on cross-learning, adopt to local conditions, and practicing by procurers and suppliers

GPP Workshop 2017

- **Philippines:** What the government partners want is a simple tool that they can use to start procuring sustainably. But it is not a magic that can happen overnight. It involves researches.
- **Cambodia:** It needs eco-labelling knowledge and capacity building in order to move towards SPP. It has an environmental and natural resource code review and that is likely to happen in the next few years, but in the meantime, it is important to mainstream GPP into our investment plans and priorities.
- **Malaysia:** It already has policy in place, so now it is focusing on implementation. The most important thing is to enhance the capacity building on the demand side and to address financing issues to achieve green growth in Malaysia. Also, the promotion and education to all stakeholders to implementing GPP is important.
- **Bhutan:** As we are only in the starting phase of GPP and not all ministries are aware of it, so we would like more capacity building and support.
- **Maldives:** The Maldives is an import-based economy where goods are shipped from outside. At the moment, there is a project that will start eco-labeling for electrical appliances and green standards for the construction sector. The government is in the process of amending the procurement regulations to procure in a sustainable manner according to green criteria. The government is still one year away from that. It is also moving towards importing of sustainable air refrigerants in the cooling sector.
- **Indonesia:** Indonesia has the framework for the development of GPP, and has a set of regulations that are just starting to implement. The regulation for eco-labeling is already implemented. It needs to strengthen cooperation, especially to increase capacity to develop criteria for GPP.
- **Lao PDR:** There is an inception workshop in Vientiane next month. Lao needs technical and financial support from UN Environment to build capacity.

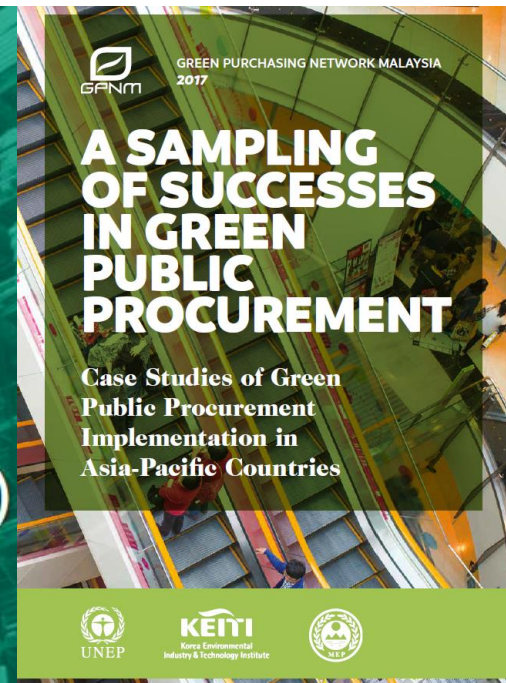
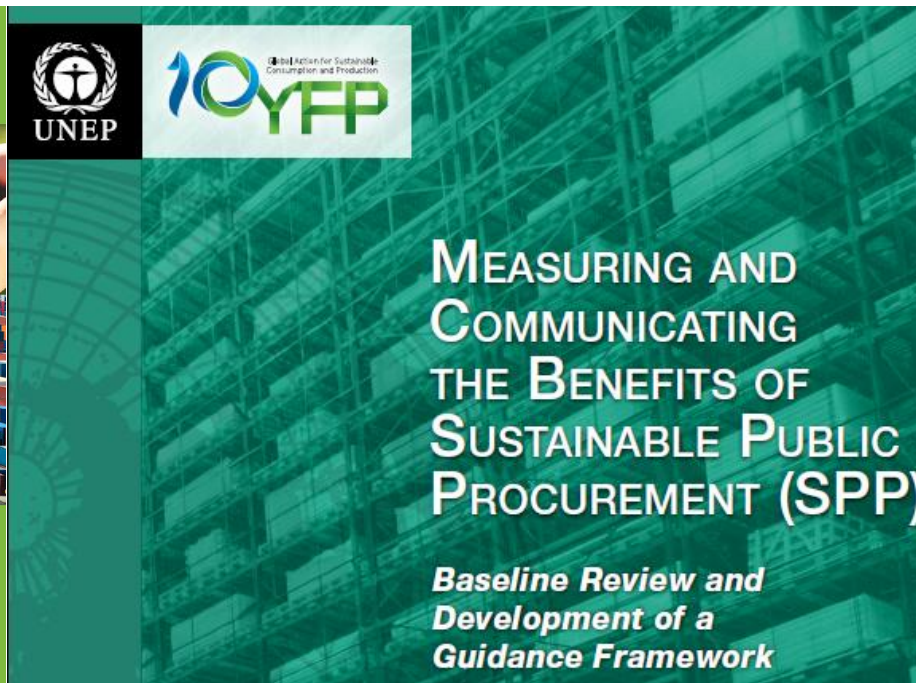
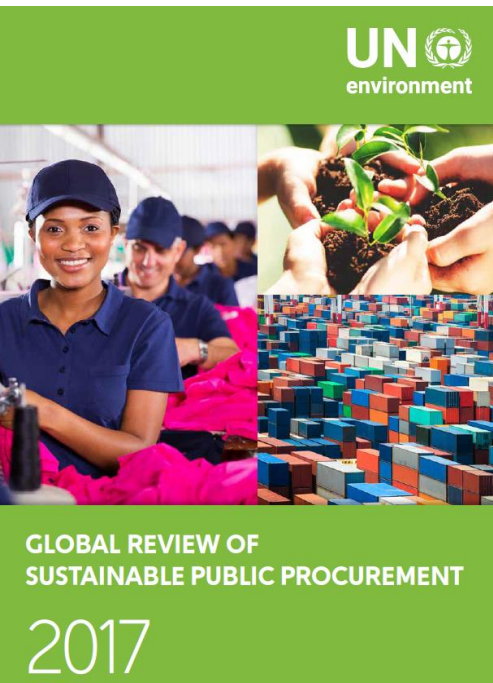
Workshop report

Pacific Green Public Procurement Partnership Project inception workshop – 27-28 September 2017

Location: Amari Watergate Hotel, Bangkok, Thailand

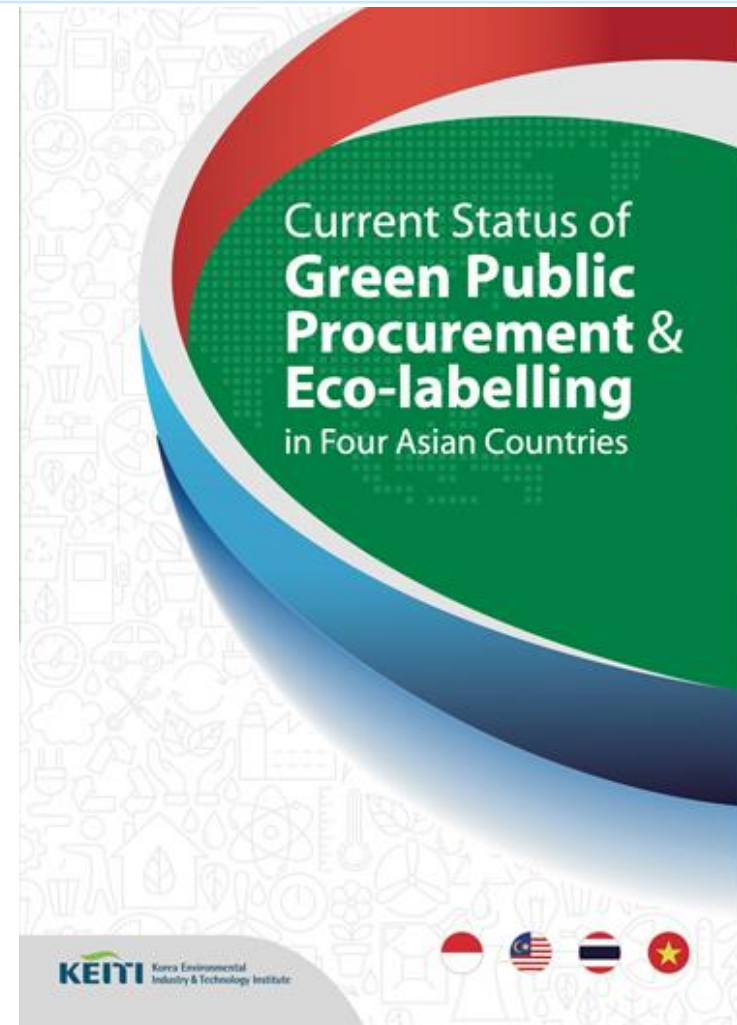


AWARENESS RAISING AND CAPACITY BUILDING



Country Surveys and Assessments

The first step to establish GPP is to assess the gaps and opportunities in the current regulatory and socioeconomic frameworks in the respective countries. This assessment also includes the needs assessment and priority sectors as some countries may be already at advanced stage of GPP; thus, for every country there can be different requirements and pathways. Hence this assessment helps to develop roadmap and action plan for the GPP.



Country Surveys and Assessments

Green Public Procurement and Eco-Labeling

Survey for a Capacity Building Project

by UN Environment (UNEP) and Korea Environmental Industry & Technology Institute (KEITI)

#	Evaluation criteria	Cambodia	Vietnam	Thailand	Lao PDR	Malaysia	Indonesia	Myanmar	Philippines
1	Green Public Procurement policy framework developed and implemented at the national level	No measures currently in place. However, the Green Growth Policy and Strategic plan paves the way for the inclusion of GPP initiatives and policy development processes.	No measures in place. Requirements in National Strategy on Green Growth to (i) develop roadmap on green procurement within 2020 and ii) develop regulations on green public procurement	Measures in place. GPPEL regulatory measures in place through the 12th National Economic and Social Development Plan (2017-2021), Environmental Quality Management Plan (2017-2021) and draft Thailand SCP Road Map 2017-2027	No measures in place.	Measures in place. GGP included in National Green Technology Policies (2009) and 11th Malaysia Plan 2016-2020. GGP is also included in the Ministry of Finance Procurement Circular (1PP) which was revised in 2015	Measures in place. GPP included in the National Midterm Development Planning Document 2015-2020 and Draft Presidential Decree on Sustainable Development Goals.		N/A
	Score		0	0	1	0	1		
2	Eco-labelling policy framework and regulatory measures implemented to assess and define green products (e.g. Eco-labelling scheme)	No measures in place.	No measures in place. Some sustainable criteria developed but there is no obligation for public procurers to integrate them into the public procurement procedures.	Measures in place. See comment above	No measures in place.	Measures in place. See above	Measures in place. See above		N/A
	Score		0	0	1	0	1		
3	Mandate and ownership for Green Public Procurement and Eco-labelling (GPPEL) has been assigned to a designated ministry, and/or government agency	Responsibility not been assigned to an agency. However, the National Council for Sustainable Development (NCS) and Ministry of Environment are in the lead for policy development related to green growth. As such it is foreseen that a future responsibility for GPPEL will lie NCS and the Ministry of Environment.	Responsibility has been assigned to an agency. Ministry of Finance leads in collaboration with Ministry of Natural Resources and Environment and Ministry of Planning and Investment	Responsibility has been assigned. The Ministry of Natural Resources and Environment (MNRE) by Pollution Control Department (PCD) is tasked with operationalizing GPP. Other ministries and agencies involved include the Ministry of Finance and Ministry of Industry	Responsibility has been assigned. Ministry of Finance has a Procurement Office attached to the Cabinet of the Ministry.	Responsibility has been assigned. Ministry of Finance, Ministry of Energy, Green Technology & Water, Economic Planning Unit of Prime Minister Department and Malaysia Green Technology Corporation.	Responsibility has been assigned. The lead agency is Ministry of Environment and Forestry		N/A
	Score		0	1	1	1	1		
4	Overall readiness for the inclusion of GPPEL into national policies and regulatory frameworks	Low readiness. No plans in pipe-line for the development of GPPEL initiatives.	Medium readiness. Plans in place include GPPEL into socio-economic development plans and regulations. A few voluntary sustainability criteria's are already in place. However, this is not mandatory and the criteria's are usually neglected by procurers within the agencies	High readiness. GPPEL included in existing policies and regulatory framework.	Low readiness. GPP is a high priority however no initiatives, or plans are currently in place to implement GPPEL initiatives into policy and regulatory frameworks	High readiness. Mandatory for Federal Government Ministries and agencies and voluntary to state governments and local authorities	High readiness. The 11th Malaysia Plan is targeting 20% GGP by 2020 and reducing up to 45% carbon emission intensity per GDP according to 2005 baseline		N/A
	Score		1	2	3	1	3		
	Total score		1	3	6	2	6		

Asia Pacific Roadmap on SCP



Training Manual for Green Public Procurement

Learning from Pilot Project Case Studies



National Policies and Processes

UN Environment is working various countries to establish and/or strengthen green public procurement:

- KEITI supported project in Vietnam
- KEITI supported project in Thailand
- India: Taskforce on sustainable public procurement led by Ministry of Finance

Sharing Information on Regulatory Framework

EC Communication (2017): [Making Public Procurement work in and for Europe](#) – key priorities include:

- Ensuring wider uptake of innovative, green, and social procurement
- Boosting the professionalism of public buyers

[Revised Public Procurement Directives](#) (2014)

– key aim to facilitate and ensure the greater inclusion of common societal goals in the procurement process.

GPP for Construction and Housing Sector

- To procure cutting edge environmental friendly technology for construction and installations
- To cut-down the operational/maintenance costs
- To reduce the impact on environment
- To get international acknowledgement for “green buildings” leading to (1) exporting services and technology, (2) attracting tourism, and (3) providing services to major clients looking for green buildings
- Help other sectors and other countries under south-south cooperation, e.g. ASEAN, SAARC and Africa

Sharing the Information for GPP in Construction and Housing Sector



Australian Institute of Architects

5 May 2014

Subject AIA BEMPQ Speech by Richard Kirk FRAIA

Design as the focus

Maximising the use of public funds by design - the role and responsibility of Government as expert client

Construction as a Foundation Industry for the State's Prosperity

The construction industry is one of the few industries that interface with every other industry in the State – from mining to health, education and infrastructure – it provides the framework for each industry and the importance of optimizing the outcome is crucial and self-evident. This Government recognizes this by identifying the construction industry as one of the four pillars of the economy.

Design is fundamental to optimizing the value from all of these construction programs - the value of design in the construction industry is fundamental to the prosperity of the State – Shane Thompson last year enumerated how high quality well managed design can provide substantial gains in operational and long term ownership efficiencies. Good design is good business.

The built environment in our cities and towns is a physical expression of the shared capabilities of the industry and the skill and leadership of the Government and its agencies. The built-environment is the only enduring legacy of our shared governance skills – and it is critical that this community presents itself as a sophisticated place in the competitive arena of new-age Cities in South East Asia. Good design is fundamental to our international competitiveness.

Aspirations to use public procurement as a lever of government reform

It has been recognised in UK government practice that procurement should be more strategic within government (HM Treasury/ Cabinet Office, 1998). In a recent speech by Gordon Brown, Chancellor of the Exchequer, it was demonstrated that public procurement is now high on the agenda of senior ministers.

"I think most of you would agree that 50, 20 or even 10 years ago the idea that the Treasury would be interested in issues like public space, the design quality of public procurement, environmental standards, devolution, regionalism and social exclusion would be almost unthinkable. But we know that not only are these questions vital to successful, economically vibrant communities but they are at the heart of the agenda for social and economic progress."

- Gordon Brown, 2005

For the purposes of this presentation I will over simplify the numerous forms of procurement that are broadly described as traditional or non-traditional.

Traditional
design – tender – build

Non-traditional
preliminary design – tender – complete design – build

Procurement of buildings and procurement of design services are intrinsically linked but need to be understood as different processes and will be discussed separately.

Construction Sustainable Procurement Guidance



Construction

Introduction

This briefing guide supplements the e-learning modules and should be read in that context. The information is for guidance only and appropriate advice, including legal support, should be taken before proceeding with specific actions.

The guidance follows the format of the e-Learning modules in providing suggestions in the following areas:

- Pre-procurement – policy context
- Pre-procurement - strategy
- Specification development
- Supplier selection *and* award, and
- Contract management
- Summary
- Useful links

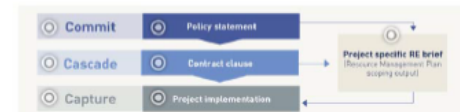
This document provides an action plan to assist procurers during the pre-procurement and procurement stages. The action boxes at the end of each section can be used to identify task relevant to a procurement stage.

The 'Introduction to Sustainable Procurement' e-learning module aims to help procurers understand the context and importance of embedding sustainability into public procurement. The 'Introduction to Sustainable Procurement' e-learning module it is available from:

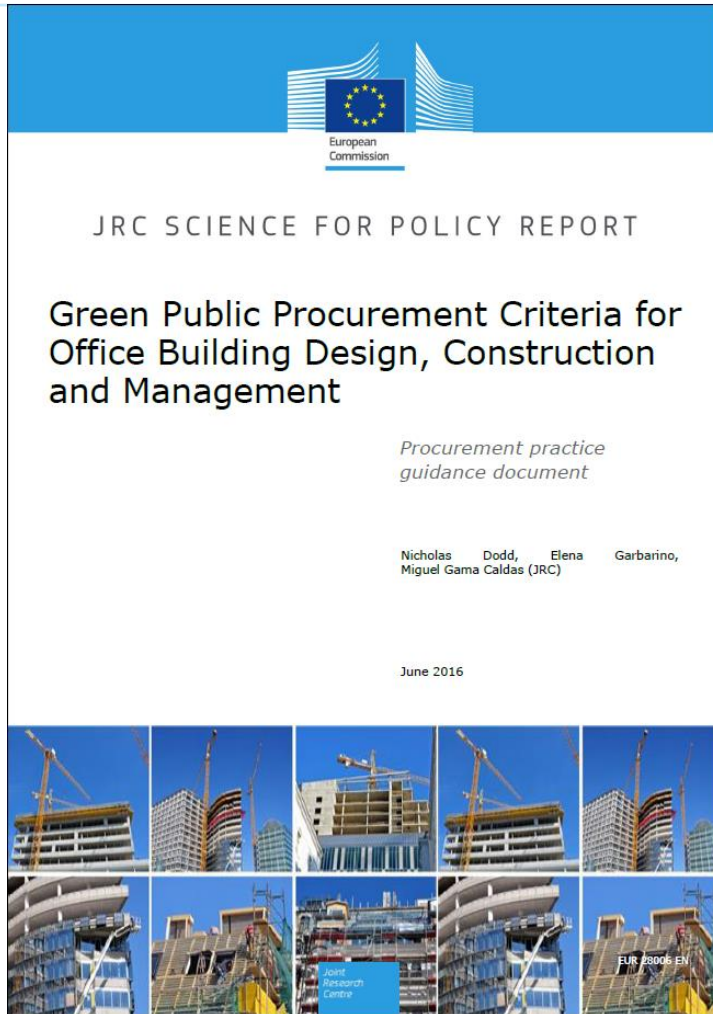
<http://www.resourceefficientscotland.com/resource/public-sector-procurement>

Complementary guidance – Procuring Resource Efficient Construction

As the e-learning modules emphasise, this guide complements Zero Waste Scotland's guidance 'Using the procurement process to drive resource efficient construction'. This focuses on creating a clear Policy Statement and Project Resource Efficiency Brief for the design and construction phases of a project. Further guidance is available for producing the Policy Statement, Resource Efficiency Brief, Cascading Requirements and Capturing Performance and Model Wording, which can be accessed at <http://www.wrap.org.uk/content/approach-procurement-resource-efficiency>. N.B. You should ensure that the guidance is relevant for the procurement you may be undertaking; for example reflecting relevance and proportionality and the use of a standardised PQQ (sPQQ).



Sharing the Information for GPP in Construction and Housing Sector



Global Review of Innovation Intelligence and Policy Studies

Ministudy 12

Sustainable Construction and Public Procurement:
Examining the Scope for a Clean Buildings Directive

Jennifer Hayden, John Rigby, Roger Courtney, Pierre Bitard

A Project for DG Enterprise and Industry

Project coordinator:

Louis Lengrand & Associés



Project partners:

MIoIR
University of Manchester



ANRT (Association nationale de la recherche technique)



April 2010

Sharing the Information for GPP in Construction and Housing Sector

Improving the Environmental Health of Residents in Public Housing: The Procurement of Paints by Korea Land & Housing Corporation

COUNTRY: Korea

PROCURED GOOD: PAINTS

PROCURING ENTITY: KOREA LAND & HOUSING CORPORATION (A PUBLIC AGENCY)

SIZE OF CONTRACT BY PURCHASING ENTITY: SINGLE CONTRACT OF 74 BILLION KRW (74 MILLION USD)

OVERVIEW OF THE PROCUREMENT OF PAINTS BY KOREA LAND & HOUSING CORPORATION

This case study illustrates the shift to the procurement of green paints by Korea Land and Housing Corporation (LH), a government-owned corporation that is responsible for the maintenance and management of land and housing. LH carries out green purchasing of products intended for construction projects according to the "Act Promoting the Purchase of Green Products." This case study demonstrates how a public institution can make strides in reducing environmental impacts and decreasing health risks to residents due to the uptake of a mandatory policy on green purchasing.

In 2014, Korea Land and Housing Corporation procured 74 billion KRW in ecolabelled paint. The monetized environmental benefits generated from the purchase of ecolabelled paint by LH were as follows:

- **Reduction in harmful substances: 1,130,555,250 KRW**
- **Reduction in indoor air pollutants: 10,688,886,000 KRW**

The procurement of ecolabelled paints by LH thus amounted to environmental benefits valued at a total of 12 billion KRW.

Key Challenges

1. Challenges identifying green alternatives for required construction materials & lack of availability of these products in the marketplace: Often, purchasers find it challenging to identify whether eco-friendly versions of the required construction materials exist, and from where they can be sourced. Purchasers sometimes find that sustainable alternatives meeting the required technical specifications are not always available in Korea.

2. Lack of awareness and understanding of green purchasing amongst business units in charge of construction: KEITI often works with officers from Environment departments when accomplishing sustainable purchasing activities. These employees don't usually have the power to directly influence purchasing decisions on construction materials, as this is decided by the construction department. More education, outreach, and coordination with other departments is necessary to build awareness and comfort with green purchasing activities.

3. Lack of time and resources dedicated to GPP: Although all public-sector organizations are mandated to do GPP, the work can be overlooked in favour of competing priorities when demands on staff time and resources are high.

Key Success Factors

1. Mandate for GPP at national and institutional level: The "Act Promoting the Purchase of Green Products of 2005" established a clear legal mandate for GPP both at national and institutional levels. With this mandatory purchasing requirement set by the government, it has become easier for public organizations to implement GPP.

2. Development of a prequalified supplier pool by LH: The Korea Land & Housing Corporation developed an early green procurement plan, enabling the creation of a prequalified supplier pool for green products. The development of a supplier pool for green products was helpful as it gave suppliers a better understanding of purchasers' needs and thereby empowered them to supply quality products at a reasonable price. The supplier pool has also helped to increase the market share of green products. Finally, the supplier pool continues to facilitate the procurement of green construction materials by providing to buyers an exclusive list of green products and materials with detailed information on product features and environmental benefits.

3. Well established monitoring and reporting processes: Green procurement activities are monitored and evaluated on a regular basis by LH. Moreover, green procurement achievement is included as one of the key performance indicators at the Korea Land & Housing Corporation, which provides an incentive to achieve the targets.

Sharing the Information for GPP in Construction and Housing Sector

In 2015, the NHIS procured 3,697 indoor LED lights that carried an ecolabel. The monetized environmental benefits generated from the purchase of ecolabelled LED lights by the National Health Insurance Service were as follows:

- **Reduction in harmful substances: 4,399,430 KRW**
- **Reduction in the use of electricity (per product per year): 52,759,317**

The procurement of ecolabelled LED lights by NHIS thus amounted to environmental benefits valued at a total of 57,158,747 KRW.

Mitigating Climate Change Through an Efficient Use of Energy: The Procurement of LED Lights by Korea's National Health Insurance Service

COUNTRY: Korea
PROCURED GOOD: LED lights
PROCURING ENTITY: National Health Insurance Service
TOTAL VALUE OF ECOLABELLED INDOOR LED LIGHTS PROCURED BY PUBLIC AGENCIES IN KOREA: 700 million KRW (700,000 USD)

When purchasing Green products, public procurement staff refer to the following criteria:

- Certified or meeting the criteria set by the **Korea Eco-label** for the product or service in question;
- Certified or meeting the criteria set by the **Good Recycled Mark** for the product or service in question;
- In compliance with **other environmental criteria** set by the Ministry of Environment in consultation with the heads of relevant ministries.

RESULTS³²

Currently 16 LED light manufacturing companies carry ecolabel certification on their products. One company with ecolabel certification for LED lights supplied 3,697 LED lights to the National Health Insurance Service.

According to 2015 data, the total value of ecolabelled indoor LED lights procured by public agencies in Korea amounted to 700 million KRW (700,000 USD).

The progress report on green public procurement by KEITI (January 2015) stated that the environmental benefits gained from the purchase of ecolabelled LED lights by the National Health Insurance Service in 2015 were equivalent to a total monetary value of 57,158,747 KRW.

The monetized environmental benefits received from the switch to ecolabelled LED lights were broken down in the 2015 progress report on green public procurement as follows:

- **Reduction in harmful substances (per product): 1,190 KRW**
- **Reduction in the use of electricity (per product per year): 14,271 KRW**

As such, the monetized environmental benefits arising from the purchase of ecolabelled LED lights by the National Health Insurance Service in 2015 are as follows:

- **Reduction in harmful substances: 3,697 units x 1,190 KRW = 4,399,430 KRW**
- **Reduction in the use of electricity (per product per year): 3,697 units x 14,271 KRW = 52,759,317**

SPP/GPP Support for India

No.F.18/22/2017-PPD
Government of India
Ministry of Finance
Department of Expenditure
Procurement Policy Division

516, Lok Nayak Bhawan, Khan Market,
New Delhi Dated the 19th March, 2018

OFFICE MEMORANDUM

Subject: Task Force on Sustainable Public Procurement.

A presentation on Sustainable Public Procurement (SPP) was organized on 7th March, 2018 by Department of Expenditure (DoE) which was also attended by the representatives of Ministry of Environment, Forest and Climate Change (MoEFCC) and United Nations Environment Programme (UNEP). It was noted that over 40 countries have put in place sustainable procurement policies. Taking note of the potential for economic and environmental gains attained within India by adopting sustainable technologies in the procurement of LED lamps, Energy Star ratings of BEE, adoption of Life Cycle Costing in certain areas, etc., it is felt that more economic and environmental gains can be unlocked through development a Sustainable Procurement Policy in specific product groups/services/works that Government procures. The need for consulting and involving industry, strengthening the certification and eco labelling systems, developing tool kits for use of LCC in various sectors, training and capacity building of procurement officers, etc., were identified as areas for attention.

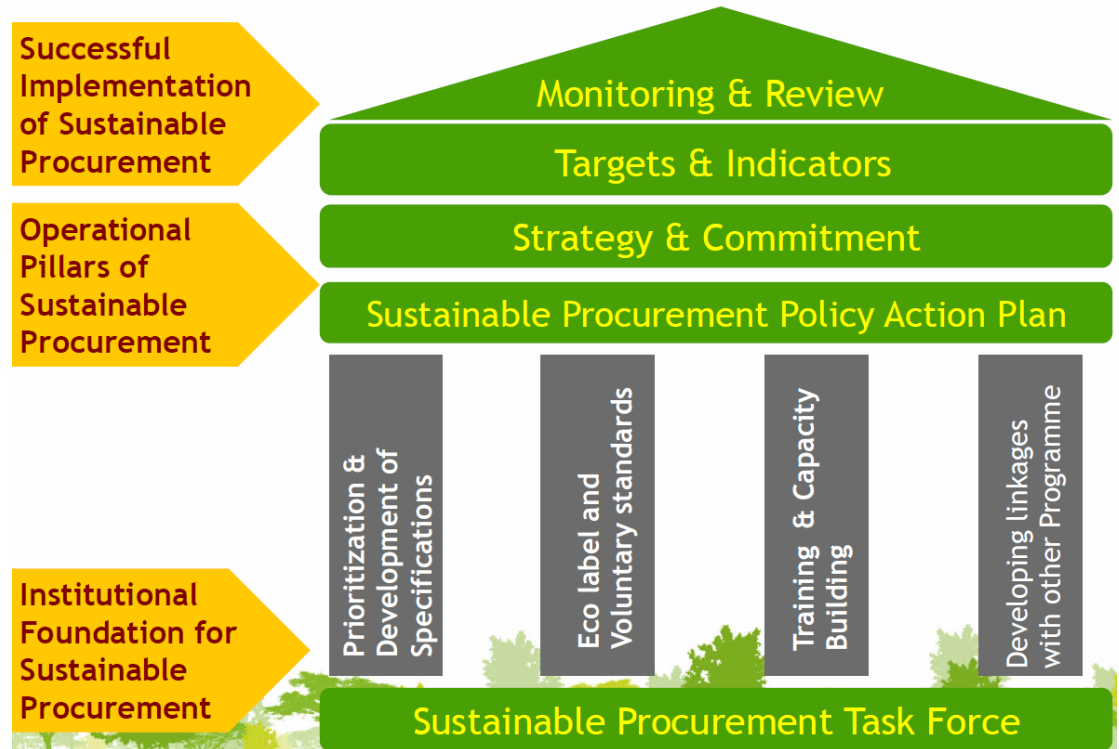
2. It is therefore decided to constitute a Sustainable Procurement Task Force with the following Terms of Reference (ToR):

- (i) Review International Best Practices in the area of SPP.
- (ii) Inventorise the current status of SPP in India across Government organizations.
- (iii) Prepare a draft *Sustainable Procurement Action Plan*
- (iv) Recommend an initial set of product/service categories (along with their specifications) where SPP can be implemented

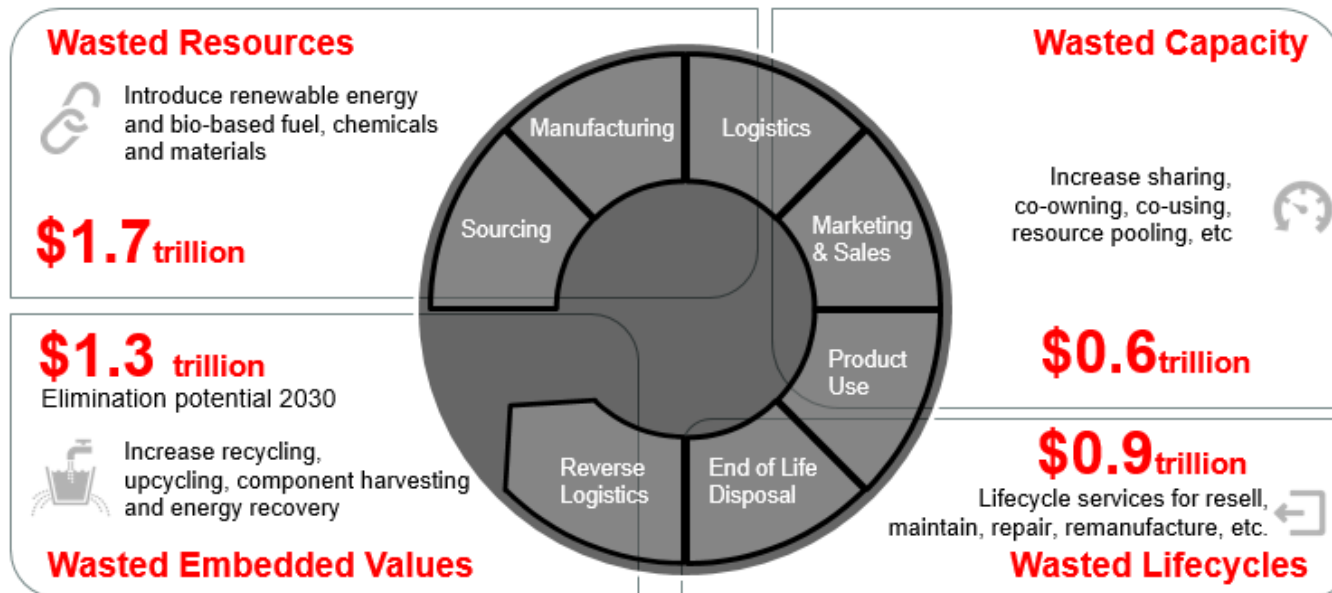
3. The composition of Sustainable Procurement Task Force shall be as follows:

- (i) Joint Secretary (PPD & PF C-II), Department of Expenditure, Ministry of Finance, Chairman.
- (ii) Representative of MoEFCC not less than the level of Joint Secretary
- (iii) Representative of Ministry of Railways (MoR) not less than the level of Joint Secretary.
- (iv) Nominee of CEO, GeM.

Sustainable Procurement Implementation Framework



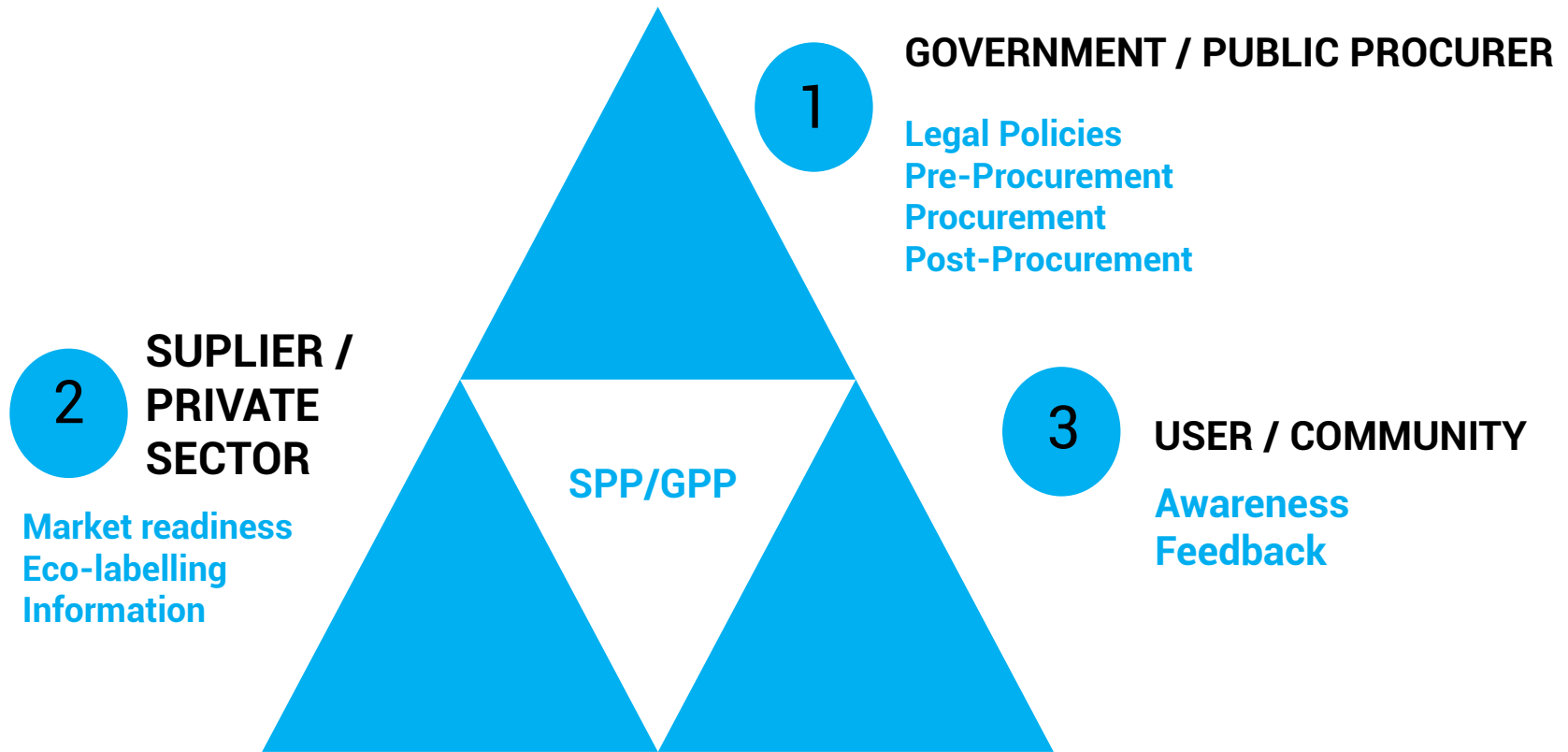
GPP for Promoting Circular Economy - India



- **Wasted resources** are materials and energy that cannot be continually regenerated, but instead are consumed and forever gone when used.
- Products with **wasted lifecycles** have artificially short working lives or are disposed of even if there is still demand for them from other users.
- Product with **wasted capacity** sit idle unnecessarily; for instance, cars typically sit unused for 90% of their lives.
- **Wasted embedded values** are components, materials, and energy that are not recovered from disposed products and put back into use.

Way Forward for GPP

INCREASE SYNERGY BETWEEN THE STAKEHOLDERS AND PARTNERS



TODAY'S WORKSHOP

- Review of “How to develop roadmap and action plan for SPP/GPP?”
Definitions,
Legal frameworks, and
Certification
Market readiness to respond to GPP
Capacity of public sector to develop and implement the process for various goods, services, works, and utilities in various sectors and at various levels of governments
- Deep dive to identify priority sectors for SPP/GPP (manufacturing, agriculture, transport, housing, energy, blue economy, tourism, etc.)
- To start cross-fertilization and cross-generation of knowledge for designing SPP/GPP based policies and practices to address specific sectors, products, services, works and utilities (groupwork)



Thank you!

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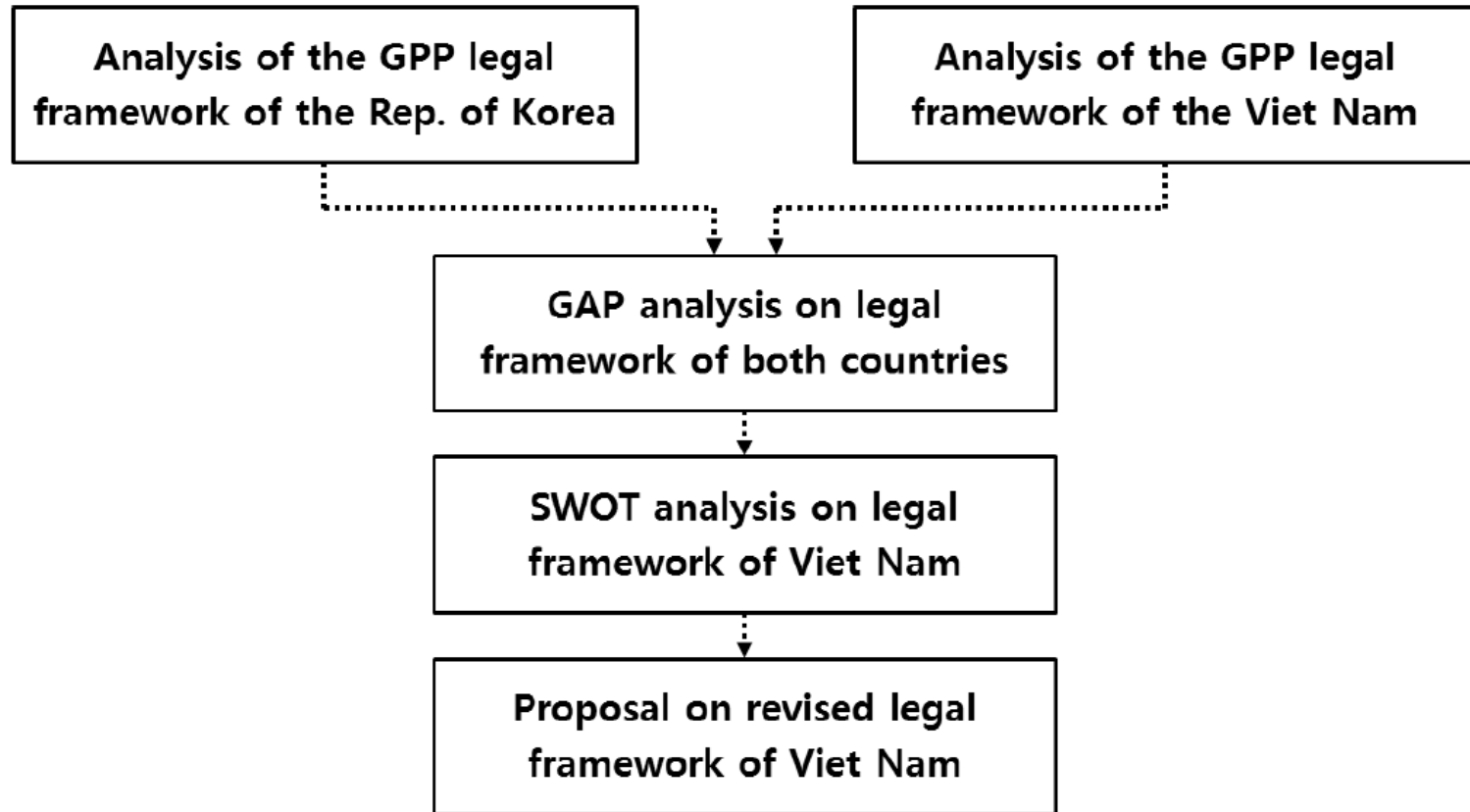


Sustainable/Green Public Procurement

Review of "How to develop roadmap & action plan?"

MUSHTAQ AHMED MEMON, PhD

Overview- Improving Policies and Legal Frameworks



Assessment of Policies and Legal Frameworks

Green Public Procurement of Viet Nam has relevant legal basis arising from the Law on Environmental Protection and the enforcement regulations of the Law on Environmental Protection being managed by the Ministry of Natural Resource and Environment (MONRE) in overall charge of environmental policies. In order to achieve effective implementation of these legal bases in Viet Nam at the policy level, it is essential to establish direct and indirect organic liaison between the Ministry of Finance (MOF) in charge of bidding and procurement, and the Ministry of Planning and Investment (MPI) in charge of national budget.

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

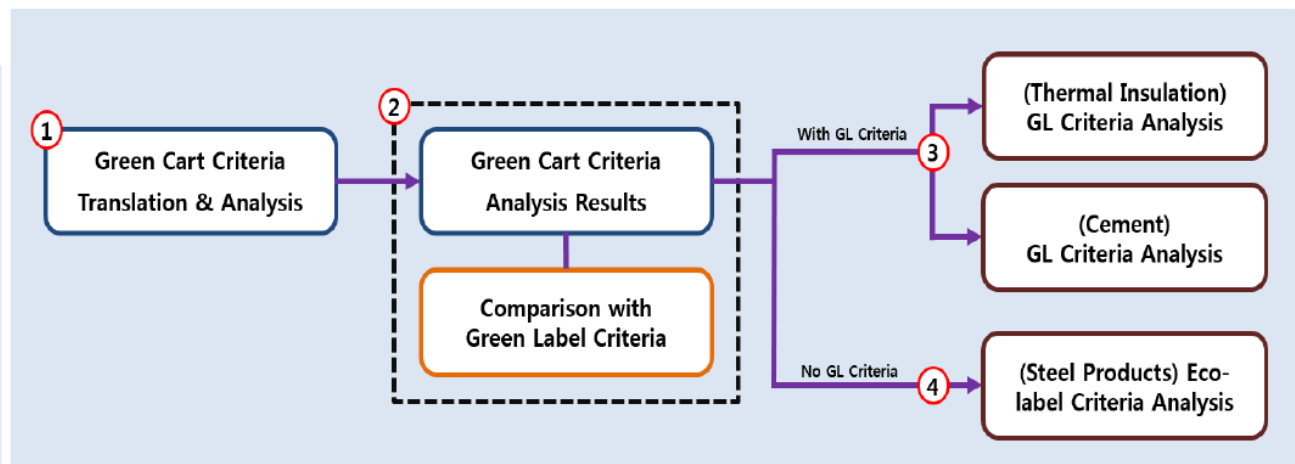
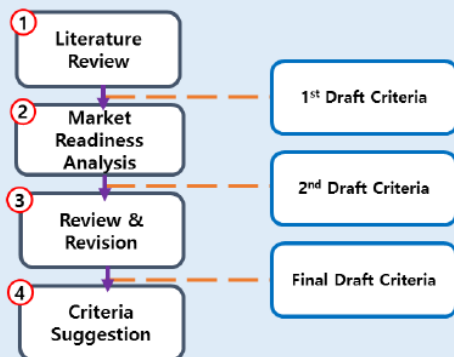
National Green Growth Strategy approved through the decision by the Prime Minister of Viet Nam (Nguyễn Tấn Dũng) on September 25, 2012 Viet Nam contains presentation of plans to proliferate information on environment-friendly products by promoting Eco-Labeling in order to promote sustainable consumption throughout all sectors of the society. Although a new Prime Minister of Viet Nam, Nguyễn Xuân Phúc, was formally elected as the successor of former Prime Minister, Nguyễn Tấn Dũng, who signed the said decision at the Parliament of Viet Nam in April, 2016, there is no change in the driving force for implementation of the existing National Green Growth Strategy. This report organizes and summarized relevant contents under the premise that the said Strategy is being pursued from the perspective of consistency of policies since mid to long-term strategies and visions up to 2020 and 2030 have already been presented.

Assessment of Policies and Legal Frameworks

Thailand is currently leading the implementation of Green Public Procurement within the region including accumulation of experiences through implementation over the last decade. It is assessed that stabilization of the system is in progress at the moment and establishment of foundation for new priority area in order to expand the system is required. Therefore, the implementing agency proposed expanded application of GPP for the construction sector of public organizations.

Focal point has been pursuing establishment of Technical Sub-committee to be in charge of establishment and examination of criteria for construction and building materials.

Establishing the foundation for selection of environment-friendly products by developing criteria for construction and building materials purchased frequently in the procurement market in Thailand.



Assessment of Policies and Legal Frameworks

The biggest stumbling block in succeeding policy level success of Green Public Procurement in Viet Nam is the lack of clear control tower for unification of opinions between the departments and ministries.

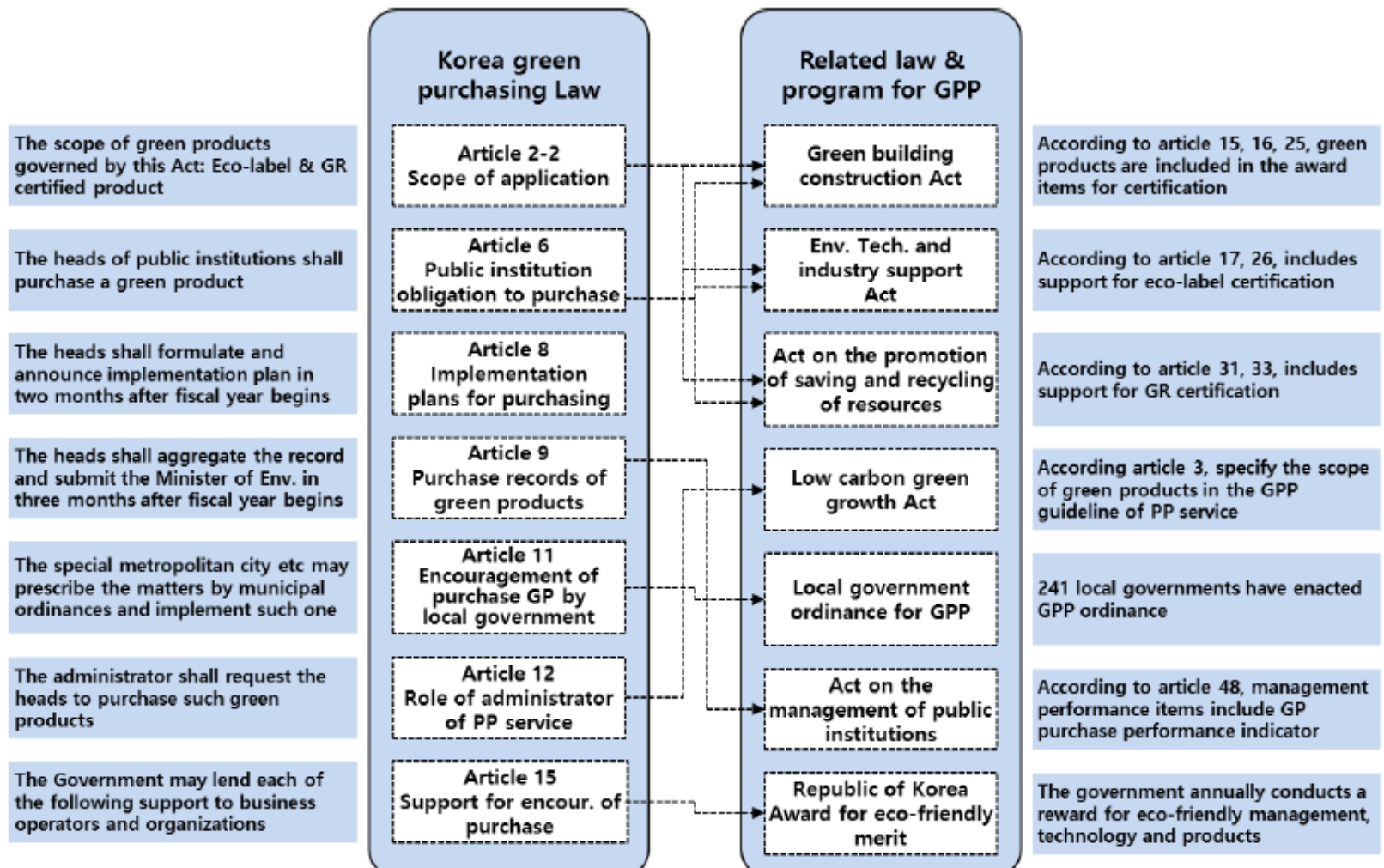
Accordingly, if introduction of Green Public Procurement policy in Viet Nam were to fail, this could induce the results of degrading the export competitiveness of products manufactured by export companies in Viet Nam.

In particular, under the current status of continued increase in the proportion of export in Viet Nam, if the product environment regulations of advanced countries cannot be coped with effectively, export competitiveness of the products can decrease significantly.

Organic association among the laws of relevant departments must be established in order for Green Public Procurement policy to be implemented successfully.

Roadmap to Improve Policies & Legal Frameworks

Benchmarking



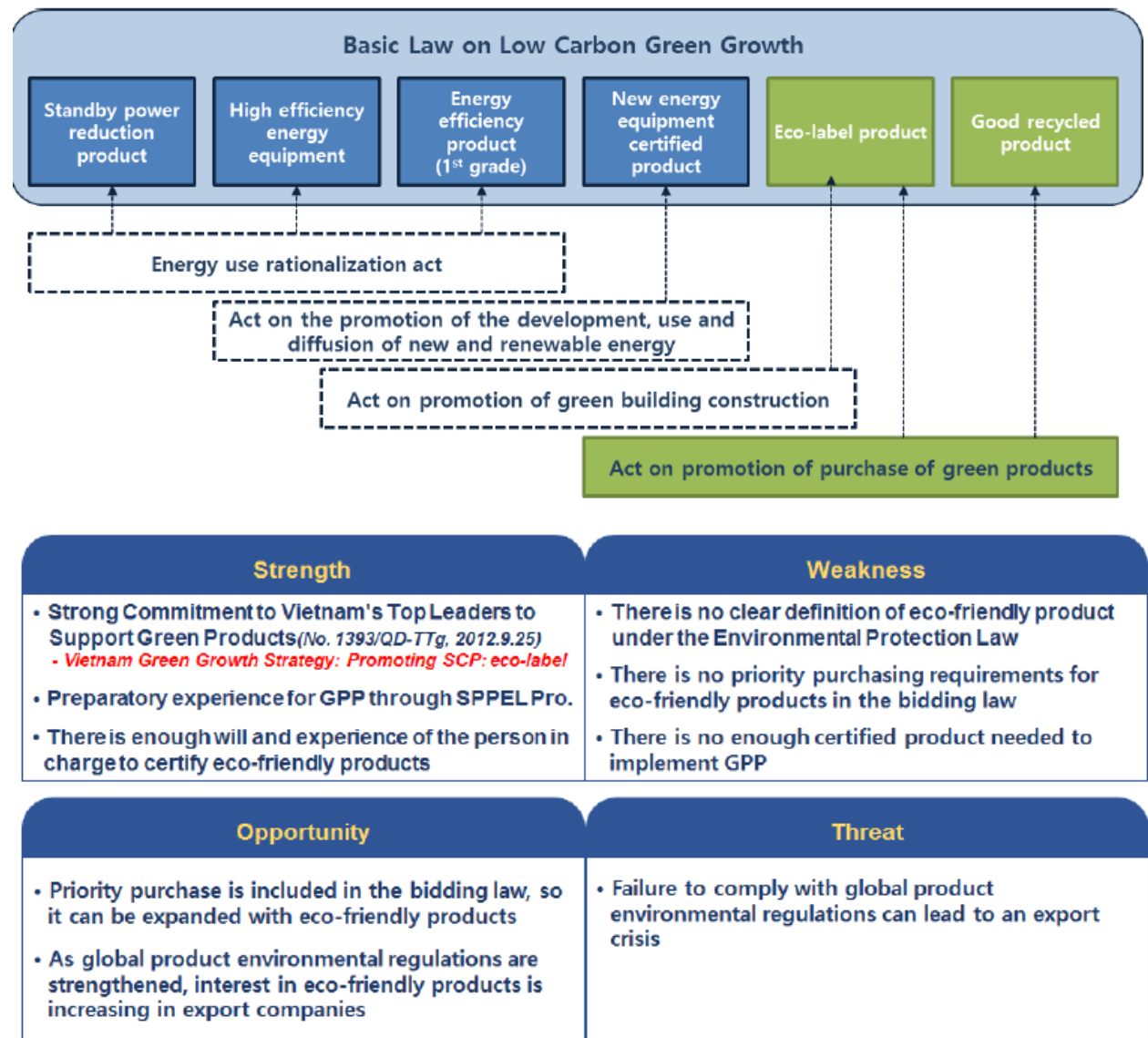
Roadmap to Improve Policies & Legal Frameworks

Criteria development

- 1) Product selection:** To select the designated products a list of top 20 highly purchased products is prepared with regards to the following aspects:
 - Technical aspects (processing with lower environmental impacts),
 - Environmental aspects (based on life cycle considerations), and
 - Economic aspects (availability of alternative products/services, availability in markets, high amount of purchase).
- 2) Literature review:** Staff from Environmental Quality and Laboratory Division and the Pollution Control Department conducts a literature review to collect information regarding national and international eco-labeling standards. These standards are further used to develop the green public procurement criteria.
- 3) Drafting criteria of product/service for green public procurement:** Draft criteria are proposed to the working group comprising of representatives from the Ministry of Natural Resources and Environment, Ministry of Industry, Thai Federation of Industry, Thai Chamber of Commerce and Thailand Research Fund after the preliminary selection of product categories and review of eco-labeling standards.
- 4) Formulating criteria for green public procurement:** The working group formulates green public procurement criteria for a designated product category as per the review of draft criteria

Learning – Case Studies

Comparative analysis of the legal systems of both countries will be carried out by executing SWOT analysis, namely, the factors of strength, weakness, opportunity and threat, in implementation of Green Public Procurement policy in Viet Nam on the basis of the contents of legal analysis on Viet Nam presented above and results of analysis of various policies and laws related to Green Public Procurement in Korea. Strength and weakness include the contents of analysis of internal factors while opportunity and threat include contents of analysis of external factors.



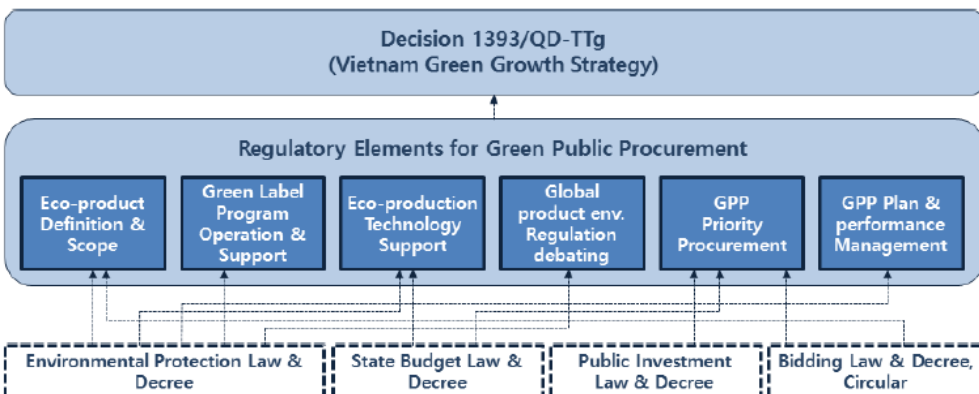
Learning – Case Studies

1) Proposal for revision of Law on Environmental Protection and Enforcement Decree of Law on Environmental Protection

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

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 eco-friendly products and services refer to those that reduce resource and energy consumption and reduce environmental impacts through the entire eco-label products system as the products and service that acquired Viet Nam Green Label certification.</u></p>	add the definition of eco-friendly products and services' that is one of key terms of GPP.
<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 eco-friendly products and services.</u></p>	add those paragraph in the regulatory policies and reflect the VEA's comment

<p>Article 44. environment-friendly production and consumption 1. (Skip) 2. Heads of agencies and units funded by the state budget <u>shall prioritize the use of eco-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 <u>shall prioritize the production and consumption of eco-friendly products and services</u> <u>a/ Heads of agencies and units funded by the state budget shall bear their responsibility to purchase eco-friendly products and services.</u> <u>b/ Heads of agencies and units funded by the state budget shall give financial incentives to eco- friendly products and services</u> <u>c/ 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 the Ministry of National Resources and Environment by the first quarter of next year, and the Minister of the Ministry of National Resources and Environment shall compile and disclose the results to the public.</u></p>	<p>add financial incentive as one of supporting items</p> <p>add management element on plan and results of GPP policy in Viet Nam</p>
<p>Article 152. Development and application of environmental protection sciences and technologies 1.-2. a/-b/ Skip</p>	<p>Article 152. Development and application of environmental protection sciences and technologies 1.-2. a/-b/ Skip <u>bb) Research, transfer, develop and apply eco-friendly technologies, products, raw materials and fuels;</u></p>	<p>add R&D support for eco-label in this article And reflect Mr. Nguyen Thi's comment</p>



[Figure 2-6] Proposal of the co-relationship between GPP-related laws in Viet Nam

Detailed Interventions

A. Bidding Law (No. 43/2013/QH13)

Current	Proposed draft	Reason for proposal
<p>Article 14. Preferences in contractor selection</p> <p>1. Skip</p> <p>2. Skip</p> <p>3. Entitled to preferences when participating in national bidding for provision of consultancy, non-consultancy and construction and installation services are:</p> <p>a/ Contractors with 25% or more of their employees being female;</p> <p>b/ Contractors with 25% or more of their employees being war invalids and people with disabilities;</p> <p>c/ Contractors that are small-sized enterprises.</p>	<p>Article 14. Preferences in contractor selection</p> <p>1. Skip</p> <p>2. Skip</p> <p>3. Skip</p> <p>a/ ~ c/ Skip</p>	

A. Decree under the National Budget Law (No. 163/2016/ND-CP)

Current	Proposed draft	Reason for proposal
<p>Article 3. State budget expenditures</p> <p>1. Development investment expenditures, including:</p> <p>a/-c/ Skip</p> <p>2. National reserve expenditures.</p> <p>3. Current expenditures for the following fields:</p> <p>a/ National defense;</p> <p>b/ Security and social order and safety;</p> <p>c/ Education-training and vocational training;</p> <p>d/ Science and technology; Viet Nam Law & Legal Forum 4</p> <p>dd/ Health care, population and family;</p> <p>e/ Culture and information;</p> <p>g/ Radio and television broadcasting and news;</p> <p>h/ Physical training and sports;</p> <p>i/ Environmental protection;</p> <p>k/ Economic activities;</p> <p>l/-n/ Skip</p> <p>4.-9. Skip</p>	<p>Article 3. State budget expenditures</p> <p>1. 1Development investment expenditures, including:</p> <p>a/-c/ Skip</p> <p>2. National reserve expenditures.</p> <p>3. Current expenditures for the following fields:</p> <p>a/ National defense;</p> <p>b/ Security and social order and safety;</p> <p>c/ Education-training and vocational training;</p> <p>d/ Science and technology; Viet Nam Law & Legal Forum 4</p> <p>dd/ Health care, population and family;</p> <p>e/ Culture and information;</p> <p>g/ Radio and television broadcasting and news;</p> <p>h/ Physical training and sports;</p> <p>i/ Environmental protection;</p> <p><u>ii/ eco-friendly product and service</u></p> <p>k/ Economic activities;</p> <p>l/-n/ Skip</p> <p>4.-9. Skip</p>	<p>identify expenditure items of env. protection</p>

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

Current	Proposed draft	Reason for proposal
<p>Article 6. Preferences in national bidding</p> <p>1. Skip</p> <p>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> <p>3.-4. Skip</p> <p>Article 12. Making of bidding dossiers</p> <p>1.-2. Skip</p> <p>3. For bidding packages to procure goods, criteria for evaluation of bid dossiers include:</p> <p>a/ Criteria for capacity and experience evaluation</p> <p>b/ Technical evaluation criteria</p> <p>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</p>	<p>Article 6. Preferences in national bidding</p> <p>1. Skip</p> <p>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 eco-friendly products and services</u> 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> <p>3.-4. Skip</p> <p>Article 12. Making of bidding dossiers</p> <p>1.-2. Skip</p> <p>3. Skip</p> <p>a/ Skip</p> <p>b/ Technical evaluation criteria</p> <p>Skip</p>	<p>add env. protection activities as one of elements on preferential treatment and Reflect Mr. Nguyen Thi's comment</p>

Detailed Interventions

Categories	Korea	Viet Nam	Comparison of levels
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	Difference in levels

[Table 2-13] Comparison of the criteria between Korean and Viet Nam (Detergent Powder)

① 1st certification criteria proposal for wooden furniture [Table 2-14]

Criteria	Standard suggestion
Recycling rate	70% or more as a mass fraction
Hazardous Substances	Prohibited Use of Hazardous Substances
Indoor air pollutants	Formaldehyde Emission $\leq 1.0\text{mg/L}$
FSC certification	Use FSC certified materials (FSC 100% / FSC Mix / FSC Recycled)

② 1st certification criteria proposal for computer monitor [Table 2-15]

Criteria	Standard suggestion
Synthetic resin	Do not use halogen-based synthetic resin.
Power Consumption	International Energy Star or Viet Nam Energy Star
Prohibited substance	Pb, Cd, Hg and compounds thereof, Cr6+ compound
	SCCP (PBBs, PBDEs, chlorine concentration 50% or more) (C=10~13)

③ 1st certification criteria proposal for air conditioner [Table 2-16]

Criteria	Standard suggestion			
Synthetic resin	Do not use halogen-based synthetic resin.			
Packing and packaging materials	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 $\leq 0.01\%$ (100 ppm)			
Energy consumption efficiency	Viet Nam 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			
	Pb: ≤ 1000 ppm Cd: ≤ 100 ppm Hg: ≤ 1000 ppm Cr6+: ≤ 100 ppm			
Hazardous Substances	Indoor Unit	Indoors: ≤ 55 Outdoors: ≤ 60		
	Noise [dB (A)]	Outdoor Unit	Indoor side: 55 or less Outdoor side: 65 or less	
		Indoor Unit	Rated cooling capacity 10 ~ 35kW Rated cooling capacity $\geq 35\text{kW}$	Indoor side: 55 or less Outside: 70 or less

Detailed Interventions

Category	NEW ZEALAND	MALAYSIA	BRAZIL	PROPOSED CRITERIA
Raw materials	Manufacturers using post-consumer scrap must implement procedures to exclude feedstocks containing undesirable materials, including: (1) Radioactive materials (2) Polychlorinated Biphenyls (PCBs)	The steel scrap substitutes and recycled feedstock shall not contain radioactive materials .	The company shall have procedures to identify and ensure the non-use of hazardous substances prohibited by law, as well as ascarel (PCBs) and radioactive materials .	The steel scrap substitutes and recycled feedstock shall not contain radioactive materials and polychlorinated biphenyls (PCBs)
		For steel products used in construction using Electric Arc Furnace, the ferrous feedstock shall contain a minimum of 88% steel scrap .		For steel products used in construction using Electric Arc Furnace, the ferrous feedstock shall contain a minimum of 88% steel scrap .
		For steel products for Basic Oxygen Furnace, the ferrous feedstock shall contain a minimum of 70% steel scrap .		For steel products for Basic Oxygen Furnace, the ferrous feedstock shall contain a minimum of 70% steel scrap .
			If using charcoal within its production process (as well as for the production of pig iron and other raw materials), the manufacturer shall ensure that the origin of the forest to be planted or legally authorized forests.	If using charcoal within its production process (as well as for the production of pig iron and other raw materials), the manufacturer shall ensure that the origin of the forest to be planted or legally authorized forests.

Figure 3-41 Analysis of Steel Bar-Related Eco-labeling Criteria (Abridged)

Homework

- Outline the detailed interventions to improve overall policies and legal frameworks for GPP
- Outline the sector specific policies and legal frameworks for GPP
- Outline the certification system
- Outline the details for the implementation of outlined improvements



Thank you!

Mushtaq Ahmed Memon, Ph.D

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Project Manager, Regional Policy Advocacy of EU-funded SWITCH-Asia Programme

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<https://www.unenvironment.org/regions/asia-and-pacific>