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**

- Environmental R&D
- Nurturing Environmental Industry
- Eco-labeling and Certification
- Sustainable Consumption & Lifestyle
- Environmental Health & welfare

**International Cooperation**

[Advisory Member logo]
Part 1

Korea’s Green Public Procurement System
Move toward Sustainable Consumption & Production

Global Context

Local Context

The Key is Sustainable Consumption & Production
Move toward Sustainable Consumption & Production

Local Context

57.9% High Interest
21.3% Low Purchase

INTEREST does not lead to PURCHASE because...
- Low Quality
- High Price
- Low Accessibility

GOVERNMENT’s ROLE is Vital.

Sustainable Consumption Policy
- Green Public Procurement
- Green Store
- Green Credit Card

Demands

Sustainable Production Policy
- Green Company
- Green-Up Program
- Eco Design Program

Supply
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

- 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
**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

<table>
<thead>
<tr>
<th>Product groups</th>
<th><strong>Korea Eco-Label</strong></th>
<th><strong>Good Recycled Mark</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Products</strong></td>
<td>165 categories including office equipment, construction materials</td>
<td>11 categories including waste paper, glass</td>
</tr>
<tr>
<td></td>
<td>4,210 companies, 16,130 products (As of October 2019)</td>
<td>191 companies, 220 products (As of October 2019)</td>
</tr>
<tr>
<td><strong>Certification Authority</strong></td>
<td>Ministry of Environment</td>
<td>Ministry of Trade, Industry and Energy</td>
</tr>
<tr>
<td><strong>Website</strong></td>
<td><a href="http://greenproduct.go.kr">http://greenproduct.go.kr</a></td>
<td><a href="http://buygr.or.kr">http://buygr.or.kr</a></td>
</tr>
</tbody>
</table>
## Non-exhaustive list of Green Products

<table>
<thead>
<tr>
<th>Office Equipment and Supplies</th>
<th>Office Equipment</th>
<th>Label paper</th>
<th>Document file</th>
<th>Copying paper</th>
<th>Toner cartridge</th>
<th>Writing materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric and Electronic Equipment</td>
<td>TV</td>
<td>Air Conditioner</td>
<td>Projector</td>
<td>DVD player</td>
<td>Computer</td>
<td></td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable supplies and etc.</td>
<td>Toilet paper</td>
<td>Detergent</td>
<td>Cleanser</td>
<td>Garbage bag</td>
<td>Disposable product</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Non-exhaustive list of Green Products

<table>
<thead>
<tr>
<th>Furniture and Equipment</th>
<th>Office furniture</th>
<th>Chair</th>
<th>Chair table</th>
<th>Water-saving device</th>
<th>Drainage pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block</td>
<td>Paper wallpaper</td>
<td>Wall finishes</td>
<td>Aluminum doors and windows</td>
<td>Aggregate</td>
<td></td>
</tr>
</tbody>
</table>

**Construction Materials**

- Flooring
- Paint
- Insulation
- Adhesive
- Soundproofing products
Working mechanism of GPP in Korea

Mistry of Environment &
Korea Environmental Industry
and Technology Institute

- Collate GPP plan and records
- Monitor and Evaluate the GPP result
- Establish mater plan for promoting GPP
- Establish guidelines and provide training

Public Procurement Service

- Request to purchase green products
- Expand foundation for electronic procurement of green products
- Designate green products as exemplary procurement goods

Public Institutions

- Establish and submit implementation plan & GPP records to MoE
- Implement GPP
- Designate GPP official
- Establish & implement municipal ordinances for GPP

Ministry of the Interior
and Safety
& Ministry of Strategy
and Finance

- Reflect the GPP records to performance assessment

Evaluate

Submit plans & records
Provide training & guideline
Submit the evaluation score

Submit GPP records via KONEPS
Provide Green products information
Supply Green Products via E-procurement System(KONEPS)

Procure Green Products via E-procurement System(KONEPS)
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

- 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 ≥ 50% or decreased by ≤ 30%

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

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

- 13 percent increase in revenue from 0.25 billion USD (2004) to 3.3 billion USD (2018)
- Increase from 1,536 products (2004) to 14,698 products (2018)
- Reduction in CO₂ emissions from 1,751,000 ton (2005-2018)

**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

As-is

Local govt. | Public authorities

To-be

Local govt. | Public authorities + Central govt. | Education Authorities

Expand the green product market

Develop new product groups

Facilitate the Green Public Procurement nationwide

Promote sustainable consumption via online platform

As-is

To-be

Promote sustainable consumption via online platform
Part 2
Asia Pacific Green Public Procurement Network
International Cooperation

- Coordination Desk of Sustainable Public Procurement Program (2014-2018)

  - (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
Asia Pacific Green Public Procurement Network

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)
Thank You very much!

Hyunju Lee
Senior Researcher
Sustainable Lifestyle Office
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

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.motiva.fi/en

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
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 - e.g. categorisation of procurement according to impact
How?

- Four phases.
- Not necessarily a linear flow: phases may overlap.
Phase 1: The need for impact assessment
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 (e.g. 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 achieving the strategic objectives of the organisation.
## Potential impact categories

### Potential impacts for procuring authority and client

<table>
<thead>
<tr>
<th>Category</th>
<th>Small</th>
<th>Moderate</th>
<th>Big</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity- /savings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvement of service quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on internal co-operation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on external co-operation (eg. Regional procurement bodies)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Business activity and competitiveness

<table>
<thead>
<tr>
<th>Category</th>
<th>No solutions ready</th>
<th>Testing required</th>
<th>Solutions available on the market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market readiness to meet the needs of the public sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The scalability of the solution</td>
<td>Small</td>
<td>Moderate</td>
<td>Big</td>
</tr>
<tr>
<td>Innovation potential for companies</td>
<td>Small</td>
<td>Moderate</td>
<td>Big</td>
</tr>
<tr>
<td>Growth potential for companies</td>
<td>Small</td>
<td>Moderate</td>
<td>Big</td>
</tr>
</tbody>
</table>
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

Input
Resources used

Output
Measurable work done

Outcome
The concrete change in people or structure

OBJECTIVE
Impact
Wellbeing and societal benefits

Wellbeing and societal benefits

THE CONCRETE CHANGE IN PEOPLE OR STRUCTURE

OBJECTIVE
Impact
Wellbeing and societal benefits
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

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion of occupational health</td>
<td>Number of absencies, results of annual questionnaires.</td>
</tr>
<tr>
<td>Promotion of the wellbeing of children, youth, families.</td>
<td>Number of unemployed youth, number of school dropouts, the psychosocial well-being of</td>
</tr>
<tr>
<td>Environmentally friendly and energy efficient building</td>
<td>Energy consumption, CO2 emissions from energy use, amount of construction material of renewable sources.</td>
</tr>
<tr>
<td>Low emission public transport</td>
<td>Fuel consumption, the amount of fuel from renewable energy sources, emissions of exhaust gases</td>
</tr>
<tr>
<td>Energy efficient lighting</td>
<td>Energy use during the life cycle, light output during lifecycle</td>
</tr>
<tr>
<td>Resource efficient waste management</td>
<td>Recycling rate for different waste fractions, amount of waste to landfill, client satisfaction</td>
</tr>
</tbody>
</table>
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 kinds 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 if 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
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!

Isa-Maria Bergman, Motiva

Isa-maria.bergman@motiva.fi
Sustainable/Green Public Procurement

Assessment Review and Prioritization of Sectors

MUSHTAQ AHMED MEMON, PhD
Designing Survey – Identification of Focal Point

<table>
<thead>
<tr>
<th>Country:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation/ Institution:</td>
<td></td>
</tr>
<tr>
<td>Name:</td>
<td></td>
</tr>
<tr>
<td>Position:</td>
<td></td>
</tr>
<tr>
<td>Contact details:</td>
<td>Email: Telephone:</td>
</tr>
</tbody>
</table>
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

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

<table>
<thead>
<tr>
<th>Options</th>
</tr>
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<tbody>
<tr>
<td>All national, state/regional, and local public authorities</td>
</tr>
<tr>
<td>All national and state/regional public authorities</td>
</tr>
<tr>
<td>Only national government public authorities</td>
</tr>
<tr>
<td>Some national public authorities</td>
</tr>
<tr>
<td>Others, please specify:</td>
</tr>
</tbody>
</table>

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

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<td>Water pollution</td>
<td>other environmental aspect, please specify:</td>
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</table>

[Logo and links]
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

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Cambodia</th>
<th>Vietnam</th>
<th>Thailand</th>
</tr>
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<tbody>
<tr>
<td>Green Public Procurement policy framework developed and implemented at the national level</td>
<td>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.</td>
<td>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.</td>
<td>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</td>
</tr>
<tr>
<td>Eco-labelling policy framework and regulatory measures implemented to assess and define green products (e.g. Eco-labelling scheme)</td>
<td>No measures in place.</td>
<td>No measures in place. Some sustainable criteria developed but there is no obligation for public procurers to integrate them into the public procurement procedures.</td>
<td>Measures in place. See comment above</td>
</tr>
<tr>
<td>Mandate and ownership for Green Public Procurement and Eco-labelling (GPPEL) has been assign to a designated ministry, and/or government agency</td>
<td>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 forseen that a future responsibility for GPPEL will lie NCSD and the Ministry of Environment.</td>
<td>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.</td>
<td>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</td>
</tr>
<tr>
<td>Overall readiness for the inclusion of GPPEL into national policies and regulatory frameworks</td>
<td>Low readiness. No plans in pipeline for the development of GPPEL initiatives.</td>
<td>Medium readiness. Plans in place include GPPEL into socio-economic development plans and regulations. A few volunatry sustainability criteria’s are already in place. However, this is not mandatory and the criteria's are usually neglected by procurers within the agencies.</td>
<td>High readiness. GPPEL included in existing policies and regulatory framework.</td>
</tr>
</tbody>
</table>
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

Support Establishment of Policy Implementation Basis
- Assist Establishment of GPP Criteria
  - Support establishment of criteria for GPP products
- 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
- Propose GPP Roadmap
  - Suggest short-term roadmap for transferring know-how and supporting implementation of GPP

Support Policy Implementation

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

Recommend GPP Incentive Mechanisms
- Recommend GPP incentives through benchmarking

Transfer of Know-how
- Host an event to support networking between Korea and Thailand experts

Assist Establishment of GPP Criteria
- Support establishment of criteria for GPP products

Awareness-raising & Public Outreach
- Hold events to promote GPP of construction & building materials

switchasia
Regional Policy Advocacy
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!

Mushtaq Ahmed Memon, Ph.D
Regional Coordinator Resource Efficiency, UN Environment - Asia and the Pacific Office
Project Manager, Regional Policy Advocacy of EU-funded SWITCH-Asia Programme
memon@un.org

https://www.unenvironment.org/regions/asia-and-pacific
Sustainable/Green Public Procurement for SDGs

Overview of Progress and Next Steps

Mushtaq Ahmed Memon, Ph.D.
Regional Coordinator for Resource Efficiency
UN Environment, Asia Pacific Regional Office
Project Manager Regional Policy Advocacy Component
(SWITCH-Asia – the European Union funded programme)
UN Building, Nok Avenue, Bangkok, Thailand
Email: memon@un.org
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
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
Growing population from 7 billion today to 9 billion by 2050

Economic development and increasing global trade

Growing middle-class with changing consumption 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).

1900: 7 billion tons
2005: 60 billion tons
2050: estimated 140 billion tons

*Materials = fossil fuels, minerals, metals and biomass.
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

- Resource decoupling
- Economic activity (GDP)
- Resource use
- Human well-being
- Environmental impact
JOURNEY FROM POLLUTION MANAGEMENT TO CIRCULAR ECONOMY 2.0

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

- 1970: Pollution dilution
- 2010: Circular economy
- 2010: Eco-industry/green industry
- 2010: Sustainable consumption and production
- 2010: Industrial symbiosis
- 2010: Clean production

From conventional approach to innovative concept toward sustainable development
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.”

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
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
• 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.
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)

<table>
<thead>
<tr>
<th>#</th>
<th>Evaluation criteria</th>
<th>Cambodia</th>
<th>Vietnam</th>
<th>Thailand</th>
<th>Lao PDR</th>
<th>Malaysia</th>
<th>Indonesia</th>
<th>Myanmar</th>
<th>Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Green Public Procurement policy framework developed and implemented at the national level</td>
<td>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.</td>
<td>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</td>
<td>Measures in place. GPPEL regulatory measures in place through the 12th National Economic and Social Development Plan (2017-2021), Environmental Quality Management Plan (2017-2022) and draft Thailand GDP Road Map 2017-2027</td>
<td>No measures in place.</td>
<td>Measures in place. GPP included in National Green Technology Policies (2009) and 13th Malaysia Plan 2016-2020. GPP is also included in the Ministry of Finance Procurement Circular (GPP) which was revised in 2015</td>
<td>Measures in place. GPP included in the National Midterm Development Planning Document 2015-2020 and Draft Presidential Decree on Sustainable Development Goals.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Eco-labeling policy framework and regulatory measures implemented to assess and define green products (e.g. Eco-labeling scheme)</td>
<td>No measures in place.</td>
<td>No measures in place. Some sustainable criteria developed but there is no obligation for public procurers to integrate them into the public procurement procedures.</td>
<td>Measures in place. See comment above</td>
<td>No measures in place.</td>
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<td>Measures in place. See above</td>
<td>N/A</td>
<td>N/A</td>
</tr>
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<td>3</td>
<td>Mandate and ownership for Green Public Procurement and Eco-labeling (GPPEL)</td>
<td>Responsibility not been assigned to a designated ministry, and/or government agency.</td>
<td>Responsibility been assigned to an agency. Ministry of Finance has an Procurement Office attached to the Cabinet of the Ministry.</td>
<td>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</td>
<td>Responsibility has been assigned. Ministry of Finance, Ministry of Energy, Green Technology &amp; Water, Economic Planning Unit of Prime Minister Department and Malaysia Green Technology Corporation.</td>
<td>Responsibility has been assigned.</td>
<td>Responsibility has been assigned. The lead agency is Ministry of Environment and Forestry</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>Overall readiness for the inclusion of GPPEL into national policies and regulatory frameworks</td>
<td>Low readiness. No plans in place for the development of GPPEL initiatives.</td>
<td>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.</td>
<td>High readiness. GPPEL included in existing policies and regulatory framework.</td>
<td>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.</td>
<td>High readiness. Mandatory for Federal Government Ministries and agencies and voluntary to state governments and local authorities.</td>
<td>High readiness. The 11th Malaysia Plan is targeting 30% GPP by 2020 and reducing up to 45% carbon emission intensity per GDP according to 2005 baseline.</td>
<td>N/A</td>
<td>N/A</td>
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<td>Score</td>
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<td>Total score</td>
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<td>6</td>
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<td>6</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Asia Pacific Roadmap on SCP

Training Manual for Green Public Procurement

Learning from Pilot Project Case Studies
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

5 May 2014

Subject: AIA BEMQ 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 Forgotten 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 present itself as a sophisticated player in the competitive arena of new-age Cities in South East Asia. Good design is fundamental to our international competitiveness.

Applications to use public procurement as a lever of government reform:

It has been recognised in UK government papers 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 issues 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 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.
Green Public Procurement Criteria for Office Building Design, Construction and Management

Procurement practice guidance document

Nicholas Dodd, Elena Garbarino, Miguel Game Cadbe (JRC)

June 2016

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 & Associates

Project partners:
MDIR
University of Manchester

ANRT (Association nationale de la recherche technique)
Sharing the Information for GPP in Construction and Housing Sector

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 ecotagged 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 ecotagged 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 KRW

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

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 South Korea.

RESULTS

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 KRW
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, 2016 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 of 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

- Monitoring & Review
- Targets & Indicators
- Strategy & Commitment
- Sustainable Procurement Policy Action Plan
- Prioritization & Development of Specifications
- Eco label and Voluntary standards
- Training & Capacity Building
- Developing linkages with other Programme

Institutional Foundation for Sustainable Procurement

switchasia  
UN Environment  
KEITI  

MANUAL FOR PROCUREMENT OF GOODS 2017
• **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

1. GOVERNMENT / PUBLIC PROCURER
   - Legal Policies
   - Pre-Procurement
   - Procurement
   - Post-Procurement

2. SUPPLIER / PRIVATE SECTOR
   - Market readiness
   - Eco-labelling
   - Information

3. USER / COMMUNITY
   - Awareness
   - Feedback
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!

Mushtaq Ahmed Memon, Ph.D.
Regional Coordinator for Resource Efficiency
UN Environment, Asia Pacific Regional Office
Project Manager Regional Policy Advocacy Component
(SWITCH-Asia – the European Union funded programme)
UN Building, Nok Avenue, Bangkok, Thailand
Email: memon@un.org

https://www.unenvironment.org/regions/asia-and-pacific
Sustainable/Green Public Procurement

Review of “How to develop roadmap & action plan?”

MUSHTAQ AHMED MEMON, PhD
Overview - Improving Policies and Legal Frameworks

Analysis of the GPP legal framework of the Rep. of Korea

Analysis of the GPP legal framework of the Viet Nam

GAP analysis on legal framework of both countries

SWOT analysis on legal framework of Viet Nam

Proposal on revised legal framework of Viet Nam
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/QD-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.
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

- The scope of green products governed by this Act: Eco-label & GR certified product
- The heads of public institutions shall purchase a green product
- The heads shall formulate and announce implementation plan in two months after fiscal year begins
- The heads shall aggregate the record and submit the Minister of Env. in three months after fiscal year begins
- The special metropolitan city etc may prescribe the matters by municipal ordinances and implement such one
- The administrator shall request the heads to purchase such green products
- The Government may lend each of the following support to business operators and organizations

Korea green purchasing Law

- Article 2-2 Scope of application
- Article 6 Public institution obligation to purchase
- Article 8 Implementation plans for purchasing
- Article 9 Purchase records of green products
- Article 11 Encouragement of purchase GP by local government
- Article 12 Role of administrator of PP service
- Article 15 Support for encour. of purchase

Related law & program for GPP

- Green building construction Act
- Env. Tech. and industry support Act
- Act on the promotion of saving and recycling of resources
- Low carbon green growth Act
- Local government ordinance for GPP
- Act on the management of public institutions
- Republic of Korea Award for eco-friendly merit

- According to article 15, 16, 25, green products are included in the award items for certification
- According to article 17, 26, includes support for eco-label certification
- According to article 31, 33, includes support for GR certification
- According article 3, specify the scope of green products in the GPP guideline of PP service
- 241 local governments have enacted GPP ordinance
- According to article 48, management performance items include GP purchase performance indicator
- The government annually conducts a reward for eco-friendly management, technology and products
路标以改进政策和法律框架

### 1) 产品选择：
为了选择指定产品，根据以下几个方面准备了前20个高购买产品列表：
- 技术方面（处理具有较低环境影响），
- 环境方面（基于生命周期考虑），以及
- 经济方面（替代产品的可用性，市场中的可用性，高购买量）。

### 2) 文献综述：
环境质量与实验室管理处和污染控制部门的工作人员进行了文献综述，以收集关于国家和国际生态标签标准的信息。这些标准进一步用于开发绿色采购标准。

### 3) 制定产品/服务的绿色公共采购标准：
草案标准被提交给由自然资源和环境部、工业部、泰国工业联合会、泰国商会和泰国研究基金会的代表组成的工作组，以便初步选定产品类别和审阅生态标签标准。

### 4) 制定绿色公共采购标准：
该工作组制定了针对指定产品类别的绿色公共采购标准，根据对草案标准的审查。
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

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

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed draft</th>
<th>Reason for proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Article 3.</strong> Interpretation of terms In this Law, the terms below are construed as follows. 1. – 29 (skip)</td>
<td><strong>Article 3.</strong> Interpretation of terms In this Law, the terms below are construed as follows. 1. – 29 (skip) <strong>add the definition of eco-friendly products and services</strong> that is one of key terms of GPP.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed draft</th>
<th>Reason for proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Article 5.</strong> State policies on environmental protection 1. – 11 (skip)</td>
<td><strong>Article 5.</strong> State policies on environmental protection 1. – 11 (skip) <strong>add those paragraph in the regulatory policies and reflect the VEA’s comment</strong>.</td>
<td></td>
</tr>
</tbody>
</table>

---

**Decision 1393/QD-TTg**

*Vietnam Green Growth Strategy*

---

**Regulatory Elements for Green Public Procurement**

- Eco-product Definition & Scope
- Green Label Program Operation & Support
- Eco-production Technology Support
- Global product-env. Regulation debating
- GPP Priority Procurement
- GPP Plan & Performance Management

---

**Figure 2-61** Proposal of the co-relationship between GPP-related laws in Viet Nam
## Detailed Interventions

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

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed draft</th>
<th>Reason for proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article 14. Preferences in contractor selection 1. Skip 2. Skip 3. Entitled to preferences when participating in national bidding for provision of consultancy, non-consultancy and construction and installation services are: a/ Contractors with 25% or more of their employees being female; b/ Contractors with 25% or more of their employees being war invalids and people with disabilities; c/ Contractors that are small-sized enterprises.</td>
<td>Article 14. Preferences in contractor selection 1. Skip 2. Skip</td>
<td></td>
</tr>
<tr>
<td>a/ ~ c/ Skip</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Article 3. State budget expenditures 1. Development investment expenditures, including: a/ National defense; b/ Security and social order and safety; c/ Education-training and vocational training; d/ Science and technology; Viet Nam Law &amp; Legal Forum 4 dd/ Health care, population and family; e/ Culture and information; g/ Radio and television broadcasting and news; h/ Physical training and sports; i/ Environmental protection; k/ Economic activities; l/ ~ n/ Skip 4/ ~ 9. Skip</td>
<td>Article 3. State budget expenditures 1. Development investment expenditures, including: a/ National defense; b/ Security and social order and safety; c/ Education-training and vocational training; d/ Science and technology; Viet Nam Law &amp; Legal Forum 4 dd/ Health care, population and family; e/ Culture and information; g/ Radio and television broadcasting and news; h/ Physical training and sports; i/ Environmental protection; j/ Eco-friendly product and service k/ Economic activities; l/ ~ n/ Skip 4/ ~ 9. Skip</td>
<td>Identify expenditure items of env. protection</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed draft</th>
<th>Reason for proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article 6. Preferences in national bidding 1. Skip 2. In case bid dossiers and dossiers of proposals of contractors are ranked equal, bid dossiers and dossiers of proposals of contractors with a total number of female employees or employees being war invalids or people with disabilities working under labor contracts of at least 3 months accounting for 25% or more, and of contractors being small-sized enterprises and who have governmental-approved eco-friendly products and services 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.</td>
<td>Article 6. Preferences in national bidding 1. Skip 2. In case bid dossiers and dossiers of proposals of contractors are ranked equal, bid dossiers and dossiers of proposals of contractors with a total number of female employees or employees being war invalids or people with disabilities working under labor contracts of at least 3 months accounting for 25% or more, and of contractors being small-sized enterprises and who have governmental-approved eco-friendly products and services 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.</td>
<td>add env. protection activities as one of elements on preferential treatment and Reflect Mr. Nguyen Th's comment</td>
</tr>
</tbody>
</table>
## Detailed Interventions

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

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Standard suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic resin</td>
<td>Do not use halogen-based synthetic resin.</td>
</tr>
<tr>
<td>Packing and packaging materials</td>
<td>The packaging damping materials, paints or pigments prepared by using more than 50% of the waste synthetic resin as a mass fraction are considered to have impurities and pollutants ≤0.01% (100 ppm)</td>
</tr>
<tr>
<td>Energy consumption efficiency</td>
<td>Viet Nam Energy Star</td>
</tr>
<tr>
<td>Refrigerant</td>
<td>The refrigerant has an ODP of 0, a GWP of 2,500 or less 80% or more as a mass fraction</td>
</tr>
<tr>
<td>Recycling rate</td>
<td></td>
</tr>
<tr>
<td>Prohibited substance</td>
<td>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</td>
</tr>
<tr>
<td>Hazardous substances</td>
<td></td>
</tr>
<tr>
<td>Noise [dB (A)]</td>
<td></td>
</tr>
<tr>
<td>Indoor Unit</td>
<td>Rated cooling capacity 10 - 35kW</td>
</tr>
<tr>
<td>Outdoors: ≤ 55</td>
<td>Indoor side: 55 or less</td>
</tr>
<tr>
<td>Outdoors: ≤ 60</td>
<td>Outdoor side: 65 or less</td>
</tr>
<tr>
<td>Outdoor Unit</td>
<td>Rated cooling capacity ≥35kW</td>
</tr>
<tr>
<td>Indoor side: 55 or less</td>
<td></td>
</tr>
<tr>
<td>Outside: 70 or less</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Standard suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling rate</td>
<td>70% or more as a mass fraction</td>
</tr>
<tr>
<td>Hazardous Substances</td>
<td>Prohibited Use of Hazardous Substances</td>
</tr>
<tr>
<td>Indoor air pollutants</td>
<td>Formaldehyde Emission ≤1.0mg/L</td>
</tr>
<tr>
<td>FSC certification</td>
<td>Use FSC certified materials (FSC 100% / FSC Mix / FSC Recycled)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Standard suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic resin</td>
<td>Do not use halogen-based synthetic resin.</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>International Energy Star or Viet Nam Energy Star</td>
</tr>
<tr>
<td>Prohibited substance</td>
<td>Pb, Cd, Hg and compounds thereof, Cr6+ compound</td>
</tr>
<tr>
<td>Prohibited substance</td>
<td>SCCP (PBBs, PBDEs, chlorine concentration 50% or more)</td>
</tr>
<tr>
<td>Category</td>
<td>NEW ZEALAND</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Raw materials</td>
<td>Manufacturers using post-consumer scrap must implement procedures to exclude feedstocks containing undesirable materials, including:</td>
</tr>
<tr>
<td></td>
<td>(1) Radioactive materials</td>
</tr>
<tr>
<td></td>
<td>(2) Polychlorinated Biphenyls (PCBs)</td>
</tr>
<tr>
<td></td>
<td>For steel products used in construction using Electric Arc Furnace, the ferrous feedstock shall contain a minimum of 88% steel scrap.</td>
</tr>
<tr>
<td></td>
<td>For steel products for Basic Oxygen Furnace, the ferrous feedstock shall contain a minimum of 70% steel scrap.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

[Figure 3-4] 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!

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Project Manager, Regional Policy Advocacy of EU-funded SWITCH-Asia Programme
memon@un.org

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