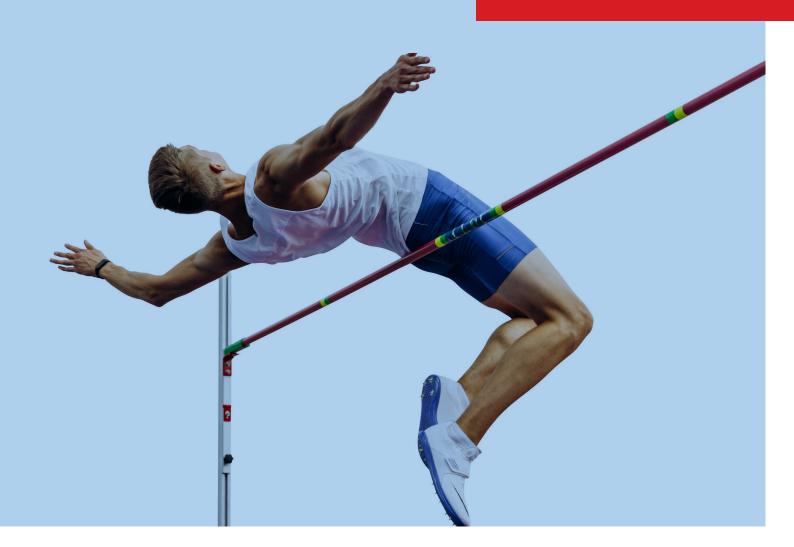
Barrier Analysis and Strategies for Ecolabels and Sustainable Public Procurement Implementation



Commonly encountered barriers and strategies for successful implementation







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Glossary

Ecolabel (Type 1)

Seal demonstrating the environmental credentials of a product or service. A Type I ecolabel is a voluntary, multiple criteria-based, third party-run environmental label indicating overall environmental preferability of a product within a particular product category based on life cycle considerations. Type 1 ecolabels fulfil the quality requirements of the ISO 14024.

External effects

External effects are benefits and costs which arise when the social or economic activities of one actor (e.g. a company) have an impact on another actor (e.g. surrounding communities), which is not accounted for nor compensated.

External costs (also negative externalities)

External costs occur when producing or consuming a product or service imposes a cost upon a third party (e.g. the general public or future generations).

Green Public Procurement (GPP)

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.

Life Cycle Assessment (LCA)

Method for the assessment of environmental impacts of products over the whole life cycle, i.e. raw material extraction, manufacturing, distribution, use and end-of-life. The methodological framework of LCA is specified by international standards ISO 14040/14044.

Life Cycle Costing (LCC)

Life cycle costing (LCC) is an assessment method including all costs related to the entire life cycle of a certain product. LCC thus includes not only purchasing costs (upfront costs) but also costs of installation, operation, maintenance and decommissioning.

Life Cycle Thinking

Life cycle thinking involves applying approaches that consider implications of consumption and production of products over their whole life cycle, i.e. raw material extraction for producing products, their manufacturing, distribution & transportation, use by consumers and disposal. In this way, life cycle thinking avoids "problem shifting from one life cycle stage to another, from one geographic area to another and from one environmental medium to another"².

Sustainable Public Procurement (SPP)

Sustainable Public Procurement (SPP) is generally understood to include environmental, economic and social objectives in the procurement of goods, services and works by public authorities.

Start-Up

A company in the first stages of operations, founded to develop a new product or service, generally starting with high costs and limited revenue.

Total costs of ownership (TCO)

The total cost of ownership (TCO) examines all costs associated with purchased goods and services throughout the entire supply chain. Total costs of ownership are typically calculated by the LCC method.

¹ European Commission (2014): What is GPP?; Available: https://ec.europa.eu/environment/gpp/what_en.htm; Accessed: 16.12.2020

² UNEP (2005): Life Cycle Approaches - The road from analysis to practice, UNEP/ SETAC Life Cycle Initiative, Available: http://www.unep.fr/shared/publications/pdf/DTIx0594xPA-Road.pdf; Accessed: 16.12.2020

Abbreviations

BAT	Best-Available Technology
CCC	Common Core Criteria
EPC	Energy Performance Contracting
EPD	Environment Product Declaration
EU	European Union
CI	Capital Investment
FSC	Forest Stewardship Council
GDP	Gross Domestic Product
GEN	Global Ecolabelling Network
GENICES	Global Ecolabelling Network's Internationally Coordinated Ecolabelling System
GPP	Green Public Procurement
ISO	International Organisation for Standardization
HFCs	Hydrofluorocarbons
HCFC	Hydrochlorofluorocarbons
LCC	Life Cycle Costing
LCA	Life Cycle Assessment
MEAT	Most Economically Advantageous Tender
MRA	Mutual Recognition Agreement
NGO	Non-Governmental Organisation
RAL gGmbH	Independent, non-profit private limited company responsible for checking compliance with the requirements of Germany's Blue Angel label
RE	Recurrent Expenditure
SCP	Sustainable Consumption and Production
SDG	Sustainable Development Goal
SEA	Southeast Asia
SME	Small and Medium-Scale Enterprises
SOP	Standard Operating Procedures
SPP	Sustainable Public Procurement
TCO	The Swedish Confederation of Professional Employees
VAT	Value Added Tax
WBCSD	World Business Council for Sustainable Development



Introduction

The objective of ecolabels and Green or Sustainable Public Procurement (SPP)³

is to influence consumption patterns to minimise the environmental damage caused by production of goods and services. However, this objective is, in many cases, jeopardised by obstacles in their practical implementation. The existence of ecolabel criteria or a SPP policy alone does not guarantee the success and market penetration of green products on an effective scale.

Experience with establishing and institutionalising ecolabels and SPP policies in Southeast Asia (SEA) have revealed repeatedly reoccurring barriers. Many of these barriers are relevant across countries and regions around the world. Thus, the experience gained in one country or region may be helpful to address similar barriers in other countries.

The following compilation of common barriers contains a short description of each challenge and possible strategies for successfully overcoming these, including references to further information and best practices. The strategies presented here are not exhaustive and originate from the authors' practical experiences in the field of sustainable product policy frameworks.

There is already a plethora of information and literature on best practices related to the implementation of ecolabels and SPP, for instance on the website of the UN One Planet Network⁴, the European Commission⁵ and the Global Ecolabelling Network (GEN)⁶. The authors therefore recommend visiting these knowledge platforms for more detailed information and best-practice examples from around the world.

³ We use the terms GPP and SPP interchangeably in this document. The term "Sustainable Public Procurement (SPP)" is being promoted by the UN One Planet Network and includes environment, social and economic considerations in the procurement procedures. In other contexts, the term Green Public Procurement (GPP) is used which entails environmental and economic considerations. In few cases, even social aspects are also considered within the GPP approach.

⁴ One Planet Network: Sustainable Public Procurement, https://www.oneplanetnetwork.org/sustainable-public-procurement; Ecolabels: https://www.oneplanetnetwork.org/initiative/working-group-2-Type I-ecolabels; Accessed: 16.12.2020

⁵ European Commission: Green Public Procurement: https://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm; Accessed: 16.12.2020

⁶ Global Ecolabelling Network: https://globalecolabelling.net/; Accessed: 16.12.2020

1

Understanding ecolabels and SPP: Key concepts



The basic concept of ecolabels and SPP relies on clear, verifiable, justifiable and ambitious environmental criteria for products and services, based on life cycle thinking and a scientific evidence base.

Before proceeding to the barriers and possible strategies, it is necessary to clarify a few common concepts and terms:

Type I, II & III labelling schemes:

A Type I labelling scheme represents "a voluntary, multiple-criteria based, third party programme that awards a license authorising the use of environmental labels on products indicating overall environmental preferability of a product within a particular product category based on life cycle considerations." They are commonly known as ecolabelling schemes, type I ecolabels, environmental label or simply ecolabels, the terminology used throughout this publication. Type I ecolabels must fulfil the quality requirements of the International Organisation for Standardisation (ISO) 14024:2018 (Environmental labels and declarations — Type I environmental labelling — Principles and procedures).

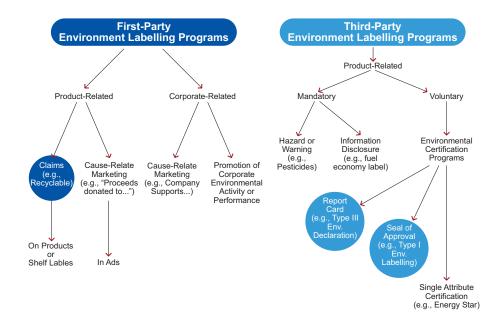
Type II claims are based on self-declarations by manufacturers or retailers. An independent third-party verification and certification is not required. ISO 14021 (Environmental labels and declarations — Self-declared environmental claims) specifies requirements for self-declared environmental claims, including statements, symbols and graphics, regarding products.

Type III environmental labels are declarations that indicate the environmental impact of products and services in a quantitative manner over the life cycle of a product. They are commonly known as Environment Product Declarations (EPDs). They should be subject to independent checking and presented in a clear and comparable format. Type III declarations are stipulated in ISO 14025 (Environmental labels and declarations — Type III environmental declarations — Principles and procedures).

1 Global Ecolabelling Network: https://globalecolabelling.net/; Accessed: 16.12.2020

Figure 1 - Classification of environmental labelling

Source: Global Ecolabelling Network (2021); https://globalecolabelling.net/what-is-eco-labelling/; Accessed: 23.06.2021



Voluntary instruments vs mandatory instruments:

Ecolabels are by nature voluntary product-related instruments. However, many companies see a market advantage for ecolabelled products and certify some or all their products to target environment- and health-conscious consumers.

SPP policies can be voluntary, mandatory or a mix of both. In some cases, SPP is mandatory at the national government level, and voluntary for regional and local public authorities. In other cases, municipalities and cities can also make SPP mandatory by passing corresponding local administrative laws. Furthermore, SPP policies could also be mandatory for certain priority product groups or for a single environmental or socio-economic issue"8.

Ecolabels and, in many cases SPP, target products that are performing best in their product class. Ecolabels normally target 20-30% of the premium products and services in the market. In contrast, SPP may not always be able to target the best available products in order to be able to receive sufficient number of offers from potential suppliers. Nevertheless, SPP still has the ambition to promote innovation by targeting second-best options. Thus, usually SPP criteria are less ambitious than ecolabel criteria.

An effective product environmental policy combines mandatory and voluntary instruments to drive innovations, foster the supply of sustainable products and forbid or discourage the supply of unsustainable products in the market. An example of a mandatory product instrument is the EU Ecodesign Directive, that aim to phase-out the worst-performing energy-using and energy-related products from the market. In the absence of mandatory instruments, effectiveness of voluntary instruments may be limited (Refer to chapter 4.1 for discussion on voluntary & mandatory instruments).

³ UNEP (2017): Global Review of Sustainable Public Procurement, https://wedocs.unep.org/bitstream/handle/20.500.11822/20919/GlobalReview_Sust_Procurement.pdf; Accessed: 16.12.2020

Multiple-criteria vs single criteria labels:

Type I ecolabels are multi-criteria labels, i.e. the criteria address several environmental aspects, such as greenhouse gas (GHG) emissions, energy consumption, resource consumption, toxicity, waste generation, air, soil and water pollution and more. Of course, not all environmental aspects must be addressed. A life cycle assessment of products is used to identify the most important aspects. In a transparent, multi-stakeholder process, the focus of ecolabel criteria can be limited to the major environmental hotspots of a product.

Single criteria labels address only one major environmental aspect of a product. For instance, the focus may be exclusively on energy consumption or GHG emissions. While the focus may express an important environmental dimension, there may be significant trade-offs in the apparent best choice. For example, purely energy consumption labels for air-conditioners ignore the high global warming of certain refrigerants, such as hydrofluorocarbons (HCFCs) and Hydrochlorofluorocarbons (HCFCs). Air-conditioners in Asian countries still rely heavily on HFCs and HCFCs as refrigerants. The most dominant refrigerant used in room air-conditioners is HCFC-22 with a Global Warming Potential (GWP) of 1760. Global commitments to tackling the ozone depletion potential of HCFCs have led to an increased use of HFCs. At the moment, a widely used alternative refrigerant to HCFC-22 is HFC-410a with a GWP of 1923.5 while few Asian countries have been opting for HFC-32 as an alternative refrigerant with a GWP of 677.

• Third-party award:

Reliability of certification systems depends on their independence from the product manufacturers to preserve neutrality and impartiality. Type 1 ecolabels are awarded by an independent and unbiased third-party organisation and are therefore recognised as the most reliable certification schemes. This is a major difference from the type II labels (self-declarations of companies) and type III schemes (where conformity or critical review is done by an independent organisation which, however, is contracted by the manufacturer of the product).

Self-declaration vs verification by independent third-party:

Within the ecolabel and SPP schemes, compliance with the criteria can either be verified based on self-declaration (e.g. by manufacturers) or by requiring proof of independent third-party testing and confirmation (e.g. energy consumption threshold, measured and confirmed by a certified, third-party laboratory). Industry self-regulatory systems have limitations in terms of their acceptance in civil society and among consumers. In general, third party verifications should be preferred over self-declarations. At the most, self-declaration can be used only in special cases to reduce the barriers for market access, for instance, for community-based small organisations and SMEs. For instance, the self-declaration mechanism could be applied in a multi-year umbrella contract for a few initial years of contract implementation, but then substituted by reliable, independent, third-party verification mechanisms.

· Life Cycle Approach:

In the field of product policy, use of the term product life cycle is very common. This approach means that all phases of a product life cycle, i.e. raw material extraction, manufacturing of components and sub-components, final product assembly, transportation, use, reuse, recycling and end-of-life, should be considered for the overall assessment of product environmental impacts and costs. Life Cycle Assessment (LCA) refers to the environmental assessment of a product over the whole life cycle, while Life Cycle Costing (LCC) refers to the methodology for calculating costs incurred by the product over the whole life cycle (e.g. purchase, maintenance, electricity, disposal costs).



2

Understanding ecolabels and SPP: Institutional set-up and stakeholders



Although there is ample literature on how ecolabels and SPP function, there is little understanding in many countries of the institutional requirements and participating stakeholders in ecolabels and SPP. Obviously, depending on the context, institutional set-up and stakeholders differ across countries. The following graphic (Figure 2) should help provide a theoretical understanding of key governance-mechanisms and stakeholders:

Institutional Landscape of SPP System (8) **Planning Ministry (6**) SPP SPP Central Proc. Agency **Ministry of Environment** SC (2) Ministry of Industry Labelling institution Others Other Ministrie TS M&V Branch Assoc. certified / recognised Tender + TS Local or nat. Manufacturers **Procurement** Product Greening Offer + Quality Infrastructure 3rd party verification

Figure 2 - SPP landscape and governance: An example

- **1. Manufacturers** are the target groups of these reforms. They are required to change from producing 'brown' to producing 'green' products.
- **2. Ecolabelling Institution** develops product-related criteria and establishes a third-party committee for ensuring the independent verification before awarding the ecolabel. Such institutions can have various legal forms. Usually, they are run by a public-sector institution that certifies products and services with an ecolabel. In few cases, ecolabelling institutions are also non-governmental organizations or private sector initiatives.
- **3. Consumers** with ecolabel awareness are critical for producer's interest in certification. Since ecolabelled products tend to be more expensive, the consumers' environmental awareness and their knowledge on ecolabel is essential. Different types of consumers are relevant: Private consumers, who purchase goods for the purpose of personal, family or household use, and organizational consumers, which consist of organizations, governments or businesses that mostly buy in bulk, in many cases in a tendering process. Business consumers can also operate in purely business-to-business purchases from pre-selected suppliers.
- **4. Quality Infrastructure** is essential for third party verification of product criteria. Quality infrastructure usually requires accreditation and calibrated testing instrument for various product groups.
- **5. Planning Ministry**, in SEA lead ministries develop top-level policies based on the SDGs, including Development Plans, SDG 12 (SCP) plans, road-maps or blue prints and at times SPP plans or road-maps, i.e. essential documents to enable line-ministries to develop a legal framework.
- **6. Line Ministries** are mandated to develop the legislative documents, such as SPP policies. Often the Ministries of Environment are mandated to develop these policies and green product criteria, while other line Ministries may be mandated to develop other sustainability criteria, e.g. social ones.
- **7. GPP/SPP Technical Committees** are platforms uniting relevant actors to negotiate SPP product criteria, often based on market studies or other product information sources. In many cases, SPP Technical Committees are supported by a smaller ad-hoc core-group, including external product-specific experts to develop the actual criteria.
- **8. GPP/SPP Certification** or endorsement of products and services by Ministries or Central Procurement Agencies are practiced in SEA to provide security to procurers. These products are often listed in online data-bases, directories and/or are marked.
- **9. Central Procurement Agencies** are generally procurer for the federal/ national government and responsible for purchasing across ministries and ministerial departments. One of the main tasks is to bundle purchases and process them centrally, which helps in saving funds of the federal budget. Central Procurement Agencies, in many cases, also standardize technical procurement requirement (e.g. standard technical specification, use of a type-I ecolabel as the means of proof of compliance etc.), which could be a useful strategy for enabling SPP. Centralizing and standardizing procurement procedures may also be helpful in establishing SPP monitoring systems.
- 10. GPP/SPP Steering Committees are platforms uniting relevant public actors to advance and shape SPP policies. The chairmanship of the lead Ministry is often essential to create consensus among conflicting interests within the government.
- 11. Capacity Development by trainings, product catalogues or procurement circulars are often used in SEA to develop the trust and competencies of procurers to implement GPP/SPP.
- 12. Tender processes using minimum green technical specification or green award criteria connect the procuring entity with the green products. Often ecolabel (see 2) or SPP certificates or marks (see 3) are used to verify compliance.



3

Underlining the role of ecolabels and SPP in the policy arena



Total governmental spending has a very high share of the national Gross Domestic Product (GDP). Governments in countries like Cambodia, Myanmar, Vietnam, Thailand, Malaysia and Bhutan spend between 20 and 40 % of the GDP. Thus, public procurement has a substantial economic and market power that creates a significant demand and shapes production. This market power and transformational potential make a strong case for embedding public procurement policies in high-level policy documents.

However, the road from the integration in high-level policy documents to implementation on the ground is long. There are a series of procedures that need to be developed and substantiated to operationalise SPP and ecolabels effectively. Furthermore, it is also extremely important to highlight the clear roles and responsibilities at the national, sub-national and municipality levels.

A simplified hierarchy of policy documents in which SPP and ecolabels should be mentioned is provided below.

- 1 High-level national planning documents, such as 5-year plans, socio-economic development plans, national development plans, national sustainability strategy, green deal;
- 2 National roadmaps and action plans for key areas, such as Sustainable Consumption and Production (SCP), green economy, circular economy;
- 3 National legislation, such as climate change act, circular economy act, environment protection act;
- National Action Plan for SPP, including targets and key performance indicators, e.g. by asking for the percentage increase in the use of ecolabels in SPP tendering;
- 5 Public procurement laws, regulations, bills and acts for implementing SPP at the national, sub-national and municipality level;
- 6 Public procurement standard operating procedures (SoP) and circulars;
- Sector and product-specific guidelines, criteria, tender examples.





Understanding underlying constraints towards a green or circular economy



Before proceeding to the specific barriers for SPP and ecolabels and describing possible solutions, it is necessary to clarify some underlying constraints that hinder the progress towards a Green or Circular Economy in general. Ultimately, ecolabels and SPP are addressing the symptoms of a deeply rooted market-failure that have allowed our take-make-dispose economy to continue.

4.1 Externalized costs in unregulated markets

The possibility to externalize costs to a third party and society in general (e.g. to future generations) in an unregulated market leads to an incentive to minimise private (marginal) costs (offer) and prices by manufacturers. External costs (also called externalities) are not part of the marginal costs of producers and suppliers (unregulated offer) and therefore lead to an incentive for higher resource use and environmental impacts compared to a situation in a regulated market that includes environmental legislation, regulations and functional compliance. Typical examples for externalities in the field of circular economy are situations in which waste, as an environmental externality, is unregulated. If, for example, hazardous waste is dumped into the environment, the environmental, social and health costs fire back in terms of polluted water and diseases in nearby communities. This means that one group (e.g. producers and users of products) can shift the burden of the waste to another group (e.g. local communities). Another typical example of a negative environmental externality is climate change itself as the costs do not occur today but in the future (see "The Economics of Climate Change: The Stern Review, 2006"9). In this context, the externality is intertemporal, meaning that the costs of the overconsumption today and its impacts are shifted to future generations. All highly CO2 intensive economic activities in today's mainly linear economies such as cement production for the building sector, CO2 emissions due to daily traffic or due to heating (in the North) and cooling (in the South) of buildings lead to high climate risks and costs in the future (increasing droughts, extreme heat or cold periods, rising sea water level, extreme loss of biodiversity, among others).

Many policy measures need to be applied to internalize such external (and hidden) costs, i.e. to ensure that products and services are sold at their "true prices" encompassing environmental and social costs (today and in the future). Examples include:

1 https://webarchive.nationalarchives.gov.uk/20100407172811/http://www.hm-treasury.gov.uk/stern_review_report.htm

- Price increases for products, works or services that lead to pollution (e.g. CO2 tax, tax on primary resources, CO2
 emission certificates, removal of subsidies for environment polluting sectors), thus disincentivizing poor production
 practices;
- Price incentives for environment-friendly products (e.g. tax reduction for repairs and repair businesses, reduced levies
 for environment-friendly packaging, eco-innovation funds and subsidies for the development of environment-friendly
 products);
- Implementing regulatory legislation that limits the negative impact of products effectively (e.g. minimum mandatory ecodesign standards, extended legal guarantees, extended producer responsibility);
- Decrease of subsidies that support polluting economic activities (e.g. subsidies on energy prices etc.) and contribute to a stepwise internalization of externalities. Many countries subsidise polluting activities (e.g. Malaysia and Thailand still have high subsidies on energy prices that make investments in energy efficiency measures less profitable). Examples from Germany and Europe are hard coal subsidies, subsidies for virgin plastics, aviation fuel tax exemptions or agricultural subsidies by the EU.

Voluntary labelling schemes per se do not have a large-scale direct market effect and hence, only have limited potential to effectively internalize externalities in the mass market. However, they need to be integrated in a mix of instruments within a product policy framework to achieve higher impact. Thus, they indirectly set standards that can be used for mandatory regulation in the future. Figure 3 shows the example of the EU product policy framework. Ecolabels and SPP are effective when integrated in a policy bundle of so-called push and pull instruments. Mandatory minimum requirements represent push measures that eliminate the poorest performing products out of the market (e.g. EU Ecodesign Directive). Pull measures, such as ecolabels and SPP, set incentives for producers to go beyond the mandatory minimal requirements. As budget for public procurement could represent as much as 30% in developing countries, there is a large potential to internalize externalities by including ambitious environmental and social criteria in the public procurement minimum technical specifications or as award criteria, in cases where market of green products is still in early stages. Once, SPP becomes mandatory, it becomes a standard for public procurement and unfolds more potential to internalize external costs. The criteria for SPP can be set in such a way that environmental and social costs are internalized to a large extent (e.g. only allowing products that have been produced using filter systems to control air pollution etc.).

Ecolabels can also be used in SPP and define ambitious requirements that indirectly lead to an internalization of costs (e.g. product take-back schemes, sound recycling etc.). As criteria of ecolabels target the best available products and technologies in the market, they provide an indication to the manufacturers of the mass market products that a future revision of the minimum mandatory standards, such as the EU Ecodesign regulation, may be closely aligned to the current ecolabel criteria. In this way, manufacturers of mass market products can start developing their future product portfolio and adapting supply chain management practices along the lines of the ambitious ecolabel criteria. Thus, ecolabels do help in transforming the markets towards more sustainability when they are embedded in a broader product policy framework and work in cohesion with e mandatory minimum environmental standards for products and SPP

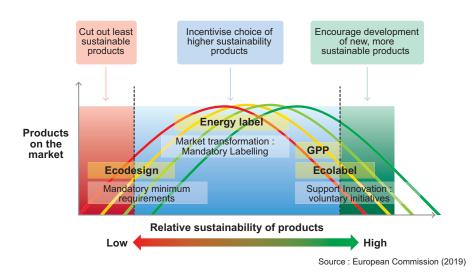


Figure 3 - EU Product Policy Framework

4.2 The split incentive dilemma

The so-called split incentive dilemma in environmental policies refers to situations in which different actors in markets have different incentives when it comes to the implementation of measures. A customer's primary intention is to reduce the product's acquisition cost, while receiving a product that meets or even exceeds the expectations (such as functionality, value, durability). Secondly, a customer may also wish to limit overall costs of ownership including follow-up expenditure after acquiring the product. However, these are often not considered explicitly or comprehensively during product purchase or procurement. Importantly, these ignored or 'hidden' costs can often exceed the acquisition cost. One example is the so called "owner-tenant" dilemma for energy efficiency investments in the building sector (see WBCSD 2009¹⁰). If there is no possibility of sharing the burden of energy efficiency investment, a building owner doesn't have an incentive to invest in energy efficient technologies, as the savings will only be reflected in the tenant's energy bill. In turn, if the responsibility for the energy bill falls to the owner, there is no incentive to save energy on the part of the tenant. Hence, there is a "split" incentive between the tenant and the owner and this can only be overcome if the burden is somehow shared between the two. Such misaligned incentive with regard to minimising the production costs instead of the full life cycle cost (LCC) for customers is a significant barrier to promoting greener products.

In general, to overcome this split incentive dilemma in a competitive market, the interests of both sides (producer vs. consumer; owner vs. tenant) must be better aligned in relation to performance and cost of products and services throughout the full product life cycle. In practice, there are different ways to achieve this:

Life-Cycle Costing (LCC): LCC can be applied in and considered as a criterion in SPP. It thus becomes part of the overall economic evaluation of an offer. For instance, new policy developments with regard to SPP from Germany show that within the new Climate Change Act (KSG, Chapter 5, §13), public procurers are obliged to prefer climate friendly products and are allowed to consider life cycle costs and economic costs of climate change in the procurement of goods and services. In the recent revision of the Climate Change Act, it is now possible in public procurement to use a CO2 price as the basis for calculating the avoidance or cause of GHG emissions in the economic feasibility study (CO2 shadow price). This allows the future costs of the investment or procurement to be calculated and considered at the decision-making stage. The revision states that at least the minimum CO2 price or fixed price specified for the respective year by the Fuel Emissions Trading Act (BEHG) for the sale of emission allowances must be applied. However, public bodies at the federal level are entitled to apply a higher CO2 price for the avoidance or cause of GHG emissions.

LCC can also be used for display in the retail sector. In this way, it can show expected future costs to the consumers and allows for better informed decision making.



Figure 4 - Example of Energy Saving Label in Japan

https://www.wbcsd.org/contentwbc/download/2067/26086/1

Product Service Systems (PSS): Suppliers retain ownership of the product over its life cycle and provide the benefits of the product as a service to the customer, in so-called product service systems (PSS). Product service systems are arrangements whereby suppliers do not market a product but a related service to the customer (e.g. leasing a bike, car, multifunctional device). Traditional forms of PSS include self-service laundries and libraries. In a PSS, suppliers have the incentive to design long-lasting products and provide repair & maintenance service, which may or may not be included in the price of the PSS. In this way, suppliers can provide a function that is in demand for as long as possible and draw maximum economic benefit out of the same product. For their part, the customers pay as they use and are cautious about reducing the costs. For instance, in 2012, the City of Zurich switched from buying (or leasing) multifunctional devices to procuring an optimized Output Management Service. Accordingly, the city paid only per page printed and did not invest in hardware. As a result, the city was able to drastically reduce its costs as well as the number of printed materials produced. It was calculated that the city was able to save 34 % energy and 30 million pages per year¹¹. PSS can be widely applied within the SPP system and ecolabels could be developed for the PSS to encourage their increased market penetration.

Energy Performance Contracting: Particularly in the building sector, split cost incentives can be overcome by energy performance contracting (EPC) models. EPC represents an arrangement where a contractor is commissioned to realise energy performance measures (e.g. in the context of building refurbishment) in terms of a fixed fee paid by the client (e.g. building owner). The energy savings are meant to finance the energy performance investments made by a contractor. The contractor therefore has an incentive to maximise energy savings and the split incentive dilemma is resolved. Recently, the MyRelamp Project in Malaysia implemented pilot projects for street lighting in four cities under the special consideration of financial incentive mechanisms, such as EPC and PSS (leasing).

¹ European Commission (2017): Public Procurement for a Circular Economy - Good practice and guidance, https://ec.europa.eu/environment/gpp/pdf/CP_European_Commission_Brochure_webversion_small.pdf, Accessed 01.12.2020



Resources / cases

1.

Examples of product policy approaches for internalizing externalities:

Sustainable product policy & ecodesign:

https://ec.europa.eu/growth/industry/sustainability/product-policy-and-ecodesign_en

European Environment Bureau (2020): Explained: Economic incentives to reduce waste, Available: https://eeb.org/library/explained-economic-instruments-waste-prevention/

Aligning Resource Efficiency and Economic Efficiency:

https://www.resourcepanel.org/sites/default/files/documents/document/media/unep_policy_brief_4_aligning.pdf Ellen MacArthur Foundation Delivering the Circular Economy – A Toolkit for Policymakers, Available: https://www.ellenmacarthurfoundation.org/assets/downloads/government/EMF_TFPM_FullReportEnhanced_11-9-15.pdf OECD 2020: Policy scenarios for a transition to a more resource efficient and circular economy, Available: https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/EPOC/WPIEEP(2019)11/FINAL& docLanguage=En

Alpizar et al. 2020: A framework for selecting and designing policies to reduce marine plastic pollution in developing countries, Available: https://reader.elsevier.com/reader/sd/pii/S1462901120301489?token=8122CE-86A92E531179DB08059D9811155DD8AD1990FA42D5029D4E548A5BDE8EF30C687C00802B80604C1B1AB-583CD35&originRegion=eu-west-1&originCreation=20210628125527

Good Practice example for incentivizing green street lighting in four pilot cities in Malaysia: MyRelamp; https://www.youtube.com/watch?v=avkfxTTZRDY

Federal Customs Administration (FCA), Switzerland: Incentive fee on volatile organic compounds (VOC), Available: https://www.ezv.admin.ch/ezv/en/home/information-companies/taxes-and-duties/importation-into-switzerland/incentive-fee-on-volatile-organic-compounds--voc-.html

2.

Examples of voluntary instruments addressing externalities

- a) Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU): https://www.bmu.de/themen/wirtschaft-produkte-ressourcen-tourismus/produkte-und-konsum/umweltfreundliche-beschaffung/b) Implications of voluntary certificates on externalities in the supply chains of cotton, palm oil and timber, see: Schleicher et al. (2020) Commodities that shape the world, chapter 3, https://www.oeko.de/fileadmin/oekodoc/BioMacht-guidance-document.pdf
- 3

Examples of Life Cycle Costing:

- a) European Commission: Life Cycle Costing, https://ec.europa.eu/environment/gpp/lcc.htm
- b) Prakash, S.; Schleicher, T.; Hilbert, H.; Priess, R. (2020) Implementing Sustainable Public Procurement (SPP) in Indonesia, Guidance document in support of the Presidential Regulation Concerning Government Procurement of Good/Services (No. 16/2018), Öko-Institut, Freiburg, Germany
- c) Ministry of Economy, Trade and Industry, Agency for Natural Resources and Energy: Japan's Policy on Energy Conservation, https://unfccc.int/files/bodies/awg/application/pdf/2_japan.pdf
- d) New policy developments with regards to GPP/SPP from Germany show that within the new Climate Change Act (KSG, Chapter 5, §13) life cycle costs (LCC) are to be considered.
- 4

Examples and studies on PSS:

- a) Agrawal, V.; Ferguson, M.; Toktay, B.; Thomas, V. (2011) Is Leasing Greener Than Selling? https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1061.921&rep=rep1&type=pdf
- b) European Commission (2017): Public Procurement for a Circular Economy Good practice and guidance, https://ec.europa.eu/environment/gpp/pdf/CP_European_Commission_Brochure_webversion_small.pdf, Accessed 01.12.2020
- 5.

Examples of EPC:

- a) European Platform for the Promotion of Energy Performance Contracting (EURO-CONTRACT): https://ec.europa.eu/energy/intelligent/projects/en/projects/eurocontract (Accessed: 16.12.2020).
- b) Information Platform on Energy Performance Contracting (EPC) by the German Energy Agency (dena): https://www.dena.de/en/topics-projects/energy-efficiency/buildings/refurbishment-strategies-and-the-real-estate-industry/contracting/ (Accessed: 16.12.2020).





5.1 Insufficient domestic manufacturing sector



In short

The development of a complete ecolabelling scheme including criteria development and related institutions may not be justified in small countries with an insufficient industrial base, e.g. countries with a predominantly agricultural or tourism sector.

Barrier

Ecolabelling schemes require substantial legislative, institutional and capacity development. A minimum industrial scope is required to justify the effort for the development of a type 1 eco label scheme. Smaller countries in SEA are characterised by a strong agricultural sector and an expanding tourism industry, while the manufacturing industries and other service sector entities are often either dominated by multinational corporations (e.g. the garment industry, component manufacturing for cars, electronics, among others). These economies lack sufficient domestic consumption and locally manufactured products to justify a fully-fledged ecolabel scheme.



Strategies for successful implementation

- 1. Creating a government endorsed and accredited directory of labels: To start with, smaller countries with an insufficient industrial base can develop a government endorsed and accredited directory of labels. Such a directory can be based on minimum environment criteria that need to be fulfilled by the labels to be eligible for listing. An advantage of this approach would be to avoid a proliferation of labels and the creation of a well-recognised national-level umbrella scheme which is better embedded in the local country context. The criteria can be set in such a way as to ensure the qualification of existing type I ecolabelling schemes from other parts of world and especially from the Asian region. This approach will have several advantages: strengthening existing ecolabel schemes by expanding their market share, reducing the burden and costs of developing new ecolabel schemes and setting incentives for the domestic industrial sector to apply for the ecolabel in order to make their products eligible for the directory. The last point would gain enormous importance and weight if the government-endorsed directory were to be linked legally to the public procurement regulations of the countries. For instance, public procurement regulations could make it mandatory to procure products, if available, from the directory. The responsibility of managing the directory could be taken up by national standardisation bodies or any other independent science-based institution available in all the countries. A good example of such a directory is the MyHIJAU Mark & Directory in Malaysia.
- 2. Linking agricultural products with the global certification and service sector: A distinct opportunity for ecolabel schemes in agriculture-dominated countries, is the targeted development of criteria for relevant agricultural products with a large export volume (e.g. palm oil, cotton, timber). Criteria for such products can often be derived from transnational sustainability policies, such as the Forest Stewardship Council (FSC). Furthermore, criteria for agricultural products can also be used in the domestic service sector, such as the catering business, hotels, restaurants, tourism, and cleaning services using certified products.
- 3. Regional ecolabelling schemes: The scope of the industrial base can be increased by uniting neighbouring economies. Regional (also called supra-national) ecolabel schemes could share the costs of scheme development, certification and marketing. This drastically reduces the administrative burden and allows for utilising specific competencies. Examples of regional ecolabel schemes are the Nordic Swan covering all Scandinavian countries and Alianza Ambiental de América involving Latin American countries Colombia, Costa Rica, Ecuador, Mexico and Paraguay.
- **4.Mutual Recognition Agreement (MRA):** If a national ecolabel exists or is being developed, another suitable strategy in countries with a weak industrial base is a mutual recognition agreement (MRA) of ecolabels with other countries in the region (that might have a larger industry base and related expertise). Weaker countries can thus benefit from the expertise, criteria development and tailored criteria of stronger countries' ecolabel programmes. In recent years, several countries in SEA have signed MRAs between their EL programmes.
- **5. Common Core Criteria (CCC):** An effective implementation of a mutual recognition programme is the development of common core criteria (CCC) between two or more ecolabel programmes. The aim is the formulation of common criteria for aspects of products that are similar or even mostly identical on international markets (e.g. information and communication technologies, lighting etc.). A full mutual recognition of either common core criteria or full criteria sets of ecolabel documents also includes the mutual recognition of verification processes. Based on CCC and MRA, SPP schemes used in countries with a weak industrial base could make use of criteria developed and implemented in other countries, thus reducing own efforts.



Resources / cases

1.

Example of a government-endorsed directory to promote the sourcing and purchasing of green products and services: https://www.myhijau.my/

2.

Example of ecolabels for the service sector:

- a) Blue Angel for Climate-friendly Grocery Stores: https://www.blauer-engel.de/en/products/business-municipality/climate-friendly-grocery-stores
- a) The EU Ecolabel for Tourist Accommodation Services: https://ec.europa.eu/environment/ecolabel/documents/tourist_accommodation_factsheet.pdf
- 3.

Examples for regional ecolabels:

a) Ecolabel Nordic Swan that includes all Scandinavian countries:

http://www.nordic-ecolabel.org/

- b) Ecolabel of the European Union (EU): https://ec.europa.eu/environment/ecolabel/
- c) South American ecolabel "Sello Ambiental":

https://www.oneplanetnetwork.org/initiative/driving-sustainable-consumption-latin-america-better-product-information-and-design

4.

Examples of Mutual Recognition Agreements (MRA) can be found at the German ecolabel scheme Blue Angel

- d) https://www.blauer-engel.de/en/blue-angel/who-is-behind-it/ipartners https://www.umweltbundesamt.de/en/press/pressinformation/blue-angel-cooperating-eco-labels-in-china-japan
- 5.

Examples and Guidance for Common Core Criteria (CCC):

- a) The Japanese ecolabel Ecomark elaborated Common Core Criteria with the German Blue Angel (for Printers and Copiers): https://www.ecomark.jp/about/mutual/
- b) The Global Ecolabeling Network (GEN) provides guidance on CCC development: https://globalecolabelling.net/eco/common-core-environmental-criteria/



5.2 Limited impact of ecolabel as a sole measure



In short

Available ecolabel criteria alone typically do not transform the market towards sustainable consumption and production.

Barrier

Ecolabel criteria target the best performing products and services in the market. As ecolabels internalize the external environmental costs in a better way than conventional products, they are generally but not always sold at a premium price to the consumers. Price-sensitive consumers are unlikely to consider ecolabels in their purchase decisions. Hence, the share of ecolabelled products in the mass market would inevitably be small and expected to target exclusive niche market products. Consequently, ecolabels, on their own, will have a limited potential in moving markets towards greater sustainability.



Strategies for successful implementation

- **1.Integration in the product policy framework mix:** Refer to the chapter "Externalized costs in unregulated markets".
- 2. Use of ecolabels and ecolabel criteria in SPP: Public authorities are major buyers. Public purchase of goods and services can range between 14 % to almost 30 % of a country's GDP. By using their purchasing power to choose environmentally friendly goods, services and works, public authorities can make an important contribution to sustainable consumption and production. In many cases, public authorities lack the know-how and resources to develop their own SPP criteria and to verify the compliance. In such cases, ecolabels offer a great opportunity, not only for the criteria development for SPP, but also as a form of proof of compliance verification. It is thus important to establish a clear legal framework that allows the use of ecolabels, for criteria development as well as one form of proof of compliance, within the SPP. Widespread use of ecolabel criteria in SPP processes enhances the indirect environmental benefits of the ecolabels and also increases their visibility as well as market share.
- 3. Linking ecolabels with individual and personal concerns of the consumers: Consumers are more conducive to voluntary ecolabels if they perceive a direct personal benefit in buying an ecolabelled product. In many countries, the number of people savvy about health and fitness continues to grow. People are concerned about the negative health impacts of chemicals and other harmful substances in the products. Thus, ecolabelled products, for instance in the field of cosmetics, household cleaners and personal hygiene, can be marketed as products providing direct individual benefits (e.g. protection against allergies and other side-effects). Beyond purely individual benefits, people are also concerned about their immediate environment. For instance, people in countries suffering from the impacts of deforestation, biodiversity loss and air pollution will be more inclined to contribute to local environmental protection. In these cases, marketing of ecolabelled products can be streamlined in accordance with the immediate concerns of the local population. Once the economies of scale for ecolabelled products is reached, costs of ecolabelled products are expected to fall. Governments can take the lead role in implementing public campaigns by involving well-known national role models (e.g. film stars, politicians, sportspeople) as ambassadors for ecolabels.
- **4. Linking ecolabels with a large-scale industrial sector:** In many industrial sectors, changes in production processes are necessary in order to achieve environmental impact reduction, as also agreed in the national and international agreements by the respective governments (e.g. Nationally Determined Contributions for reducing greenhouse gas emissions under the Paris agreement). Linking ecolabel criteria to a relevant industrial sector may help in increasing the uptake of ecolabel criteria and certification by the industry.

For instance, defining a minimum share of recycled content in ecolabel-certified cement for the construction sector could be an attractive proposition for the industry. Such a certification would serve as a direct way of communicating the GHG reduction achieved in the production processes. Thus, the industry can highlight its contribution to the achievement of national climate goals.



Resources / cases

1.

EU Product policy framework: COMMISSION STAFF WORKING DOCUMENT, Sustainable Products in a Circular Economy – Towards an EU Product Policy Framework contributing to the Circular Economy, European Commission:

https://ec.europa.eu/environment/circular-economy/pdf/sustainable_products_circular_economy.pdf

2.

Global example for the current use of ecolabels in GPP/SPP:

a) European Commission: Ecolabel and Green Public Procurement; https://ec.europa.eu/environment/ecolabel/ecolabel-and-green-public-procurement.html; OECD (2015): Going Green - Best Practices for Sustainable Procurement,

 $https://www.oecd.org/gov/ethics/Going_Green_Best_Practices_for_Sustainable_Procurement.pdf$

3.

Linking ecolabels with individual and personal concerns of the consumers:

a) Blue Angel for environmentally friendly sanitary recycled paper:

https://www.blauer-engel.de/en/products/home-living/sanitary-papers-toilet-paper-paper-towels-handkerchiefs

EU Ecolabel for personal care products and cleaning products:

https://ec.europa.eu/environment/ecolabel/products-groups-and-criteria.html

Blue Angel for environmentally recycled paper:

https://www.blauer-engel.de/en/products/paper-printing/recycled-paper-until-12-2020 Blue Angel for environmentally friendly wall paints: https://www.blauer-engel.de/en/products/construction-heating/wall-paints-indoor-159

4

Linking ecolabels with a large-scale industrial sector: GreenPro Certification Programme for construction and building sector, http://activeads.in/greenpro/products-standards.html



5.3 "Chicken and egg" problem



In short

Low demand for ecolabelled products by consumers leads to low incentives for companies to apply for and use ecolabels, and vice-versa. Thus, market penetration of ecolabelled products is stalled.

Barrier

Ecolabels need to be recognised and acknowledged by consumers as an important decision-making tool if they are to be attractive for companies to invest in the development and certification of green products. Even though consumers may be aware of ecolabels, in many cases, sole recognition does not lead to real purchases of ecolabelled products. The fact that companies do not offer and actively promote eco-labelled products leads to less overall awareness, and hence less demand by consumers. In a nutshell, low demand limits green offers on the side of companies, and low supply of green options leads to less awareness and demand on the part of consumers. Such a "chicken and egg" problem (also called "lock-in effect") constitutes a substantial market barrier for ecolabels.

Figure 5 - (Dis)incentives for ecolabels on the supply and demand side





Strategies for successful implementation

The following measures can contribute to overcoming the lock-in effect:

1. Interventions on the demand side: Government expenditure for products, works and services within SPP results in a large purchasing power (e.g. 14 % of EU GDP in 2016, in case of developing countries up to 30%). By integrating sustainability criteria set by ecolabels in SPP, demand for green products can be leveraged. This can lead to more confidence on the manufacturers side regarding (future and secure) sales volumes. For instance, EU procurement directives (2004/18/EC and Directive 2004/17/EC) allow for using Type I ecolabels as a source of for technical specifications, as a form of verification, and in the definition of environmental award criteria. So, in technical specifications or in award criteria, it is possible to ask that, for example, all notebooks meet the sustainability criteria of a Type I ecolabel for notebooks, or specify that products carrying the Type I ecolabel for notebooks will be deemed to comply with the requirements. Of course, any other appropriate and reliable means of proof will also have to be accepted.

Another example of promoting ecolabels through the GPP regulatory framework was shown by South Korea where GPP and the Korea Eco-label were introduced in tandem under the Act on Development and Support of Environmental Technology of 1994. This meant that the state agencies were recommended to give preference to products awarded the Korea Eco-label when making purchases. However, the uptake of ecolabels continued to be low. In 2005, the Act on Encouragement of Purchase of Green Products was passed. State organisations were obliged to submit an implementation plan on green purchases of the year and the performance records of the previous year. GPP was to be implemented in connection with the eco-labelling – i.e. Korea Eco-label and Good Recycled Mark to minimise the administrative costs. The products and services applicable for green public procurement are defined by the Act of 2005 as:

- ✓ certified or meeting the underlying criteria set by the Korea Eco-label;
- certified or meeting the criteria of the quality certificate for recycled products (Good Recycled Mark);
- complying with other environmental criteria set by the Ministry of Environment following consultation with the relevant ministries.

According to the Act of 2005, state agencies should purchase green products and services for which eco-label criteria exist. If the total amount of purchase exceeds a certain threshold, the purchase is commissioned by the Korea Public Procurement Service (PPS), the central public procurement agency. As a result, the number of products certified by the Korea Eco-label increased by a factor of 3.8 between 2004 and 2012; Total public expenditure on green purchases increased by a factor of 6.7 between 2004 & 2012.

- 2. Awareness campaigns: Awareness campaigns around ecolabels, linking major environmental problems with specific ecolabel criteria can contribute to stronger market demand. The German Blue Angel is a good example of how high awareness can translate into change in consumption behaviour. In 2020, almost 30 % of the respondents in the environmental awareness survey of the German Federal Environment Agency (UBA) mentioned that they purchase products certified with environmental labels, such as Blue Angel. Overall, the Blue Angel has a recognition level of over 90 % in Germany.
- **3. Interventions on the supply side:** Active product policy can address the specific sector needs of manufacturers and coordinate market entry by supporting new green products as well as ecolabels in a targeted manner. (Financial) support programmes, such as ecodesign competitions, ecolabel prizes, industry pledges and joint declaration of commitment between government & industries) can incentivize and flank the development of green products.



Resources / cases

1

Examples for the use of the ecolabel in SPP/GPP:

a) Official Website of the EU on GPP showing the use of ecolabels:

https://ec.europa.eu/environment/gpp/eco_labels.htm (Accessed: 16.12.2020)

b) Official Website of the Korean Ecolabel: http://el.keiti.re.kr/enservice/enpage.do?mMenu= 3&sMenu=1 (Accessed: 16.12.2020)

c) Information on GPP/SPP using ecolabels in South Korea on the One Planet Network Platform: https://www.oneplanetnetwork.org/initiative/green-public-procurement-republic-korea (Accessed: 16.12.2020)

2.

Example for awareness campaigns:

- a) The German ecolabel Blue Angel launched numerous awareness campaigns as well as special prices to market the label on the supply side, see https://www.ral-umwelt.de/wp-content/uploads/sites/5/2019/04/uba-40jahreblauerengel-publikation-en-web-1.pdf
- b) Marketing Guide for EU Ecolabel companies: https://ec.europa.eu/environment/ecolabel/documents/marketing_guide_en.pdf (Accessed 16.12.2020).

3.

Examples for interventions on the supply side:

- a) Competition on best ecodesign in Germany: https://www.bundespreis-ecodesign.de/en (Accessed 16.12.2020).
- b) Communication awards of the EU Ecolabel: https://ec.europa.eu/environment/ecolabel/awards.html
- c) European Citizen Prize: https://www.ekoenergy.org/european-citizens-prize-for-ekoenergy-ecolabel/



5.4 High certification costs



In short

High certification and third-party verification costs of the ecolabel, especially if there is little demand by customers, can hinder the supply of ecolabelled products.

Barrier

Ecolabelling of products often requires certification by accredited institutions and third-party verification. Criteria verification can be a lengthy and costly process, requiring elaborate and expensive testing equipment and laboratories. Limited availability of test infrastructure, especially of expensive testing machinery, can further increase costs. Finally, some tests require rather complex, lengthy and costly testing series.



Strategies for successful implementation

- 1. Graded certification fees on the basis of product sales: Typically, the usage fee of certification itself is not very expensive (e.g. EU ecolabel states 0.15 % of the annual turnover of the product in the European Economic Area, not less than 15,000 € and no more than 25,000 € + VAT per year). For the German Blue Angel, the awarding body RAL gGmbH charges a one-off fee of 400 EUR (plus the statutory level of VAT) for processing the application for the use of the Blue Angel ecolabel. After the conclusion of a contract on the use of the environmental label, a yearly fee based on a graduated scale is to be paid to RAL. The size of the fee is determined by the total yearly sales of all the products or services awarded with the environmental label in accordance with the corresponding Basic Award Criteria.
- 2. Reference to existing tests and international standards: The use of and reference to existing tests, international standards, and processes in ecolabel and SPP e.g. standards by the International Organisation for Standardisation (ISO), reduce adaptation and other transaction costs
- **3.Government support:** Governments can support the setting up of general testing and certification infrastructure, e.g. by independent public laboratories or supporting the establishment of independent private test laboratories and inspection authorities. Also, product criteria development can be supported by governmental agencies, lowering the overall costs. The introduction of base-funding for ecolabel institutions removes the necessity for certification fees by applicants. Special financial provisions can also be developed for SMEs.
- **4. Grace period:** Ecolabels and SPP product catalogues can introduce a grace period for certification fees and/or 3rd party verification to incentivize companies to join the ecolabel and SPP scheme. Example: The Thai government provides a grace period of 2 years for green products and services companies to enter the "Green Cart" which serves as the green product catalogue for SPP. To be listed in the Green Cart, companies self-declare their compliance with the criteria. Companies may be asked randomly to verify the compliance with the criteria. Sanctions apply in the event of false claims.



Resources / cases

1.

Example for reference to international test standards:

a) The German ecolabel Blue Angel often refers to ISO 17025 when setting requirements on testing institutions (e.g. RAL-UZ 204, Stationary Air Conditioners: https://produktinfo.blauer-engel.de/uploads/criteriafile/en/DE-UZ%20204-201608-en%20Criteria-2020-01-10.pdf) (Accessed: 16.10.2020).

2.

Example for funding options:

a) The cost structure of the EU Ecolabel and the German Blue Angel are explained here: i. EU Ecolabel: https://www.ecolabel.dk/en/become-certified/what-does-it-cost/eu-ecolabel

(Accessed: 16.12.2020)

 $ii. Blue\ Angel:\ https://www.blauer-engel.de/en/companies/costs-blue-angel-schedule-fees$

(Accessed: 16.12.2020)

3

 $\label{thm:cat-1-ssl} \mbox{Example of a grace period: Green Cart Thailand, $http://gp.pcd.go.th/cat-1-ssl.}$



5.5 Mismatch with supplier branding strategy



In short

Suppliers may be reluctant to market ecolabelled products alongside their conventional products for fear of jeopardising their overall product portfolio.

Barrier

Suppliers which have successfully established "conventional" products in the market have an interest in defending their market shares to lower their marginal costs. Consequently, R&D and marketing is typically focused on well-performing products rather than jeopardising the main business by introducing new 'green' products.



Strategies for successful implementation

Ecolabelling institutions can follow several complementary strategies to successfully introduce ecolabels/ ecolabel criteria when there is a risk of competition with existing successfully established conventional products:

- 1. Focus on progressive companies, SMEs and start-ups that target niche segments: In contrast to big companies with established product lines, smaller companies or start-ups often already have "greener" products competing in the same market. An ecolabel can provide an opportunity for these newcomers to gain product visibility and differentiation. Ecolabel criteria could be developed in close cooperation with such innovative companies, taking account of their capacities. Additionally, these companies and start-ups could also be supported through financial instruments, for instance eco-innovation funds, SME promotion, or Eco-design competitions and prizes.
- 2. Building trust through market dialogue: Some innovative larger companies are looking for new opportunities to achieve a competitive advantage. It is important to identify these companies. Based on a good market overview and knowledge of Best-Available-Technologies (BAT), a strategic dialogue on the stepwise product improvement towards BAT can be initiated with these companies. It is essential to involve progressive companies in the criteria-setting negotiation process, even if the achieving the level of ambition is low in the beginning. This process helps to build trust in the ecolabel allowing gradually increasing aspirations over time.
- **3.Measuring environmental benefits of the eco-labelled products:** More and more big market players, especially Multi-Nationals, are interested in monitoring their impacts in the context of the Sustainable Development Goals (SDGs). In contrast, market players are often not aware of the quantifiable environmental benefits of ecolabelled compared to conventional products. This can be a driver for companies to demonstrate their engagement and contribution towards achieving SDGs. Ecolabelling institutions should train their personnel in calculating the environmental benefits of ecolabelled products or use available scientific data and studies to communicate the environmental benefits of green products in the context of the SDG.



Resources / cases

1.

Focus on small companies and start-ups that target a niche segment

b) Blue Angel for Environment-friendly Toys (DE-UZ 207):

https://www.blauer-engel.de/en/products/home-living/toys; Accessed: 24.11.2020;

- c) German Federal Ecodesign Award: https://bundespreis-ecodesign.de/en;
- d) Eco-Innovation Funding Programmes of the EU:

https://ec.europa.eu/environment/ecoap/about-action-plan/union-funding-programmes_en

2.

Strategic dialogue with major market players: Refer to the TCO Certified label of the TCO Development for a good example: https://tcocertified.com/

3.

Measuring the environmental benefits of ecolabelled products: Prakash, S., Hilbert, I., Manhart, A., Rüdenauer, I. (2020). Methodological challenges for ecolabels in the Global Ecolabelling Network – Evaluation and traceability of critical raw materials and determination of quantitative environmental relief potentials, Öko-Institut e.V. commissioned by the German Environment Agency (UBA), Dessai, Website: https://www.umweltbundesamt.de/publikationen/methodological-challenges-for-ecolabels-in-the; Accessed: 24.11.2020



5.6 Fast innovation cycles



In short

Ecolabel or SPP criteria development and verification of compliance takes time. In industries with fast innovation and product cycles, such criteria can quickly become outdated and as a result, less effective in incentivizing green product development.

Barrier

Some product groups, such as smartphones, are characterised by short innovation cycles, the result of rapid technological advancements. In contrast, ecolabels and SPP criteria-making, certification and verification, can often take several months. Hence, short innovation cycles and lengthy administrative processes are at times incompatible.



Strategies for successful implementation

- 1. Dynamic criteria updates and supplemental certification for best in class products: Regarding rapidly changing product developments, dynamic criteria updates, or a supplemental certification with additional criteria to target best in class products could be a possible strategy to tackle this barrier. For example, TCO certified edge is a complementary certification to TCO certified, which is a type-I ecolabel based in Sweden. For displays, the TCO certified edge products must contain at least 85% recycled plastic, while there is no such requirement in TCO certified. Thus, TCO certified edge offers the possibility to showcase products that go beyond the TCO certified criteria, which in itself is an ambitious standard. In other cases, ambition of criteria can be raised periodically (e.g. every second year) in order to keep pace with the technological progress ("dynamic tier approach").ISO/IWA 19 Guidance principles for the sustainable management of secondary metals recommend ambition raising of criteria within tiers over time.
- **2. Multiple levels of ambition within the label:** Furthermore, changing levels of product sustainability can be considered by multiple levels of goals within an ecolabel scheme (e.g. bronze, silver, gold, platinum). If the levels are well designed, there is room for products to "move up the ladder" to the more ambitious categories over time.
- **3. Registry in combination with self-declaration:** In order to save time for the verification process, a registration system for manufacturers combined with a self-declaration that the criteria are met can be a suitable strategy (also called "declare and verify"-system). Upon request by a compliance body. However, the manufacturers must possess and provide evidence to support all declarations. In the event of non-compliance being proven, delicate sanctions for manufacture (including possible "shaming campaigns") are the consequences.



Resources / cases

1.

Example for dynamic criteria adjustment:

- a) Guidance principles for the sustainable management of secondary metals (ISO/ IWA 19:2017), : https://www.iso.org/standard/69354.html (Accessed: 16.12.2020)
- b) TCO certified Edge: https://tcocertified.com/tco-certified-edge/ (Accessed: 30.09.2021).

2.

Example for various levels of ambition in a label scheme:

- a) German Council for Sustainable Building (DGNB) displaying a bronze, silver, gold and platinum standard for Green Buildings is noteworthy: https://www.dgnb-system.de/en/system/ (Accessed: 16.12.2020)
- b) EPEAT Bronze, Silver, Gold for technology products such as mobile phones, imaging equipment, computers & displays https://www.epeat.net/about-epeat#accessing-epeat-criteria

3.

Example for a "declare and verify" system:

a) The US American Label EPEAT makes use of a "declare and verify" system: https://greenelectronicscouncil.org/epeat/manufacturers/ (Accessed: 16.12.2020)



5.7 Non-acceptance of non-state ecolabels



In short

Governments may be hesitant to support ecolabels that are run by non-state actors, because of collusion potential or simply mistrust.

Barrier

SPP can be used to stimulate the demand of ecolabels by either using them as source of SPP criteria or as proof of compliance in the procurement process. However, in some countries in SEA, ecolabels are hosted by NGOs or other private actors. Governments often lack trust in such ecolabels and fear adverse media reports if ecolabels are used as compliance proof, especially in view of potential collusion.

Figure 6 - ISO guiding principles for Type I ecolabels, irrespective of their ownership12

Table 2.IISO 14024 Guiding Principles:

Clause 5.1	Voluntary nature
Clause 5.2	ISO 14020 Principles apply
Clause 5.3	Applicants comply with environmental and other revelant legislation
Clause 5.4	Criteria development includes comprehensive life cycle consideration approach
Clause 5.5	Environmental criteria differentiate environmentally preferable products from others
Clause 5.6	Criteria based on indicators arising from life cycle considerrations. Criteria set as attainable and measurable levels
Clause 5.7	Fitness for purpose and levels of performance [of product] taken into account in developing criteria
Clause 5.8	Criteria are set with a predefined validity peroid; criteria and product function requirements are reviewed, and potentially revised, with in a predefined time peroid
Clause 5.9	Formal open participation process foe selection and review of product categories, environmental criteria and product function characteristics
Clause 5.10	All [product] environmental criteria and function characteristics are verifiable; compliance assessment incorporates generally acceptable standards and methods
Clause 5.11	Transparency exists through all stages of ecolabelling program development and operation; information on sighificant program aspects is available for inspection and comment by interested parties
Clause 5.12	Unnecessary obstacles to international trade don't exist
Clause 5.13	Application and participation is open to all potential applicants
Clause 5.14	Development and selection of criteria based on sound scientific and engineering principles
Clause 5.15	Program is free from undue influence
Clause 5.16	Any fees are kept as low as possible and applied equitably to all applicants and licensees
Clause 5.17	Confidentiality of pertinent information is maintained
Clause 5.18	Mutuak recognition is deemed desirable

² Source: Global Ecolabelling Network, https://globalecolabelling.net/about/iso-14024-definition-and-other-regulatory-documents/, Accessed: 16.12.2020



- 1) Educate public procurers to trust Type I ecolabels: Instead of focusing on the type of organisation running an ecolabel, emphasis should be placed on ensuring that ecolabels used in public procurement fulfil quality requirements. In general, the type I ecolabels enjoy a high level of trust in society. The quality requirement for type I ecolabels is defined in the ISO 14024:2018 Environmental Labels and Declarations—Type 1 Environmental Labelling. (see Figure 7) In a nutshell, type I ecolabels are based on scientific criteria developed from an assessment of all environmental impacts across the whole life cycle of products and services. The criteria are developed in a transparent and multi-stakeholder process. The compliance of products with these criteria is verified by qualified third-party organisations using generally acceptable standards and methods. Lastly, the label is awarded (even if by a non-state actor) indicating the overall environmental preferability within a product category. Thus, type I ecolabels can be run by state and non-state organisations alike but must meet specific criteria and thus merit trust for use in public procurement. For example, the EU Procurement Directives allow using all kinds of ecolabels, irrespective of their ownership if certain conditions are met, namely:
- the label requirements are based on objectively verifiable and non-discriminatory criteria;
- the labels are established in an open and transparent procedure in which all relevant stakeholders, including government bodies, consumers, social partners, manufacturers, distributors and non-governmental organisations, may participate;
- the labels are accessible to all interested parties;
- the label requirements are set by a third party over which the economic operator applying for the label cannot exercise a decisive influence.
- 2) Membership in the Global Ecolabelling Network (GEN): The Global Ecolabelling Network (GEN) is a non-profit association of third-party, environmental performance recognition, certification and labelling organisations to improve, promote, and develop the ecolabelling of products and services. GEN member programmes have attained the status of type I ecolabels according to ISO 14024. Thus, irrespective of the state or non-state status, ecolabelling schemes within the GEN fulfil highest-quality criteria and can be used in the procurement process for criteria development and proof of compliance. Furthermore, full GEN members also undergo a review process named GENICES (Global Ecolabelling Network's Internationally Coordinated Ecolabelling System), to test their adherence to ISO 14024 principles.



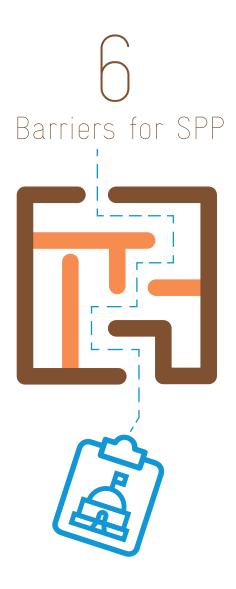
Resources / cases

European Commission: Ecolabel and Green Public Procurement, https://ec.europa.eu/environment/ecolabel/ecolabel-and-green-public-procurement.html

2. ISO 14024: Environmental labels and declarations — Type I environmental labelling — Principles and procedures, https://www.iso.org/standard/72458.html

3. Global Ecolabelling Network: https://globalecolabelling.net/





6.1 Insufficient support infrastructure



In short

Establishing SPP and ecolabels requires well-developed private and public sector support infrastructure and processes.

Barrier

SPP and ecolabels require a well-functioning support infrastructure, including test laboratories, harmonised technical standards, third party verification and auditing procedures. Furthermore, know-how in product selection and criteria development is required to enable informed policy decision making. If this conducive environment is missing or underdeveloped, the potential of SPP or ecolabel may stay unutilised.

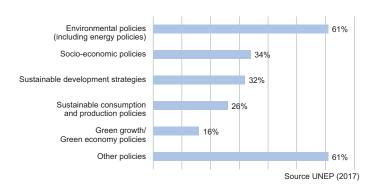


Developing a complete conducive environment for reliable product assessments, including the essential quality infrastructure, is a long-term process. It requires government support, which goes well beyond SPP and ecolabel development. It is possible, however, to take steps to achieve impact in a less-developed environment.

1. Linking SPP with high-level policy goals: Development of support infrastructure for product assessments can be stimulated by linking product policy instruments, such as SPP, with national development strategies, international agreements (e.g. Paris Agreement, Convention on Biological Diversity) and other policy goals (e.g. Socio-Economic Development Plan, National 5-year Plan, National Development Plan, 3Rs — Reduce, Reuse, Recycle, Air Pollution act, National Circular Economy Plan). In this way, players from the private sector, civil society and technical institutions can be mobilised to start developing new solutions and support infrastructure for product assessments. Of course, financial support from the government is critical, for instance in the form of funding for research and development, establishing technical standardisation committees and testing laboratories.

Figure 7 - Example showing linking SPP policies with high-level policy goals

Types of overarching & thematic policies that include SPP provisions



2. Starting with existing structures focusing on most relevant products: In a globalised world, consumption patterns and policies in one part of the world influence actions in other parts. Discussion on policies, measures and instruments to reduce negative environmental impacts of many globally traded commodities is not new and has led to international frameworks. For instance, the Forest Stewardship Council (FSC) has been initiated to reduce deforestation and land degradation in the global south and has spurred institutional change and formed new governance structures. Countries interested in exporting wood and wood-based products to the EU need to provide assurance of the legality of the logging activities and consideration of social, economic and environmental aspects. The obligation has led to the establishment of support infrastructure in the supplier countries, such as independent and accredited certification schemes, auditing procedures and technical standard documents. Thus, starting SPP and type I ecolabels can utilise the existing support infrastructure for a few selected product groups that are relevant to the national economy and international trade.

Experience suggests that institutions responsible for SPP and ecolabels are not always aware of the availability of technical standards, testing possibilities and independent verification mechanisms within their country or vicinity. In these cases, capacity building of SPP and ecolabel institutions is required to link criteria development with existing reliable means of verification in the countries.



- **3.Learning from friends:** In many countries, know-how and competencies for developing scientific and technical criteria for SPP and ecolabels might not be available. However, many other countries have already developed product-specific criteria for ecolabels and SPP. Using existing criteria can therefore serve as a starting point of discussion with national stakeholders and should focus on the ambition level and ensure local market compatibility. For instance, one level to decide on could be the percentage share of waste/recycled paper in paper products or the threshold of energy consumption in the use-phase of household appliances.
- **4. Market dialogue:** Transparent market dialogue and communication are important for stimulating the development of the support infrastructure for product assessment and verification. For instance, governments can inform the market players of their intentions to introduce or expand the scope of SPP and ecolabels for specific product groups well in advance. In this communication, the government can announce that independent, third-party certification will be the cornerstone for product assessments. Subsequently, market players will be invited to present their current approaches for reliable product assessments for selected product characteristics and environmental impacts.
- **5. Dialogue with accreditation bodies:** Many countries have established national accreditation bodies for certification of quality systems, products, services, environmental management systems and other programmes of conformity assessment. A dialogue with the national accreditation bodies helps to identify possibilities and limitations of existing certification and testing bodies. Such a dialogue can also be used to communicate the potential certification and testing requirements for SPP and ecolabels. In the absence of national accreditation bodies, government support is necessary to establish such a system at the country level. For SPP and ecolabels, technical support may be required to formulate exact requirements for certification and testing bodies for product assessments.



- Linking SPP with high-level policy goals
- a) Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU):https://www.bmu.de/the-men/wirtschaft-produkte-ressourcen-tourismus/produkte-und-konsum/umweltfreundliche-beschaffung/b) UNEP (2017): Global Review of Sustainable Public Procurement, https://wedocs.unep.org/bitstream/han-
- b) UNEP (2017): Global Review of Sustainable Public Procurement, https://wedocs.unep.org/bitstream/han-dle/20.500.11822/20919/GlobalReview_Sust_Procurement.pdf
- 2. Focus on most relevant products: Example: SVLK Indonesia's timber legality assurance system: https://www.flegtlicence.org/svlk-indonesia-s-timber-legality-assurance-system; TCO Certified label of the TCO Development for the focus on the IT-sector: https://tcocertified.com/
- o.
 Criteria Development: EU GPP Criteria: https://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm
- 4.
 Market dialogue: Example: European Commission GPP Training Toolkit, Module 6 on market engagement, https://ec.europa.eu/environment/gpp/toolkit_en.htm
- 5. Accreditation bodies: Example: International Accreditation Forum (IAF): https://www.iaf.nu/



6.2 Unclear reform mandate



In short

Unclear ministerial responsibilities may hamper the implementation of a greener, more sustainable procurement.

Barrier

SPP inherently is a 'green' reform and thus often mandated to the ministries responsible for environmental protection (e.g. Ministry of Environment). However, the Ministry of Environment has limited influence on the procurement processes and often lacks the coordination capacity to unite all public actors. To be successful, SPP needs to have an impact on general procurement practices, which are usually administered by Central Procurement Authorities. The budget for public spending is normally mandated to the Ministry of Finance whose main target is to ensure efficient use of taxpayers' money.

Finally, within the SPP system, product criteria setting requires industry market dialogues and green product development, including industry incentives, which is mostly led by the Ministry of Industries or the Ministry of Economic Affairs. Competencies and core interest for developing green product criteria generally lie with the Ministry of Environment or its subordinate bodies.

It is these multi-ministerial responsibilities and the complex and protracted nature of the GPP reforms that constitute a serious obstacle to the implementation in practice.

Agencies leading the implementation of SPP policies

Inter-ministerial or inter-agency committee

Procurement agency
With environmental responsibilities

Ministry or egency with social responsibilities

Ministry or egency with economic/ financial responsibilities

Ministry or egency with industry/ growth responsibilities

Other

25%

Figure 8 - Bar chart illustrating the involvement of multiple institutions in the implementation of SPP policies



Source UNEP (2017)

In general, SPP is incorporated with overarching high-level policy goals, procurement regulations and specific policies, to trigger the development and wider implementation. A wider implementation of SPP can be supported by:

- **1.SPP policy framework:** SPP needs to be incorporated in overarching high-level policy goals, procurement regulations and specific policies. Refer to the examples and hierarchy of policy documents that should entail clear references to SPP in the chapter "Underlining the role of ecolabels and SPP in the policy arena". This is generally the first major step to trigger the development and wider implementation of SPP reforms, such as setting targets, selecting priority product groups and designing a monitoring system.
- 2. Inter-ministerial steering committee: SPP requires substantial political will and inter-ministerial coordination if it is to be successful. As technical competencies for developing green criteria, access to manufacturers and industries and the mandate for implementing public procurement lie with different agencies, establishing inter-ministerial steering committees for SPP is indispensable. The inter-ministerial steering committee should consist at the very least of central procurement authorities, ministries of environment, finance, and industry/economic affairs. In many cases, a lead agency is dominant and coordinates the dialogue within the inter-ministerial steering committee. Considering the proximity of the central procurement agencies to the practice and implementation of SPP, they might be best suited to carry out this responsibility.
- 3.Technical committees and advisory groups: Technical committees, reporting to the above-mentioned steering committee, and informal ad-hoc advisory groups have proven to be beneficial in accelerating reforms. Such technical committees and the respective SoP have been developed in the Philippines. In Indonesia, a technical core group comprising experts from the Ministry of Finance, Ministry of Forestry & Environment, Central Procurement Agency and provincial government helped in successfully developing SPP criteria for photocopy paper and wooden furniture in 2020. Within the EU GPP system, the GPP Advisory Group is an expert group composed of representatives of the EU Member States, the industry association, the small and medium enterprises (SMEs) association, the European consumer organisation, the European environment organisation and a network of local and regional governments. The role of the Group is to provide advice to the European Commission on the development and implementation of GPP policies and criteria. It is important that such informal consultative groups are given clear mandates and a functioning coordination mechanism for contributing towards SPP development.



1

European Commission: GPP Good Practice - Implementing GPP Policies, https://ec.europa.eu/environment/gpp/case_group_en.htm; Accessed: 16.12.2020 a) "Ökokauf Wien" - Vienna's Sustainable Procurement Programme, GPP in Practice, Issue no. 51, May 2015,

https://ec.europa.eu/environment/gpp/pdf/news_alert/Issue51_Case_Study106_Vienna_Okokauf.pdf Greening public procurement in the Basque Country, GPP in Practice, Issue no. 73, July 2017, https://ec.europa.eu/environment/gpp/pdf/news_alert/Issue73_Case_Study_147_BasqueCountry.pdf

2.

Strategy and approach to SPP in the Municipality of Copenhagen, GPP in Practice, Issue no. 64, September 2016, https://ec.europa.eu/environment/gpp/pdf/news_alert/Issue64_Case_Study_130_Copenhagen.pdf UNEP (2017): Global Review of Sustainable Public Procurement,

https://wedocs.unep.org/bitstream/handle/20.500.11822/20919/GlobalReview_Sust_Procurement.pdf



6.3 Least (acquisition) cost paradigm in public procurement and capacity gaps of public procurers



In short

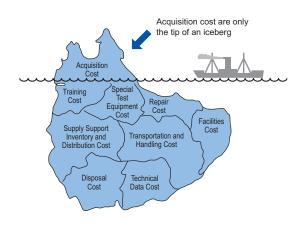
Public procurement of the cheapest products hinders the adoption of higher quality and more sustainable alternatives, and procurement authorities that are willing to apply SPP lack capacity, such as know-how, time and personnel for implementation.

Barrier

The "least [acquisition] cost paradigm" is prevalent in public procurement and favours conventional non-green products (see chapter 4, Understanding underlying constraints towards a green or circular economy). Even though SPP policies of various countries in SEA have started to integrate the so-called 'value-for-money' principle and 'life cycle costing (LCC)', in practice, it is difficult to change this paradigm. Procurers and decision makers often must justify their decisions within financial audits aimed at good governance and reducing corruption. In this context, auditors are not only authorised to review and verify the accuracy of financial records (compliance) but also ensure that no 'privileged clauses' have been included in technical specifications. Green criteria embedded in the technical specifications of a tender might be marked as an inadmissible 'privileged clause'. This might put procurers under pressure to justify their decisions, which they tend to avoid. This paradigm typically results in suboptimal procurement decisions in terms of functionality, quality and future costs.

Also, procurement authorities tend to follow inflexible processes that have been established over the years. Such processes might be difficult to change due to a lack of appropriate know-how, time, or personnel resources. Hence, public procurers might not be able to apply ecolabels and SPP in practice due to such capacity gaps.

Figure 9 - Decision making based on acquisition costs only often neglects other costs that are related to environmental impacts (e.g. high energy intensive operational costs) or waste disposal



Source: University of Nottingham



Strategies for successful implementation

- **1. Political commitment:** The most important strategy is related to clear political and institutional commitment. This means that subordinate authorities and ministries must allocate sufficient resources (in terms of staff, capacity building, processes, and legislation) on the side of the procurement authorities.
- 2. Political and legal backing for procurers: Procurement practitioners are required to strictly follow processes defending the fundamental principles of procurement (Transparency, Accountability, Value for money, Equality of treatment, Non-discrimination etc). The audit is their anxiety. Anything bending these principles (i.e. adding green criteria in the technical specifications which may reduce competition), puts them in an awkward position. Thus, any clear policy or circular letter by higher authorities, etc. helps overcome this fear. In the Philippines, it is planned to include green specification in the Philippine Bidding Documents, which is a supplementary policy document. This, however, is still difficult to implement since there is no established capacity for developing green criteria within government, and ecolabel criteria is not yet endorsed. Furthermore, there is not enough market penetration of green products.
- 3. Mandatory SPP: Another possibility to overcoming the issues related to legal securities is to make SPP mandatory. Malaysia has a plan to make SPP mandatory once selected green products are available in the market at competitive prices. In Germany, within the Climate Change Act, public procurers have the obligation to prefer climate friendly products and are allowed to consider life cycle costs and economic costs of climate change in the procurement of goods and services. In the recent revision of the Climate Change Act, it is now possible in public procurement to use a CO2 price as the basis for calculating the avoidance or cause of GHG emissions in the economic feasibility study (CO2 shadow price).
- **4. Capacity building and training:** Human resources in procurement agencies (such as the auditors of tenders and procurement lawyers) need to be trained in the implementation of new tender evaluation processes based on SPP including LCC and the 'value for money' principle.



5. Guidance documents for procurement authorities: Clear and comprehensible practical guidelines for procurement authorities that enable and strengthen their capacities to apply transparent tender evaluation schemes based on SPP including LCC and the 'value for money' principle (see Prakash et al. 2020) are provided.

6. Green e-catalogue of sustainable products and a government endorsed and accredited directory of labels: If the government provides an e-catalogue of sustainable products that can be accessed for the purpose of procuring goods and services, it is expected that the list contains sustainable products with higher upfront costs than conventional market products. However, such a list would provide a legal security to the procurement officers, if for instance, public procurement regulation makes it mandatory to procure products from the list, if available. This would promote sustainable purchasing without having to go for the cheapest products in the market. Thailand's Green Cart, where only preferable products are listed and the law specifically hints towards this list is a good example of such an e-catalogue. A similar approach can be followed by establishing a government endorsed and accredited directory of labels, as for instance implemented in the form of the MyHIJAU Mark & Directory in Malaysia (refer to 5.1). The responsibility of managing the e-catalogue or the directory could be taken up by national standardization bodies or any other independent science-based institution that are available in all the countries.

7.Central e-procurement: The Philippines do central bulk procurement for common use supply and equipment. Other countries in SEA venture towards central e-procurement where the consuming institutions order the respective goods purchased at central level. In both options, the green criteria are integrated into the technical specifications itself and thus non-compliant products are already excluded. Central procurement options reduce the number of tenders dramatically and thus more complex tender specifications with higher sustainability criteria can be applied by highly specialist tender agents. The downside is that this reduces the number of potential bidders and may have disadvantages for SMEs, since often they are not capable to fulfil minimum bidder requirements.

8. Competence Centre/ Help Desk for SPP: A SPP competence centre or a SPP helpdesk could be one of the effective ways of establishing a permanent SPP advisory service for public authorities at the federal, sub-national and local level. The advisory services could be financed by the central government and would employ permanent staff experts on SPP. The advisory services could take place via telephone hotline or e-mail, or even by means of tailored consultations, on-site training and targeted web-based information on SPP. The platform could also offer detailed information on the legal basis for SPP, guidelines and complete example documents of successful tenders in which sustainable criteria were required. A similar kind of a helpdesk can also be established for the ecolabels, but it is probably more efficient to integrate the ecolabel related topics in the advisory services for SPP.



1.

Examples for political commitment on SPP:

a) Within the new Climate Change Act (KSG, Chapter 5, §13), Germany shows commitment in aiming to create a role model for SPP (Climate neutrality of the public sector by 2030:

 $https://www.bmu.de/fileadmin/Daten_BMU/Download_PDF/Gesetze/191118_ksg_lese fassung_bf.pdf$

(Accessed: 16.12.2020).

b) Indonesia issued a new Presidential Regulation No. 16/2018 with a clear focus on GPP/SPP: https://www.

lexology.com/library/detail.aspx?g=a6dc6363-75ab-4432-88d1-886c7b690175

(Accessed: 16.12.2020).

2

Examples of e-procurement & e-catalogues in SPP:

- a) The Korea ON-line E-Procurement System (KONEPS), Public Procurement Service KONEPS, https://www.pps.go.kr/eng/jsp/koneps/overview.eng
- b) OECD (2016): The Korean Public Procurement Service: Innovating for Effectiveness, OECD Public Governance Reviews, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264249431-en
- c) Green Cart Thailand, http://gp.pcd.go.th/cat-1-ssl

3.

Prakash, S.; Schleicher, T.; Hilbert, H.; Priess, R. (2020) Implementing Sustainable Public Procurement (SPP) in Indonesia, Guidance document in support of the Presidential Regulation Concerning Government Procurement of Good/Services (No. 16/2018), Öko-Institut, Freiburg, Germany

4.

Examples of advisory services for SPP and ecolabels:

- a) Competence Centre for Sustainable Procurement, Germany:
- http://www.nachhaltige-beschaffung.info/DE/Home/home_node.html
- b) EU Ecolabel Helpdesk: https://ec.europa.eu/environment/ecolabel/helpdesk.html



6.4 High upfront costs of sustainable products



In short

The acquisition of sustainable products, is costlier now and less so later — but the now matters to policy makers and often there are contradicting incentives

Barrier

Development or procurement of sustainable products often require higher upfront investments for procurement authorities while the life cycle costs (including recurrent expenditures) might be lower. Such savings can only be realised over time. If the purchase price is the core purchase criterion only, sustainable products may not be able to successfully compete for public contracts. The issue is most relevant for complex energy related "products" such as buildings.

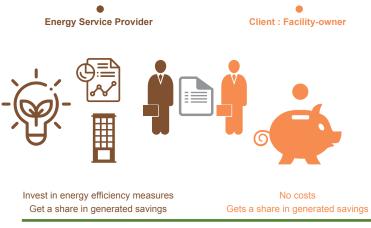
Typically, in government authorities, recurrent budgets are calculated based on past expenditures, and therefore often transferred or authorised from higher government levels i.e. local governments receive recurrent budgets from central authorities. Thus, there is very little incentive for mayors to reduce energy consumption.

Justifying higher capital investment to reduce recurrent expenditure is often not in the mind-set of short-lived political cycles.



- **1.Budget planning based on consumption:** Instead of budget planning based on past expenditures, consumption-based cost allocation taking account of future cost savings, can overcome the adverse incentives and realise cost-effective investments by public authorities over time.
- **2.Life Cycle Costing (LCC):** Integration of LCC in the procurement planning and tender evaluation can shift the focus from short-sighted decisions towards-long term financial planning achieving both cost and environmental benefits. Transparent tender evaluation schemes and processes that include environmental, social and economic criteria in an integrated manner (according to the 'value for money' principle) should be formalised and operationalised (refer also to chapter 4.2).
- **3.Energy Performance Contracting (EPC):** EPC is a model to refinance investments and operating costs from energy cost savings e.g. through energy-efficient building technologies and professional energy managements (see graphic below). Sector specific business models such as EPC in the building sector can overcome short-sighted investment planning by public authorities. However, it is important to note that success of EPC models depend upon specific conditions in a country. EPC models do not pay off within sufficient time periods if energy tariffs are very low or energy is highly subsidized. In such cases, financial mechanisms of leasing and self-finance can prove to be more beneficial.

Figure 10 - Sector-specific business models such as Energy Performance Contracting (EPC) in the building sector can overcome the barrier of high upfront cost for green products and services



= Energy saved, cost saved, an attractive business model



1.

Examples and Resources for EPC:

- a) The EU GPP platform provides information on specific contracting models for the office building sector to overcome the barrier of high upfront costs in GPP/SPP for buildings: https://ec.europa.eu/environment/gpp/pdf/Guidance_Buildings%20final.pdf
- b) The German ecolabel "Blue Angel" is awarded to energy services provided under guaranteed energy saving contracts, which is a form of Energy Performance Contracting (EPC): https://www.blauer-engel.de/en/products/construction-heating/energy-savings-contracts MyRelamp Government Green Procurement Pilot Project for Local Authorities through Lighting Energy Efficiency in Supporting Low Carbon Cities Initiative: https://www.mgtc.gov.my/2021/02/myrelamp-government-green-procurement-pilot-project-for-local-authorities-through-lighting-energy-efficiency-in-supporting-low-carbon-cities-initiative/

2.

Examples of Life Cycle Costing:

a) Estevan, H. & Schaefer, B. (2017) Life Cycle Costing, State of the art report, ICLEI - Local Governments for Sustainability, European Secretariat,

https://sppregions.eu/fileadmin/user_upload/Life_Cycle_Costing_SoA_Report.pdf (last access: 8 Dec. 2020). European Union (2020), Introduction to Life Cycle Costing, Official Website on GPP of the European Union, https://ec.europa.eu/environment/gpp/lcc.htm (last access: 8 December 2020).



6.5 Industry policy focusing on domestic manufacturing



In short

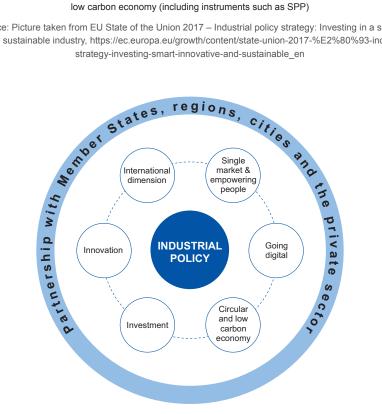
In many transition countries, local manufacturers lack the capacity to develop products with ambitious ecolabel or SPP criteria, while multi-national corporations have the know-how and resources to do so. This disadvantage is often in contrast to prevailing industry policies.

Barrier

Most governments in SEA implement industry policies that aim to develop domestic manufacturing, often with a focus on SMEs. However, the abovementioned verification and certification cost, as well as different know-how favours multi-national corporations already producing green products. Therefore, governments and procurement authorities are often reluctant to implement ambitious SPP criteria favouring imported products. Hence, rigid industrial policy regime can represent a significant policy barrier for SPP.

Figure 11 - Industrial policy supporting SMEs can be linked to environmental policies such as a circular and low carbon economy (including instruments such as SPP)

Source: Picture taken from EU State of the Union 2017 – Industrial policy strategy: Investing in a smart, $innovative\ and\ sustainable\ industry,\ https://ec.europa.eu/growth/content/state-union-2017-\%E2\%80\%93-industrial-policy-poli$ strategy-investing-smart-innovative-and-sustainable_en





1. Special provisions for SMEs: The introduction, integration and implementation of special provisions for SMEs in the SPP tender evaluation scheme considers the need for local economic development and can balance concerns with other procurement values such as environmental or social aspects. One major factor that influences the extent to which SMEs can access the contracts is the value of public contracts. The larger a contract (e.g. in a single lot), the lower the probability that it will be awarded to an SME. Thus, a central instrument to facilitate access for SMEs in public procurement is a possibility for multiple contracts within framework agreements to decrease transaction costs for the applicants. Beyond this, newly introduced e-procurement tools frequently allow for leaner processes, thus fostering competition. This also includes the possibilities for SMEs to compete in cross-border projects.

For example, in Indonesia, within the Presidential Regulation (No. 16/2018), the Indonesian government sets a strong focus on the empowerment of small businesses. Several Articles contain specific requirements which support the participation of small businesses in practices. Procurement packaging shall therefore be done by setting aside as many packages as possible for small businesses, and procurement packages with a certain maximum value shall also be reserved for small businesses. Furthermore, it is prohibited to centralise packages which could be offered by small businesses considering their value. Moreover, the reservation and allotment of packages for SMEs is listed as one specific focus for the internal supervision of procurement processes. Furthermore, according to GHK/Ecorys/pwc (2014)¹³, around 56 % of all public procurement contracts (above the EU thresholds) were awarded to SMEs between 2009-2011.

2.Dialogue and awareness raising: The introduction of a timely domestic dialogue and awareness platforms during procurement planning can inform and create awareness on new SPP criteria so that SMEs can prepare for the tenders in time.

⁽B GHK/Ecorys/pwc (2014) on behalf of the EU DG Internal market and Services, https://op.europa.eu/en/publication-detail/-/publication/c0681db7-e56e-11e5-8a50-01aa75ed71a1



1.

Examples of provisions for SMEs:

- a) GHK/Ecorys/pwc (2014) on behalf of the EU DG Internal market and Services, https://op.europa.eu/en/publication-detail/-/publication/c0681db7-e56e-11e5-8a50-01aa75ed71a1
- b) Prakash, S.; Schleicher, T.; Hilbert, H.; Priess, R. (2020) Implementing Sustainable Public Procurement (SPP) in Indonesia, Guidance document in support of the Presidential Regulation Concerning Government Procurement of Good/Services (No. 16/2018), Öko-Institut, Freiburg, Germany
- 2. Guidance on Procurement Planning including a market dialogue and special provisions for local SMEs are elaborated in:
- a) Buying Green Handbook: https://ec.europa.eu/environment/gpp/buying_handbook_en.htm
- b) EU GPP Toolkit (2019): https://ec.europa.eu/environment/gpp/toolkit_en.htm
- c) Prakash, S.; Schleicher, T.; Hilbert, H.; Priess, R. (2020) Implementing Sustainable Public Procurement (SPP) in Indonesia, Guidance document in support of the Presidential Regulation Concerning Government Procurement of Good/Services (No. 16/2018), Öko-Institut, Freiburg, Germany





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