Use of E-catalogues in Sustainable Public Procurement (SPP):

Overview of current practices

On behalf of:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

Öko-Institut e.V. Institut für angewandte Ökologie Institute for Applied Ecology

AS A FEDERALLY OWNED ENTERPRISE, GIZ SUPPORTS THE GERMAN GOVERNMENT IN ACHIEVING ITS OBJECTIVES IN THE FIELD OF INTERNATIONAL COOPERATION FOR SUSTAINABLE DEVELOPMENT.

Published by:
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices:
Bonn and Eschborn, Germany

Authors:
Ashleigh McLennan, Siddharth Prakash
Öko-Institut e.V.

Editors:
Kai Hofmann

Design:
Inis Communication

GIZ is responsible for the content of this publication.

Distribution:
Bangkok, May 2022

Contact
info@oeko.de
www.oeko.de

Head Office Freiburg
P. O. Box 17 71
79017 Freiburg

Street address
Merzhauser Straße 173
79100 Freiburg
Phone +49 761 45295–0

Office Berlin
Borkumstraße 2
13189 Berlin
Phone +49 30 405085–0

Office Darmstadt
Rheinstraße 95
64295 Darmstadt
Phone +49 6151 8191–0

Kai Hofmann
Project Director, Scaling Sustainable Consumption and Production (SCP): Ecolabelling and Sustainable Public Procurement for a Low-Carbon Pathway in South-East Asia (Scaling SCP), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
193/63 Lake Rajada Office Complex, 16th Fl.,
New Ratchadapisek Road, Klongtoey,
Bangkok 10110, Thailand
Phone +66 2661 9273
Email: kai.hofmann1@giz.de

TABLE OF CONTENTS

List of Figures 4

List of Tables 4

List of Abbreviations 4

Summary 5

01 Introduction 6

02 Defining e-catalogues 7

2.1 Central e-catalogues 9

2.1.1 KONEPS (Republic of Korea) 11

2.1.2 ChileCompra Express (Chile) 12

2.1.3 Electronic Marketplace for the Public Administrations – MePA (Italy) 13

2.1.4 BreKat (Bremen, Germany) 14

2.1.5 Katalog Elektronic and Toko Daring (Indonesia) 14

2.1.6 Common Use Items (Republic of the Philippines) 16

2.2 E-marketplaces 17

2.2.1 Green Cart (Thailand) 18

2.2.2 MyHIJAU Mark (Malaysia) 19

2.3 Single contract e-catalogues (supplier-developed) 20

2.3.1 Government of Flanders (Belgium) 20

2.3.2 City of Ludwigsburg (Germany) 21

03 Overview of digital platform approaches 22

04 Principles of effective digital platforms for supporting SPP 23

05 Next steps for projects seeking to establish or enhance e-catalogues for SPP 26

List of References 28

LIST OF FIGURES

Figure 1: Visualisation of ecolabels consolidated under the MyHIJAU label 19

LIST OF TABLES

Table 1: Potential for digital platforms to overcome barriers to SPP 8

Table 2: Definition of different digital platforms for SPP 9

Table 3: Overview of digital platform approaches 22

LIST OF ABBREVIATIONS

CPB	Central Purchasing Body
DPS	Dynamic Purchasing Systems
GPP	Green Public Procurement
MAS	Multiple Award Schedules
SDG	Sustainable Development Goals
SPP	Sustainable Public Procurement

SUMMARY

Sustainable Public Procurement (SPP) is a powerful tool in the promotion of sustainable development. However, public buyers often lack the know-how, time and personnel needed for SPP. This is because buying sustainable products and services requires procurers with the skills to apply sustainability criteria in a legally compliant way and check the compliance of bids against these criteria. It can also take more time to compare the sustainability of offered goods and services, especially in contexts where contracts are usually awarded based on a lowest cost basis.

To increase the amount of sustainable goods and services purchased by the public sector, new tools are needed which streamline SPP and make sustainable options more accessible. E-catalogues of pre-qualified suppliers and/or goods and services offer one such option. To date, however, little consideration has been given to 'green' or 'sustainable' e-catalogues, both in theory and in practice.

This pre-study therefore attempts to summarise existing definitions, where they exist, of e-catalogues as developed by key actors in the definition of public procurement practices and present these alongside existing international examples of e-catalogue use in practice. From this, three general approaches have been identified: 'central e-catalogues', 'e-marketplaces', and 'single contract e-catalogues'. Although 'central e-catalogues' offer the greatest potential for streamlining SPP and increasing access to sustainable products and services, they also require a supportive institutional and legal framework. Therefore, e-marketplaces and single contract e-catalogues are also included in this pre-study, as they offer more flexible opportunities which can be adopted in a wider range of contexts.

As a pre-study, this report does not attempt to provide guidance on implementing e-catalogues or e-marketplaces, but rather provides a starting point for future work, including the definition of some general principles along with some initial recommendations on increasing knowledge of and uptake of e-catalogues in a project context.

01 INTRODUCTION

Sustainable Public Procurement (SPP) is a powerful tool in the promotion of sustainable development. By buying sustainable goods, services and works, governments can reduce their environmental impact, while supporting progress towards wider environmental, social and economic policy goals.

The importance of SPP is widely recognised, and many national, regional, and local governments are already taking action to buy more sustainable goods, services and works. Increasing SPP is also targeted by the Sustainable Development Goals (SDG) under Goal 12 'Sustainable Production and Consumption', Target 12.7: "Promote public procurement practices that are sustainable, in accordance with national policies and priorities".

Barriers to SPP exist, however, including a lack of know-how and time within public authorities (Prakash et al, 2021). This is because successfully purchasing sustainable products requires the right skills to set appropriate sustainability criteria and check the compliance of bids against these criteria, and it can take more time to compare sustainability credentials and account for this in the award of the contract.

For several reasons, not all public sector officers who are responsible for buying goods and services will be able to conduct a SPP procedure. For some, it is because they have not received the necessary training. For others, it is a matter of not having the time, resources, confidence, or decision-making powers. And in many cases, both barriers are present, especially when buying is not the responsibility of dedicated procurement officers, as can often be the case, especially in smaller public authorities.

Digitalisation has created new opportunities for finding and buying sustainable products and services, including e-catalogue tools. Despite their potential, little consideration has been given to 'green' or 'sustainable' e-catalogues, both in theory and in practice.

As such, this pre-study aims to identify some general models for e-catalogues, ranging from e-marketplaces (online directories of good and services) to e-catalogues with fully integrated direct purchase functionalities. Short case studies are also provided on how each model is being applied in practice, and to end, an overview of the potential requirements, strengths, and weaknesses of each model is outlined, along with some general principles for e-catalogue approaches and recommendations on e-catalogue implementation.

02 DEFINING E-CATALOGUES

As defined by the World Bank (2021), an e-catalogue provides buyers with a list of goods and services which have been pre-approved as meeting relevant criteria. According to the World Bank, e-catalogues are usually administered by central purchasing bodies (CPBs), or another relevant specialised agency, which takes responsibility for keeping the catalogue up-to-date and verifying the sustainability credentials of all listed products and services. It is asserted that CPBs are ideal managers of e-catalogues because they are well placed to consolidate purchases from across the public sector. By buying on behalf of many public agencies, they increase their market power, and are better positioned to negotiate discounts from suppliers.

In practice, however, few countries appear to make use of **central e-catalogues**. The reasons for this would require further research, but could include the high level of institutional commitment and initial investment required to create and maintain e-catalogues, in addition to the need for specific institutions (like a CPB) and legal framework requirements (for example, an ability to procure centrally, and provisions on the use of framework agreements or direct purchasing). In addition, none of the central e-catalogues identified by this pre-study focus exclusively on green products and services, perhaps due to cost pressures or because verifiably sustainable options are not available for every product or service that the CPB aims to provide centrally to public buyers. It may also be due to a lack of awareness within the CPB of the need for SPP, or a lack of technical skills to verify the sustainability credentials of goods and services.

Other digital tools can also be identified which attempt to overcome the same barriers as e-catalogues, but with fewer functionalities or coverage. In particular, **e-marketplaces** provide similar information as an e-catalogue but without direct purchase functions (World Bank, 2021). An e-marketplace can be used by procurers to identify suppliers of sustainable products and services available in the local market, but it does not eliminate the need to run a procurement procedure. E-marketplaces can also be combined with other SPP support tools, including SPP criteria catalogues, helpdesk functions, or social fora where procurers can ask questions and run ideas past their peers. Although not as powerful as a central e-catalogue, an advantage of an e-marketplace is that it can be created by any institution with an interest in promoting SPP (for example, a national Ministry of Environment). It also has lower requirements in terms of the institutional and legal framework. An additional, indirect benefit is that the e-marketplace can also be used by other market actors, for example large private sector buyers, or as a source of benchmarking for manufacturers and service providers.

TABLE 1: POTENTIAL FOR DIGITAL PLATFORMS TO OVERCOME BARRIERS TO SPP

BARRIER	E-CATALOGUE	E-MARKETPLACE
Lack of SPP skills	High – eliminates need to develop and apply SPP criteria and assess bids against these	Medium – can be used as a source of SPP criteria. But criteria still need to be applied to tenders, and bids evaluated accordingly
Additional time needed for SPP	High – by enabling direct ordering, the need to run a tender is eliminated	Medium – drastically reduces time needed for market research, but tender is still required
Lack of confidence in effectiveness of SPP	High – suitability of products and services verified by CPB	High – procurers reassured that sustainable products and services are available on the market, and that requirements can be met. Can be further enhanced through helpdesk and social functions
Procurers lack powers to choose SPP over conventional procurement	Variable – decision of what to include in e-catalogue made by CPB. If e-catalogues are not focused exclusively on sustainable products and services, procurers still need to choose to filter sustainable options over conventional ones.	Low – procurers still need to be empowered / encouraged to choose SPP
Visibility of sustainable products and services	Variable – dependant on e-catalogues focus (are conventional products also included) and functionality (can sustainable options be easily identified and filtered)	High – e-marketplaces can be designed to exclusively focus on sustainable products and services. In addition, the results can be viewed by other market actors, achieving indirect benefits
Monitoring & Evaluation of SPP	High – data on the number of green products and services being purchased through the e-catalogue can be easily collected using automated processes for monitoring and evaluation purposes.	Low – as purchasing is not integrated into the e-marketplace, it is difficult to measure the extent to which procurers are using it to inform SPP criteria, and the impact that these criteria are having.

Finally, a third related tool has been identified, namely "**single contract e-catalogues**". This is a term created by this pre-study to differentiate between central e-catalogues and e-catalogues created by a contracted supplier to facilitate orders. For example, if a contracting authority creates a framework agreement with a selected supplier of stationary products, they can require that the supplier provides an e-catalogue as part of their service. The idea is to make it easier for office managers from different departments to find items and place orders. As such, it can be understood as offering the same benefits to users as a central e-catalogue, albeit on a smaller, time-limited scale. This approach could offer potential opportunities when upfront investment is not an option, and it is available to any type of contracting authority, including at the regional and municipal level. However, its downslides include the inherent inefficiencies of creating an e-catalogue to serve just one buyer for one product over a limited time period.

TABLE 2: DEFINITION OF DIFFERENT DIGITAL PLATFORMS FOR SPP

APPROACH	DEFINITION
Central e-Catalogue	Online shop of pre-approved suppliers or centrally purchased goods and services, which public buyers can purchase or order from directly (i.e. without a separate competitive procurement procedure)
Green e-Marketplace	Online list of sustainable products and services offered by registered suppliers. Direct purchase is not supported.
Single Contract e-Catalogue	Online shop created by a contracted supplier to facilitate orders of pre-approved products and services.

2.1 CENTRAL E-CATALOGUES

Given the scale of environmental challenges we face as a society, it is essential that procurement systems become more sustainable, and e-catalogues offer exiting opportunities to streamline the procurement process and make it easier for procurers to access the sustainable versions of the products and services they need. It is still essential, however, to respect general principles of good public procurement when designing an e-catalogue approach, such as transparency and fairness. These essential considerations are enshrined in the procurement law of most countries and are essential for protecting against corruption and ensuring good use of public funds. However, these principles also create obstacles to e-catalogues, in particular the general requirements to use competitive procedures unless specifically exempted. To put it simply, procurers are often required by law to publish an open call for competition, and to award the contract to the lowest priced bidder.

Several countries have, however, developed e-catalogues in ways which comply with their national laws on competition. One approach identified is to use a 'framework agreement' i.e. "an agreement with one or more economic operators for the supply of goods, services and, in some cases, works, the purpose of which is to establish the terms governing contracts to be awarded by one or more contracting authorities during a given period, in particular with regard to maximum price, minimum technical specifications and, where appropriate, the quantities envisaged" (OECD, no date). Using a framework agreement to create a e-catalogue means that access to the e-catalogue is still competitive: the CPB publishes a call for competition, and suppliers respond with information on their capabilities, their products, and the prices. Only selected suppliers can be listed in the e-catalogue, and buyers can use the digital platform to place direct orders, safe in the knowledge that the supplier and/or product has been pre-approved by the CPB.

As with any other type of public contract, the amount of time for which a framework agreement is valid is normally limited by law, meaning once established, the e-catalogue also needs to be periodically renewed. But regular renewal of the framework is beneficial, as it helps keep the products and services up-to-date (in terms of technology and price) and allows opportunities for new market entrants to qualify. The shorter the framework contract's length, however, the more transaction costs for the CPB and suppliers, and suppliers may also be less incentivised to invest in sustainable innovation. Differentiation may therefore be required between products according to initial investment required, speed of obsolescence, and entry of new suppliers.

As well as time, the number of suppliers included in the framework agreement (and thus e-catalogue) should be carefully considered. A benefit of e-catalogues is that they allow contracting authorities easier access to a greater number of suppliers (and suppliers access to more public contract opportunities). However, if the e-catalogue includes too many suppliers, there is a chance that the majority will not receive any revenue. This represents wasted efforts for both the CPB and the supplier. A balance between inclusivity and efficiency needs to be struck.

To manage this, the OECD recommends (in consideration of the Chilean system – see example 2.1.2 for more details) that differentiation is made between types of product categories. For product categories where economies of scale can be realised, competitive procedures should be used which reduce the pool of suppliers. For product categories with highly heterogeneous demand, such as food, large pools of suppliers should be reinforced, for example, by allowing suppliers to join existing instruments at set entry points i.e. a Dynamic Purchasing System[1] (OECD, 2017). Alternatively, shorter time limits could be set for products with faster innovation cycles (such as in the Republic of Korea, where framework agreements for electronic goods are renewed every year, as opposed to the standard two-year duration (see section 2.1.1 for more details).

Finally, framework agreements (and resulting e-catalogues) will only achieve results if they are used. Communicating the availability of the e-catalogue to relevant buyers is essential. For maximum commitment, the use of central framework agreements and / or e-catalogues can be made mandatory in procurement legislation. This is the approach taken by Korea, (2.1.1), Chile (2.1.2) and Italy (2.1.3). This can, however, prevent ambitious and skilled contracting authorities from procuring at higher standards than available through the framework.

Another approach identified was the use of e-catalogues for low value purchases which fall under procurement thresholds i.e., the below the value at which competitive procedures are required. This is the approach used by Italy's MePA catalogue (2.1.3) and Indonesia's Katalog Elektronic and Toko Daring (2.1.5). Italy's MePA, for example, also includes products certified with an ecolabel. To be accepted onto the platform, suppliers need to submit relevant certifications for verification. Once approved, suppliers can list ecolabels held by the product under the technical description of the product, and buyers can filter the database accordingly.

With regards to establishing a sustainable or green e-catalogue, this approach may be of interest in contexts with the following conditions:

- direct purchasing is allowed under a certain threshold
- relevant Type I ecolabels are available in the market (i.e. third-party verification that products meet sustainability criteria)
- a CPB or other relevant actor exists who can manage the e-catalogue and verify the suitability of suppliers.

Finally, a third approach to central e-catalogues can be found in the Philippines (2.1.6). In this example, the CPB buys a range of 'common use items' in bulk, which it then distributes to regional warehouses. This means that public authorities do not need to purchase common use items at all, and instead request items which have already been purchased and stored on their behalf. Such an approach may also be replicable in other countries where procurement is highly centralised. Such an approach requires appropriate measures to balance supply and demand, in order to avoid potential overconsumption, inefficiencies or shortages.

[1] A Dynamic Purchasing System (DPS) is similar to a framework agreement, however, new suppliers can join at any time, provided they meet the selection criteria. There is no limit on the number of suppliers that can join. Contracting authorities can then invite all suppliers on the DPS to bid for specific contracts. This saves time, as suppliers do not need to re-demonstrate their suitability for each contract (CCS, 2016).

2.1.1 KONEPS (Republic of Korea)

In 2005, the Act on Encouragement of Purchase of Environment-Friendly Products (renamed as the Act on Promotion of Purchase of Green Products in 2012) obliged public institutions in the Republic of Korea to purchase green products, and to develop and submit GPP plans and performance records. According to the act, for a product to be classified as green, it must either be certified or meet the criteria set by the Korea Eco-Label or the Good Recycled (GR) Mark, or, meet other environmental standards as set by the Ministry of Environment in consultation with relevant Ministries.

To support this requirement in practice, in 2006 the Korean e-Procurement System (KONEPS)[2] launched its 'e-Shopping Mall'. Buyers can use the e-Shopping Mall to search for products by product category, name, and other properties, and to buy these directly from suppliers using integrated online ordering.

Around 320,000 products from over 5,200 suppliers are included in the e-Shopping Mall, which also hosts a dedicated section for green products, including high energy efficiency appliances, ecolabelled products, and recycled goods etc. (KONEPS, no date). As of May 2019, 15,081 sustainable products supplied by 3,953 companies were available, under 165 product categories (Asia Pacific GPP Network, 2021).

To populate the e-Shopping Mall, Korea uses a framework agreement approach called Multiple Award Schedules (MAS) contracts, which are managed by the Public Procurement Service (PPS). PPS uses MAS to issue unit-price contracts for homogenous goods and services, which are then listed on the e-Shopping Mall. The majority of goods and services can then be purchased by public buyers without the need to make further contracts. Factors which make a product or service suitable for a MAS contract include the existence of a competitive market, sufficient demand from contracting authorities, and the ability to define a price per unit (OECD, 2016).

> "Central government, local authorities and other public entities and quasi-governmental agencies are required to purchase via PPS under certain conditions, which includes the requirement to buy from centralised contracts (including MAS contracts) where they exist (OECD, 2016)."

In order to participate, suppliers are asked to satisfy minimum requirements, including satisfactory past performance. A minimum credit rating threshold is also set, as a measure of suppliers' ability to fulfil contracts (OECD, 2016).

Once a supplier has fulfilled the minimum requirements, PPS negotiates prices. To do so, it establishes a reference price for the product or service in question. This reference price is determined through past transactions, or when these are not available, through a holistic evaluation of the good or service, including logistics, installation, training, permit, testing or taxation cost, and it acts as a reference during the award and negotiation of contracts. Once an agreement has been reached on price, a contract is awarded. During the contract period, suppliers can only increase their prices in the case of inflation of more than 3%. Prices can be lowered at any time (OECD, 2016).

Three or more suppliers are required for a MAS contract. Although originally awarded for one year, the duration of a MAS contract was increased to two years to reduce burden on suppliers. However, for some products, such as electronics where technological development and price change is faster, one-year contract periods are still used (OECD, 2016).

[2] E-procurement system which covers the entire procurement cycle, including publication of tender notices, communication with suppliers, collection of bids, bid opening and contract award, inspection and payment.

Once the MAS contract is established, the products become available on the KONEPS e-Shopping Mall. Simple purchases can then be ordered directly within KONEPS, without need for further tendering procedures. However, in 2012, a requirement for second stage competition was added to one-time purchases of over 42,400 USD for goods manufactured by large enterprises, or 84,800 USD for goods manufactured by SMEs. This requirement was added to enhance transparency and competitiveness in larger contracts. The system also tracks repetitive orders, and automatically blocks further orders if these thresholds are exceeded within a 30-day period (OECD, 2016).

According to the OECD's 2016 Governance Review of the PPS, MAS contracts deliver a number of benefits, including:

- Allowed more suppliers to participate in the public procurement process, including SMEs, which account for over 98% of MAS contractors.
- Increased number of suppliers and increased competition, not just in terms of price, but also quality, delivery terms and after-sales service.
- More options provided to procurers, by providing access to a broader range of suppliers.
- Streamlined ordering process for large number of contracting authorities, thereby saving money.

2.1.2 ChileCompra Express (Chile)

The Directorate of Government Procurement and Contracting of Chile (ChileCompra) manages the ChileCompra Express e-catalogue. ChileCompra Express is based on framework agreements, meaning that suppliers are selected using a public tender. If accepted onto the framework, ChileCompra makes a contract with the supplier and their products and services are added to the e-catalogue. Contracting authorities can buy from the e-catalogue with one click. At the time of writing this report the e-catalogue was based on 21 Framework Agreements and offered over 90,000 products and services from just under 3,000 authorised suppliers (ChileCompra, no date).

According to Chile's Law on Public Procurement, the use of central framework agreements (and thus the use of the ChileCompra Express catalogue) is mandatory for central government, unless more competitive conditions have been identified outside of the framework. Municipalities and other contracting authorities can also buy from central framework agreements on a voluntary basis, and frequently do. As a result, ChileCompra Express became "the largest online store in the country" and was "almost equivalent to all private electronic commerce in Chile" (OECD, 2017, p.3).

In the last five years, the administration of central framework agreements has been a target of the State Modernisation Program of the Ministry of Finance, due to the high administrative burden that was being placed on ChileCompra contract mangers (ChileCompra, no date). For example, once listed, qualified suppliers were allowed to request changes to the e-catalogue, including lowering prices and adding new products. Changes required approval from ChileCompra, and in 2015, around 436 000 catalogue change requests were made by suppliers. This equates to approximately 16 564 hours of work, carried out by almost 10 full-time category managers processing an average of 22 requests per hour. The amount

of administrative work drastically reduced the time available for the strategic development of future framework agreements (OECD, 2017).

Another inefficiency identified was the number of suppliers being accepted onto framework agreements. In 2014, 70% of bidders on average were accepted onto framework agreements (which is an average 185 out of 248 bidders per contract). Once accepted into the e-catalogue, however, more than 60% of suppliers on average did not receive any orders, while an average 71% of revenue went to the top ten suppliers under each framework (OECD, 2017). This represents wasted efforts for both the suppliers and ChiliCompra.

As a result of the State Modernisation Program, new criteria were therefore established for framework agreements, with the purpose of focusing resources on product categories with the biggest potential for price savings and resource efficiency (Chile Compra, no date). That includes goods and services which:

- Are highly standardised and frequently consumed
- Are in high demand, with a large number of purchases orders
- Have a clear 'market price'
- Alternative purchase options, such as dynamic purchasing, are also available

2.1.3 Electronic Marketplace for the Public Administrations – MePA (Italy)

Italy's CPB Consip sits within the Ministry of Economy and Finance. It was founded in 1997, and since 2004 it has managed Italy's Electronic Market Place for the Public Administration (MePA). MePA is an e-catalogue which contracting authorities can use to easily compare products and make purchases under the EU procurement thresholds. Buyers can use MePA to issue direct orders, or, if they choose, to request quotes from suppliers in order to negotiate further on price and supply conditions.

To be able to offer goods and services on MEPA, economic operators must first qualify as suppliers. Consip publishes 'Calls for Qualification' for specific Product Categories. Different requirements are defined for suppliers of products and suppliers of services within each category (i.e., the requirements for provider of ICT products are different from the requirements for providers of ICT services). Suppliers need to upload data on their offered products and services to the catalogue using a standardised form. Data categories include geographic region, delivery times, product characteristics, as well as certifications and labels. In addition, suppliers need to provide all company relevant information as required by law (for example, address, tax number etc.). Once completed, the supplier sends the qualification request to Consip, which can either approve the request, ask for clarification, or reject the request (Consip, 2020).

In 2017, the MePA e-catalogue contained over 10 million items and processed 600,000 transactions. MePA has saved time for contracting authorities and suppliers. In addition, suppliers can access a wider pool of buyers, while contracting authorities are able to compare a larger range of products and services (OECD, 2019).

2.1.4 BreKat (Bremen, Germany)

The Free Hanseatic City of Bremen, with a population of 680,000 is the smallest of Germany's federal states. Its Purchasing and Procurement Centre (EVZ in German), which sits within the public property management service Immobilien Bremen, acts as a CPB for all federal and municipal buyers in the State.

As early as 2008, politicians decided that Bremen's products must not come from exploitative child labour and should be produced in humane conditions and an ecologically sustainable manner. This position has been enshrined in regulation, including the Tariff Compliance and Procurement Act and the Core Labour Standards Ordinance.

As part of its work to increase SPP, EVZ created the BreKat e-catalogue[3], which allows public employees to electronically order both conventional and sustainable products directly from the webshop. The range of products available in BreKat have been selected using framework contracts, which are put out to tender in accordance with procurement regulation (Immobilien Bremen, no date).

Any institution which participates in the Bremen Administration Network can access the webstore, in which over 3000 items – including office stationery, furniture, coffee and uniforms – are available. Sustainable options are highlighted to buyers with a special 'green leaf' icon and information about the ecolabels held by the product.

2.1.5 Katalog Elektronic and Toko Daring (Indonesia)

LKPP's Katalog Elektronic V.5.0[4] is the e-catalogue of the Indonesian National Procurement Agency LKPP. It displays goods of strategic importance. At a national level, it includes over 70,000 products from over 1,300 vendors. Categories include streetlighting, health facilities, internet service providers, vehicles (purchase and rent), food, medicine, office electronics, sports equipment, and televisions. It also offers local catalogues, catalogues for specialist sectors (for example, disaster logistics, water engineering equipment, agricultural commodities and equipment and so on), small business catalogues, and innovation catalogues (currently limited to health and drug innovation).

The conditions that suppliers need to meet are provided for each product category when announced on the platform. For buyers, purchases are restricted to a maximum 200,000,000 Indonesian Rupiah (Rp) (approximately €12,270). This complies with the threshold set for Direct Purchasing in the Indonesian Procurement Regulation. The exception is for 'Pejabat Pembuat Komitmen' (PKK) which are government officials authorised to make decisions that may result in higher budget expenditures.

In addition to the Katalog Elektronic, the **Toko Daring**[5] (translation: online shop) is an e-purchasing platform for government procurement of goods/services focussed exclusively on SMEs. It is run in collaboration with e-commerce platform providers (Penyelenggara Perdagangan Melalui Sistem Elekronik, or PPMSE), which are business actors who are licensed to run an electronic system under the Minister of Trade (MOT) Regulation No. 50 of 2020 regarding Provisions of Business Licensing, Advertising, Guidance and Supervision of Business Actors in Trading through Electronic Systems.

---

[3] https://www.einkaufskatalog.bremen.de/

[4] https://e-katalog.lkpp.go.id/

[5] https://tokodaring.lkpp.go.id/

At the time of writing this report, Toko Daring reports that 291,464 SMEs have joined the platform, and that 48,163 transactions have taken place, worth a total of 74 billion rupiah (Toko Daring, no date).

The commodities available in the online shop are set by a decree of the LKPP. In January 2022 the following commodity groups were announced (LKPP Decision 2, 2022)[6]: Office Stationery, Transportation Services, Accommodation, Souvenirs, Food and Beverage, Medical Devices, Furniture, Couriers, Electronic Equipment, Tools, Clothing, Creative Services & Office Needs, and Rent of Equipment & Rooms.

The decree No.2 2022 also states that all products displayed in the online store must be domestic products, meaning, goods or services which are manufactured or worked on by companies that invest and produce in Indonesia, that have a workforce fully or in part comprised of Indonesian citizens, and uses raw materials or components wholly or partly originating from within the country.

Finally, as laid out in the decree, direct purchases can be made from the online shop of up to 50,000,000 Rp (approximately €3067). It is also possible to make purchases of up to 200,000,000 Rp (approximately €12,270), provided a negotiated procedure is used.

The existence of two e-catalogues – the first for strategic goods and services, and the second for purchases from SMEs – could create confusion for buyers and suppliers. In addition to the two e-catalogues, a small e-marketplace for environmentally friendly goods and services is also provided by the Indonesian Ministry of Environment and Forestry (i.e., a directory of sustainable goods without direct purchase). The following product categories are covered by Sibarjasramling[7]: paper, plastic, wood, medical waste treatment equipment, and air conditioning devices.

Products are selected according to existing Eco-labels and criteria available in the Indonesian market. These are:

- Timber Legality Assurance System (TLAS Certification) as known as Sistem Verifikasi Legalitas Kayu (SVLK)
- Paper with Type 1 Ecolabel Certification Scheme
- Plastic with Type 2 Ecolabel Certification Scheme
- Air Conditioner with Low Watt/Energy Label
- Medical Waste treatment equipment with Environmental Friendly Technology Verification Scheme

More examples of e-marketplaces are presented in Section 2.2.

---

[6] LKPP Decision 2, 2022: Online Store: Commodity Production Determination

[7] https://sibarjasramling.com/

2.1.6 Common Use Items (Republic of the Philippines)

GPP began in the Philippines as early as 2004, when an executive order on the 'Establishment of a Green Procurement Program in all Government Agencies' (EO 301/2004) was issued. Little progress however, was made, due to confusion around ecolabels, which were named as the core mechanism for GPP in EO 301/2004, but were viewed by procurers as being similar to brand names and therefore not allowable under the Government Procurement Reform Act's (GPRA 2003) rules on competition (GPPB-TSO, 2017). Almost ten years later, GPP was reintroduced by the Government Procurement Policy Board (GPPB) via Resolution 15 (2013) 'Approval to Support the Implementation of Sustainable and/or Green Public Procurement Regime in Government'. And in 2017, the GPPB published a five-year GPP Roadmap, which included the introduction of GPP criteria to centrally purchased Common-Use Supplies and Equipment (CSEs) as one of five key strategies for the implementation of GPP (GPPB-TSO, 2017).

CSEs are products are procured centrally in bulk by the Department of Budget and Management's Procurement Service (DBM-PS) on behalf of all users. This means that public authorities do not need to purchase common use items at all and can instead use the Common Use Item e-catalogue[8] to search for and request items which have been purchased and stored on their behalf. In 2017, around 82 product groups and 297 CSE items were available (GPPB-TSO, 2017).

In order to determine which CSE items GPP criteria should be applied to first, a market survey was conducted to assess the feasibility of putting products on the list. This included the following considerations, each of which was scored using a 1–5 scale:

- Market Readiness: Is there a sufficient number of suppliers, choices and products of the necessary quality?
- Environmental Impact: What is the direct environmental impact, for example, in terms of GHG emissions, depending on the number of procured goods and the environmental pollution caused by each product? In addition, what is the indirect environmental impact in terms leverage on the market and opportunities to green industry?
- Cost Implications: Are decreasing costs through lower operational costs for energy, water and disposal expected? Or higher costs, for example, as a consequence of higher product cost and higher product quality?
- Practicability: Are supposed green criteria easy to formulate and to verify?
- Would GPP support to government environmental objectives?
- Would GPP support the local economy?

As a result of this assessment, the first set of ten CSEs suitable for GPP were identified. In order, these were: multi-copy paper; toilet paper; record books; cleaners; chairs; disinfectant sprays; trash bags; liquid hand soaps; detergent powder; and LED light bulbs. After positive stakeholder consultation, the first green specifications were included in the 2017 procurement plan. The intention set by the GPP Roadmap was to roll GPP out to further CSEs in a systematic manner, as well as increase the use of GPP in a greater number of non-CSE categories (GPPB-TSO, 2017). At the time of writing this pre-study, it is unclear to what extent GPP criteria have been applied. Some green products were available (namely, toilet paper with the Green Choice Philippines Type I ecolabel), however there are no options to filter for green products.

[8] https://ps-philgeps.gov.ph/home/index.php/what-we-sell/common-use-items

2.2 E-MARKETPLACES

An **e-marketplace** can be defined as a list of suppliers and/or products that demonstrate the availability of sustainable options. It differs from an e-catalogue in two main ways:

- It is not populated using a procurement procedure
- It does not allow direct purchase (or offer associated integrated order processing and invoicing).

An e-marketplace can be described as an information tool which helps procurers to identify suppliers of sustainable products and services. After this however, the procurers are still required to run a tender according to their national procurement rules. For example:

- If competitive bidding is required, the e-marketplace can demonstrate the technical performance characteristics of products available on the market, thereby giving procurers confidence that their sustainable requirements can be met by suppliers. The information can also help procurers draft their technical specifications.
- If restricted competition/ pre-qualification is allowed, the e-marketplace can help procurers identify suitable suppliers and request quotes.
- If the procurement is under threshold / direct purchase is allowed, the e-marketplace can be used to help procurers identify best value products and services.

Although not as powerful as a central e-catalogue, an advantage of an e-marketplace is that it can be created by any institution with an interest in promoting SPP. This is important, especially because SPP is more likely to be spearheaded by the Ministry of Environment rather than the Ministry of Finance or CPB. It also has lower requirements in terms of the institutional and legal framework, making its establishment faster and more flexible than a central e-catalogue.

E-marketplaces can be a valuable tool for increasing the visibility of ecolabels available on the market. Preference should be placed on Type I ecolabels[9], meaning labels which are awarded by a third-party on the basis of multiple criteria which take into account the environmental impact of product throughout its whole life-cycle. This helps ensure that products placed in the e-marketplace meet the highest environmental standards, and avoids the risk of supporting misleading environmental claims, known as greenwashing.

Ideally, all products and services listed in the e-marketplace should be verified by the e-marketplace owner as meeting the required standards. This means that manufacturers or suppliers should supply a green label certification or performance standard compliance report from an independent certification body to the e-marketplace owner, who is then responsible for checking this proof. Again, this avoids the risk of greenwashing, and increases the suitability of the tool for use in procurement.

---

[9] To be classed as a Type I ecolabel, the scheme must fulfil the quality requirements of the International Standards Organisation (ISO) 14024:2018 (environmental labels and declarations – Type I environmental labelling – Principles and procedures).

2.2.1 Green Cart (Thailand)

The Thai Green Cart[10] was established in 2008 by the Pollution Control Department (PCD), which sits within the Ministry of Natural Resources and Environment. Its goal is to make GPP easier, by providing a list of products and services that can be used by procuring agencies to find out what green products and services are available on the market. The Green Cart also includes a social function which facilitates peer-to-peer communication.

To establish the Green Cart, the PCD first researched what green products and services were available in Thailand, in particular products awarded the Thai Green Label. Based on this, the Green Cart was launched with 17 product and 3 service categories. The focus is products and services which are widely purchased by all contracting authorities (for example, office equipment). As of June 2020, the Thai Green Cart contained over 1,600 green options across 25 products and services.

Products and services holding the Thai Green Label are automatically added to the Green Cart. Due to the low number of ecolabelled products, however, the PCD also developed lower requirements to allow more products and services to qualify. To be listed in the catalogue, suppliers need to submit an online application which includes a self-declaration that the technical requirements are met. The PCD does not verify these claims before admitting suppliers into the Green Cart system, however, companies may be asked randomly to verify their compliance with the criteria at any time. In cases where false claims are found, penalties apply (Prakash et al, 2021). Once listed in the Green Cart, uncertified products and services have three years to achieve the Thai Green Label. After this point, they will be removed from the catalogue if the ecolabel has not yet been achieved.

A major challenge for establishing the Thai Green Cart was the lack of legal recognition of GPP. For a procurement to be legally compliant, bids were needed from at least three suppliers, and the contract had to be awarded to the cheapest contract. To encourage the use of the Green Cart, it was therefore essential to prove to procurers that more than three options were available for each product and service, meaning they could set green technical specifications in the confidence that at least three suppliers can make offers.

> “Direct purchase from the Green Cart in cases where only one product is available was made allowable by the 2021 revision to Thailand’s Law on Public Procurement. If more than one product is available, at least two quotes need to be requested, with the contract going to the lowest cost offer.”

GPP remains voluntary in Thailand, and no policy targets for GPP have been set. Data on the use of the Green Cart by procurers is also limited. Twice per year, the PCD asks procurers who have registered their interest in GPP to submit data on a voluntary basis on their use of the Green Cart. In the early years of the Green Cart initiative, a prize was available for the best performing procurers. However, since this initiative ended, fewer contracting authorities submit data, and what is submitted is often incomplete.

In addition to Green Cart, two further product databases are being developed in Thailand: Made in Thailand[11] (developed by the Federation of Thai Industries) and the Thai SME GP database[12] (developed by the Office of Small and Medium Enterprises Promotion – OSMEP). These are being developed to support procurement requirements established in the latest revision of Thai Procurement Law. For example, if a contracting authority wants to buy paper, and paper products are available on the new Made in Thailand database, then the contracting authority is obliged to spend at least 20–30% of the purchase budget on domestically manufactured products.

---

[10] http://gp.pcd.go.th/cat-1-ssl

[11] https://mit.fti.or.th/Product/Search

[12] https://www.thaismegp.com/product

2.2.2 MyHIJAU Mark (Malaysia)

The Malaysian MyHIJAU mark is a government recognized label scheme managed by the Malaysian Green Technology and Climate Change Corporation (MGTC). The aim of MyHIJAU Mark is to simplify the vast array of ecolabels under one mark, thereby sending a clear signal to procurers and other consumers that the product meets credible environmental standards.

FIGURE 1: VISUALISATION OF ECOLABELS CONSOLIDATED UNDER THE MYHIJAU LABEL

Source: https://www.myhijau.my/about/ [last accessed 19.11.2021]

To qualify for MyHIJAU Mark, a manufacturer or supplier must have already been qualified for a green label certification or hold a performance standard compliance report from an independent certification body that meets the minimum standards recognized by MGTC. In total, four 'Compliance categories' are recognized under product groups (MGTC, 2020):

1. Green Label Certification
   a. ISO 14024 Type I Ecolabel (such as SIRIM Ecolabel (Malaysia), Blue Angel (Germany), Thai Green Label etc.)
   b. ISO 14025 Type III Ecolabel (such as SIRIM Product Carbon Footprint label (Malaysia), Thailand's Carbon Footprint Reduction Label etc.)
   c. Other Type I-like Voluntary Sustainability Schemes (such as OEKO-TEX Standard 100, BPI Compostable Label Program, FSC).
2. Performance Standard Compliance related to environmental parameters (such as standards set by Malaysian Standard (MS) or ISO).

In addition to consolidating all ecolabels under one mark, an online marketplace called the MyHIJAU Directory has been created[13]. The Directory acts as an information tool, allowing procurers – as well as private-sector and individual consumers – to check the availability of green products and services on the market. Purchases cannot be made directly using the Directory. Instead, procurers still need to run legally compliant tenders.

[13] https://dir.myhijau.my/directory#/myhijau-mark

The Directory can be filtered according to several criteria, including sector (Building, Energy, Transport, Water, Waste), category (19 in total including Office & Stationary, Building Materials, Cleaning Products), and level of compliance. As of 31 December 2021, 9,647 products and services, and 552 suppliers were registered (MyHIJAU, no date).

2.3 SINGLE CONTRACT E-CATALOGUES (SUPPLIER-DEVELOPED)

While researching e-catalogues for this pre-study, a second use of the term 'e-catalogue' was identified, in particular in the European context, where the term 'electronic catalogue' is defined by Directive 2014/24/EU (the Public Procurement Directive) as "a format for the presentation and organisation of information in a manner that is common to all the participating bidders and which lends itself to electronic treatment". Article 36 (2) of the directive further states that "Electronic catalogues shall be established by the candidates or tenderers with a view to participating in a given procurement procedure in accordance with the technical specifications and format established by the contracting authority".

The purpose of an electronic catalogue, as defined by the European Directive, therefore differs from the central e-catalogue examples examined above. In this case, electronic catalogues are prepared by bidders as part of the competition phase, as opposed to the e-catalogue being prepared after the competition phase by a central purchaser in order to list contracted suppliers and their goods and services.

In practice, a further e-catalogue approach which combines the above can be found i.e. e-catalogues which are prepared by suppliers as part of contract delivery. In the examples found (summarised in 2.3.1and 2.3.2), catalogues for office supplies were developed as part of framework contracts awarded to a single supplier. This pre-study will refer to this approach as 'single contract e-catalogues', in order to differentiate them from the central e-catalogues developed by CPBs using framework contracts awarded to multiple suppliers.

2.3.1 Government of Flanders (Belgium)

In September 2016, Government of Flanders (one of Belgium's three regional governments) launched a new framework agreement for stationary suppliers. The four-year contract was estimated to be worth over two million euros and was awarded to a single supplier. As part of this contract, the selected supplier was also responsible for providing a web-shop where users of the framework contract (all central government offices in Flanders) can easily place orders (European Commission, 2018).

The framework required 252 types of stationary products. Of these, all paper products (60 in total) had to meet sustainability standards (i.e. meeting standards of listed ecolabels, for example the Blue Angel or equivalent). For 20 products, suppliers had to offer a sustainable alternative to the conventional product. For the remaining products, offering a sustainable product was optional. This was because market research showed that no sustainable options were currently available, therefore, it could not be made mandatory.

In addition to using **technical specifications**, which set out the minimum mandatory sustainability requirements for the stationary, Flanders also used **award criteria** to award more points to suppliers offering a higher share of sustainable products in their inventory, as well as bid which offered sustainable transport for delivery. Points were also awarded for the quality of the web-shop, with a focus on how easy it is for users to find and buy green options.

Using **contract performance clauses**, Flanders required the supplier to report once per year on the products purchased under the framework agreement, including the number of sustainable stationary orders. The supplier also had to give each customer a list of 10 products where they could have made a more sustainable choice, including the price difference between what they bought and the sustainable alternative. To check compliance with sustainability requirements, Flanders can ask for proof for a random selection of products being offered in the web-shop each year. For false or non-verifiable sustainability claims, a penalty of 10x the product value will be charged.

2.3.2 City of Ludwigsburg (Germany)

In 2018, the City of Ludwigsburg launched a tender for a two-year framework agreement (with extension possible) with a single supplier for the delivery of office supplies, **including the development and maintenance of a web-based ordering system** that all departments of the city could use to order office material (European Commission, 2020).

In order to set appropriate technical specifications, Ludwigsburg conducted market engagement, and devised the following requirements:

- All paper-based products must fulfil the criteria of Blue Angel (or equivalent)
- Products containing plastic are required to: contain a minimum recycled material or be made from biodegradable material (minimum set depending on product); be free of PVC, chlorine or phthalates (where possible); be certified with Blue Angel (or equivalent), when available for product.
- Products containing wood and rubber are 100% FSC certified (or equivalent).

The contract was awarded based on the most economically advantageous offer (80% price and 20% sustainability criteria). Sustainability was assessed according to circularity of products (for example existence of take-back schemes), social responsibility (for example, supply chains have been assessed for compliance with human rights, and/or contractor employs people with limited access to employment opportunities), as well as packaging, transport, and recycling processes.

The total volume of the contract was €165,000 and three bids were received. The winning supplier was able to offer ecolabelled products (Blue Angel, FSC and Cradle-to-Cradle) for most product types included under the framework. Although the framework required extra lead in time, namely via the market engagement to set higher specifications, the City rationalized its product range which led to no increase in cost (European Commission, 2020).

03 OVERVIEW OF DIGITAL PLATFORM APPROACHES

The below table sets out the requirements, strengths and weaknesses identified so far for each of the three e-catalogue approaches covered in this pre-study.

TABLE 3: OVERVIEW OF DIGITAL PLATFORM APPROACHES

E-CATALOGUE APPROACH	REQUIREMENTS	STRENGTHS	WEAKNESSES
Central e-catalogues	• Central Purchasing Body • Supportive legal framework (i.e. Direct Purchase or Framework Agreement provisions)	• Reduces transaction costs of public procurement • Provides contracting authorities access to wider market • Provides suppliers greater access to public contracts	• Income uncertainty for suppliers • Potential to hinder innovation / buying at highest standards • If both sustainable and conventional products in catalogue, lower cost conventional items may still be purchased over sustainable options
E-marketplaces	• Institutional owner with good access to contracting authorities and suppliers • Defined sustainability standards and/ or ecolabel	• Lower entry requirements (in terms of legal and institutional framework) • Increases visibility of sustainable products and services available on market • Can be combined with other tools, such as communication fora, SPP criteria directories and SPP helpdesk functions.	• Limited impact on procurement process (no direct purchase and integrated invoicing options) • Still relies on individual procurers with motivation to do SPP
Supplier e-catalogues	• Skilled procurers with ability to set and verify compliance with sustainability criteria • Supportive legal framework	• Can by implemented by any contracting authority • Places responsibility for designing, populating and maintaining e-catalogue on supplier	• Reduces competition and SME participation (only large suppliers have necessary coverage and abilities) • Compliance of products in e-catalogue still needs to be periodically verified • Inherent inefficiency of e-catalogues being created to serve one contract with one buyer

04 PRINCIPLES OF EFFECTIVE DIGITAL PLATFORMS FOR SUPPORTING SPP

CREDIBLE

The sustainability of products and services placed in an e-catalogue or e-marketplace must be credible. Any claims made should be verified before the products and services are listed in the catalogue. This means that buyers can be confident in their purchases.

Central e-catalogues are typically managed by CPBs, however, these bodies may not have the technical skills to set sustainability criteria and verify the compliance of goods and services with these requirements. Cooperation between actors, for example the Ministry of Finance and/or CPB, and sustainability experts from the Ministry of Environment, is therefore essential.

Ecolabels can also be a useful complimentary tool. These can be a source of SPP criteria and provide an easy means of verification. Ecolabels also clearly signal to users which options are sustainable (especially in catalogues which list both conventional and sustainable options). When using ecolabels in procurement, priority should be placed on Type I labelling schemes I.e. voluntary, multi-criteria labels based on life cycle considerations which are awarded by a third-party programme.

INCLUSIVE

E-catalogues should ideally encourage the participation of local suppliers and SMEs. In this way, procurement can also contribute to social objectives, such as job creation and domestic industrial development.

The e-catalogue must also meet the needs of all the contracting authorities expected to use it. For example, rural municipalities in remote regions may

have different demands. Likewise, not all SME suppliers can offer services on a nationwide scale. Dividing framework contracts into regional lots and allowing the e-catalogue to be filtered accordingly is a potential solution. Another could be allowing consortia to bid for contracts (particularly large-scale ones), thereby allowing SMEs to overcome any scale or supply limitations.

EASY-TO-USE

An e-catalogue should be easy to search, and product listings should include data on all relevant characteristics of a product, including price and technical performance. With regards to sustainability, this could include the energy performance of a product, the warranty period, the possession of an ecolabel and so on.

Easy comparison between products is essential, including displaying price-per-unit of all offers. Standardised units should always be used for sustainability characteristics.

The catalogue should have a search function, which generates results from common terms as well as official procurement categories. For example, in English, people are more likely to use the word 'printers' than the technical term 'imaging equipment', and a search function should recognise both.

It should also be possible to filter results, including by environmental objectives or level of environmental ambition attained. This is especially relevant in e-marketplaces where ecolabel products are listed alongside products meeting lower sustainability thresholds.

Other relevant filters which make the use of the e-catalogue compatible with other policy objectives should also be considered. For example, if a country has requirements on buying from SMEs or local suppliers, including these filters in the e-Catalogue will make it a more attractive tool for buyers. As SMEs may not be able to serve the whole country, geographic filters may also be necessary.

UP-TO-DATE

Products should be updated regularly. This could mean limiting framework contracts to between one and three years, depending on the product category (with the possibility of prolongation by one or two years, depending on performance).

Changes made during a contract should be possible without the catalogue owners' approval wherever possible. For example, reductions in price should be possible directly on the platform (with automated functions that allow lowering but not raising of prices).

VISIBLE

The existence of an e-catalogue must be communicated to all relevant contracting authorities, and its use should be actively promoted. Making use of central e-catalogues, where they exist, could also be made mandatory.

It is also recommended that only one central e-catalogue is provided to procurers and suppliers as a one-stop-shop, in order to avoid confusion and increase visibility. In some countries, several e-catalogues or e-marketplaces are available or under development, each focusing on a separate policy goal. Ideally however, products could be displayed in one place, with options to filter them according to goal. For example, users could search one catalogue for products which are sustainable and provided by an SME supplier, rather than have to visit two different sites.

05 NEXT STEPS FOR PROJECTS SEEKING TO ESTABLISH OR ENHANCE E-CATALOGUES FOR SPP

E-catalogues could become valuable tools in streamlining SPP and making sustainable options available to a larger number of public buyers. To date, however, little consideration has been given to 'green' or 'sustainable' e-catalogues, both in theory and in practice. In this pre-study we have therefore sought to provide an initial overview of international examples of e-catalogues, and from this, identify common features which may be useful when considering how to design e-catalogues for SPP.

Although this pre-study originally set out to examine e-catalogues, the decision was also made to include e-marketplaces, due to some of the similarities in function, as well as the opportunities offered by e-marketplaces in contexts where e-catalogues are not viable, at least in the medium-term.

For projects wishing to establish or enhance e-catalogues for SPP, a detailed scoping study of existing e-catalogue or e-marketplace infrastructure and the institutional and legal framework is a necessary first step. The scoping study should first determine whether any online tools have already been established in the country. If yes, the following questions should be answered:

- Do these allow direct purchase (e-catalogue), or are they for information only (e-marketplace)?
- Who owns the online tool?
- How do suppliers register to be listed on the online tool? What documents do they need to supply, and who verifies them? At what stage does this verification take place?
- How can procurers use the tool in a way compliant with procurement regulations?
- Does the tool already list sustainable products/and or services? If so, what standards must sustainable products comply with, and how are these verified? Do these align with national ecolabel or SPP criteria?

In addition, the scoping study should also answer the following, whether an e-catalogue exists or not:

- **Legal framework**: what provisions are already included within national procurement law which could support an e-catalogue approach (i.e. framework agreements, direct purchasing, or other relevant procedures)?
- **Institutional framework**: what organisation acts as the CPB? Are they supportive of SPP? What other institutions are engaged in SPP?
- **Existence of ecolabels or SPP Criteria**: does a national ecolabel or SPP criteria exist? Which institution leads the ecolabel / SPP criteria development? What products and sectors are included under the ecolabel/SPP criteria?

Based on the information derived from the scoping study, specific activities could then be developed depending on the needs of partner countries. For example:

- Feasibility study on enhancing e-catalogues and e-marketplaces as tools for SPP, including concepts such as benchmarking of ecolabels.
- Capacity building and/or guidance on establishing an e-catalogue, for both the framework agreement and direct purchasing model.
- Capacity building and/or guidance on establishing an e-marketplace, or connecting an e-marketplace to central purchasing activities.
- Capacity building and/or guidance on introducing or increasing visibility of sustainable options in existing e-catalogues.
- Further development of case studies which show how e-catalogues or e-marketplaces have been developed in other countries, such as Korea, the Philippines, Indonesia, Thailand and Malaysia, with in-depth analysis of the advantages and challenges of these different approaches.

To conclude, e-catalogues for SPP are still in a nascent phase, and detailed guidelines have not yet been developed. However, the opportunities and obstacles to implementing e-catalogues are context specific. As this pre-study has shown a range of flexible implementation options exist, and identification of capacity building activities should always be done in close collaboration with local project partners in order to achieve the highest relevance and impact.

Future studies on this topic could also help to develop clearer methodologies for the different e-catalogue and e-market place approaches, and more understanding of their respective benefits and challenges. Potential topics could include:

- Overview of international practices regarding framework agreements, including the conditions necessary (policy and institutional) to support their use and increase their impact in terms of SPP.
- Detailed exploration of the institutional, technical and resource requirements of establishing an e-catalogue, including the availability of off-the-shelf opportunities to 'import' systems developed in other countries.

LIST OF REFERENCES

Asia Pacific GPP Network (2021) Webinar Series #2: GPP Implementation in the Republic of Korea. 17 Nov 2021, Available at: https://www.youtube.com/watch?v=1-nbMngr0IY [last accessed 11.02.2022]

ChileCompra (no date) https://www.chilecompra.cl/convenio-marco/ [last accessed 05.01.2022]

Consip (2020) Qualification of a supplier to the Electronic Marketplace of the Public Administration (MePA)

Crown Commercial Service (2016) The Public Contracts Regulations 2015 & The Utilities Contracts Regulations 2016: Dynamic Purchasing Systems

European Commission (2018) Encouraging more sustainable office supplies in Flanders. GPP News Alert, Issue no-80.

European Commission (2020) Framework contract for sustainable office materials based on "Cradle to Cradle" principles. GPP News Alert, Issue no.94.

GPPB-TSO (2017) The Philippine Green Public Procurement Roadmap. EU SWITCH-Asia Programme

Immobilien Bremen (no date) https://www.immobilien.bremen.de/einkauf-vergabe/elektronische-beschaffung/einkaufskatalog-brekat-14925 [last accessed 04.01.2022]

KONEPS (no date) https://www.g2b.go.kr/gov/koneps/pt/intro/file/4_KONEPS_eng.pdf [last accessed: 04.01.2022]

MGTC (2020) Government Green Procurement Guidelines 3.0

MyHIJAU (no date) https://www.myhijau.my/statistics/ [last accessed 07.01.2022]

OECD (no date) https://www.oecd.org/governance/procurement/toolbox/about/terminology/ [last accessed 07.01.2022]

OECD (2016) The Korean Public Procurement Service: Innovating for Effectiveness, OECD Public Governance Reviews, OECD Publishing, Paris.

OECD (2017) Public Procurement in Chile: Policy Options for Efficient and Inclusive Framework Agreements. OECD Public Governance Reviews, OECD Publishing, Paris.

OECD (2019) Report on the Implementation of the Recommendation of the Council on Public Procurement. OECD Publishing, Paris.

Prakash, S., Schleicher, T., Michalscheck, M. (2021) Barrier Analysis and Strategies for Ecolabels and Sustainable Public Procurement Implementation. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

World Bank (2021) Green Public Procurement: An Overview of Green Reforms in Country Procurement Systems. Climate Governance Papers Series. Washington, DC.

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

Friedrich-Ebert-Allee 32 + 36
53113 Bonn, Germany
T +49 228 44 60-0
F +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1 – 5
65760 Eschborn, Germany
T +49 61 96 79-0
F +49 61 96 79-11 1

E info@giz.de
I www.giz.de