

Development of the Vendor List Registration System for the Thai Green Directory

Acknowledgement

This Report was prepared on behalf of the EU SWITCH-Asia Sustainable Consumption and Production Facility (SCP Facility) by Dr Natworapol Rachsiriwatcharabol under the supervision of Lunchakorn Prathumratana. It was revised by Zinaida Fadeeva.

List of acronyms

ΑΡΙ	Application Programme Interface
CDG	Comptroller General's Department
e-GP	electronic Government Procurement
EU	European Union
FTI	Federation of Thai Industries
GPP	Green public procurement
п	information technology
MoU	Memorandum of Understanding
NGO	non-governmental organisation
PAO	provincial administrative organisations
PCD	Pollution Control Dept
PR	public relations
RFQ	request for quotation
SA0s	subdistrict administrative organisations
SCP	Sustainable consumption and production
SME	small and/or medium-sized enterprise(s)
SWOT	strengths, weaknesses, opportunities, and threats
TGD	Thai Green Director
тнв	Thai baht (currency)
WEIS	Water and Environment Institute of Sustainability

Executive Summary

Green Public Procurement (GPP) is an important policy in Thailand which has been implemented since 2012. It has been incorporated in the 20-year National Strategy (2018–2037), the National Economic and Social Development Plan, and the National Sustainable Consumption and Production Roadmap that aligns with the Sustainable Development Goal 12. The Pollution Control Department (PCD), with technical assistance from the European Union (EU) SWITCH-Asia Sustainable Consumption and Production (SCP) Facility, has developed the National Action Plan on Green Public Procurement Promotion (2021–2027), which was officially endorsed in May 2022.

There are two major platforms for green products in Thailand. One is the platform of PCD called 'Green Basket', where there are 40 product categories eligible for governmental agencies to buy. The other platform is operated by the Federation of Thai Industries (FTI) and is called 'Thai Eco-Products Directory'. The products/ services cover about 22,000 certified Thai Eco-labels products from 17 eco-labelling schemes, including the list of products under the Green Cart platform of the PCD. However, none of these platforms has a vendor list to facilitate the procurers. On 22 December 2020, Thailand's Ministry of Finance issued a Ministerial Regulation Prescribing Supplies and Methods for Procurement of Supplies that the State wants to promote or support (No.2) B.E. 2563, which allows public agencies to procure green products and services that are registered under the platform of the PCD. The government's initiative is consistent with the recommendation of the project on the development of the National Green Directory.

The project 'Development of Vendor List Registration System' was elaborated in cooperation among the PCD, the FTI and the EU SWITCH-Asia SCP Facility, supported by the EU. The project aims to support Thailand's green procurement implementation by developing a tool that provides information on vendors selling environmentally friendly certified products and services available in the market, and it integrates into the National Green Directory to facilitate buyers and provide a recommendation and action plan for sustainability of the vendor registration system and National Green Directory.

The implementation of the project began with establishing the Working Group on National Green Directory, consisting of representatives from the PCD, the Water and Environment Institute of Sustainability (WEIS) of FTI, eco-label agencies, SCP experts, and the EU SWITCH-Asia SCP Facility. The Working Group's tasks are to advise on developing the vendor registration system, support the data of eco-label certified products and services and their certified companies, and promote the National Green Directory platform. The working group meetings were conducted five times during the project implementation period (January–August 2022) to follow up on progress and provide inputs. After the first meeting, the Working Group decided to change the name of the Thai Eco Product Directory to the Thai Green Directory.

The project kick-off meeting with the EU Delegation Thailand was conducted on 11 February 2022. Consultation meetings with relevant stakeholders were organised on the structure of the registration platform and the workflow of data inputs on 9 March 2022 (Annex 1), agency users and functional requirements for the design on 18 March 2022 and 8 April 2022 (Annex 2). The obtained inputs and comments were fed into the development of the vendor registration platform. After that, the demo version was distributed for testing by all types of users (website admins, eco-label agencies, certified manufacturers, and sellers) before finalising the platform.

The data in the Thai Green Directory comes from three sources: eco-label agencies, eco-label certified manufacturers, and vendors (Figure 1). Eco-label agencies provide a database on the updated list of certified products and details of certified manufacturers via either the Application Programme Interface (API) or manually. The website admin will send an initial login and password to eco-label agencies that do not have API to access the website and import the data. The eco-label institution can also generate a user login so that its certified manufacturers can update their certified products information in the database. Persons or juristic persons1 are eligible to register their shops on the website and submit legal documents for approval by the admin of the website, who grants access. A registered vendor can create their list of products in the shop by selecting from the list of eco-label certified products provided by eco-label agencies.

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¹ Under the Thailand Civil and Commercial Code.



Figure 1 Workflow diagram of the vendor registration system

Currently, the Thai Green Directory has a database of 18 eco-labels from 11 organisations, as summarised in Table 1. The list of products and services categories is summarised in Table 2.

No.	Eco-label scheme	Logo	Scheme owner organisation
1	Green Basket	٢	Pollution Control Department (PCD)
2	Thai Green Label		
3	Carbon Reduction	grantik Granikasi Granikasi	Thailand Environment Institute (TEI)
4	Circular Mark	CHECULAR	
5	Green Hotel	G	
6	Green Production	GREEN	Department of Environmental Quality Promotion
7	Green Restaurant	G	(DEQP)
8	Green National Park	G	

Table 1 Eco-labels currently listed in the Thai Green Directory

No.	Eco-label scheme	Logo	Scheme owner organisation
9	Carbon Footprint		
10	Carbon Footprint Reduction		Thailand Greenhouse Gases Management Organisation (TGO)
11	Cool Mode		
12	Energy Saving No.5		Electricity Generating Authority of Thailand (EGAT)
13	High-Efficiency Energy Label	Ø	Department of Alternative Energy Development and Efficiency (DEDE)
14	Green Leaf	A manufacture	Green Leaf Foundation
15	SCG Green Choice	CREEN CHOICE	Siam Cement Group (Public) Co., Ltd.
16	Green Heart Label	Sileant stimilan	Siam City Cement (Public) Co., Ltd.
17	Green For Life	BREEN FOR LIFE	PTT (Public) Co., Ltd.
18	Eco Plus	ecø⁺	The Federation of Thai Industries

Table 2 List of products and services groups in the Thai Green Directory

1. Office supplies	6. Household	11. Electric appliances and lighting
2. Construction materials	7. Apparel	12. Health and beauty
3. Food and drinks	8. Automobile	13. Hotels and resorts
4. Cleaning services	9. National Parks	
5. Raw materials	10. Restaurants	

The official launching event of the Thai Green Directory was organised in cooperation with the PCD and FTI on 23 August 2022 at Pullman Bangkok G Hotel (Annex 4, Figure 2). The hybrid event was attended by over 200 participants of various stakeholders including private sector, central and local government officials, state enterprises, educational and research institutes, NGOs, banks, etc. It was also broadcasted live on the SWITCH-Asia YouTube channel.



Figure 2 Launching event of the Thai Green Directory on 23 August 2022

At the end of the project implementation period, the vendor registration system was integrated into the Thai Green Directory, and the registered URL is https://www.thaigreendirectory.com/. There are 189 registered vendors/stores in the Thai Green Directory platform, in 9 categories: apparel, automobile, cleaning services, construction materials, electronic appliances and lighting, food and drinks, health and beauty, household, and raw materials. The Working Group continues to promote the platform and send letters to relevant stakeholders to promote it on their websites. Figure 3 shows the locations of registered vendor shops displayed in red pins on the Google Map.



Figure 3 Locations of registered vendors in the Thai Green Directory

Recommendations to improve the Thai Eco Product platform to become a National Green Directory are provided in the next Chapter. A literature review was conducted on the Green Public Procurement regime in Thailand, the existing vendor registration system of green products and services in other platforms, and examples of similar practices in other countries. SWOT analysis was also conducted. A draft policy recommendation and action plan for the sustainability of the vendor registration system and the Thai Green Directory were developed and brought into a stakeholder consultation workshop on 5 July 2022 in Bangkok to get feedback (Annex 3). The workshop was attended by representative of eco-label agencies, government officials, state enterprises, the private sector, eco-labels certified companies, and NGOs.

The Thai Green Directory development aims to be the source of information on eco-label certified products and services for the public and private sector, where the data is either imported by or automatically linked with eco-label agencies and vendors registered on the platform. In order to gain maximum benefits and achieve the implementation targets of the TGD, key recommendations are summarised as follows.

- Strengthen the cooperation among the eco-label agencies, PCD and FTI through the development of a Memorandum of Understanding (MoU) to support green procurement for the country and update the data on certified products and services to support the implementation of the TGD
- Due to the difference in data updating in terms of frequencies, the admin team of TGD should coordinate closely with eco-label agencies to develop a plan with a timeline for importing and updating data
- Develop a monitoring report and evaluation system to review the platform's performance and continuous improvement; the report should be annually submitted to the management level of agencies under the MoU
- Promote the TGD and vendor registration platform to consumers and sellers/suppliers and organise promotional campaigns to encourage users, such as providing free PR Banners on the first page of the website for registered vendors, or coordinating with online shopping platforms on special occasions (e.g. World Environment Day)
- · Provide incentives to eco-label certified producers and vendors in TGD

- Provide annual capacity building to TGD admin staff and in-charge personnel of eco-label agencies, representative of manufacturers and registered vendors
- Upgrade TGD to be able to support the green procurement reporting system for the entire country

Recommendations to improve the Thai Eco Product platform to become the National Green Directory

1) Literature review

1.1) The legal and administrative requirements for public procurement in Thailand

The Government Procurement and Supplies Management Act B.E. 2560

Section 46 of The Comptroller General's Department (CGD) has the responsibility to manage and develop an electronic government procurement system and to manage the announcement of procurement information publication via the CGD's information network system for open access to users.

As a consequence, the CGD has formulated guidelines for implementing electronic procurement through an e-Government Procurement (e-GP) system. It is imperative that a government agency perform the procurement via electronic procedures.



Figure 4 Electronic Government Procurement (e-GP)

Registration as public sector trade partner

According to the Regulation of the Ministry of Finance on Public Procurement and Supplies Administration B.E. 2560 via electronic procedures, the government agency should conduct the electronic procurement using the Electronic Government Procurement (e-GP) platform as defined by the CGD. The government agency should use the printed document from the e-GP platform as an attachment for the procurement procedures. It is required that entities or entrepreneurs who would like to trade with the public sector register to bid as public trade partners using the following procedures:

หน้าหลัก กฏ/ระเบียบ/มติ ครม./หนังสือเวีย	ขน ข้อมูลผู้	บริหารและคณะกรรมการ	หลักสูตรฝึกอบรม	CoST Thailand	ป ช่องทางการติดต่	Ð
กฏ/ระเบียบ/มติ ครม./หนังสือเวียนล่าสุด	อ่านทั้งหมด	ด้บหาประก	าาศจัดซื้อจัดจ้าง		เข้าสู่ระเ	บบเพื่อการใช้งาน
				- 6	อผู้ใช้งาน :	รทัสม่าน :
ันหา กฏ/ระเบียบ/มติ ครม/หนังสือเรียนล่าสุด	Q	ประเภทประกาศ : - เลือกประเภทประกาศ -				ก็มารปังหว่าน ?
ค้นหาด้วยเลขที่หนังสือ 01 ประกาศรายชื่อผู้ประกอบการงานก่อสร้างที่มีสิท ข้อเสนอต่อหน่วยงานของรัฐ ครั้งที่ 2/2565 มี.ค.	ຮີເປີນຜູ້ຢືນ	หน่วยงาน :			(2) องระเบียนได้ที่นี่ มีอะไรใหม่	ເຫັງທີ່ແກງ ເ
 มาตรการเจ๋งรัดการเปิกจ่ายงบประมาณและการ รัฐ 	ใช้จ่ายภาค	จังหวัด : -เลือกจังหวัด-			นิติบุคคลในระบบ	นวยความสะดวก สามารถใช้ข้อมูล J e-GP แทนการยิ่นสำเนาเอกสารและ บัติของผู้ยื่นข้อเสนอ
 แนวทางปฏิบัติการใช้ข้อมูลนิติบุคคลจากระบบจ จ้างภาครัฐด้วยอิเล็กทรอนิกส์ (e - GP) แทนกา เภพ. เอกสารการแสดงคุณสมบัติของผู้ขึ้นข้อเสนอที่เป็ 	รขึ่นสำเนา	ค้มหา Q	ค้นหาขั้นสูง Q		Infographic nr browsing data)	รล้างประวัติการเข้าเว็บไซด์ (Clear
		U	ะกาศวันนี้			• • • •

- 1. Register on the website (<u>http://www.gprocurement.go.th</u>) to obtain an e-GP reference number, using the 'Registration' section tab.
- 2. Fill in entity/entrepreneur taxpayer ID and information. Save the registration at this point.
- 3. Verify all information.
- 4. Print out the registration form notification.
- 5. At this point, the online registration is complete.
- 6. Submit the registration form notification to CGD.
 - If the entity/entrepreneur is located in Bangkok, the form should be submitted to the Public Procurement Division, CGD.
 - If the entity/entrepreneur is located in a provincial area, the form should be submitted to the Provincial Office of the CGD of the province where the entity/entrepreneur is located.
- 7. Verification and registration approval
- 8. Registration result notification: as the final step, the entity/entrepreneur will be notified by email about their registration status by the CGD to the email address they provided during registration.

Examples of guidelines for handicap and ranking of the bidder (hiring work, excluding construction work):

- If the bidding entity/entrepreneur is SME, the handicap is 10% maximum.
- If the lowest bidder is general entity/entrepreneur and there are other SME bidders that have higher proposed price, ranking will be conducted with 10% handicap maximum for SMEs but no more than 10% higher than the lowest price of general entity/entrepreneur bidder.
- If all bidders are entity/entrepreneur, no handicap will be applied for consideration.
- If all bidders are SMEs, no handicap will be applied for consideration as well, since all bidders have equal characteristics.

Example 1 SME proposed 5,100,000 THB (1st rank) SME proposed 5,300,000 THB (3rd rank) SME proposed 5,200,000 THB (2nd rank) General entity/entrepreneur proposed 5,000,000 (4th rank)
Example 2 SME proposed 5,300,000 THB (3rd rank) SME proposed 5,200,000 THB (2nd rank) SME proposed 5,000,000 THB (1st rank) SME proposed 5,500,000 THB (4th rank)

The first 3 lowest-ranked bidders will be called for the subsequent contract making procedure.

Price negotiation for SMEs that proposed the price higher than procurement budget

If the SME bidder proposed a price lower than 10% higher than the other general bidders, but still exceeding the total procurement budget, the government agency must comply with the Regulation of the Ministry of Finance on Public Procurement and Supplies Administration B.E. 2560 section 57. The government agency still needs to apply less than 10% maximum handicap for SME for consideration as well.

Example

In this case a government agency has a total procurement budget of 5,000,000 THB. There are five bidders: Company A, Company B, Company C, Limited Partnership A, and Limited Partnership B. Limited Partnerships A and B are SMEs, while Companies A, B, and C are general entities. The proposed prices are as follows:

Company A: 5,000,000 THB (3rd rank) Company B: 5,200,000 THB Company C: 5,250,000 THB Limited Partnership A: 5,300,000 THB (SME) (1st rank) Limited Partnership B: 5,400,000 THB (SME) (2nd rank)

It can be considered that Limited Partnerships A and B proposed higher prices than the lowest general bidder (Company A), but less than a 10% margin. Therefore, in this proposal, Limited Partnership A is considered as 1st rank, Limited Partnership B as 2nd rank, and Company A as 3rd rank. However, the 1st ranked bidder, which is an SME, has proposed a price that exceeded the total procurement budget of the government agency. The government agency will proceed as follows:

- Negotiate the price with the SME to obtain as low a price as possible. If the SME bidder agrees to discount, and the new proposed price is within the procurement budget, or if the SME bidder does not agree to discount but the exceeded margin is less than 10% of total procurement budget, and if the government agency considers that price as appropriate, the government agency can decide to purchase or hire with that SME.
- 2. If the procedures in (1) show no success, the government agency notifies all bidders to propose a new price within an appropriate timeframe. If a bidder fails to propose a new price, their original price for will be retained. According to the new price proposal, if a bidder proposes the lowest price, and it is within the total procurement budget, or if a bidder proposes a price that exceeds the total procurement budget by less than 10% of the price, and if the government agency considers that price as appropriate, the government agency can decide to purchase or hire with that bidder.

In addition, the government agency still needs to apply a less than 10% maximum handicap to the SME for consideration as well.

3. If the procedures in (2) show no success, the government agency can consider discarding the purchase or hiring and proceed to comply with the Government Procurement and Supplies Management Act B.E. 2560.

e-market e-catalog

The electronic government procurement (e-GP) system will be reworked (Phase 5 – implement date to be announced). Phase 5 e-GP will increase system efficiency to deal with increased traffic, support current technology, and increase system security. Systems that will be reworked include:

- 1. Registration
 - Government organisation
 - Trade partner with public sector
- 2. E-market system
- 3. E-bidding system
- 4. Report and dashboard system

In the near future, further improvement will be carried out to add more efficiency and coverage of e-GP system such as:

- 1. E-contract system
- 2. E-shopping system
- 3. Online proposal submission
- 4. Work abandonment
- 5. Construction project management
- 6. Grading system
- 7. Electronic price index
- 8. Online petition system
- 9. Supply reference price
- 10. Chatbot

Procurement can be divided into 3 categories as follows:

- 1. Purchasing or hiring
- 2. Consultant hiring
- 3. Designing or supervising

In this report, the review will focus only on purchasing or hiring work, which can be described as follows:

1. Announcement for bid invitation method

This method invites qualified entrepreneurs or stakeholders to submit a bid. There are 3 procedures for this method.

1.1 Electronic Market: e-market procurement is the purchasing or hiring of work with a total budget of more than 500,000 THB value, in which such products or services have non-complex characteristics, meet standards, and appear in an e-catalogue. The e-market operates in 2 ways as follows:

(1) Request for quotation (RFQ) – a single procurement of supply of more than 500,000 THB but within 5,000,000 THB value. Price proposal shall be done once within one workday, from the day following the date of publicising the announcements and documents in the website.

(2) Price proposal by electronic auction – a single procurement of supply of more than 5,000,000 THB value. Proposal can be made multiple times within a 30 minute timeframe.



Figure 5 The process of finding parcels with E-market

There are 77 items of products in the e-market that the Comptroller General's Department had allowed the government organisation to procure for products and services via the e-market method, which are as follows:

- 1. 3D projector
- 2. Air conditioner
- 3. All in One desktop computer for office
- 4. Amplifier
- 5. Ball-point pen
- 6. Basketball
- 7. Benign Prostate Hyperplasia treatment medication (Doxazosin)
- 8. Binding machine
- 9. Black paper binder
- 10. Calcium carbonate prevention pill
- 11. Carbon paper
- 12. CCTV camera
- 13. Cloth tape
- 14. Cold water dispenser
- 15. Colour pencil
- 16. Common calculator
- 17. Common sewing machine
- 18. Desktop banknote counter
- 19. Desktop computer
- 20. Digital camera
- 21. Document cabinet

- 22. Document envelope
- 23. Document file
- 24. Electric centrifugal water pump
- 25. Eraser
- 26. Fan
- 27. Fax machine
- 28. Front facing metal bookshelf
- 29. Front facing wooden bookshelf
- 30. Highlighter
- 31. Hospital air purifier
- 32. Hot-water and cold-water dispenser with water supply pipe
- 33. Industrial dryer machine
- 34. Industrial washing machine
- 35. Lamp
- 36. Laptop computer
- 37. Large toilet roll
- 38. Lawnmower
- 39. Liquid-based correction pen
- 40. Locker cabinet
- 41. Marker pen
- 42. Meeting room speaker

43. Metal student chair	61. Projector monitor
44. Metal student table	62. Rubber stamp ink pad
45. Microphone	63. Ruler
46. Microscope	64. Scanner
47. Multifunction printer	65. Scissors
48. Multimedia projector	66. Shredder
49. Municipal waste bin	67. Soccer ball
50. Network video recorder	68. Stapler
51. Office air purifier	69. Staples
52. Office chair	70. Television
53. Office desk	71. Toner cartridge
54. Pencil	72. Uninterruptible Power Supply (UPS) system
55. Photocopier machine	73. Volleyball
56. Pickup truck	74. Whiteboard pen
57. Power over Ethernet (POE) equipment	75. Wired office telephone
58. Printer	76. Wooden student chair
59. Printing calculator	77. Wooden student table
60. Printing or photocopy paper	

Topics	Required information
1. Product information	- Name of sub-products
	- Product photo/picture
	- Brand
	- Model
	- Selling unit
	- Product name
2. Specific characteristics	For example
(depends on selected product	- Paper size
category)	- Paper weight
	- Paper colour
	- Type of packaging for each ream
	- Type of packaging for total reams
	- Environmentally friendly product (non-compulsory)
	- Equipment (non-compulsory)
3. Specific characteristics (non-	For example:
compulsory)	- Specific characteristics, such as screen resolution
	- Specific parameters, such as 1200´1200 px

Table 3 Information to be completed in e-Catalogue

4. Other information	- Price before VAT (non-compulsory)
	- VAT (%) (non-compulsory)
	- Price after VAT (non-compulsory)
	- Product addition date (non-compulsory)
	- Product display termination date (non-compulsory)
	- Additional specification for customer (non-compulsory)
	- Equipment status

It is imperative that the registrant choose 'to accept terms regarding responsibility and service policies' before submitting the approval for e-market list import.

1.2 Electronic Bidding: e-bidding is the procurement of purchasing or hiring work with more than 500,000 THB value, and the characteristics of such services or products are not specified in the e-catalog

1.3 Price Verification is the procurement of purchasing or hiring work with more than 500,000 THB but within 5,000,000 THB, and such government organisation is located in the area with limited internet connection.

2. Selection procurement method

This method invites at least 3 qualified entrepreneurs or stakeholders to submit the proposal, unless there are fewer than 3 qualified entrepreneurs or stakeholders under certain conditions; for example, no proposal was submitted under the announcement for bid invitation method; the proposal is not being considered; the proposal has technical limitations that require specific brand selection; or the bidder needs to conduct direct purchasing from other country or via international cooperation.

3. Specific procurement method

A government organisation may invite a single qualified entrepreneur or stakeholder to submit the proposal, or to negotiate the price directly with that government organisation.

1.2) The Green Public Procurement regime in Thailand

The Pollution Control Department (PCD), Ministry of Natural Resources and Environment began implementing the Green Public Procurement Promotion plan for environmentally friendly products and services phase I (B.E. 2551–2554) and phase II (B.E. 2556–2559) by asking for cooperation from 170 departmental government organisations, local administrative authorities (special local administrations, provincial administrative organisations (PAO), and municipalities), state enterprises, universities, public organisations, along with state agencies, in order to conduct green procurement for environmentally friendly products and services.

At the same time, in order to achieve increased green public procurement and expand environmentally friendly product and service markets, phase III of the Green Procurement Promotion plan (B.E. 2560–2564) was continuously being developed. This plan aimed to expand target groups of green procurement to the private sector, as well as to cover local administrative authorities (excluding subdistrict administrative organisations [SAOs]). Furthermore, it also encouraged the manufacturing sector to produce environmentally friendly products and services as approved by the National Environment Board on 6 September 2017.

In 2020, Ministry of Finance had endorsed the Ministerial Regulation on supply determination and procurement procedures that the public sector would like to promote or support (Issue 2) B.E. 2563 on 22 December 2020. It was indicated in Chapter 7/2 on environmentally friendly supplies that such supply according to PCD's list of environmentally friendly products are items that the public sector would like to promote or support.2 The procurement procedures would be on a voluntary basis.

² **Section 27/5**: Environmentally friendly supplies according to PCD's list of environmentally friendly products and services are supplies that the public sector would like to promote or support.

Section 27/6 The procedure for green procurement from section 27/5 will be implemented as follows:

- 1. If such supply has only a single product seller or service provider, the government organisation applies a specific procurement method
- 2. If such supply has at least two product sellers or service providers, the government organisation applies a selection procurement method

However, should a government organisation not wish to use procurement methods (1) or (2), that government organisation may use an invitation to tender method instead.

Number of products and service registration requests in PCD's list of environmentally friendly products and services database

- Year 2020 had a total of 62 items (7 types) of products and services requested for registration, which were (1) 25 items of correction products; (2) 3 items of whiteboard pen; (3) 6 items of photocopier; (4) 9 items of printer; (5) 14 items of ink cartridge; (6) 3 items of cleaning service; and (7) 2 items of surface cleaning products.
- Year 2021 had a total of 59 items (11 types) of products and services requested for registration (as of September 2021), which were (1) 6 items of correction products; (2) 10 items of primary battery; (3) 3 items of whiteboard pen; (4) 12 items of photocopier (5) 6 items of ink cartridge; (6) 7 items of lubricants; (7) 9 items of cleaning service; (8) 1 item of photocopier rental service; (9) 3 items of LED lamp; (10) 1 item of remanufactured toner cartridge; and (11) 1 item of surface cleaning products.
- The 2021 PCD database of environmentally friendly products and services (as of 20 February 2022) had 1,611 items (39 types). There were 17 types of un-registered products and services: fluorescent lamp, document envelope, document file, document box, fuel, lubricant oil change service, petrol station, vehicle repair business, computer, van, uninterruptible power supply (UPS) system, vehicle tire, car battery and reinforced steel rebar.

The PCD's list of environmentally friendly products and services had these specified labels: (1) green label, (2) green basket, (3) environmentally friendly hotel, (4) cool mode label, and (5) carbon footprint reduction label. In 2020, there were 1,686 items (40 types), such as correction products, whiteboard pen, lubricant, photocopier, photocopier rental service and cleaning services, etc.

In 2022, the action plan for the Green Procurement Promotion plan B.E. 2565-2570 was approved at the National Environmental Board 2/2565 meeting on 11 May 2022. The strategies of the plan were:

- To increase the quantity of environmentally friendly products and services in the market and procurement system
- To promote the manufacturing of environmentally friendly products and services
- To promote a sustainable consumption society in the public and private sectors, as well as within the population
- To implement economic measures and legislation to support the promotion of environmentally friendly products and services
- · To track and report the manufacturing of environmentally friendly products and services
- To administer and regulate the action plan for the Green Procurement Promotion (GPP) plan

1.3) The existing vendor registration system of green products and services and registration criteria in different platforms

A vendor registration system that displays a green product and service database has not always existed in Thailand. Most such systems display the data of a specific group, such as the organic farming group and the G Label (certified by Department of Environmental Quality Promotion), which is certified by the Department of Environmental Quality Promotion. The registration criteria in various different platforms are as follows:

Thai Green Market (http://www.thaigreenmarket.com/) is a network of producers, entrepreneurs, and consumers of organic food and non-toxic products who have created a socially conscious and sustainable market. The process for applying to become a Green Network is as follows:

- Interested persons can complete the online application form: basic information, product information, and production process. After that, the network agency will screen and consider the following green market network criteria:
 - Agricultural products obtained from the cultivation of organic crops that have not undergone any processing or alteration of the production conditions
 - Processed food/ready meals, namely products that use organic agricultural products to be processed into food or consumable products
 - Personal care products/Cosmetics (Handmade products): consumer products for the body that either enhance or nourish the body using natural or organic raw materials
- The Thai Green Market network makes an appointment for the interested person/s to present their product. If they pass the presentation, they will be included as producers or new entrepreneurs which can distribute products within the green market network.



Figure 6 Green Market

The green marketplace is a market that gathers G Green entrepreneurs, which is a mark of green production, service, and consumption standards approved by the Department of Environmental Quality Promotion of the Ministry of Natural Resources and Environment.

The Green Market page administrator provides group rules to interested persons: green producers, green vendors, green services, and green customers who would like to join the group by responding to the question, 'Why do you value green products and services?'

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Figure 7 Applying to join the Green Marketplace



Figure 8 Green Marketplace Facebook Page

2) Recommendation and action plan for sustainability of the vendor registration system and Thai Green Directory

Торіс	Internal	External
	 Complete list of all certified products in Thailand 	 Policy supporting green public procurement
Strengths	 List of names of distributors and prices of eco-products and services 	 Development of a green supplies inventory to support green public
otteligtilo	 Producers are keen to provide information on eco-products and services to promote the expansion of the business 	procurement
	 The data collection system or requirement from each certification body is different 	 Lack of PR Sellers/buyers lack of knowledge about eco-labelling
Weaknesses	 Lack of readiness of personnel in certification body to import data in the case that the linking system is not automatic 	 No incentives for certification bodies to regularly update the data

2.1) SWOT analysis of Thai green directory platform

2.2) Policy recommendations for sustainable Thai Green Directory

The targets of Thai green directory development are to (1) providing data on eco-products and service sellers (the certification body imports the data/the seller registers in the system), and (2) act as the directory for both the private and public sectors for purchasing/procuring environmentally friendly products and services.

In order to gain the maximum benefits and achieve the implementation targets of the Thai green directory, the following recommendations are provided.

- 1. Establish cooperation among certification bodies in importing data into the Thai green directory system by preparing a Memorandum of Understanding (MOU) to promote and support green procurement for the country, along with cooperation in maintaining the Thai green directory platform.
- 2. The information should be updated, and the data import should be followed up by cooperating with certification bodies, producers and distributors. The following steps are recommended:
 - Identify the implementation timeline for data improvement/updating, and include plans to manage clean up, IT equipment and the data storage bin
 - Organise progress meetings to monitor and clarify the data improvement implementation with every participating/related organisation by explaining the adoption of informative data patterns, and importing data according to the template
 - Import the data according to the time specified in the plan and prepare the summary consistently from the change in data
 - Organise seminars to exchange information on importing data for relevant officers (certification bodies, producers, distributors)
 - The performance of data system administrative officers of each certification body as well as representatives of producers and shops should be consistently developed and brought up to date (every year). The following steps were suggested.
 - Identify an implementation timeline for capacity-building/training of personnel and officers with respect to data improvement as well as for preparing training plans and notifying the relevant individuals

- Organise training sessions according to the work plan
- 3. Develop and maintain efficient public relations (PR) for reaching a wide range of potential target groups: buyers (private, government and public), distributors and producers
- 4. Promoting benefits and incentives for producers/distributors alliance in preparation of Thai green directory
- 5. Develop monitoring, reporting and evaluation systems:
 - Monitoring: follow-up the cooperation every 3-6 months
 - Reporting: write up progress reports concerning ongoing cooperation
 - Evaluation: assess the work done and provide comments for improvement, along with reporting to the executives as per MOU to acknowledge their support and request continued support
- 6. Expansion of the Thai green directory to support green procurement for the public and private sectors and for users who are able to report back on the information in procurement
- 7. Expansion with respect to the e-commerce platform to promote, to obtain feedback on the green procurement system and how it functions

A	2022	20	23	20	24	20	25	
Activities	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Responsible organisation
1) Building cooperation among organisations								Pollution Control Department
2) Data improvement and follow-up for importing data								All certification bodies
3) Officer performance development								Pollution Control Department Federation of Thai Industries
4) Efficient PR								All certification bodies
5) Promoting benefits and incentives								Pollution Control Department Department of Environmental Quality Promotion
6) Development of monitoring, reporting and evaluation systems								Pollution Control Department
7) Expansion to support green public procurement								Pollution Control Department
8) Expansion towards e-commerce platform for eco-products and services								Federation of Thai Industries Thai Retailers Association

Implementation plan

3) Recommendations on International best practices to promote the nondiscriminatory and fair registration for all eligible vendors in the Thai Green Directory

The following guidelines for importing product data (harmonised with international eco-labelling standards):

- · Must be eco-labelling and/or a service within the ISO 14020 series
- As the National Green Directory system was developed to prevent any misunderstanding of information/ errors that may occur, product data must be imported from the certification body only
- Afterwards the Thai Green Directory will coordinate the content of eco-labelling certification from the certification body and propose it to the working group related to the promotion of the production of green products and services from the Federation of Thai Industries and Department of Pollution Control for an administrator to approve
- After approval, the administrator will create an account and import data for the certification body

4) List of vendors selling green products and services

The consultant has worked with the IT expert to 1) get feedback and acceptance from PCD, FTI, and the users or stakeholders for software development, and 2) liaise with suppliers of environmentally friendly products and services, in order to import data into the Thai Green Directory system. The final results of collecting the list of vendors of green products and services in Thailand are summarised as follows.

No.	Environmentally friendly product label	The environmental label certification agency	Number of products or services
1	Green Label	Thailand Environment Institute	770
2	Carbon Reduction		22
3	Circular Mark		335
4	Green Cart	Pollution Control Department	164
5	Cool Mode	Thailand Greenhouse Gas Management	24
6	Carbon Footprint Reduction Product	Organisation (Public Organisation)	363
7	Carbon Footprint Product		1689
8	Green Production	Department of Environmental Quality	22
9	Green Hotel	Promotion	74
10	Green National Park		37
11	Green Restaurant		15
12	Electricity Saving Label No. 5	Electricity Generating Authority of Thailand	6317
13	High-Efficiency Energy Label	Department of Alternative Energy Development and Efficiency	3238
14	Green Leaf*	Green Leaf Foundation	258

Table 4 Eco-labels in Thailand

No.	Environmentally friendly product label	The environmental label certification agency	Number of products or services
15	SCG Green Choice*	Siam Cement Public Company Limited	40
16	Green For Life*	PTT Public Company Limited	120
17	Green Heart *	Siam City Cement Public Company Limited	36
Total			13,524

Note: (1) The data is automatic updated in the Thai Green Directory system as of 7 September 2022; (2) *The data is manually updated as of August 2022

The Thai Green Directory platform system has 3 parts:

- 1. Importing data on environmentally friendly products and services, carried out by the environmental label certification agency
- 2. Adding information about products or services that are environmentally friendly to the system, and information about distributors by the manufacturers of products or services that are environmentally friendly
- 3. Adding the vendor's name to the products or services that are environmentally friendly in the system by the vendors

List of vendors selling environmentally friendly products and services

Currently, there is a list of vendors of environmentally friendly products and services in the Thai Green Directory system with 187 stores/commercial outlets, consisting of

- 122 outlets for vendors of consumer products such as cleaning products, clothing, etc.
- 61 car dealers
- · 2 distributors of construction materials
- 2 electrical appliance distributors



ANNEXES

22

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ANNEX 1 Consultation meeting on structure of the vendor registration platform on 9 March 2022

The meeting aimed to discuss about structure of the vendor registration platform. The discussion was conducted online on 9 March 2022 from 13.30–16.00 pm with two representatives from the Pollution Control Department (PCD) as shown in Table 1, and representatives from the Federation of Thai Industries (FTI).

Table 1 Names of participants

No.	Name	Organisation
1	Prasith Simcharoen	Pollution Control Department (PCD)
2	Pinthong Tonrub	Pollution Control Department (PCD)

The following issues were discussed.

Details of green products and services information



Thai Green Directory Logo

Logo (สัญลักษณ์ Thai Green Directory)



23

Thai Green Directory website structure



Summary of discussion issues

- The current Application Programming Interface (API) of websites is composed of two parts. The first
 part is the API from certified body that already has the API system, even though the format varies by
 organisation; it can, however, be adjusted to be in the same format or the standard format.
- · Evidence attachment for vendor is determined according to the business type:
 - · Individual attach the copy of identification card
 - Legal entity attach the legal entity registration certificate/commercial registration documents/ memorandum of association
- Environmental claim is the environmental information of products and services given by the certification body (can be left blank if information is not available).
- Additional information from Thai Eco Product websites:
 - Products
 - · Vendor name and contact list
 - Shop location (link with Google maps)
 - Services
 - Shop location (link with Google maps)
 - Other issues
- Further recommendations are as follows:
 - · Add the figure of website structure
 - Add explanations to clarify the Application Programming Interface (API) for better comprehension
 - An issue that requires further discussion is the uploading of product images to websites, and whether this should be done by the certification body or the vendor

Next implementation steps

- Adjust website page
- Adjust presentation format, website structure and data upload format in order to use in discussion with the certification body

Images of online discussion



ANNEX 2 Consultation meetings on agency users and functional requirements for the platform design on 18 March 2022 and 8 April 2022

The discussion conducted online on Friday **18 March 2022** from 9.30–11.30 a.m. was attended by 21 representatives from certification bodies as shown in Table 2.

No	Name	Organisation	
1	Mr. Supachai Sampao	Department of Alternative Energy Development and Efficiency (DEDE)	
2	Miss Suchitra Chamnongbutr	Department of Alternative Energy Development and Efficiency (DEDE)	
3	Mr. Jakkrit Petchnadee	Department of Alternative Energy Development and Efficiency (DEDE)	
4	Miss Jenjira Kulpanich	Department of Alternative Energy Development and Efficiency (DEDE)	
5	Nuttanon Jivapaisarnpong	Department of Alternative Energy Development and Efficiency (DEDE)	
6	Dr. Chuttree Phurat	Green label Thailand, Thailand Environment Institute (TEI)	
7	Miss Kanokwan Dongkanja	Green label Thailand, Thailand Environment Institute (TEI)	
8	Miss Phonnapa Yapan	Thailand Environment Institute (TEI)	
9	Mr. Thada Warunchotikul	Thailand Greenhouse Gas Management Organisation (Public Organisation)	
10	Miss Nonthaphat Sangsongsilp	Thailand Greenhouse Gas Management Organisation (Public Organisation)	
11	Miss Chonthicha Suksupak	PTT Public Company Limited	
12	Miss Bunyawee Phumchaiya	PTT Public Company Limited	
13	Mr. Montree Chitbumrung	Electricity Generating Authority of Thailand (EGAT)	
14	Yutthana Koonsong	Electricity Generating Authority of Thailand (EGAT)	
15	Suchawalee Meeboon	Electricity Generating Authority of Thailand (EGAT)	
16	Atit Kesraman	The Siam Cement Group Public Company Limited (SCG)	
17	Sawitri Phatayanon	Siam City Cement Public Company Limited (SCCC)	
18	Yotsapon Ounjitpan	Siam City Cement Public Company Limited (SCCC)	
19	Janyaporn Klinbuppa	Department of Environmental Quality Promotion (DEQP)	
20	Pintusorn	Department of Environmental Quality Promotion (DEQP)	
21	Prasith Simcharoen	Pollution Control Department (PCD)	

Table 2 List of certification bodies participating in the discussion

The discussion issues are consisting of the following.

• Format of data entry to Thai Green Directory websites by certified body.



Overview of operating system flow



Sending data from an organisation



* API is the linking service for exchanging the data from one system to another

• Operating system of API

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Addition of distributors' information into Thai Green Directory websites:

- There are 2 methods for adding information:
 - 1. The manufacturers enter their own distributors' information.
 - The distributors register in the system and select the distributed products in their own shops by selecting the certified products available on the websites; in addition, evidence of registration certificates or personal identification must be attached.
- · Details of green products and services
 - Required: products or services category, products or services name, commercial name (brand), model, product characteristics/properties, product image, company/organisation, address-shop location (link with Google maps), contact information (telephone, email, websites), contact person information, vendor list and contact details, certified eco-label (certification number, issue and expiry dates)

• Optional: contact details (fax, Facebook, Line Official, etc.), tag products or services, BARCODE and environmental claims of products and services

Summary of discussion issues

- Details of green products and services
 - Mr. Prasith from the Pollution Control Department (PCD) proposed that the information on address/ location that link with the Google maps and vendor list should be optional in filling in data. In the future, the Pollution Control Department might develop the address/location that link with the Google maps in the database but it is not available currently. The vendor list is also not available and not likely to be included in the future database but it is possible to cooperate with the manufacturer to obtain the data.
 - The website developer mentioned that for the data on address/location that link with the Google maps, it can be adjusted to display the information by sub-district, district or province, and the data of shop location categorised by sub-district, district or province can also be stored in the database system of websites.
 - Mr. Atit from the Siam Cement Group Public Company Limited (SCG) agreed that the information on address/location that link with the Google maps and vendor list should be optional in filling data, and proposed to enhance on the contact information or better link directly to the vendor website as some products might be distributed to many areas.
 - Mr. Thada from the Thailand Greenhouse Gas Management Organisation (Public Organisation) provided information that the organisation has already collect the data and is developing the information of address, location that link with the Google maps and coordinates of the manufacturers but the information and shop location of the distributors are difficult to gather. In addition, it was proposed that there should be option for shops such as convenient store or department store that are decentralised throughout the country to choose in filling data; and for the address, it should be filled by province, district, sub-district; to support the convenient in data collection in website database, rather than filling as a single long sentence.
- Other additional information

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- The Pollution Control Department proposed that if the cooperation in providing information is required from the entrepreneur, the websites should support the sales of the entrepreneur as well and in order to disclose the entrepreneur information, it must be consent by the entrepreneur first.
- Mr. Atit from the Siam Cement Group Public Company Limited (SCG) has given the following recommendations:
 - 1. Is it necessary to show the price to the consumer on the websites?
 - 2. Linking the Thai Green Directory websites with the online platform of selling products
 - 3. The websites should be easy access and not complex.
- The issues for which the certification body should provide the answer:
 - The details of green products and services
 - Which part of information can/cannot be given/collected by the certification body and which part will be optional?
 - Linking API data to the certification body

Summary of the data entry system of each certification body

Eco-label agencies	Certified eco-label	Sync	
Thailand Greenhouse Gas Management Organisation	Carbon footprint	API	
(Public Organisation)	Carbon reduction label		
	Cool mode		
Pollution Control Department	Green basket	ΑΡΙ	
Department of Environmental Quality Promotion	Green Production	In the process of developing API system, should be completed by June and has the	
	Green Hotel	discussion with the developer team on Friday 25 March, 2022	
	Green Restaurant		
	Green National Park		
Siam Cement Group Public Company Limited	SCG Green Choice	Waiting to contact the developer team for discussion	
Thailand Environment Institute	Green label	Not capable of doing as the database system is not complete	
	Carbon reduction label		
Department of Alternative Energy Development and Efficiency	Energy saving label	Already has the database but waiting for reply from the website developer	
Green Leaf Foundation	Green Leaf	Still could not reach the developer team	
Electricity Generating Authority of Thailand	Label no.5	Waiting for reply from website developer	
PTT Public Company Limited	Green For Life	Waiting for meeting with IT team	
Siam City Cement Public Company Limited	Green Heart Label	Add Form (enter the data in TGD websites by themselves)	

Next implementation steps

- Cooperate with the IT division of certification body
- If any certification bodies require the cooperation memo, just notify and the letter will be provided

Images of online discussion



The discussion conducted online on Friday **8 April 2022** from 9.30–10.30 a.m. was attended by 12 representatives from manufacturing sectors as shown in Table 3.

No	Name	Organisation
1	Phassorn Piennapa	TOA Paint (Thailand) Public Company Limited
2	Nathaporn Denninnat	TOA Paint (Thailand) Public Company Limited
3	Patcharee Pattanasitthiseri	TOA Paint (Thailand) Public Company Limited
4	Praphassorn Klubprasith	Double A (1991) Public Co., Ltd.
5	Naiyana Lertkomenkul	Canon Marketing (Thailand) Co., Ltd.

Table 3 Name list of participants

No	Name	Organisation
6	Taweesak Teerarattana	Canon Marketing (Thailand) Co., Ltd.
7	Kamolwan Saikaew	Thai Wacoal Public Company Limited
8	Napatsawan Sawasprom	Thai Wacoal Public Company Limited
9	Patcharee Ong-arj	Patum Vegetable Oil Co., Ltd.
10	Pitchsinee Kuenchantuek	Thanulux Public Company Limited
11	Miss Nuntiya Pantueng	CPRAM Company Limited.
12	Atongpin	TOYOTA MOTOR THAILAND CO., LTD.

The discussion issues were as follows:

Usage flow of the Thai Green Directory websites



- Format of data entry onto websites and addition of distributors information into the Thai Green Directory website:
 - Addition of data/information for manufacturers
 - 1. The certification body provides the account to the manufacturer
 - 2. The manufacturer enters the system
 - 3. Add the product information in both general information of the manufacturer and the details of shop and green services that are in the website
 - The distributor's information can be added by 2 methods:
 - 1. The manufacturers enter their own distributors' information
 - The distributors register in the system and select the distributed products in their own shop by selecting the certified products available on the websites and the evidence of registration certificates or personal identification must be attached

Details of green products and services

- Required: products or services category, products or services name, commercial name (brand), model, product characteristics/properties, product image, company/organisation, address-shop location (link with Google maps), contact information (telephone, email, websites), contact person information, vendor list and contact details, certified eco-label (certification number, issue date and expiry date)
- Optional: contact details (fax, Facebook, Line Official, etc.), address-shop location (link with Google maps), tag products or services, BARCODE and environmental claims of products and services

Details of green products and services for manufacturers

- Required: company/organisation, contact information (telephone, email, websites), contact person information, address and factory registration number
- Optional: contact details (fax, Facebook, Line Official, etc.), address-shop location (link with Google maps), vendor list and contact details, product characteristics/properties, product image and environmental claims of products and services where the information of product characteristics/properties, product image and environmental claims of products and services will be selected from the green products and services listed in the website

Details of green products and services for distributors

- Required: company/organisation, contact information (telephone, email, websites), contact person
 information, address and shop image or logo, products or services name, commercial name (brand) and
 model where the information of products or services name, commercial name (brand) and model will be
 selected from the green products and services listed in the website
- Optional: contact details (fax, Facebook, Line Official, etc.), address-shop location (link with Google maps)

Summary of discussion issues

Recommendations from the discussion issues:

- If the manufacturer is allowed to add their shop, and that shop has many branches, the coordinate of each branch could be identified, or else identify as 'Sell at shop____ throughout the country'
- The factory registration number should be the same number that applies for the certification of the ecolabel
- In the case of providing the factory registration number, it should it be clarified whether the factory number conducts the business in Thailand
- In the case that there are large numbers of certified products with similar properties or usage, would it be possible for the manufacturer to enter information just once, as an overview of the characteristics?
- In purchasing online products, from which main page of whose website should this be done: the manufacturer, the shop or the particular product?

Next implementation steps

- The Federation of Thai Industries and the developer team will hold discussions concerning requirements for the design the of the system, and add more structure as appropriate to usage.
- Once the system has been developed, the draft platform will be sent to the manufacturer for testing and providing feedback.

Images of online discussion



Result of the meeting with vendors on usage flow and green products and services data on Thai Green Directory websites

The discussion was conducted online on Friday **8 April 2022** from 10.45–12.00 a.m. with 8 representatives from vendors as shown in Table 4.

No	Name	Organisation
1	Sarinthip Uppathum	Saha Lawson Co., Ltd.
2	Prairahong Keeratipinij	Saha Lawson Co., Ltd.
3	Wattanika Thongboonrit	Saha Lawson Co., Ltd.
4	Napussawun Pleankrasant	Saha Lawson Co., Ltd.
5	Tipsukon	Foodland Supermarket

Table 4 Name list of participants

No	Name	Organisation
6	Kemjira	Foodland Supermarket
7	Ladda Yamsakul	TMK KANCHANABURI TRADING CO., LTD.
8	Kritpas Preedalumpabutr	Siam Makro Public Company Limited

The discussion issues were as follows:

• Usage flow of the Thai Green Directory websites



- Format of data entry onto websites and addition of vendor information into the Thai Green Directory website
- Addition of information for manufacturers
 - 1. The certification body provides the account to the manufacturer
 - 2. The manufacturer enters the system
 - 3. Add the product information in both general information of the manufacturer and the details of shop and green services that are in the website
- The vendors information can be added by 2 methods
 - 1. The manufacturers enter their own distributors' information.
 - 2. The distributors register to the system and select the distributed products in their own shop by selecting the certified products available on the websites and the evidences of registration certificates or personal identification must be attached.

Details of green products and services

- Required: products or services category, products or services name, commercial name (brand), model, product characteristics/properties, product image, company/organisation, contact information (telephone, email, websites), contact person information, vendor list and contact details, certified ecolabel (certification number, issue date and expiry date)
- Optional: contact details (fax, Facebook, Line Official, etc.), address-shop location (link with Google maps), tag products or services, BARCODE and environmental claims of products and services

Details of green products and services for manufacturers

- Required: company/organisation, contact information (telephone, email, websites), contact person information, address and factory registration number
- Optional: contact details (fax, Facebook, Line Official, etc.), address-shop location (link with Google maps), vendor list and contact details, product characteristics/properties, product image and environmental claims of products and services where the information of product characteristics/properties, product image and environmental claims of products and services will be selected from the green products and services listed in the website

Details of green products and services for vendors

- Required: company/organisation, contact information (telephone, email, websites), contact person
 information, address and shop image or logo, products or services name, commercial name (brand) and
 model where the information of products or services name, commercial name (brand) and model will be
 selected from the green products and services listed in the website
- Optional: contact details (fax, Facebook, Line Official, etc.), address-shop location (link with Google maps)

Summary of discussion issues

Recommendations from the discussion issues

- In the case that the distributor has many branches of shop, the coordinate of each branch could be identified or use single account in adding branches and could be registered once and select to add the information for many branches
- In the case that there are online shops, the link to online shops can be added as the shop information and can be the link connecting to that particular product or service
- The coordinate of the nearest branch to the user will be shown on the websites (in the case that the shop coordinate was shown on Google maps)
- It was proposed that prices be shown on the websites, but the following remarks were made:
 - The shop mentioned that if the price was shown, it could be beneficial to the user, but the shop must be the one who supplies the information, as that data should be regularly updated
 - For small-sized shops, or shops with insufficient employees to update price information in a timely manner, the price information could become inaccurate
 - The price at each branch might be different, or each branch might have different promotions for products

Next implementation steps

- The Federation of Thai Industries and the developer team will hold discussions according to requirements, and design the system and add more structure as appropriate to usage.
- Once the system has been developed, the draft platform will be sent to the manufacturer for testing and providing feedback.
- Issues of feedback from the distributors were raised, i.e. shop coordinates, links to products or services, product price; these are to be discussed in the working committee
- The way to select the product of the distributor is that it is user-friendly.

Images of online discussion





ANNEX 3 Stakeholder Consultation Workshop on Policy Recommendation for Implementation of Thai Green Directory on 5 July 2022

The workshop seminar on policy recommendations for Thai green directory was organised on 5 July 2022 from 13.30–16.30 at the Gallery 1 room (36th floor), Pullman Bangkok Hotel G, Bangkok. The aim was to propose the draft of policy recommendations for the national green directory to relevant people and conduct discussions with stakeholders.

There were 25 participants from the eco-label certification bodies, the Comptroller General's Department and eco-product producers attending the workshop. The details are as follows.

Opening remarks by Mr. Janejob Suksod, Director of Environmental Analysis, Pollution Control Department

Introducing the project of seller registration system development by Dr. Natworapol Rachsiriwatcharabul, project expert. The presentation was given on the database, roadmap and platform development of the Thai green directory, following by the proposal of the draft policy recommendations and SWOT analysis of platform as well as policy recommendations on sustainable Thai green directory.

The participants engaged in sharing opinions and recommendations on the prioritisation of implementation that is urgently required for developing the seller registration system and the Thai green directory. The top three significant measures that need to be implemented as soon as possible are:

- Efficient PR for reaching a wide range of potential target groups: buyers (private, government and public), distributors and producers
- Promoting benefits and incentives for a producers/distributors alliance in preparation of Thai green directory
- Expansion with an online shopping platform to promote green procurement

After that, the participants were divided into three groups to discuss further details of implementation activities. Each group had the following moderator and conclusion.

Dr. Chaiyod Bunyagidj, expert on environmentally friendly consumption and production, moderated the topic of 'Efficient PR for reaching a wide range of potential target groups: buyers (private, government and public), distributors and producers'. The participants mentioned the activities that should be implemented urgently as follows:

- · Consistently organise activities providing basic environmental knowledge
- PR through several channels, i.e. social media, mass media
- PR at the selling point
- Establish an MOU with the Comptroller General's Department
- Logo label on the product

Ms. Patranda Sangmahamad from the Federation of Thai Industries moderated the topic of 'Driving benefits and incentives for producers/distributors alliance in preparation of Thai green directory'. The participants mentioned the urgent implementation of the following activities:

- Offer free advertisement
- Build 'top search' in Google
- Design and display according to the consumer group
- Provide tax benefits for participating products
- Support the inclusion of the Thai green directory into the green public procurement

Dr. Natworapol Rachsiriwatcharabul, project advisor, acted as the moderator on the topic of 'Expansion with online shopping platform to promote green procurement'. The participants mentioned that the following actions must be taken urgently.

- · Surveys on online platforms such as Shopee, Lazada
- Prepare the online market platform with the link to products and services that were provided to customers on a particular website (affiliate marketing)
- · Organise campaigns on environment day, giving rewards/coupons for promoting green procurement
- · Prepare green stamps for collecting in order to redeem rewards

Images Workshop activities















ANNEX 4 Launching event of the Thai Green Directory on 23 August 2022

The seminar was organised on 23 August 2022 (13:30–15:45) at Ballroom, 38th floor, Pullman Bangkok Hotel G, Bangkok. The seminar was attended by 290 participants from government and private agencies, label certification bodies, and interested entrepreneurs attending the seminar (257 participants attended online and 33 participants attended onsite). The seminar was presided over by Dr. Zinaida Fadeeva, SWITCH-Asia SCP Facility Team Leader, who gave a speech to welcome the participants. Mr. Pornsak Phuimm, Deputy Director-General of the Pollution Control Department, delivered the opening remarks at the seminar for launching Thailand's database of environmentally friendly products and services (Thai Green Directory).

The seminar had as its objectives to promote the database of environmentally friendly products and services in Thailand (Thai Green Directory) and to promote the registered green producers and providers to those involved. The target groups were department-level government agencies, tenders and suppliers to the government, local government organisations, universities, along with the general public, agencies participating in the Green office project, the Working Group on Developing National Green Directory, SMEs, retail associations, and interested parties. The seminar to launch a database of environmentally friendly products and services in Thailand (Thai Green Directory) had interesting lectures and sessions as follows:

Topic: Eco-friendly procurement of the private sector

Speaker: Mr.Kirati Kosicharoen, Executive Vice President, Corporate Service Group, Stock Exchange of Thailand

Mr. Kirati Kosicharoen spoke about the green procurement guidelines of the Stock Exchange of Thailand. The Stock Exchange of Thailand realises the importance of efficient use of resources from the production of products and services to sustainable consumption. Therefore, green procurement has been implemented since 2017 to all stakeholders in the supply chain, including employees of the Stock Exchange of Thailand, trading partners, and listed companies. It is believed that this helps create awareness to choose environmentally friendly products and services. Moreover, it is also believed that green procurement is one of the key mechanisms to ensure sufficient resources in the future. In addition to green procurement, the Stock Exchange of Thailand was accredited with many energy and environmental standards and awards, such as Green Office, Carbon Neutral, ASEAN Energy Awards 2017, LEED Zero, Thailand Energy Award, and Best in Building Health.

The approach for implementing green procurement of the Stock Exchange of Thailand has seven steps as follows:

- 1. Identify green procurement principles, namely, environmentally friendly procurement, managing business partners, managing using human rights, and preventing corruption
- 2. Set indicators for green procurement to increase the proportion of procurement value of goods and services of the organisation and to expand the categories of green procurement products/services
- 3. Establish a database of green products and services using the database of green products and services of the Pollution Control Department (http://gp.pcd.go.th/) and information of goods and services that have been certified with various nationally and internationally environmental labels, and in addition, ensure that the inclusion of environmental considerations for production processes and products/services is applied on products and services that do not have certification criteria for environmental friendliness
- 4. Have pilot product groups determined from the list of products and services that are procured in large quantity and/or with high value, along with the availability of products and services that can support the green procurement; to note that there are 13 pilot groups and 8 potential groups for green procurement in the future
- 5. Supply green products/services by using environmental label certification as an important factor (for products/services with existing environmental certification criteria) and establishing green criteria (for products/services without existing environmental certification criteria)
- 6. Track implementation and performance

7. Develop and expand the results of green procurement with respect to sustainable procurement by supporting the supply chain to widely implement green procurement in the future

Topic: Presentation of the result of Developing the List of green products and services in Thailand

Speaker: Dr. Natworapol Rachsiriwatcharabul, Rector of Rajamangala University of Technology Phra Nakhon and project advisor

Dr. Natworapol Rachsiriwatcharabul discussed the database for distributors and retailers of green products and services (Thai Green Directory), which has been developed from the website of the National Green Directory. The database contains the list of green products/services and the listing of manufactures of green products and providers of green services. For developing the website, the convenience and promotion of buying/selling certified green products (Label Type I, II, III, etc.) were taken into consideration by adding the information of the database – distributor, retailers, and providers of green products/services. This facilitates the search and analysis of green procurement and develops the TGD platform to support the procurement list of the government, private sector, and the general public.

The database of distributors and retailers of green products and services (Thai Green Directory), has compiled the lists of certified green products and services (Label Type I, II, III, etc.). The database of producers and manufacturers of green products and services and the database of distributors and retailers of green products and services and the database of distributors and retailers of green products and services and the database of distributors and retailers of green products and services and certified product categories as follows:

1. List of environmental labels in the database

1.	Green Label	10. Energy Label No.5	
2.	Green Basket	11. Green Heart Label	
3.	Carbon Footprint	12. Green Production Mark	
4.	Carbon Footprint Reduction	13. Green Hotel Mark	
5.	CoolMode	14. Green For Life Mark	
6.	Carbon Reduction Label	15. SCG Green Choice Mark	
7.	High-Efficiency Energy Label	16. Green National Park	
8.	Energy Saving Label	17. ECO Plus Label	
9.	Green Leaf	18. Circular Mark	
2. Product categories listed in the database			
1.	Office supplies	8. Travel	
2.	Household appliances	9. Hotels and resorts	
3.	Electrical appliances and lightings	10. Cleaning services	
4.	Building materials	11. National parks	
5.	Apparels	12. Restaurants	

- 6. Health and beauty13. Industrial products
- 7. Food and beverages

For producers/manufactures and shops/retailers who want to register themselves in the database, the procedure is as follows.

- 1. Qualification of registration
 - Producer/manufacture: The producers/manufacturers must be certified with the environmental label from the responsible agency
 - Vendor/Shop/retailer: The shops/retailers must sell certified green products and have the products in the platform of the Thai Green Directory
- 2. Registration for juristic person/commercial registration
- 3. The person/entity registering must be a taxpayer

Topic: How to successfully sell green products

Speaker: Ms. Khemupsorn Sirisukha, Actor and environmental activist

Ms. Khemupsorn Sirisukha, actor and environmental activist told the story about the inspiration and turning point that turned her attention to the environment. It was because she had seen problems with the drought that occurred in Thailand. The first project she started was 'Little Forest' at Wang Chin District, Phrae Province. Started with planting trees in the form of supplementary planting, it was begun by conducting a survey for the demand and putting the emphasis on working with the community in order to achieve continuity and a strong network. During the past 2 years, all sectors have been affected by COVID-19; therefore, social enterprises have been established to help farmers earn more income. Thus, rice under the brand called Sirithai was started by promoting socially responsible and environmentally friendly rice cultivation and developing the environmentally friendly packaging to increase the value.

By enrolling in a course of business management for sustainability from the University of Oxford, a worldclass university, knowledge can be used to build a sustainable business. There are three important issues: finance capital, natural capital, and social capital, contributing to the operation of business in a sustainable manner.

For those who are interested in doing environmentally friendly business, one first needs to believe. Believing is what can help overcome obstacles. From a consumer's perspective, we can reduce waste and reduce energy consumption. These actions will gradually adjust our perspective. For example, environmentally friendly products are more expensive. After becoming a producer, it is understandable why eco-friendly products are priced higher than conventional products. This coupled with the lower demand for environmentally friendly makes eco-products even more expensive. It can be seen that consumers play an important role in driving the market. The marketing method of green entrepreneurs relies on telling the story of green products – how they are good for the environment and how they positively affect the environment.

Concerning the Thai Green Directory database, it is interesting because it can make it easier for users to use green products. It is important for the certification bodies to facilitate small entrepreneurs to conveniently come in and ask about the certification and to conveniently apply for the certification. This will help to increase the numbers of producers/manufacturers in the database.

Questions and answers

1. What are the similarities or differences between the Thai Green Directory and the Green Card?

The Thai Green Directory will provide information on the environmentally friendly products and services (certified with environmental label(s)) in Thailand and on the distributors (stores) that sell such products.

As for the Green Card, it has information about environmentally friendly products and services and has a function to collect points from purchasing green products and to use points to redeem as various rewards.

2. In the case of receiving the certification of environmental labels from foreign countries, can the products be listed in the Thai Green Directory?

At present, the Thai Green Directory system will consider only products that have been certified with Thai

environmental labels. But in the case of receiving the certification of environmental labels from specific foreign countries with an MRA (Mutual Recognition Agreement), one can ask to compare the standards (between Thai and foreign standards of the labels) on a case-by-case basis.

3. What are the objectives for creating the Thai Green Directory website?

The objectives are to create understanding on the benefits and privileges of obtaining the environmental labels and joining the Thai Green Directory and to invite and promote distributors/retailers to join the Thai Green Directory.

4. If a company received the green industry mark, and the partner has the CE standard in Europe, can the company join the Thai Green Directory?

Green industry mark cannot automatically join the Thai Green Directory, because the system will first have to evaluate the environmental friendliness of the product.

5. In the event that the company received the certification for thousands of SKU under one brand, can they be plugged in to link to the company's website?

According to the system of the Thai Green Directory website, the products that can participate must receive the environmental label certification, and they will be linked with the environmental label certification body. They cannot directly link with the company's website.

6. If the organisation purchases biomass fuels, which are non-certified products, can the company keep the record as a green procurement?

Guidelines for green procurement are voluntary options for each organisation. As for the Thai Green Directory, the main focuses are on the purchase and sale of certified green products/services and the development of projects to support certified products, such as plastic pellets.

7. Do the manufacturers and distributors of products certified with the green label receive any tax benefits?

The primary benefit is to be the first choice for consideration in green procurement. However, tax benefits are still under consideration and are being pushed forward in the green procurement promotion plan.

8. What are the types of products in the Thai Green Directory?

Currently, there are 13 product categories, including office supplies, household appliances, electrical appliances and lightings, building materials, apparels, health and beauty, food and beverages, travels, hotels and resorts, cleaning services, restaurants, industrial products, and national parks.

9. If the products were evaluated for carbon credits, can they be listed in the Thai Green Directory?

Carbon credit is not eligible to participate in the Thai Green Directory; however, products with the carbon footprint information can be priced on the basis of emissions or further participate in the carbon market.

10. What are the features of products for being considered to participate in the Thai Green Directory?

Participating products must be certified with Thai environmental labels (Type I, Type II, Type III, etc.) and have passed verifications with the respective certification bodies.

In the case of product manufacturers, environmental label certification bodies will send the information concerning certified products that are within the system of the Thai Green Directory. In the case of shops/ distributors, they must sell certified products.

12. How much detail will the system show with respect to the product information and the location?

The Thai Green Directory website will show product information as received from the environmental label certification bodies. For the location, it will indicate the physical address. In the case of registered distributors and retailers, the coordinates of store locations can be entered.

13. Once the products are registered and listed in the Thai Green Directory, how will their information be utilised?

The aim is to develop the Thai Green Directory to support public and private procurement of public and private organisations. The information will be used for purchasing green products and services.

14. For some products with expired certification, such as a carbon label or circular mark, will the data entry be removed from the system to provide current certification status of products?

The system will set the validity period. If the certificate expires, the system will automatically remove the information from the website.

15. In the case of an organisation purchasing green products, how can they find registered distributors and retailers in the Thai Green Directory?

This information can be found by visiting the website https://www.thaigreendirectory.com/ and then searching for the product or service you want. Then you will find the stores that sell that product.

16. Can the service sector, such as green hotels, participate in the Thai Green Directory?

Green hotels that are certified with both the Department of Environmental Quality Promotion and the Green Leaf Foundation can participate in the Thai Green Directory.

17. Is there any MRA (Mutual Recognition Agreement) with Eco Mark Japan?

There are MRAs with Eco-Mark for some products. Information can be found on Thai Green Label website <u>https://www.tei.or.th/greenlabel/labs.html</u>.



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