

Flash Report

Regional Dialogue on Driving Mechanisms for Eco-design Implementation in Asia



Date: Friday 9 December 2020 | 10.00 hrs.

Venue: Bangkok, Thailand

Disclaimer

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List of Acronyms:

CE	Circular Economy
LCA	Life Cycle Assessment
SCP	Sustainable Consumption and Production
SDGs	Sustainable Development Goals
SMEs	Small and Medium Enterprises
TEI	Thailand Environment Institute Foundation
TISI	Thai Industrial Standards Institute
UNEP	United Nations Environment Programme

Background:

Objectives of the Event

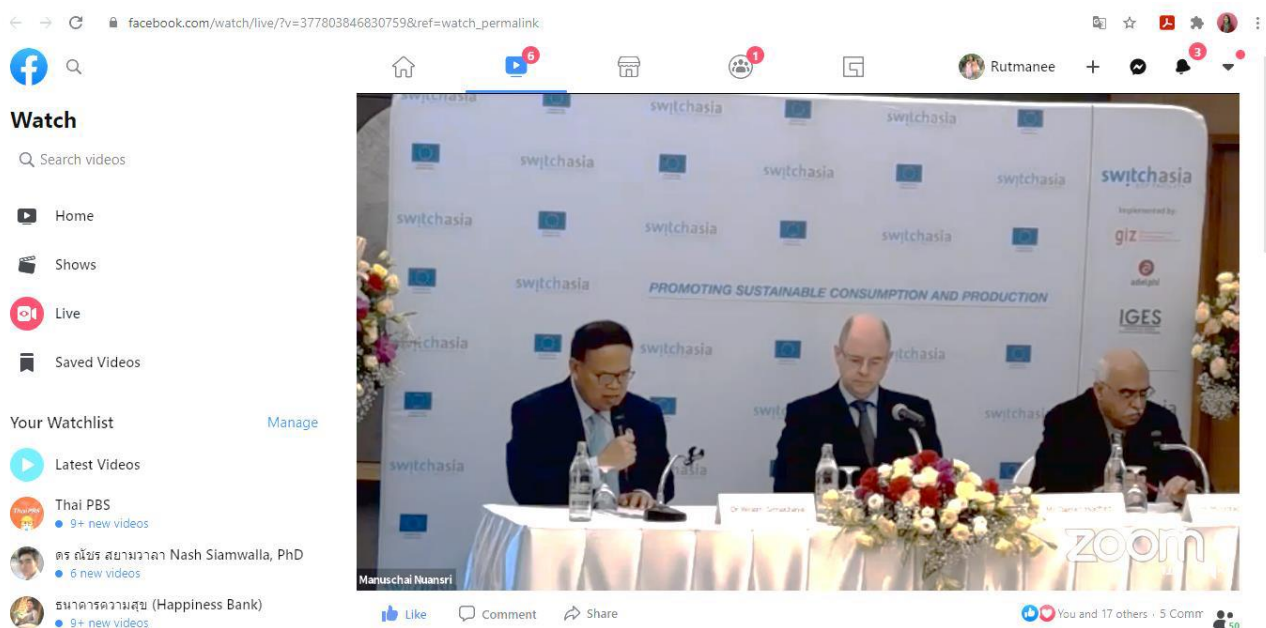
The objective of this activity is to increase technical knowledge and enhance common understanding of the concept of eco-design in Asia through the organization of a regional forum OR a webinar, which is expected to raise awareness of the importance of eco-design in Asia in general and may lead to discussion to prioritize specific sectors at the regional level.

Logistical information about the event

The invitations were sent for both online and physical participation. There were 47 attendees at the meeting venue at the Centara Grand at Central Plaza Ladprao, Bangkok, and 64 participants attended online via Zoom application. The regional dialogue was also shared LIVE on TEI Facebook as well as EU-SWITCH Asia Facebook. The total viewers were 589.

Facebook live Url:

https://www.facebook.com/watch/live/?v=377803846830759&ref=watch_permalink



All presentations and the draft discussion paper of the dialogue are shared with the participants and interested public at: http://www.tei.or.th/th/area_activities_detail.php?area_id=3&event_id=934

Key Messages:

The following is a summary of the key messages emerged from the Regional Dialogue on Driving Mechanisms for Eco-design Implementation in Asia.

- Eco-design is a design for sustainability which fosters resource efficiency and thus helps us consume without “leaving anything behind”. It is a pre-cautionary approach that many impacts can be pre-determined and thereby is aligned with SCP principle. SCP is a dynamic exercise in which partnership and networking are significant to make transition to sustainability.
- Despite around two decades of eco-design introduction and a number of tools and guidelines developed, eco-design adoption in Asia seems not yet to grow significantly. Speakers of the forum provided inspiring cases which shown possibilities of employing different driving mechanisms for eco-design implementation in different sectors and geographical scopes.
- Mana hotel, an eco-hotel in Bali, Indonesia has attempted to exemplify a truly circular and regenerative economy where “the more benefits businesses make the better the world would become”.
- The Bureau of Energy Efficiency (BEE) of the Government of India, has facilitated energy efficient use and conservation in all sectors, particularly in building and construction sector. The agency strategized to use government policy and mechanisms to stimulate the market and design concept to play major role in energy efficiency which would be more sustainable than enforcing by regulations.
- Moreloop Co., Ltd., a Thai start-up uses 100% of fabric waste (sources?) in their business to prevent virgin material production and generation of CO₂. The company conducts researches and studies to match the demand of designers and customers with the supply for the surplus fabrics from the garment factories. Their production thus requires active collaborations and understandings of the customers to take part in designing. The approach strengthens the need for effective communications with the end-users of eco-design products throughout the whole processes.
- To spread the practices, more solutions would have to be disseminated and effective mechanisms to be shared. The dialogue would thus be a starting point for more discussions to come for further decisive collaboration and action.
- Key activities that help translating eco-design concept into real practices highlighted in the discussion included upholding collaboration on eco-design and sustainability through, for instance, establishing cooperation on green network or green supply chains; creating a platform where academia and designers could foster strong engagement with companies that want to sustainably shift production processes or sources of energy. Building alliance or collaborative synergy can really change the industries and economies.
- Less expensive and competitive eco-design products from Asia could have greater opportunity to supply to the world market. Especially products exporting to Europe, eco-design principle will become more important. The region thus needs to be creative and innovative in driving economies toward green eco-design products and services.

Welcome and Opening remarks:

Welcome Remarks

Dr Wijarn Simachaya

President of Thailand Environment Institute (TEI)

Dr Wijarn welcomed the participants and provided a brief introduction of TEI. As a non-government organization, the Institute has been closely working with various sectors ranging from public and private sectors, international organizations, civil society and local communities. Among others, the focused environmental issues of TEI include marine waste management and plastic waste management. He indicated that the past and current patterns of natural resource uses are resulting in increasingly negative impacts on the environment and human health, prompting the need to advocate for a new production model that makes optimal use of resources and energy. Although significant efforts have been made in remedial actions particularly on waste management and pollution control, such actions alone do not have the potential to reduce the environmental impacts to a degree that facilitates toward a sustainable society. Research studies revealed that interventions at the design stage of products and services have a much higher potential to improve their environmental performances, in which they are usually termed as “eco-design” concept.

Therefore, this regional dialogue aims at raising awareness of the importance of eco-design in Asia, which would lead to continuing discussion in order to prioritize specific sectors, as well as fostering further collaboration at the regional level in the future. He gave information on the diverse participants representing individuals, public agencies, private corporates and academia involving in eco-design policy and product development from different Asian countries. He lastly expressed heartfelt appreciation on the support of the EU-funded SWITCH-Asia programme and was grateful to all participants for being a part of this Regional Dialogue. He concluded by wishing the meeting a successful deliberation.

Opening Remarks

Mr. Daniel Hachez

Minister Counsellor, Head of Cooperation, Delegation of the European Union to Thailand

Mr. Daniel addressed the challenges of climate change under the Paris Agreement to limit the increase in global average temperature to 1.5 degrees Celsius compared to pre-industrial levels. He observed that the outbreak of COVID-19 pandemic affects all parts of the world and all sectors creating unprecedented challenges that will leave a lasting impact on the way we live and work. He remarked on the EU Green Deal, a roadmap supporting EU growth strategy 2050 to sustain the transition to climate neutral and more sustainable economy. The announced measures to shift energy supply to renewable energy in order to improve energy efficiency utilize eco-design for making sustainable food system, in which products will last longer and be repairable and recyclable. It then offered a direction for all EU initiatives including research, innovation, trade and investment policies.

Current production and consumption of goods and services remains a driver of climate change generating losses of biodiversity, pollutions and overexploitation of natural resources. As a result, our economic system needs to transit to a more sustainable consumption and production pattern as highlighted in the EU Green Deal. A number of push, for instance eco-design collaborations and pull

such as green public procurement mechanism have currently been introduced encouraging the development of more sustainable products whether being purchased, used and disposed as part of the EU fight against climate change, as well as fulfilling the objective of becoming climate neutral continent by the year 2050. The EU is committed to improve energy efficiency. He provided an example of global action such as a declaration of the commitment made by specific countries namely Japan, South Korea, and China in favor of climate neutrality by the year 2050 and beyond. To help achieve this target, the EU has taken measures for promoting green product designs or eco-design, and consumer information on energy consumption and environmental performances, as well as energy labeling. The EU-funded Asia programme is promoting eco-design and energy labeling, which primarily focus on energy efficiency, water consumption and noise reduction. Governments, businesses and citizens all have important roles to play in moving towards sustainable consumption and production pattern and a wide range of actions is necessary to ensure it.

The EU has been a strong supporter promoting sustainable consumption and production pattern in Asia working with SMEs and national governments and more need to be done with consumer organizations through the SWITCH-Asia programme. He provided an update that the EU has been supporting more than 100 projects spreading over 19 countries in Asia in addressing both consumption and production challenges. He indicated that the EU wishes to share the best practices with Asia. Now the EU needs to move toward inspiring more governments to apply appropriate law and taxation as crucial tools to promote sustainable consumption and production. He informed that the new SWITCH-Asia's call for proposals was recently published by the EU with the deadline for submitting concept notes closed on 18 December 2020. The current COVID-19 pandemic is more than ever underlining the importance of a resilient society due to it has revealed strong interrelations between health and ecosystem, supply chain, consumption pattern and the planet.

He reminded that the fighting against COVID-19 will confidentially not distract us from the longer-term goal of 2030 agenda for sustainable development, the Paris Climate Agreement and the international biodiversity agreement. It is clear that we need to do much more to keep our planet healthy to become sustainable future not only for economic sustainability but also sustainable ecological system. Therefore, we must find new ways to reduce inputs, minimize waste, improve efficient management of resources, change consumption pattern and optimize production processes. He lastly encouraged active knowledge exchange and learned from each other, as well as identifying the best practices in order to stimulate eco-design for green production of goods and services and rational decision of consumers.

Introduction to the Dialogue

Dr. Mushtaq Memon

Project Manager of the SWITCH-Asia Regional Policy Advocacy Component

Dr. Mushtaq introduced that the EU funded SWITCH-Asia programme has been supporting the mainstreaming of sustainable consumption and production projects in Asian region for over 10 years. The SWITCH-Asia programme is also in line with the SDGS, climate changes and various international and regional agreements such as biodiversity and waste management, which are major challenges in Asia. Currently, there are increasingly developments on carbon neutrality initiatives all over the world. International trades are intensifying in the global villages like in Asia and the Pacific region. He posed the questions how these trades of products are happening and how to achieve the end goal of SDGs. Mainstreaming sustainable consumption and production is to achieve resource efficiency and pollution free at all spatial levels of the region. Every day we use many products for

different purposes. He indicated how these products and services can help achieving broader goal of sustainable development or the current challenge towards green recovery of COVID-19 situation. Products used in everyday life such as plastics and metals or sector-wise, such as housing, mobility, agriculture, food could all be designed as green products.

The focus of this event was to deliberate how these products can be designed and certified as green products. To do so, the major call for this event was that what support from the governments should come in in terms of policies, institutional framework and learning from different countries in order to support green products trade across countries such as intra-ASEAN and Asian trade and interregional trade with Europe, etc. To achieve all these objectives, the SWITCH-Asia programme has provided a broad range of assistances including regional policy advocacy in trying to get the governments on board to come up with policies, institutional framework, rendering technical support to governments and grants for pilot projects on green products. He revealed that the programme is very helpful for Asia and the Pacific region as we have seen a lot of improvements, for instance green building code, green public procurement, and eco-labeling. Therefore, eco-design is critical and important platform and tool. He urged that we need governments on board to create policies and institutional framework to support capacity building and implementation of eco-design. He lastly thanked all partners contributed to the smooth organization of this event.

Keynote speaker

Prof. Martin Charter

Director of the Centre for Sustainable Design, University for the Creative Arts, UK

Prof. Martin provided an overview of eco-design implementation. He started by providing background on eco-design in industry and circular economy, in which industry has been applying eco-design tools and approaches for over 20 years. The principles being applied in industry and standards include aspects closely linked to circular economy e.g. design for reparability, etc. The emergence of the circular policy in Europe and subsequent materials efficiency standards are steps towards increasing the scope of eco-design policy from an energy focus to include resource efficiency. Circular design is a sub-set of eco-design. The underlying importance to uphold eco-design largely due to 80% of environmental impacts is determined at the design stage. Design only constitutes 5% of the total cost of a product. And 90% of manufacturing costs are the result of decisions taken at the product design stage. He defined eco-design that is the systematic identification and consideration of environmental aspects within product design and development in order to reduce adverse environmental impacts and improve environmental performance of the product throughout its whole life cycle. An environmental aspect of a product is any element attribute or function that can interact with the environment. There are various terminologies similar to eco-design such as green design, environmental design, ecological design, life cycle design, eco-innovation, environmentally sustainable design, and environmentally conscious design and manufacturing, etc.

He further recalled to the traditional linear 'cradle to grave' product life cycle thinking, which consists of extraction of raw materials, manufacturing, packaging and distribution, use and maintenance, and lastly incineration and disposal. Whereas, the major components of eco-design cover 3 key aspects. Firstly, environmental impacts comprise climate change, ozone layer depletion, air pollution, loss of habitat and biodiversity and resource depletion. Secondly, environmental product aspects contain energy and water consumption, emissions to air, water and soil, generation of waste, ease of reuse and recycling, material content and amount. Thirdly, product design improvements embrace weight and volume, shape, number of parts, plating, fixings, choice and mix of materials, fabrication and assembly techniques, power supply consumption and efficiency, fuel consumption, and use of consumables. The legal framework of European Commission on Eco-design particularly on product-

specific regulations includes eco-design directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy-related products (ErP). This framework defines the rules for setting product-specific requirements/legislation on energy efficiency and further parameters. Compliant products receive the circular economy (CE) mark. Eco-design regulations encompass various household, office and industrial electrical appliances.

He presented evolution from the past to present of EU eco-design. The past eco-design related to energy-related products (ErPs) include energy consumption in the use phase, emissions and resource use (e.g. water conservation). Present eco-design related to ErPs are as above, plus facilitating repairability, spare parts, manuals, combatting product premature obsolescence, combatting test detection software, and product circularity (end of first life and facilitating second life). The EU made available published documents on resource efficiency (circular economy) standards. Eco-design in industry means much more than the Eco-Design Directive. The European Green Deal aims to transform the EU's economy for a sustainable future by promoting the EU as a global leader, as well as creating European Climate Pact. It is implemented through designing a set of deeply transformative policies, mainstreaming sustainability in all EU policies, financing the transition, as well as leaving no one behind.

The circular economy action plan under the European Green Deal adopts value chains approach covering a range of products namely electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings and food, water and nutrients, which would all affect the value chain in Asia. He noted that product circularity aspects e.g. repairability, replicability, and re-manufacturability will likely be a stronger focus alongside energy efficiency. He stated that the International Standards on Eco-Design in general use continuous improvement cycle to identify, plan, execute and review. The currently published eco-design standards are ISO 14006:2019 on environmental management systems, Guidelines for incorporating eco-design and ISO 14006:2020 on environmental management systems, Guidelines for incorporating eco-design. He highlighted the EU Environmental Product policy in 2020 consisting of cutting out the least sustainable products, driving the existing market towards greater sustainability through labeling, green procurement and eco-labeling, as well as encouraging development of new and more sustainable products. Examples of leaders of eco-design in Asia such as Japan and China, and a number of following countries for instance Thailand, Taiwan and Vietnam were presented, in which various initiatives have been developed but may not yet be coordinated. Prof. Martin finally cited several challenges in implementing eco-design in Asia including the need for capacity buildings to stakeholders involved, the need to engage with SMEs, as well as requiring to stimulate green markets through coordination of different policy tools both on demand and supply sides.

Panel Sessions:

Dr Singh Intrachotoo

Associate Professor of Building innovation, Kasetsart University

There were three presentations representing different driving mechanisms of eco-design implementation in different sectors and geographical scopes: i.e. Case 1: market mechanisms presented by Mr. Tomo Hamakawa, Managing Director of the Earth Company; Case 2: government mechanisms given by Mr. Saurabh Diddi, Bureau of Energy Efficiency of the Government of India; and Case 3: research and development mechanisms performed by Ms. Thamonwan Virodchaiyan, Co-founder of Moreloop Co., Ltd. The seminar session was moderated by Dr. Singh Intrachotoo,

Head of Eco-design Centre of the Faculty of Architecture, Kasetsart University. The details of panel sessions are as follows:

Case 1: Market mechanisms

Mr. Hamakawa presented market mechanisms to stimulate eco-design through a case of eco-hotel in Bali, Indonesia. He observed that tourists use 2,500L of water per day while the locals use only 180L. Tourists generate 3.7 Kg of solid waste per day while the locals generate only 0.70 kg. And 50% ends up in landfill. Therefore, Mana hotel wants to be part of the solution, not the problem. Therefore, Mana hotel exists to make the world a better place. Mana hotel wants to exemplify a truly circular and regenerative economy where “the more benefits businesses make the better the world would become”. The main philosophies are based on 3 Balinese worldviews of harmonies with gods, nature and among the people. Mana hotel has 3 key facilities. Firstly, Mana eco-villas or the earth bag villas, ideal of sustainable architecture made of rice bags, sand and water, which are simple, cheap, fast, durable, ecological and slow heat transfer. This kind of bag house is implemented by United Nations in refugee camps in Iran.

Secondly, Mana kitchen with its core concepts are eco-and health-conscious, farm to table, food as medicine, organic, no MSG, no GMO, no beef, non-F1 heirloom seeds, no microwave, as well as accommodating 30+pax. Thirdly, Mana market is where the more you buy, the better the world becomes. Mana market has 5 elements encompassing organic, eco, ethical, social, and local aspects. Mana market products are reusable pads and soap made of used oil, zero waste soap, salt made by NGO, zero waste goods, fresh spice made by local women, coffee that saves climate-affected farmers, upcycled sandals made of used tires, and bags made by Kalimantan women. Each element generates its subsequent positive impacts. Other facilities of Mana hotel are yoga shala used for yoga, workshops and for relaxation, permaculture garden veggies grown chemical-free served at Mana kitchen and kids playground. The events for a good cause are farmer markets, movie nights to raise awareness on specific issues and fundraisers for local nonprofits for special campaigns or occasions. He lastly presented the events for COVID-19 relief, which are local food market, bag of hope by hosting a local fundraiser to buy products made by rural villages in Bali and plastic exchange for rice. Furthermore, Mana hotel continues to learn from others to improve their practices.

Case 2: Government mechanism

Mr. Diddi presented government mechanisms to stimulate eco-design implementation through the work of the Bureau of Energy Efficiency (BEE) of the Government of India. The Bureau of Energy Efficiency is a statutory body of Government of India, under the Ministry of Power, which was created in March 2002. The Energy Conservation Act 2001 led to its creation to reduce energy intensity of the Indian economy. It facilitates and enforces efficient use of energy and its conservation in all sectors. The mandates of BEE are to prepare regulatory framework for energy conservation, develop policy and programmes, establish state designated agencies, and create professionals and awareness. The key highlights of energy efficiency (EE) activities on energy savings during the fiscal year 2018-2019 avoided capacity generation of 43.24 GW. The total energy savings was 2.69% of total primary energy supply of the country. The energy consumption by buildings in 2017 was 200 million toe or 390 GWh. The Indian real estate generates 24% of India’s annual CO2 emissions, 30% of solid waste and 20% of wastewater.

India's real estate sector is expected to contribute 13% to the country's gross domestic product by 2025. The current share of consumption in building sector accounted for 33% of total electricity consumption. Additionally, 1 billion square meters of commercial buildings and 3 billion square meters of residential buildings will be added by 2030. As a result, electricity consumption in building sector will surpass industry by 2030. Tools and measures to promote energy efficiency are based on two components: (1) building side (e.g. STAR rating of commercial buildings, energy conservation building code for commercial buildings, studies of thermal comfort occupancy in residential buildings); and (2) equipment and appliances side (e.g. EE building material directory, smart home appliances, Eco Niwas Samhita for residential buildings). Based on these measures, BEE ultimately aims to enhance capacities and adoption from architects and designers, as well as customers and general public.

Case 3: Research and development mechanisms

Ms. Thamonwan presented research and development mechanisms to stimulate eco-design through the work of the Moreloop Co., Ltd., a Thai start-up who turns waste in fashion industry into resources and creates a market to allow SMEs to access quality fabrics at reasonable price. The mission of Moreloop is to make circular economy a reality. In Thailand, the total textile waste was 350,000 tons, which is equivalent to 700 million T-shirts. In normal process using virgin material, CO₂ is generated in every process. However, in Moreloop fabric circular economy mindset and process, waste upcycling uses 100% of fabric waste in order to prevent virgin material production while not generating CO₂. There are 3 types of Moreloop businesses namely Moreloop fabric (B2B/B2C), Moreloop upcycled (B2B) and Moreloop collection (B2C).

Their services include supporting of online fabric, as well as producing of made to order products and upcycled textile products. Through their operational approach, Moreloop therefore conducted studies to match the demand of designers and customers and the supply for the surplus fabrics from the garment factories. Their production requires active collaborations and understandings of the customers to take part in designing. Ms. Thamonwan finally emphasized on the need for effective communications with the end-users of eco-design products throughout the whole processes right from the introducing approach, designing, production and subsequently positive impacts a product could deliver.

Conclusion Sessions:

As a conclusion, Dr. Singh posed the question that despite around two decades of eco-design introduction and a number of tools and guidelines developed, eco-design adoption in Asia could not yet grow significantly. The speakers provided inspiring cases of various mechanisms in different sectors. To spread the practices, more solutions would have to be disseminated and effective mechanisms to be shared. The dialogue would thus be a starting point for more discussions to come for further decisive collaboration and action.

Inviting inputs from the participants for the next steps:

Ms. Tunnie Srisakulchairak, Programme Management Officer, UNEP Asia Pacific Regional Office, implementing the EU SWITCH-Asia activities, concluded that eco-design is a design for sustainability. It is a design to foster resource efficiency and it is a design to help us consume without "leaving anything behind". It is a pre-cautionary approach that many impacts can be pre-determined. SCP is a dynamic exercise and endless journey which partnership and networking are significant to make transition to sustainability. The Regional Policy Advocacy Component will take results,

feedbacks and views from the survey and develop focal discussion points for 2021 activities to promote eco-design both at regional and sub-regional levels.

Dr. Rutmanee Ongsakul, TEI project manager, presented a preliminary result of the draft discussion paper on eco-design in Asia based on a review of available literatures and contribution of eco-design practitioners in Asia under the project's activities as part of the preparation activities of the regional dialogue. According to the draft discussion paper, the defined eco-design definition is "a proactive approach in designing products and services that use minimum resources and energy and have minimum negative environmental and social impacts throughout their life cycle while meeting the users' needs of functionality and quality". The key drivers of eco-design adoption consisted of corporate social responsibility, compliance with legislation on energy, hazardous substance and pollution emission, stimulus for innovation in improved functionality and quality of products, marketing and increased new market share and less cost due to more efficient production and supply chain management. Whereas, the key barrier to eco-design adoption were perception of high investment costs/uncertainty of returns, consumers' low level of understanding of eco-design, low level of public supports to develop eco-design innovations, risks of trying new materials and approaches, company's culture and capability, difficulty to integrate the principles across the businesses' supply chains and difficulty to find alternative ways to make profits out of longer-life products.

Eco-design practices in Asia are categorized into two approaches, which are state induced interventions and voluntary and market-driven efforts by private sector. The state induced interventions comprise planning and regulatory instruments, economic instruments and regional and international cooperation and networking. The voluntary and market-driven efforts by private sector involve national and international award programs, eco-labeling, green building and foreign investment flows and international markets.

She then invited inputs from the participants for network development and actions for the next steps of regional collaboration through providing feedbacks to three specific questions. First, what should be done to stimulate eco-design implementation in Asia, for instance, development and enforcement of specific and operational-based policies towards SCP, market information, providing financial support scheme and research and development programs for businesses, supporting of decision support tools, as well as supporting eco-design facilities for Asian SMEs. Second, what should be prioritized as key eco-design sectors in Asia. And lastly, what are suggestions on regional network activities to stimulate eco-design adoption in Asia. For instance, in the form of seminar and training, platform collecting good practices of eco-design business models, exchange learning across-industries and countries, regional eco-design award, expert consultants and partial financial supports for tools and equipment improvement to SMEs and start-ups. With this, the project team prepared a short feedback questions to seek inputs for the next steps and would welcome any suggestions on the dialogue. The link and QR code of the survey

(https://docs.google.com/forms/d/e/1FAIpQLSeflcfj5aHR_CFwZs-TOybWN9QAG7TLkvuyDVSD1sATPyfXCA/viewform) was presented and there will also be follow-up emails to all participants.

Highlights of discussions:

Less expensive and competitive eco-design products from Asia could have great opportunity to supply to the world market. To take advantages of current and future market trend, it is necessary to proactively concentrate more on innovative in driving economies towards eco-design products and services. The discussions were focused on how to stimulate the adoption and successfully implement eco-design in Asia. There were key actions identified that would help translating eco-design concept into actual practices. These included upholding collaboration on eco-design and sustainability, establishing cooperation on green network or green supply chains, and creating platforms where academia, designers and companies could work together in an orchestrated manner by fostering strong engagement with companies that want to sustainably shift production processes or sources of energy towards renewable energy. Building alliance would stimulate collaborative synergy throughout the value chain.

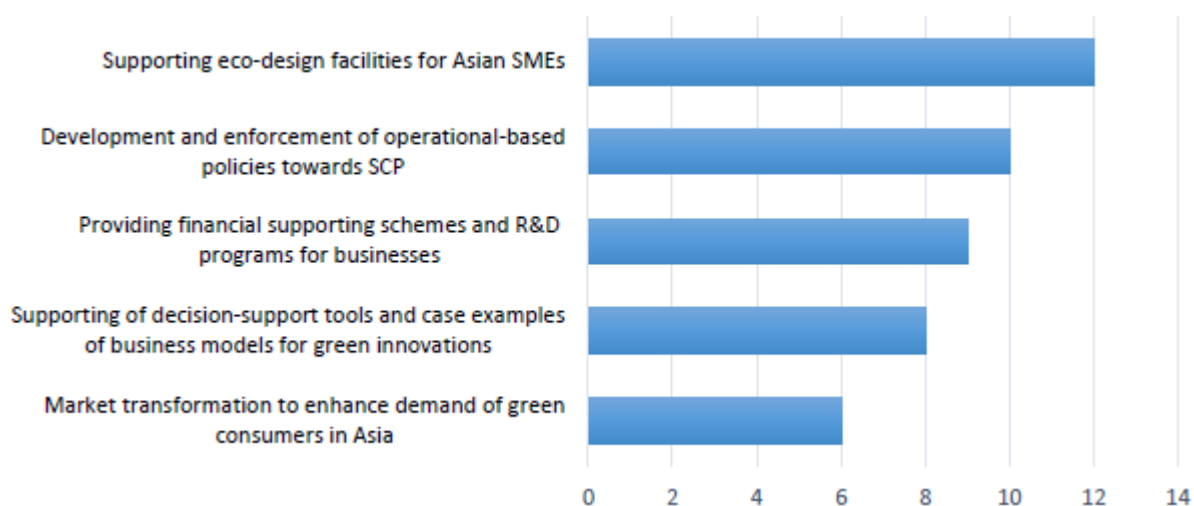
In addition, Lessons learned and success cases of business models could encourage more initiators and improve know-hows of existing practitioners as eco-design practices are a dynamic process. The dialogues on various platforms to disseminate and exchange win-win solutions would thus be needed and should be continued.

Evaluation/Assessment results:

The evaluation was responded by participants from Thailand, Afghanistan, Vietnam, Sri Lanka, Myanmar, Cambodia and Bangladesh representing government agency, International/ inter-governmental organization, NGOs, academia, and private sector. The results are as follows.

Opinions for the next steps

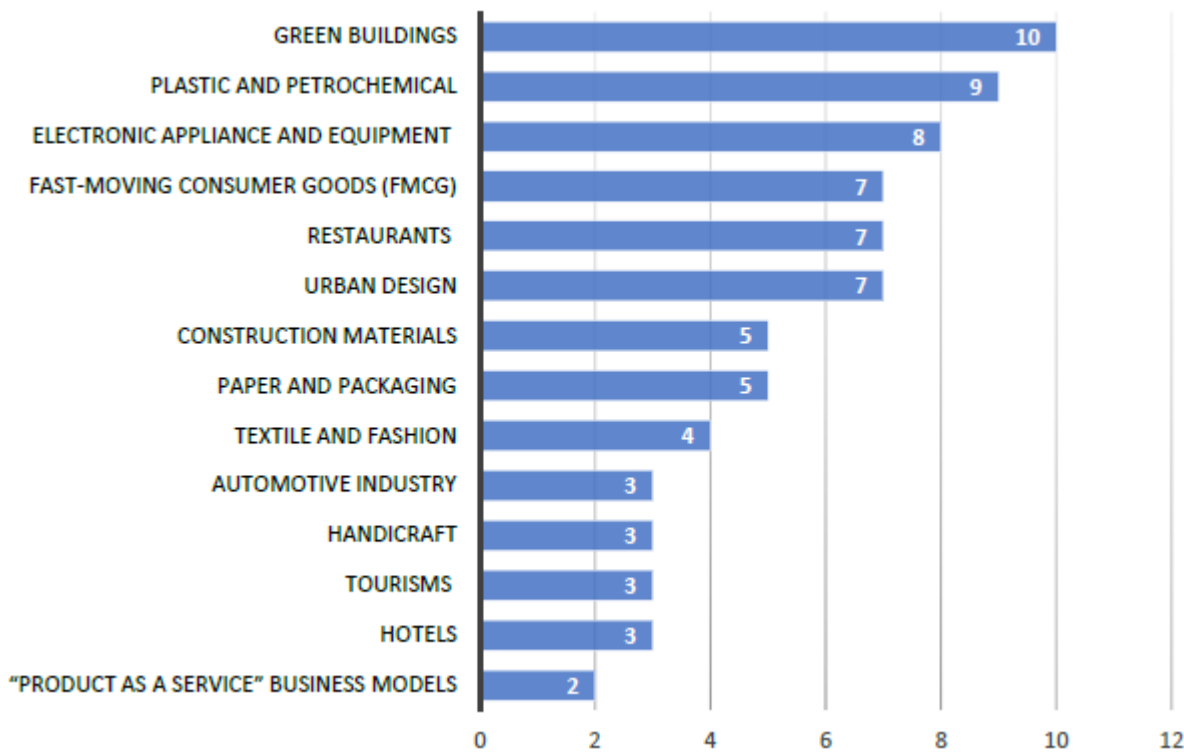
What should be done to stimulate eco-design implementation in Asia?



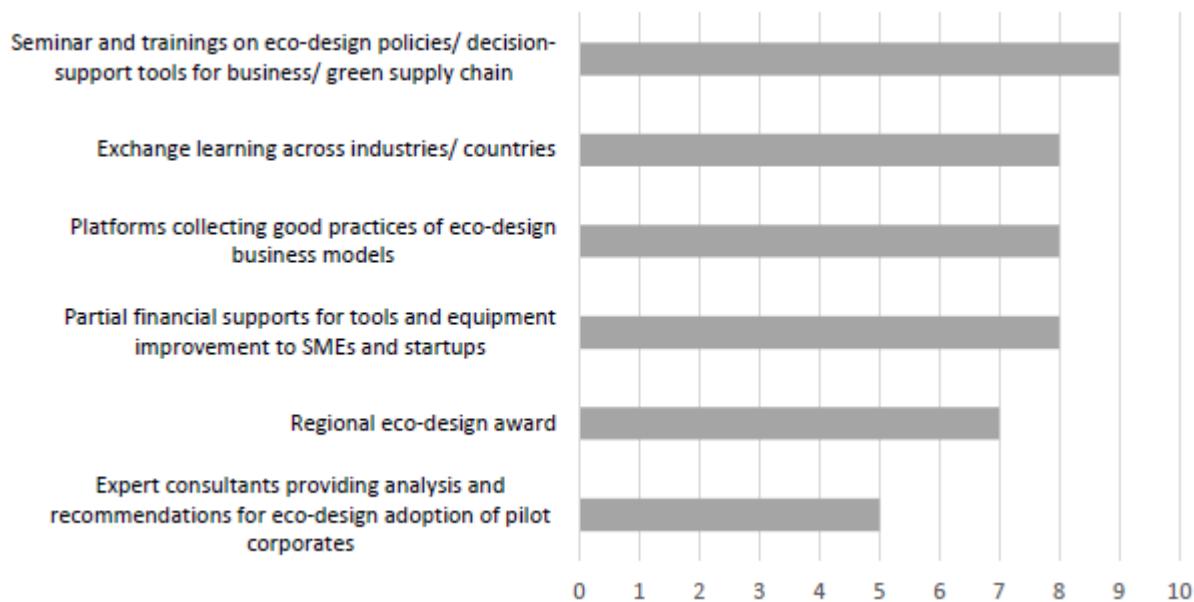
The most chosen answers were supporting eco-design facilities for Asian small and medium sized enterprises (e.g. access to trainings and test and assessment facilities, database for green materials, and research cooperation between corporates and academic institutions) (26%), followed by development and enforcement of specific and operational-based policies towards sustainable consumption and production (e.g. emission discharge standards, restricted substances in products, green public procurement, etc.) (22%) and providing financial supporting schemes and R&D

programs for businesses (e.g. technology transfers in green innovations and clean technology) (22%). The sequence was also same with the opinions on most important choices identified.

What should be prioritized as key eco-design sectors in Asia?



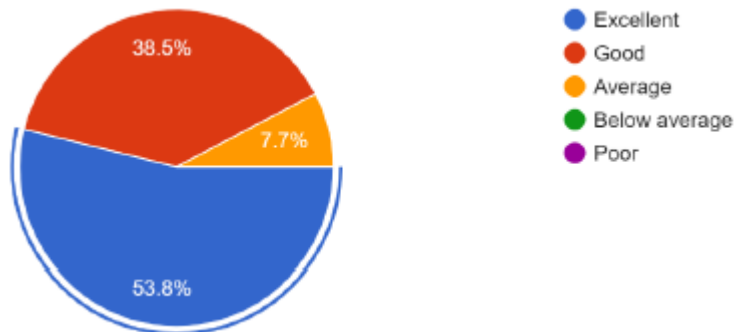
Suggestions on regional network activities to stimulate eco-design adoption in Asia



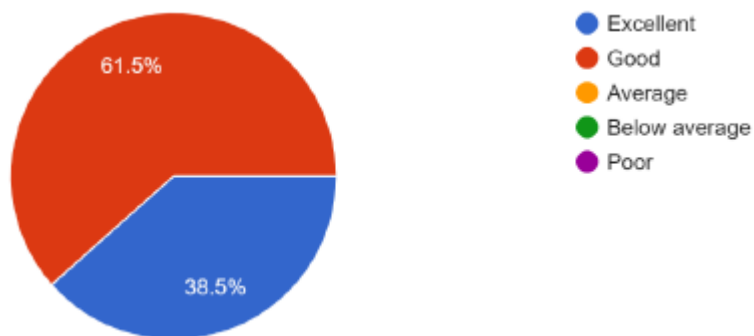
The most agreed actions were seminar and trainings on eco-design policies/ decision-support tools for business/ and green supply chain (20%), followed by the three equal scores answers of platforms collecting good practices of eco-design business models, exchange learning across industries/ countries and partial financial supports for tools and equipment improvement to SMEs (18%).

General Evaluation of the Regional Dialogue on 9 December 2020

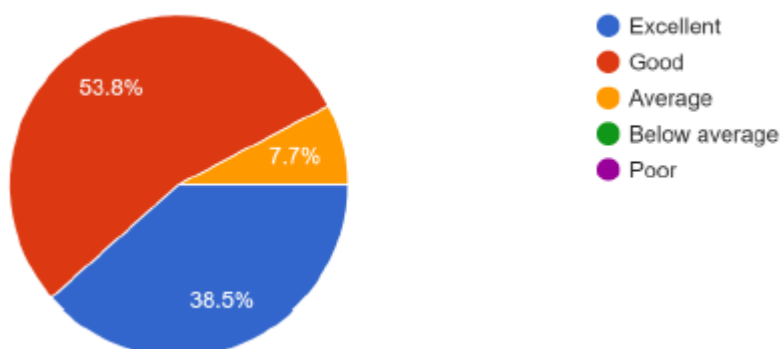
Rating the overall organization of the event



How well did this webinar meet your expectations?



How would you rate the relevancy of the contents to your own work?



Annex:

Annex 1: The Final agenda

Time (IST)	Theme
0930-1000	Registration
1000-1020	Opening Session Welcome remarks Dr. Wijarn Simachaya President of Thailand Environment Institute Opening remarks Mr. Daniel Hachez Head of Cooperation, Delegation of the European Union to Thailand EU SWITCH-Asia Regional Policy Advocacy Component Dr. Mushtaq Memon Project Manager, SWITCH-Asia RPAC
1020-1030	Keynote Speech on Eco-design Implementation Prof. Martin Charter Director, Centre for Sustainable Design, University for the Creative Arts, UK
1030-1050	Case of market mechanisms driving eco-design practices in business Mr. Tomo Hamakawa Managing Director, Earth Company
1050-1105	Case of government mechanisms to stimulate eco-design implementation Mr. Saurabh Diddi Bureau of Energy Efficiency (BEE), Government of India
1105-1120	Case of R&D mechanisms to initiate eco-design implementation Ms. Thamonwan Virodchaiyan Co-founder, Moreloop Co., Ltd.
1120-1140	Q&A session
1140-1150	Concluding and take-home messages
1150-1200	Inviting inputs from the participants for the next steps TEI & SWITCH-Asia RPAC

The seminar session was moderated by Dr. Singh Intrachooto, Associate Professor of Building Innovation, Kasetsart University/ Founding Director of the Creative Center for Eco-design, Osisu Co., Ltd.

Annex 2: Presentations

A video of the event is available for viewing at:

https://www.facebook.com/watch/live/?v=377803846830759&ref=watch_permalink

All presentations and the draft discussion paper of the dialogue can be downloaded from:

http://www.tei.or.th/th/area_activities_detail.php?area_id=3&event_id=934

Annex 3: Evaluation/assessment form

ECO-DESIGN IN ASIA

Under the EU SWITCH-Asia Regional Policy Advocacy Component,
implemented by the United Nations Environment Programme in collaboration with
the Thailand Environment Institute

**Feedbacks for The Next Steps on Actions Needed To Stimulate
Eco-Design Implementation In Asia**

Respondent's information:

Name-Surname:

Gender:

Female Male

Country:

Afghanistan

Bangladesh

Bhutan

Cambodia

China

India

Indonesia

Lao PDR

Malaysia

Maldives

Mongolia

Myanmar

Nepal

North Korea

Pakistan

Philippines

Sri Lanka

Thailand

Vietnam

Others, please specify

Name of organization:

Type of organization:

Government agency

International/ inter-governmental organization

NGO

Civil society organization

Academia

Private sector

Others, please specify

Email:

Your opinions for the next steps:

1. In your opinion, what should be done to stimulate eco-design implementation in Asia? (can choose more than 1 answers)

- (1) Development and enforcement of specific and operational-based policies towards sustainable consumption and production (e.g. emission discharge standards, restricted substances in products, green public procurement, etc.)
- (2) Market transformation to enhance demand of green consumers in Asia
- (3) Providing financial supporting schemes and R&D programs for businesses (e.g. technology transfers in green innovations and clean technology)
- (4) Supporting of decision-support tools for selecting, ranking, and optimizing the deployment of green technologies at commercially scale and providing case examples of business models for green innovations.
- (5) Supporting eco-design facilities for Asian small and medium sized enterprises (SMEs) (e.g. access to trainings and test and assessment facilities, database for green materials, and research cooperation between corporates and academic institutions)
- (6) Others, please specify

If you choose more than one answer, kindly let us know what you think the most important?

- (1) (2) (3) (4) (5) (6)

2. What should be prioritized as key eco-design sectors in Asia? (can choose more than 1 answers)

Product:

- Electronic appliance and equipment
- Automotive industry
- Textile and fashion
- Paper and packaging
- Plastic and petrochemical
- Fast-moving consumer goods (FMCG)
- Handicraft

Service:

- Tourisms
- Hotels
- Restaurants
- "Product as a service" business models

Architecture and urban design:

- Green buildings
- Construction materials
- Urban design
- Others, please specify

3. What would you suggest to be regional network activities to stimulate eco-design adoption in Asia? (can choose more than 1 answers)

- Seminar and trainings on eco-design policies/ decision-support tools for business/ green supply chain
- Platforms collecting good practices of eco-design business models
- Exchange learning across industries/ countries
- Regional eco-design award

- Expert consultants providing analysis and recommendations for eco-design adoption of pilot corporates
- Partial financial supports for tools and equipment improvement to SMEs and startups
- Others, please specify

4. Other feedbacks and suggestions:

.....
.....

General Evaluation of the Regional Dialogue| on 9 December 2020:

1. How would you rate the overall organization of the event?

- Excellent
- Good
- Average
- Below average
- Poor

2. How well did this webinar meet your expectations?

- Excellent
- Good
- Average
- Below average
- Poor

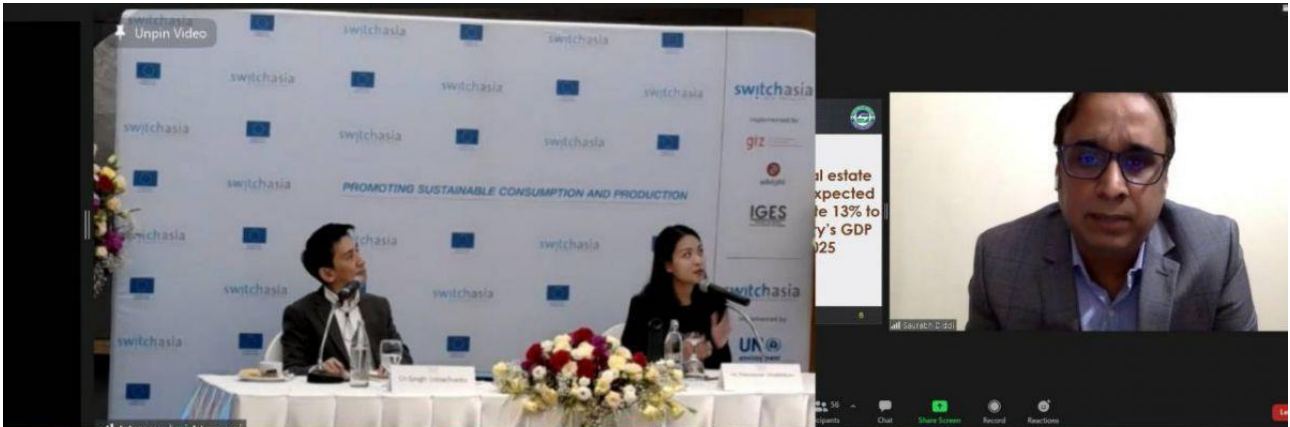
3. How would you rate the relevancy of the contents to your own work?

- Excellent
- Good
- Average
- Below average
- Poor

Thank you very much for your kind support of valuable information.

Annex 4: Screenshots/Photos from the event

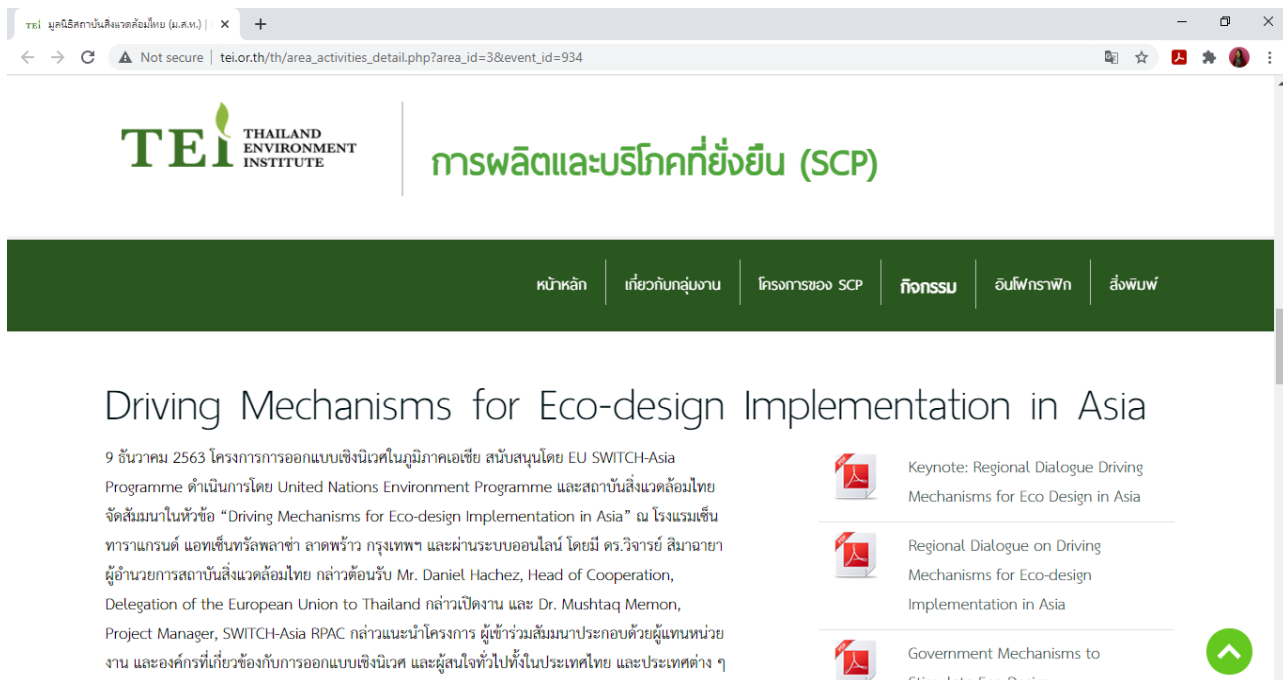
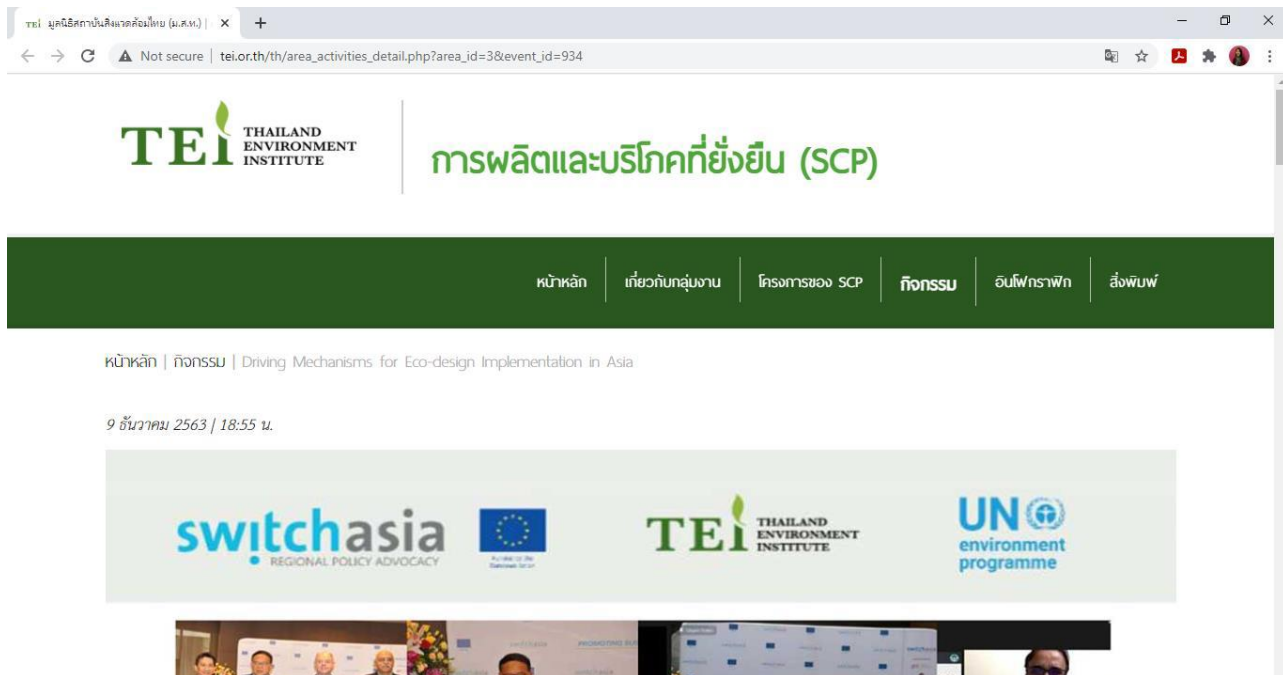




Annex 5: News page (in Thai and English on TEI website)

The event was reported on the dialogue in Thai and English articles titled as on TEI website.

Url: http://www.tei.or.th/th/area_activities_detail.php?area_id=3&event_id=934



For more information

SWITCH-Asia event page:

URL: <https://www.switch-asia.eu/event/driving-mechanisms-for-eco-design/>

Contact SWITCH-Asia Regional Policy Advocacy Funded by European Union
Implemented by United Nations Environment Programme, Asia and the Pacific Office

Mr. Mushtaq Ahmed Memon
Regional Coordinator for Resource Efficiency
United Nations Environment Programme, Regional Office for Asia and the Pacific
Project Manager
Regional Policy Advocacy Component
(SWITCH-Asia – the European Union funded programme)
Email: memon@un.org