

# SWITCH-Asia Policy Advocacy Component

## Full Report

### *Green Mobility for Clean Air in World Environment Day 2019*



#### Disclaimer

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## List of Acronyms

<b>DEQP</b>	Department of Environmental Quality Promotion
<b>WED</b>	World Environment Day
<b>MONRE</b>	Ministry of Natural Resources and Environment (Thailand)
<b>EU</b>	European Union
<b>EUD</b>	European Union Delegation
<b>MTEC</b>	National Metal and Materials Technology Center
<b>SCP</b>	Sustainable Consumption and Production
<b>SWITCH-Asia</b>	
<b>RPAC</b>	SWITCH-Asia Regional Policy Advocacy Component
<b>UN Environment</b>	United Nations Environment Programme

## Key Messages

### a. Policy Dialogue



#### **Dr. Sirima Panyametheekul**

Professor, Chulalongkorn university

- PM<sub>2.5</sub> and PM<sub>10</sub> levels in Thailand are still too high and fail to meet WHO guidelines in many areas.
- The highest episode of PM in Bangkok during 2018 was mostly caused by emissions from cars and open burnings.
- The measures to reduce emissions from cars include the improvement of fuel standard to low sulphur; investment in public transport infrastructure; replacement of low emission bus; increment of vehicle inspection and maintenance; increment of old vehicle tax; promotion of electric vehicle; zoning the areas to limit numbers of vehicles.
- The evaluation of implemented measures should take into consideration the following information: i) health data; ii) verified air quality data; and iii) air quality index.

#### **Mr. Thalearnsak Petchsuwan**

Deputy Director General, Pollution Control Department

- There are 3 different areas in Thailand having high seasonal levels of fine dust depending on the wind and other meteorological factors: i) Bangkok: from November to February; ii) Northern: from January to May; iii) Southern part: from July to September, when transboundary haze occurs from Indonesia.

- Main sources of Bangkok seasonal high level of dusts are 50% from cars and 35% from open burnings. For Northern part, main source are forest fire and agriculture waste burning. Southern part fine dust source is from peat land and forest fire.
- Measures to reduce emission from cars include inspect diesel cars, replace with low sulfur (less than 10ppm sulfur) diesel, apply EURO5 and EURO6 standards.
- Measures to reduce emission from open burnings and forest fires include strict law enforcement to control illegal fire starters, enhance community-based monitoring, build capacity of local authorities to raise awareness and monitor of zero open burning in agriculture and forest areas.
- Fine dust monitoring capacity in Bangkok will be increased to cover every district in Bangkok next year.
- Ambient air quality standard of PM2.5 will be improved to be stringent towards the interim target 3 of WHO guidelines, effectively in 2021.

#### **Dr. Danai Theewanda**

Deputy Director General, Department of Health

- Thailand mortality rate report of 2017 showed the significant increase of air pollution related diseases that diagnosed as the cause of death including stroke, ischemic heart disease, and chronic obstructive pulmonary disease. Trend of lung cancer mortality rate was increasing year by year since 2013.
- The health impact showed more impact to vulnerable groups of children, pregnant women, elderly, people with chronic diseases, outdoor labors, and workers exposing high level of air pollution.
- Personal measures are to: i) always monitor the level of air pollution in the areas where you are; ii) evaluate whether you are within the most vulnerable groups; and iii) apply personal preventive measures such as avoiding highly concentrated air pollution areas, staying indoor, using protective equipment i.e. mask.

#### **Ms. Suwimol Wattanawiroon**

Consultant, SWITCH-Asia Regional Policy Advocacy, UN Environment

- Green mobility is one of the activities of sustainable consumption and production which allows the basic needs of individuals and societies to be met safely, efficiently, with low energy and material intensity and less pollutions emitted to the environment.
- The core factor to increase the utility rate of public mobility is to make it more convenient by improving regularity and punctuality, offering the optimal price, reducing crowding, providing parking and connectivity, enhancing online information i.e. GPS tracking, travel time, transit, etc.

- An example of a good practice from the European Union to enhance green mobility is the 'Digitalization' initiative ([https://ec.europa.eu/transport/modes/road/road-initiatives/digitalisation\\_mt](https://ec.europa.eu/transport/modes/road/road-initiatives/digitalisation_mt)). The initiative applies information management technology to provide information of all modes of public transportation including trains, planes, coaches, and other public transportations and connections in each country in Europe. The system makes it easy for travelers to plan their journeys throughout Europe with more accurate information and conveniences.
- An example of a good practice from the region are bicycle-sharing systems (BSS) in China. Such schemes are considered promising solutions to the first/last mile problem (in public transport, first mile represents the passenger's travel journey from home location to metro or other public transport stops; and last mile means the travel journey from metro or public transport stops to workplace or other final destinations). In China, the bike sharing systems are equipped with technology of Internet of Things (IoT). IoT enables the service providers to track and locate the sharing bikes accurately even in the underground parking lots. This technology provides the possible solutions of theft and vandalism issues. It also provides more flexibility to the users and reduce the waiting time to unlock the bikes improving users experience.

### **Dr. Nuwong Chollacoop,**

Head, Renewable Energy laboratory National Metal and Materials Technology Center (MTEC)

- The electric vehicle policy and promotion action plan in Thailand approved by Thai governments to be implemented from 2016 to 2036 includes:
  - Foreign direct investment support to promote production of EV in the country;
  - Domestic market stimulation by replacing government agencies' fuel cars to Battery EV;
  - Infrastructure preparation to install EV charging station and prepare the testing facility and human resource capacity;
  - EV standards to be issued for EV charging station, battery standards, meter for billing;
  - End of life management to issue regulation to handle the retired battery after use;
  - Capacity building for automobile production industries to move to EV production.
- There are subsidies provided by government to support installation of EV charging stations responsible by Ministry of Energy (Energy policy and planning office). The target is 150 charging stations. For public sector, a 100% subsidy is provided. For private sector, there are 3 phases, first phase, the subsidy for installation is 70%, phase 2 is 50% subsidy and phase 3 is 30% subsidy.
- The examples of EV pilot projects of charging stations are being installed by Electricity Generating Authority of Thailand, Metropolitan Electricity Authority, Provincial Electricity Authority, PTT public

company, Chulalongkorn university, King Mongkut University of Thonburi and Bangkok Mass Transit Authority.

### **Mr. Kiartnarong Kuba**

Professional Scientist, Department of Land Transport

- The process of registration of an electrical vehicle (EV) is the same as the other powered vehicles. However, the imported EV needs to present the quality assurance certificate complied to international or national standards for safety reasons. The policy to promote the usage of EV is reducing annual fee for registered EV by 50%.

### **Mr. Kangwarn Laowirojanakul**

Secretary General of the Provincial Chamber of Commerce, Konkaen province

- The concept of smart city focuses on smart mobility, smart environment, smart people, among others.
- Konkaen province can be a role model city for others to learn from. The province has pledged to be the lowest carbon emission city of the country.
- Konkaen's smart city plan for includes urban planning with smart mobility to connect people within 500 meters. Smart mobility includes rail transport, 3-wheel EV are installed to reduce carbon and air pollution emissions. The lines of rail transport were planned to manage the urban planning of city center and its neighboring areas.
- Waste management is also the focus of the smart city plan. The province installed ae waste incinerator plant using electrical combustion. The waste management system was implemented with the plan to be completed in 7 years.
- Communication and consultation to all stakeholders before implementing project is the important step. The province provides a platform to exchange information between stakeholder; enhance understanding about the project; share views to reduce the conflicts and avoid unnecessary impacts to society and environment. The community and civil societies are always invited as the key partners in this communication. Mediation is sometimes used as the technique to get the agreement from the parties.

### **Mr. Manit Ounkruae**

President of the Pichai Sub-District Administrative Organization, Lampang province

- Forest fire and agricultural waste burning in Northern part of Thailand is a big air pollution issue for many years.

- The Pichai subdistrict has been working to prevent forest fire and agriculture waste burning to clear the land for next cultivation has been implemented for 8 years. The continuing effort and leadership are the key of success. The leader should share concrete information that much benefits in terms of income gain are well received by community living by the product from forest. The statistical data compare the crop yield between no waste burning versus burning can be shared.
- From Pichai sub-district experience, much more crop yields and forest products were gained a lot more than when after forest fire or agriculture waste burning. Soil is rich in nutrients than after burning for land clearance.
- The cooperation within community and neighboring communities and with authority has to be high. The approach is through continuous communication, negotiation and project cooperation. It's more effective than law enforcement.
- Awareness raising will focus on cost-benefit that each individual gains from no burning and forest fire. The long-term communication results in feeling of ownership of forest. The community will strongly protect forest by themselves.
- Regulation of Thailand on community forest was recently announced which will help strengthen the forest protection by community and reduce burden to forest authorities.

## b. World Environment Day Celebration

### **Dr. Isabelle Louis**

Deputy Regional Director

United Nations Environment Programme, Asia and the Pacific Office





- This year theme of world environment day is on 'air pollution' to inspire governments, industry and individuals to come together to explore clean air solutions, including renewable energy and green technologies and improve air quality across the world.
- UN Environment has issued the report of Clean Air Solutions which outlined 25 policy and technological measures. Some of the key actions to undertake to beat air pollution are related to the transport sector. Examples of these actions include: i) strengthen emission standards for road vehicles; ii) regularly maintain and inspect vehicles; iii) mainstream electric vehicles; iv) provide better mobility options; v) control dust from construction and roads; vi) reduce emissions from international shipping.
- Policy dialogue on green mobility supported by SWITCH-Asia Regional Policy Advocacy Component will support Thailand on its pathway to decrease emissions from the transport sector and at the same time contributed to Thailand sustainable consumption and production roadmap 2017-2036.

### H.E. Mr. Pirkka Tapiola

Ambassador of the European Union to Thailand



- The EU has been a strong supporter of the uptake of Sustainable Consumption and Production (SCP) patterns in Asia, working with both SMEs and national governments. Under the SWITCH-Asia programme, the support was provided to more than 100 projects spreading over 19 countries of Asia, addressing both the consumption and production, sharing best practices and demonstrate the results on the ground.
- Air pollution is a global threat leading to large impacts on health and ecosystems. Road transport is the main source of air pollution and the biggest greenhouse gas emitter in Europe. We have also

aim to reduce the greenhouse gas emission from transport by at least 60% before 2050. Europe has a lot of experiences and lesson learned and is willing to support our partners in Thailand and in the region, under the various components of the EU SWITCH-Asia and other programmes.

- To make rapid progress towards a sustainable mobility system, the EU Mobility packages of the 'Europe on the Move' on clean, competitive and innovative mobility was established. The objective is to allow all Europeans to benefit from safer traffic, less polluting vehicles, and more advanced technological solutions, while supporting the competitiveness of the EU industry. It comprises a wide-ranging set of initiatives that will modernise European mobility and transport. Achieving a sustainable mobility system is vital to reaching EU's goals for a low carbon economy.
- The initiatives of Europe on the Move' include
  - an integrated policy for the future of road safety with measures for vehicles and infrastructure safety;
  - the first ever CO2 standards for heavy-duty vehicles;
  - a strategic Action Plan for the development and manufacturing of batteries in Europe and
  - a forward-looking strategy on connected and automated mobility;
  - the adoption of the "Green Deal" for Mobility in Europe on "Starting a new era: clean, safe and affordable mobility for Europe" with a clear commitment to modal shift towards sustainable modes of transport and support for cycling by the EU Transport and Environment Ministers in October 2018.
  - Accelerate the introduction of low- and zero-emission vehicles, including the development of charging infrastructure.
  - The promotion of 'Car Free Sunday' derived from the good work of 'European Mobility Week'

**Dr. Wijarn Simachaya**

Permanent Secretary, Ministry of Natural Resources and Environment



- The recent air pollution across Thailand in particular fine dust (PM2.5) has seriously impacted people's health and severely affected the tourism industry. Automotive technologies and efforts to properly handle agriculture field and forest burning are among the top priorities of the Ministry of Natural Resources and Environment to call for collaborations.
- The United Nations Environment Programme (UNEP) has called on people from around the world to be aware of the effects of air pollution and take actions to reduce the sources of air pollution. According to the World Health Organization (WHO), around seven million premature deaths are attributable to air pollution each year, or about 800 people every hour, and this has affected the economy and contributed to global warming. All stakeholders in the countries have to work together to improve air quality by moving from personal vehicles to public vehicles, reducing greenhouse gas emissions, sorting garbage, using environmentally friendly products, and grow more trees to make the air cleaner and healthier.

## Event Summary

- The main objective of the event was to raise awareness among key players in the transport sector of the importance of promoting sustainable means of transport to beat air pollution and improve human health.
- The event comprised 3 separate activities: a press conference, a policy dialogue and the WED official celebration.
- The press conference took place on May 30<sup>th</sup> and 23 journalists from 19 medias attended.

- The Policy Dialogue on Green Mobility and the official WED celebration took place on June 5<sup>th</sup> with more than 800 participants representing the government, academia, civil organizations and the private sector.
- Key messages shared by the speakers at both the policy dialogue and the WED official celebration include
  - PM.2.5 and PM 10 levels in Thailand are still too high and fail to meet WHO guidelines.
  - The highest episode of PM in Bangkok during 2018 was mostly caused by emissions from cars and open burnings.
  - Some of the key actions to undertake to beat air pollution are related to the transport sector. Examples of these actions include: i) strengthen emission standards for road vehicles; ii) regularly maintain and inspect vehicles; iii) mainstream electric vehicles; iv) provide better mobility options; v) control dust from construction and roads; vi) reduce emissions from international shipping.
  - Thailand is making rapid progress in supporting green mobility in the country, but there is still much to be done.
  - The implementation of Thailand Sustainable Consumption and Production Roadmap 2017-2036 will help the country to reduce air pollution.
  - Green technology, innovation and access to green finance are key aspects to support green mobility in Thailand from the producer side.
  - From the “consumer” side, better transport infrastructure and a continuous awareness program will be needed to promote sustainable lifestyles.
  - The awareness raising campaign developed in the Lampang province to stop forest burning practices could serve as example to develop a campaign to promote green mobility.
  - 'Europe on the Move' is a wide-ranging set of initiatives that could be showcased in Thailand to make traffic safer; encourage smart road charging; reduce CO2 emissions, air pollution and congestion; cut red-tape for businesses; fight illicit employment and ensure proper conditions and rest times for workers. The long-term benefits of these measures will extend far beyond the transport sector by promoting growth and job creation, strengthening social fairness, and widening consumers' choices.
  - Policy dialogue on green mobility supported by SWITCH-Asia Regional Policy Advocacy Component will support Thailand on its pathway to decrease emissions from the transport sector and at the same time contributed to Thailand sustainable consumption and production roadmap 2017-2036.

- We all have a role to play to beat air pollution and the choices with the mode of transport we use are very powerful.

## Detailed Event Information

**Name:** Policy dialogue on “Green Mobility for Clean Air” at World Environment Day 2019 Thailand

**Date:** Press conference- 30 May 2019 , Policy dialogue on ‘Green mobility for clean air’- 5 June 2019, WED official celebration – 5 June 2019

**Venue of press conference:** Meeting room 301, Ministry of Natural Resources and Environment Building,

**Venue of policy dialogue and WED official celebration:** Grand Diamond Room, Impact Forum building, Impact Muangthong Thani Convention Center, Nonthaburi province

### Objectives

#### ***Press conference:***

- Announce the policy dialogue on “Green Mobility for Clean Air” to be held during the 2019 World Environment Day event, hosted by the Ministry of Natural Resources and Environment of Thailand in collaboration with the SWITCH-Asia Regional Policy Advocacy Component funded by the EU and managed by UN Environment, Asia Pacific Office.
- Disseminate the importance of using sustainable means of transport to beat air pollution while promoting sustainable consumption and production.

#### ***Policy dialogue on ‘Green mobility for clean air’:***

- Raise awareness among key players in the transport sector of the importance of promoting sustainable means of transport to beat air pollution and improve human health. These key players include technology producers, legislators as well as users.
- Raise awareness of the importance of promoting green mobility to meet Thailand’s road map on sustainable consumption and production.
- Showcase best practices on green mobility currently being implemented in Thailand.

#### ***The WED official celebration***

- Showcase best practices on green mobility currently being supported by the Thai government, the EU and UN Environment.

## SWITCH-Asia's Visibility at the events

### Press conference



From left to right: Welcome and Opening Remarks by:

- **Mr. Ratchada Suriyakul Na Ayudhaya**, Director General, Department of Environment Quality Promotion (DEQP)
- **Mr. Wijarn Simachaya**, Permanent Secretary, Ministry of Natural Resources and Environment
- **H.E. Mr Pirkka Tapiola**, Ambassador of the European Union to Thailand
- **Ms. Isabelle Louis**, Deputy Regional Director, Asia Pacific Office, United Nations Environment Programme



Policy dialogue on 'Green mobility for clean air'





The WED official celebration





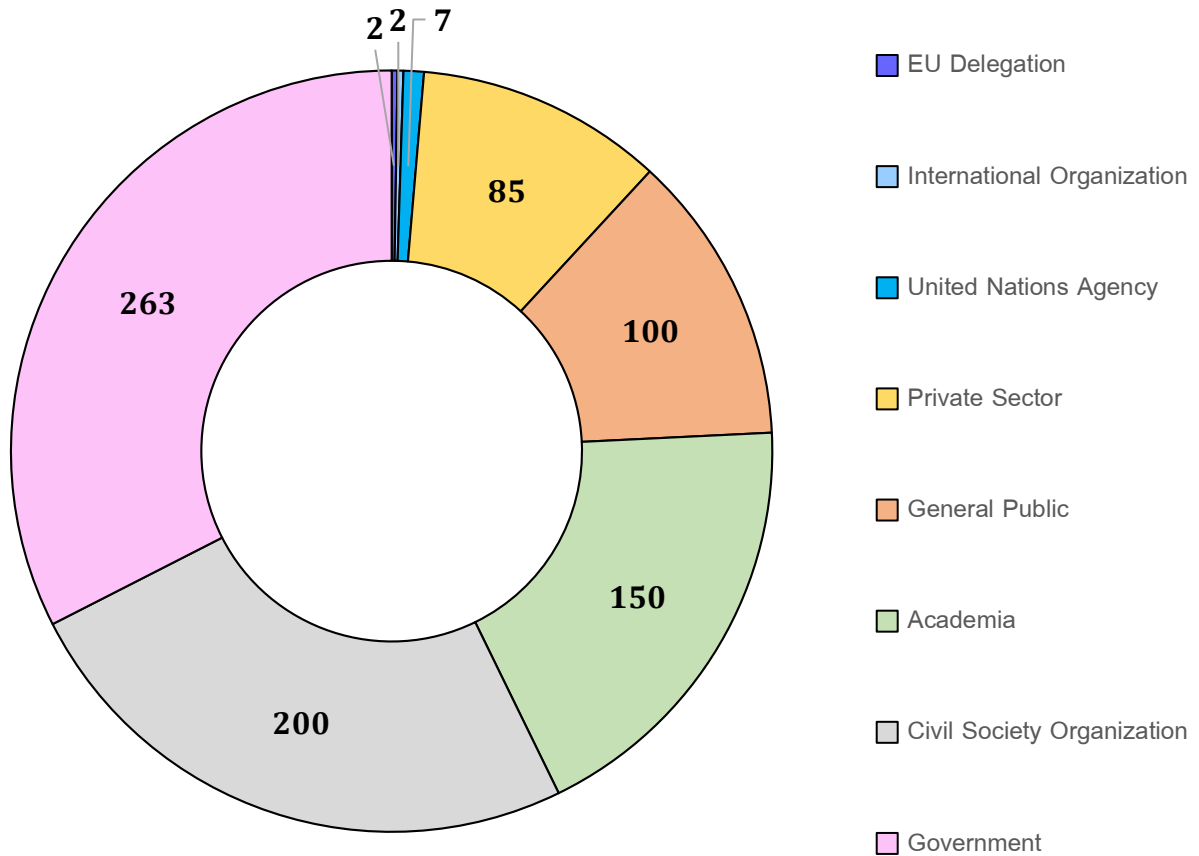
**WED SWITCH-Asia Exhibition**





**Targeted Participating Organizations:** The World Environment Day – Policy Dialogue involved wide spectrum of participants with a total of 809 participants, including governments, EU, Embassy, inter-governmental organizations, private sectors, civil society organizations and academia, as shown in the following diagrams:

## Participants by Category



## Event Analysis

### a. Background of the event

SWITCH-Asia Regional Policy Advocacy Component, funded by the European Union, is implemented by UN Environment to promote sustainable consumption and production in Asia focusing on improving resource efficiency and managing environmental pollution in consumption and production for all the sectors. This policy dialogue and WED celebration event was organized specifically to resonate the messages of sustainable consumption and production and green mobility to reduce air pollution to the wider audiences from government agencies both central and local, private sector, SWITCH-Asia and EU partners, research institutes, academia, civil societies, volunteers, and individuals.

'Green Mobility' has the power to beat air pollution while contributing to sustainable consumption and production practices. We live in a world where the tendency to move is always growing. People move every day to work and for leisure and goods and products of all kinds move all around the world from massive distances. The World Environment Day 2019 event was a great opportunity for stakeholders to explore options to support green mobility in Thailand. The dialogue and messages in the event advocating the policy and behavior change for new and more sustainable forms of mobility were well heard.

## b. Lesson Learned

- World Environment Day is celebrated on 5 June every year and is the United Nations' principal vehicle for encouraging awareness and action for the protection of our environment. Using the World Environment Day to draw attention to a specific SCP topic is a successful way for raising awareness around SCP among both, politicians and the general public.
- In order to send a coherent advocacy message, it is very important that the different speakers touch upon the same topic again and again. In this regard, RPAC's role of preparing the key messages in advance and aligning them among the different speakers was key.
- In countries, such as Thailand, where English is a barrier, having the event in the local language may have its pros and cons. In this sense, the fact that this event comprised 3 separate activities (i.e. press conference, a policy dialogue and the WED official celebration) and that the different activities were conducted in different languages (ie. press conference in English, policy dialogue in Thai and WED official celebration in English) allowed to reach a largest number of people.

## For more information

SWITCH-Asia event page:

<https://www.switch-asia.eu/event/world-environment-day-2019-thailand-5th-june-2019-green-mobility-for-clean-air-policy-dialogue/>

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Implemented by United Nations Environment Programme Asia and the Pacific Office

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