

## FINAL WORKSHOP

### Project “EIAP - Assessment of Environmental Inequalities of Air Pollution of Vulnerable Socioeconomic groups in the World of Work in Bangkok City, Thailand”

#### Background

The project "Assessment of Environmental Inequalities of Air Pollution of Vulnerable Socioeconomic Groups in the World of Work in Bangkok City, Thailand" is funded by the International Development Research Centre (IDRC), carried out with Stockholm Environment Institute (SEI) and in partnership with the International Labour Organisation (ILO). The major objective of the project is to contribute to our understanding of the relationship between socioeconomic deprivation and air pollution exposure through the environmental justice index of air quality. This case study project employed an integrated assessment approach to achieve its objective through the study in the five districts in Bangkok: Bang Khun Thien; Thon Buri; Klong Toei; Nong Chok; and Din Deang, where the vulnerable socioeconomic groups are most exposed to unhealthy levels of urban air pollution.

Asian Institute of Technology (AIT) has been collaborating with the Department of Public Works and Town & Country Planning (DPT), the Pollution Control Department, and the Department of Labor Protection & Welfare as study partners for the effective planning and implementation of the project.

The outcomes of the project in the selected area are (i) monitoring ambient air quality for workers' exposure and hazard index of different impacted people by the application of the GIS technique; (ii) assessing health impacts of air pollution based on personal lived experience and examining impacts on their health and well-being; (iii) identifying impact factors influencing well-being and health ranked spatially and temporally; and (iv) policy recommendations for emission mitigation, policies, city planning, and labor protection law.

*The project's final workshop will be conducted within two sessions: 1. Scientific workshop and 2. Policy roundtable.*

#### 1. Scientific workshop

There has been increasing policy and scientific attention on inequalities in environmental hazards, including air pollution. Inequalities of air pollution exposures have important health implications. Asia-Pacific region experienced the world's sharpest rise in premature deaths between 1990 and 2015, caused by ambient air pollution (i.e., fine particulate matter in the air or PM 2.5). Air pollution is caused by several sources, including vehicle emissions in cities, biomass burning in rural, transboundary haze in border areas, and industrial discharges in concentrated industrialized zones. UNESCAP confirms that poor and disadvantaged people are more exposed and vulnerable to the pernicious impact of pollution.

Because they are less able to protect themselves from pollution, their health and productivity suffer disproportionately. However, very few studies on inequalities in air pollution exposures, including the origins of environmental inequality, policy implications for environmental justice of air pollution, and air pollution disproportionately impact populations of low socioeconomic status and vulnerable people. The socio-economic characteristics of a group influence its population's health and well-being through the availability of public goods and services and, environmental pollutants, social protection to cope with health problems. Vulnerable socioeconomic groups are disproportionately more affected by air pollution than other groups.

This scientific workshop aims to present and exchange knowledge and understanding among scientists, practitioners, and policymakers on hot spots of air pollution, the relationship between air pollution and climate change, air pollution exposure of different social and economic groups, and the relationship between social-economic deprivation and air pollution exposures, sustainable urban planning and air quality.

The workshop will be conducted in a hybrid mode (in person plus online). The workshop will be presenting scientific research findings conducted within the project as well as other research experiences of other similar projects, with highly interactive, actively engaging participants in discussions.

### Target Participants

The target participants for the scientific meeting are the project team, study partners, scientists, practitioners, students, representatives from the boundary partners, donor agency, senior managerial level staff from key air pollution and air quality related government agencies, and non-governmental organizations,

**Date:** Wednesday, 07 September 2022

**Time:** 8.30 am – 12.00 pm

**Venue:** The Okura Prestige Bangkok.

**Via Zoom Link:** <https://ait-ac-th.zoom.us/j/99477026342>

### Agenda for Scientific Workshop (Provisional).

Time	Topic	
8.30 – 9:00	Registration	
9.00 - 9.05	Welcome address by AIT (5 min)	AIT VPAA
9.05 – 9.25	Emission Inventory Development for Bangkok City (15 min)	Dr. Ekbordin Winijkul AIT

Time	Topic	
	Q&A (5min)	
<b>9.25 – 9.45</b>	Data driven method to predict perceived air pollution impact on human health	Dr. Salvatore G.P. Virdis AIT
	Q&A (5min)	
<b>9.45-10.05</b>	The influence of socio-economic and demographic factors on air pollution exposure of vulnerable groups (15min)	Dr. Thi Phuoc Lai Nguyen AIT
	Q&A (5min)	
<b>10.05 – 10.20</b>	Photo Session and Tea break	
<b>10.20-10.40</b>	Health Impacts and Costs of P.M 2.5 Formation from Road Transport in Bangkok Metropolitan Region (15 mins)	Dr. Trakarn Prapasongsa Mahidol University
	Q&A (5min)	
<b>10.40-11.00</b>	The impacts of exposure to fine particulate matter on premature mortality in Bangkok (15min)	Dr. Kessinee Unapumnuk Pollution Control Department, Thailand.
	Q&A (5min)	
<b>11.00 – 11.20</b>	PM Reduction Efficiency using Diesel Particulate Filter (DPF) in diesel vehicles (15min)	Mr. Ittipol Paw-amart Pollution Control Department, Thailand
	Q&A (5min)	
<b>11.20-11.40</b>	Integrated Air Pollution and Climate Change Mitigation Assessment in Thailand' (15min)	Dr. Jessica Slater, SEI
	Q&A (5min)	
<b>11.40 – 11.50</b>	Closing remark	
<b>11.50-12.40</b>	Lunch break	

## 2. Policy Roundtable

This project contributes to the understanding of the relationship between socio-economic deprivation and air pollution exposures through the environmental justice index of air quality developed by combining the air pollution protection index and socio-economic index with multi-stakeholders. These findings are helpful for policymakers, managers, and employers to develop adequate strategies for mitigating air pollution burdens, sustainable city planning, and improving social and labor protection policy considering the needs of different vulnerable socioeconomic groups. The project enhances awareness and protection motivation behaviors against air pollution in the community, especially in vulnerable socioeconomic groups (i.e., women, elderly, and youth) who operates in both informal and formal economy.

## Objectives of the Policy Roundtable

The project's policy roundtable aims at:

- Informing multi-stakeholders of the key research findings and outcomes of the project and seeking the interpretation of the research findings from the stakeholders' perspectives.
- Co-producing knowledge on hotspots of air pollution and its correlation with health conditions and well-being and air pollution impacts the vulnerable socioeconomic groups in the world of work in Bangkok City and suggested policies/practices of air pollution control and health protection,
- Identifying the potential policy options for health and labor protection against air pollution in the world of work
- Identifying opportunities and synergies for collaboration in terms of data exchange, knowledge and experience sharing, etc., for supporting policy formulation and enforcement on air pollution mitigation and adaptation.

## Expected Outcomes of the Policy Roundtable

The policy roundtable aims to enhance understanding on:

- Co-producing knowledge and understanding of air pollution impacts the vulnerable socioeconomic groups in the world of work in Bangkok City, hotspots of air pollution, and its correlation with health conditions and well-being.
- Identifying the potential policy options for health and labor protection against air pollution in the world of work
- Identifying policy options for air pollution mitigation and adaptation in the world of work.
- Identifying policy options for sustainable city planning for improving air pollution reduction.
- Enhance awareness and protection motivation behaviors against air pollution in the community
- Networking with the representatives from the Governments, NGOs, industry, labor, and other relevant stakeholders in Thailand for air quality research and policy

## Modality of the inception workshop

The workshop will be conducted in a hybrid mode (in person plus online). The workshop will be highly interactive, actively engaging participants in discussions.

## Target Participants

The target participants for the policy roundtable are the project team, study partners, representatives from the boundary partners, donor agency, senior managerial level staff from key air pollution and air quality related government agencies, non-governmental organizations, scientists, and researchers in Thailand.

**Date: Wednesday, 07 September 2022**

**Time: 13.00 am – 17.00 pm**

**Venue: The Okura Prestige Bangkok.**

Via Zoom Link: <https://ait-ac-th.zoom.us/j/97212252685>

### Agenda for Policy Roundtable(Provisional)

Time	Topic	
12.40-13.00	Registration	
13.00-13.45	Session 1: Opening session	
	<ul style="list-style-type: none"> <li>Welcome address by AIT (5 min)</li> </ul>	AIT President
	<ul style="list-style-type: none"> <li>Welcome address by SEI (5 min)</li> </ul>	Dr. Diane Archer, SEI
	<ul style="list-style-type: none"> <li>Welcome address by Pollution Control Department (5 min)</li> </ul>	Mr. Ittipol Paw-armart, DPC
	<ul style="list-style-type: none"> <li>Welcome address by Department of Public Works and Town &amp; Country Planning (5 min)</li> </ul>	Dr. Rattikarn Khambud, DPT
	<ul style="list-style-type: none"> <li>Opening address by Project Team Leader (5 min)</li> </ul>	Dr. Thi Phuoc Lai Nguyen - AIT
	<ul style="list-style-type: none"> <li>Brief introduction of the participants (10 min)</li> </ul>	All (Presentation slide)
	<ul style="list-style-type: none"> <li>Overview of the roundtable objectives and expectations (5 mins)</li> </ul>	Dr. Thi Phuoc Lai Nguyen, AIT
	<ul style="list-style-type: none"> <li>Project Introduction Summary in Thai Language (5 mins)</li> </ul>	Dr. Rattikarn Khambud, DPT
<b>Photo session and tea break (15 minutes)</b>		
14.00- 14.30	Session 2: Presentation of Project scientific findings	
	<ul style="list-style-type: none"> <li>Presentation of the EIAP project key findings</li> </ul>	Dr. Thi Phuoc Lai Nguyen< AIT
	<ul style="list-style-type: none"> <li>Participants' feedbacks and interpretation of the project's research findings</li> </ul>	All participants
	<ul style="list-style-type: none"> <li>Summary of co-agreed findings/understanding of the research.</li> </ul>	Dr. Diane Archer, SEI

Time	Topic	
	Session 3: Policy Discussion	
14.30 – 16.30	<ul style="list-style-type: none"> <li>• Discussion on policy options/ strategies for air pollution mitigation and adaptation in the world of work</li> </ul>	Chair: Mr. Ittipol Paw-armart Rapporteur: Ekachai Lojanaphiwat
	<ul style="list-style-type: none"> <li>• Discussion on policy options for labor health protection for vulnerable groups in both formal and informal economy</li> </ul>	Chair: TBA Rapporteur: Siwarta Pattanasri
	<ul style="list-style-type: none"> <li>• Discussion on policy options/ strategies for sustainable urban planning for air pollution reduction</li> </ul>	Chair: Dr. Rattikarn Khambud Rapporteur: Panupong Sridom
16.30- 17.00	<ul style="list-style-type: none"> <li>• Plenary session and summary for policy briefing</li> </ul>	All groups
17.00-17.10	<ul style="list-style-type: none"> <li>• Closing remarks</li> </ul>	AIT SERD Dean

Register here



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