UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific
Asian and Pacific Centre for Transfer of Technology (APCTT)

Inception Meeting for the Project

"Enhanced capabilities to adopt innovative technologies for city air pollution control in select countries of the Asia-Pacific"

23 September 2022 (Virtual)

Meeting Report

A. Background

Air pollution is one of the critical challenges affecting the health and wellbeing of people, particularly in cities. The Asia-Pacific region alone accounts for about 70 per cent of deaths globally due to air pollution and has recorded some of the highest air pollution levels in recent times. It is also a major transboundary environmental challenge that threatens all countries in the region. Recognizing the need to improve air quality to protect human health, member States strive to reduce air pollution through various ways such as technology interventions for source-reduction of pollutants, enabling policy measures, regulations, and incentives. Countries are adopting action plans to control air pollution, but more needs to be done as they face multiple challenges such as capacity and resource constraints as well as limited awareness and access to effective and affordable technologies.

Towards strengthening the capacity of member States, the Asian and Pacific Centre for Transfer of Technology (APCTT) of ESCAP will implement a project titled "*Enhanced capabilities to adopt innovative technologies for city air pollution control in select countries of the Asia-Pacific*". The project will strengthen the capacity of city officials and stakeholders (through improved availability of knowledge regarding innovative technologies and good practices, better understanding of technology needs and gaps in three selected cities, namely Dhaka (Bangladesh), Gurugram (India), and Jakarta (Indonesia), and enhanced capacity to strengthen action plans for adoption of innovative technologies to control air pollution in a few target countries of the region. Through assessments and multi-stakeholder consultations, the project will facilitate development of recommendations to strengthen city level action plans for adoption of innovative technologies. The experience and outcomes of the project will be shared with stakeholders from other member States for wider dissemination and adoption. The project targets policymakers, pollution control authorities/departments, city municipal authorities and the private sector. The project is being implemented by APCTT in collaboration with relevant divisions and sub-regional offices of ESCAP, namely Environment and Development Division, and the regional offices in Northeast Asia, Southeast Asia, and South and Southwest Asia.

The inception meeting for the project **"Enhanced capabilities to adopt innovative technologies for city air pollution control in select countries of the Asia-Pacific"** was organized by APCTT on 23 September 2022. The meeting was held to introduce the project, discuss implementation modalities and explore cooperation and support from project implementing partners, key stakeholders and knowledge partners.

The key objectives of the Inception Meeting were to:

- Enhance understanding on the project and identify issues and challenges
- Discuss and identify the responsibilities of project implementing partners and stakeholders as well as APCTT in support of the implementation of the project
- Discuss and develop an operational work plan including strategy and timeline for project implementation

B. Salient features of the project

- Key challenges that countries in the Asia-Pacific face in addressing air pollution are: (1) limited awareness, knowledge and access to innovative air pollution control technologies; (2) limited understanding and capacities to strengthen city action plans in coherence with national strategies for adopting technological changes; (3) inadequate linkage between national strategies and city level action plans; and (4) limited opportunity for cross-border learning on good practices and technology collaboration.

- From a technology perspective, there are a number of technology options for air pollution control that are existing and some of them have been adopted but accelerated adoption of these technologies remains a challenge for countries.

- The project aims at strengthening policies to facilitate adoption of innovative technologies for controlling air pollution in the Asia-Pacific. As the outcome, the project will assist city officials and stakeholders in target countries to strengthen city action plans for adoption of innovative technologies for air pollution control.

- The project envisages to achieve two outputs through key activities:

  Output 1: Improved availability of technical knowledge regarding technologies, innovations and good practices, and better understanding of technology needs and gaps for air pollution control in the selected cities

  Activities

  1. Develop a compendium of good cases of innovative technologies for air pollution control implemented at cities level in Asia and the Pacific
  2. Study the technological interventions and gaps/needs for air pollution control in the selected cities (Gurugram, Dhaka, Jakarta)
  3. Examine city level action plans of the selected cities (and their alignment with national plans), and assess the strengths and challenges related to the strategies for adopting air pollution control technologies
  4. Conduct a comparative study between the selected cities to draw lessons and understand opportunities and good practices for technology adoption to control air pollution

  Output 2: Increased awareness and capacity of city officials and stakeholders to strengthen action plans for adoption of innovative technologies to control air pollution.

Activities

1. Organize knowledge exchange and experience sharing events between cities (virtual workshops, study tours – including a study tour to Republic of Korea under NEACAP and Thailand under EDD project) for city officials for understanding innovative technologies and good practices for air pollution control
2. Organize multi-stakeholder consultations at the city level to discuss the outcomes of assessment studies and develop recommendations for strengthening their city action plans for adoption of enabling mechanism for innovative technologies
3. Conduct training workshops to increase knowledge and understanding of city officials and relevant stakeholders for adoption and implementation of the recommendations
4. Organize a regional knowledge sharing workshop and contribute to ESCAP's dialogues and forums for sharing experiences and outcomes from the select cities among stakeholders of other member States

- The project has synergy with other ESCAP projects on air pollution and the outputs and learnings from these projects will be vital knowledge support for the project activities and outputs.

- The United Nations country teams in the target countries will be involved to disseminate the project outcomes to wider range of stakeholders.

C. Summary of discussion

- Crop burning, traffic congestion, vehicle emissions and construction activities have been identified as major sources of very high levels of air pollution in cities, particularly in India and Bangladesh.

- Technology-based traffic regulation which uses Geo-satellite positioning of vehicles and traffic can be considered to address the challenges of pollution.

- Brick kilns are major constraints of air pollution in Dhaka. The brick kilns have employment potential and hence there are challenges of shutting them down. Repurposing of brick kilns can be an alternative option, but this can be very expensive. Therefore, clean technology options need to be considered for reducing air pollution.

- Good practices and measures for air pollution control and management that have been successful in some cities can be good examples of learning for policymakers and city executives. These experiences, technologies and practices can be utilized in controlling air pollution in cities.

- The importance of local and grassroots innovations that are affordable was emphasized. These innovations could be identified under the project activities and recommended for scaling up to combat air pollution in the cities.

- Bangladesh Council of Scientific and Industrial Research (BCSIR) Bangladesh has conducted research on how to minimize the emission from the brick kilns in Dhaka and selected two technologies to minimize pollution.

- Representative of the United Nations Resident Coordinator (UNRC) Bangladesh expressed willingness to collaborate for supporting multi-stakeholder consultations under the project and convene key city

level actors including industry associations, national government counterparts, city municipal government and other stakeholders. The UNRC office offered to coordinate and organize stakeholder consultation meetings for reviewing the assessments and drafting recommendations for strengthening city action plans.

- The Environment and Development Division (EDD) of ESCAP is implementing a satellite data capacity building project for air pollution. One of the components of this project is the provision of ground-based air pollution sensors that provides data on the air pollution profile of a specific city. There are sensors available under this project which have been earmarked for deployment in India. There is an opportunity for both APCTT and EDD projects to synergize with each other to get the sensors deployed on the ground. This may be a key benefit of transfer of a cutting-edge technology. The EDD project has also developed the template and structure of city action plans and agreed to share the templates which could be used for the target cities under APCTT project.

- The knowledge products, lessons learnt and outcomes from the KCEF project will provide inputs for regional policy framework/modality on air pollution control which is being developed by ESCAP.

- The Sub-regional Office for South and South-West Asia (SRO-SSWA) of ESCAP offered its support to make this project a success, as well as strengthen this cooperation with APCTT.

- It was suggested that the project could tie up with the international funding institutions, agencies and banks to finance development of relevant infrastructure or technology demonstration for air pollution control under the project.

D. Next steps

- Focal points from Bangladesh and India expressed their commitment and ownership of the project. They agreed to develop their workplans, identify the city-level nodal agencies and facilitate agreements between APCTT and the target cities.

- APCTT is following up with ESCAP seat of government for designation of project national focal points for Indonesia as well as Jakarta city level agency.

- APCTT will initiate the development of technology compendium and city-level assessment studies on (1) technological interventions and gaps/needs for air pollution control in the selected cities (Gurugram, Dhaka, Jakarta); and (2) city level action plans of the selected cities (and their alignment with national plans), and assess the strengths and challenges related to the strategies for adopting air pollution control technologies.

- APCTT is in the process of hiring a consulting agency for developing the develop technology compendium on air pollution control. The process is expected to be completed by November 2022.

- The process of recruiting national consultants has been initiated and the process is expected to be completed by November 2022.

- Bangladesh and India are requested to identify city level agencies and communicate to APCTT.

List of participants

Sl. no.	Name	Organization	Contact details
Bangladesh			
1	Mr. Asir Uddin Sarder	Deputy Secretary, Ministry of Science and Technology, Bangladesh (Country Coordinator of KECF project)	section2@most.gov.bd
2	Dr. Mohammad Moniruzzaman	Principal Scientific Officer, Bangladesh Council of Scientific and Industrial Research, Bangladesh (Country Focal Point of KECF project)	monirbcsir@grnail.com
India			
1	Mr. Surinder Pal Singh	Joint secretary, Department of Scientific and Industrial Research, Govt. of India, Country Focal Point	surinder.singh66@gov.in
2	Mr. P.R. Hariharan	Section Officer, Department of Scientific and Industrial Research, Govt. of India	hariharan.pr@nic.in
UNRC, Bangladesh			
1	Ms. Subhra Bhattacharjee	Senior Development Coordination Officer, Strategic Planning & Head, UNRCO	bhattacharjee@un.org
EDD, ESCAP			
1	Mr. Matthew Perkins	Economic Affairs Officer, EDD, ESCAP	perkinsm@un.org
SRO-SSWA, ESCAP			
1	Ms. Mikiko Tanaka	Head, ESCAP/SRO-SSWA	mikiko.tanaka@un.org
2	Mr. Rajan Ratna	Senior Economic Affairs Officer, ESCAP/SRO-SSWA	ratna@un.org
APCTT, ESCAP			
1	Dr. Preeti Soni	Head, APCTT	preeti.soni@un.org
2	Dr. Satyabrata Sahu	Coordinator, APCTT	sahus@un.org
3	Ms. Divya Mohan	Coordinator, APCTT	divya.mohan@un.org
4	Mr. Anand David	Program Assistant, APCTT	anand.david@un.org