

The Fifth Session of the Committee on Information and Communications Technology, Science, Technology and Innovation

2 to 4 September 2026

SIDE EVENT CONCEPT NOTE

Frontier Technologies for Climate Action and Resilience:

Connecting Data, Trust and Incentives

<2 September 2026, 12:15 pm - 1:30 pm>

Meeting Room G, United Nations Conference Center (UNCC), Bangkok, Thailand



Background

Frontier technologies are creating new opportunities to strengthen climate action and resilience across Asia and the Pacific. Geospatial technologies and Earth observation are improving the monitoring of environmental change and climate-related risks. Artificial intelligence is expanding the capacity to analyse complex datasets, while distributed ledger technologies, interoperable digital infrastructure and digital platforms are being applied to improve transparency, traceability and participation in environmental initiatives. Emerging approaches such as digital tokens are also being explored to create new incentives for climate and environmental action.

These technologies are often discussed individually. In practice, however, climate challenges are not technology-specific, and different technologies address different functions and problems. Their effectiveness depends not only on technical capabilities, but also on data quality, institutional arrangements, regulatory frameworks, user participation and integration with existing systems. For policymakers, therefore, the key question is not simply which frontier technology should be adopted but where a particular technology can add value, what conditions are required for it to work and where its limitations remain.

This side event will examine practical applications of frontier technologies across four areas: environmental observation and analysis; data transparency and trust; participation and traceability; and digital incentives for environmental action. These areas are not intended as stages of a single technology architecture. Rather, they provide a common lens for comparing different approaches and understanding how technologies are being applied to specific climate and environmental challenges.

Drawing on operational experiences from Asia and the Pacific, the session will highlight lessons on implementation, institutional and regulatory requirements, and pathways for adoption and scale-up, with particular attention to their relevance for developing countries in the region.



Objectives

The objectives of the event are:

- **Showcase practical applications of frontier technologies for climate action and resilience**, including geospatial technologies, artificial intelligence, distributed ledger technologies, digital platforms and token-based mechanisms.
- **Examine where these technologies add value and what conditions are required for effective implementation**, including data, infrastructure, institutional capacity, regulation, stakeholder participation and interoperability.
- **Identify practical lessons and opportunities for developing countries in Asia and the Pacific**, including potential entry points for adoption, capacity-building, technology transfer and regional cooperation.

Date and venue

- *Date: 2 September 2026*
- *Time: 12:15 pm - 1:30 pm*
- *Venue: United Nations Conference Center (UNCC), Bangkok, Thailand*

Target participants (By invitation only)

- *35-40 participants*

Organizers and partners

The organizers of the event are:

- *Asian and Pacific Centre for Transfer of Technology (APCTT) of the UN ESCAP*

Language

This event will be conducted in English.

Registration Link for Online Participation

https://zoom.us/meeting/register/6w86fuvSRE2tg4Y2I-GbKg#

Contact person

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Annex: Provisional schedule

Provisional Schedule

Frontier Technologies for Climate Action and Resilience: Connecting Data, Trust and Incentives

<2 September 2026, 12:15 pm - 1:30 pm>

Meeting Room G, United Nations Conference Center (UNCC), Bangkok, Thailand

	Frontier Technologies for Climate Action and Resilience: Connecting Data, Trust and Incentives	
12:15 – 12:20	Opening	Ms. Lin Yang, Deputy Executive Secretary for Programme, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
12:20 – 13:10	Frontier Technologies in Practice (Presentation and Q&A)	
	Building a Climate-Resilient Power Sector: Geospatial Technologies for Climate Action	Dr. Manzul Kumar Hazarika, Director, Geoinformatics Center, Asian Institute of Technology (AIT), Thailand
	Making Carbon Data More Transparent: Digital Infrastructure for Carbon Markets (remote session)	Ms. Ieva Steponaviciute, Director, Climate Action Data Trust (CAD Trust)
	Tracing Environmental Action to Communities: Digital Platforms and Blockchain in Practice (remote session)	Mr. Amr Shehata, Head of Operations & Data, Plastic Bank
	Creating New Incentives for Environmental Action: The Blu Green Token Experience	Dr. Supattana Wichakul, Acting Managing Director, TEAM Consulting Engineering and Management Public Company Limited (TEAMG) Mr. Wanrob Boontham, Chief Investment Officer, Token X
13:10 – 13:25	Moderated Discussion	
13:25 – 13:30	Closing	

For further information, please contact soohyung.kim@un.org