



79th Commission Session

15 - 19 May 2023 Bangkok | THAILAND

Side Event

Cooling: The Unseen Climate Challenge

Date: Friday, 19 May 2023
Time: 12:45 - 13:45 (GMT+7)
Venue: Conference Room 3,
UNCC, Bangkok, Thailand
Mode: In-person and online

Registration: Click or scan:



Contacts:

Kimberly Roseberry
ESCAP
roseberry@un.org

Clément Charnailat
UNEP–Cool Coalition
clement.charnailat@un.org

The side event, Cooling: the Unseen Climate Challenge, is organized by



ESCAP
Economic and Social Commission
for Asia and the Pacific

UN
environment
programme





79th Commission Session

15 - 19 May 2023 Bangkok | THAILAND

Cooling: The Unseen Climate Challenge

Background:

The cooling sector – including space cooling, refrigeration, cold chains, mobile air conditioning, and industrial cooling – is a top driver of rising electricity demand and carbon emissions in the Asia-Pacific region. In major growth markets, which are powered primarily by fossil fuels, the annual increase in electricity demand from cooling is outpacing annual renewable energy generation capacity additions, increasing stress on power systems and posing a serious challenge to reducing the sector's emissions.

While access to cooling technologies has improved the quality of life for many people, large shares of populations, particularly in developing nations, remain without access. The penetration rates of household air conditioners are still in the single digits in many of the region's fastest growing economies. Rising temperatures and heat stress from climate change will increasingly negatively impact populations, while growing household spending power will propel cooling demand upward. Unmanaged cooling growth would play a significant part in keeping fossil-fueled sources of electricity in the energy system. At the same time, refrigerants used in conventional technologies are up to 4,000 times more damaging to the climate than CO₂.

The need for sustainable cooling solutions has never been more urgent, and requires a collaborative effort from policymakers, industry leaders, and civil society. The UN Secretary General recognised the urgency of the cooling challenge and has called upon nations to act. To support countries to assess current and future cooling needs, introduce responsive and future-oriented policies, and encourage cross-sectoral cooperation under a common framework for action, the UNEP-led Cool Coalition and ESCAP, in collaboration with the Alliance for an Energy Efficient Economy, developed the [National Cooling Action Plan \(NCAP\) Methodology](#). Dozens of countries globally have or are in the process of developing NCAPs as a first step toward meeting the cooling challenge. In addition, the Asia-Pacific region has numerous examples of leadership in the cooling sector, from passive design strategies for buildings and urban landscapes, to high-efficiency cooling appliance and equipment development.

This year, the UAE Presidency of COP28, with UNEP's Cool Coalition initiative, is introducing a [Global Cooling Pledge](#) as a commitment that can be made by countries to take action to reduce the environmental impact of cooling technologies, while also ensuring access to cooling for those who need it. The Pledge can serve as a step toward catalyzing global and national cooling sector actions that also support the achievement of SDG 7, SDG 13, NDC targets and the Kigali

The side event, Cooling: the Unseen Climate Challenge, is organized by



ESCAP
Economic and Social Commission
for Asia and the Pacific

UN
environment
programme





79th Commission Session

15 - 19 May 2023 Bangkok | THAILAND

Amendment to the Montreal Protocol. It is a response to the recognition that cooling technologies, such as air conditioning and refrigeration, are major contributors to energy consumption, greenhouse gas emissions, and the depletion of the ozone layer. At the same time, access to cooling is essential for the well-being and health of individuals, particularly in areas experiencing high temperatures and humidity. Thus, the Pledge aims to balance the need for cooling with the need for environmental protection, while also promoting energy efficiency and clean energy solutions.

Objectives and themes of the event:

To address the sustainable cooling challenge, this side event will examine the cooling challenge and showcase national best practices to assess and meet the demand for sustainable cooling through plans, policies, and actions. In addition, participants will have the opportunity to share perspectives on the proposed set of commitments under the Cool Coalition and United Arab Emirates-led Global Cooling Pledge, and thus supporting the finalization of a “Cool COP Menu of Actions” to be presented during COP28.

Expected outcomes:

Participants will gain awareness of the sustainable cooling challenge, learn from national best practices, and identify opportunities for collaboration to achieve sustainable cooling at scale. Participant feedback on the Global Cooling Pledge will help ensure that the Pledge is reflective of the diverse needs and priorities of the Asia-Pacific region.

The side event, Cooling: the Unseen Climate Challenge, is organized by



ESCAP
Economic and Social Commission
for Asia and the Pacific

UN
environment
programme





79th Commission Session

15 - 19 May 2023 Bangkok | THAILAND

Agenda

MC and Panel Moderator: **Ms. Lily Riahi**, Coordinator, Cool Coalition, UNEP

I. Welcoming Remarks (5 min)

- **Prof. Ji Zou**, CEO & President, Energy Foundation China

II. Opening

- **Introducing the Global Cooling Pledge and International Collaboration on Cooling**

Mr. Rahma Alshamsi, Office of the UAE Special Envoy for Climate Change,

- **Presentation – Cooling: The Unseen Climate Challenge**

Ms. Kimberly Roseberry, Energy Division, ESCAP

- **Presentation - International Collaboration on Cooling**

Mr. Abhay Bakre, Director General (DG) of Bureau of Energy Efficiency (BEE)

III. Panel Discussion – Member State Feedback on Pledge “Menu of Options” and national best practices to accelerate sustainable cooling

- **National Cooling Action Plans** – Cross-sectoral analysis and planning to advance sustainable cooling

H. E. Pak Sokharavuth, Director General, General Directorate of Environmental Protection, Ministry of Environment, Cambodia

- **Urban planning and design** – mitigating urban heat island effect, district cooling:

Mr. Owen Gow, Associate Director, Extreme Heat Initiative at Adrienne Arsht-Rockefeller Foundation Resilience Center, Atlantic Council

- **Cool and energy efficient buildings** – Energy codes, building guidelines

Mr. Stanford Harrison, Director, Commercial Buildings Policy, Energy Division / Industrial Energy Efficiency Branch, Department of Climate Change, Energy, the Environment and Water, Australia

- **Climate friendly cooling technologies and Life-cycle approach to cooling** – MEPS, energy efficient cooling technology development

Dr. Li Pengcheng, Research Fellow and Team Leader of Energy Conservation and Low Carbon Group, China National Institute of Standardization (CNIS)

IV. Q&A

V. Concluding Remarks

- **Mr. Michael Williamson**, Chief of Section, Energy Division, ESCAP

The side event, Cooling: the Unseen Climate Challenge, is organized by



ESCAP
Economic and Social Commission
for Asia and the Pacific

UN
environment
programme

