

Beating the Heat: Achieving Sustainable Cooling through National Cooling Plans

Introduction

Cooling in several sectors of the economy is significant and growing -- from realizing thermal comfort in buildings, to maintaining ideal storage conditions for vaccines and medicines, transporting perishable food along agriculture and food supply chains, and to controlling temperature in industrial processes. The use of cooling is critical and ubiquitous. It is projected that the current estimated 3.6 billion cooling appliances in use will jump nearly 4 times by 2050¹ if all cooling demands are met.

Unfortunately, the increasing use of air-conditioning and refrigeration equipment can be harmful to the climate, as these cooling systems are often very energy intensive and reliant on fossil-fuel-generated electricity, and sometimes contain refrigerants that can be hundreds to thousands of times more potent than carbon dioxide in terms of global warming effect.

To address this issue, many countries are developing National Cooling Plans (NCPs) as a mechanism to bring all relevant stakeholder together and identify actions to reduce emissions of greenhouse gases from cooling appliances. NCPs assist in identifying ways to integrate comprehensive action to reduce energy consumption and related emissions from cooling. NCPs can serve as an important element of countries' efforts to achieve Sustainable Development Goals and fulfill their obligations under the Montreal Protocol and the Paris Agreement.

UNDP has supported 12 countries (Bangladesh, Chile, Costa Rica, Cuba, Ghana, Lebanon, Mexico, Nigeria, Panama, Philippines, Sri Lanka, and Trinidad and Tobago) in the development of NCPs, with the financial assistance from the Clean Cooling Collaborative (former Kigali Cooling Efficiency Program (K-CEP)).

These NCPs include both active and passive cooling, alongside demand management plans. They also cover energy efficiency measures, the refrigerant transition, research and development (R&D) etc. Detailed recommendations, actions, the appropriate responsible agency within government, other stakeholders to be involved, indicative costs, and the key existing policy to link to are also key parts of the NCPs.

Hosted by the Montreal Protocol Unit of UNDP, this side event will spotlight and share key experience of countries in developing the NCPs, and offer space for discussion of challenges and opportunities.

Agenda

Moderator: Mr. Anderson Alves, Regional Technical Advisor & Regional Coordinator for Asia & the Pacific, Montreal Protocol, Chemicals & Waste Unit, NCE/GPN/BPPS - UNDP

- Opening Remarks (8 minutes)
Ms. Xiaofang Zhou
Director
Montreal Protocol, Chemicals & Waste Unit, NCE/GPN/BPPS – UNDP

¹ UNEP-IEA. 2020. "Cooling Emissions and Policy Synthesis Report".
<https://www.unenvironment.org/resources/report/cooling-emissions-and-policy-synthesis-report>

- Summary of Cooling Plans (15 minutes)
Mr. Anderson Alves
Regional Coordinator for Asia & the Pacific
Montreal Protocol, Chemicals & Waste Unit, NCE/GPN/BPPS – UNDP
- Innovative Financial Solution Options (10 minutes)
Ms. Dima Ray Mahdi
Consultant, UNDP
- Panel discussion -- Cooling Plans: Forward Looking (20 minutes)
 - Mr. Mazen Hussein, Head of National Ozone Unit, Ministry of Environment, Government of Lebanon
 - Engr. Idris Abdullahi, National Ozone Officer, Federal Ministry of Environment, Government of Nigeria
 - Mr. Rifa Wadood, National Ozone Officer, Ministry of Environment, Government of Sri Lanka
 - Mr. Kasper Koefoed-Hansen, Regional Coordinator for LAC region, Montreal Protocol, Chemicals & Waste Unit, NCE/GPN/BPPS – UNDP
- Questions and Answers (10 minutes)
- Closing (2 minutes)