

Mobilizing Finance for Climate-friendly Cooling in Developing Countries

Background

Global warming, if left underestimated, will have extensive, prolonged and destructive ramifications for planet Earth. The most immediate and obvious solution is to own the responsibility and take course corrective measures across livelihood applications.

Aiming at universal goal to limit global warming to well below 2°C and preferably to 1.5°C compared to pre-industrial levels, the Paris Agreement provides a long-term approach which needs to be capitalized through top-down and bottom-up implementation strategies across sector.

Researchers recognized significant contribution of Air Conditioning and refrigeration (AC&R) to global emissions. The refrigerants used in AC&R have 100-year global warming potentials (GWPs), which are typically greater than 1000 times that of CO₂. Further, life cycle emission spans manufacturing process, refrigerant leakage and disposal to make AC&R as one crucial resource possessing great potential to reduce emissions. Over the past few decades, rising temperatures have flipped cooling from a luxury to developmental need, thus a way forward for climate-friendly cooling needs to be explored especially in the context of developing countries – the key pillars to global climate actions. To avoid up to 0.5°C of global warming, the Montreal Protocol and its Kigali Amendment in 2016 have been instrumental by directing countries to phase-down the Hydrofluorocarbons (HFCs), commonly used high GWP substances in air conditioning and refrigeration. As per the Kigali Amendment, India falls in the third group of Article 5 countries (developing countries such as India, Pakistan, Iran, Saudi Arabia) with an obligation to start phasing down HFCs by 2028 and reducing it to 15% of 2024–26 levels till 2047.

There are legitimate financial and technological issues with industries in developing countries to adopt climate-friendly cooling. Group 3 countries currently lack access to larger part of Multilateral Funds for early or advanced phasedown of HFCs. Government of India has already India Cooling Action Plan (ICAP) that provides 20-year perspective (2017–18 to 2037–38) aiming at national development goals with climate resilience. Subsequent to ICAP, India has also recently ratified Kigali Amendment, showing commitments to India's nationally determined contributions and global climate objectives. With other developing countries moving in this direction, greater access to multilateral funds and public–private partnership funds for climate-friendly cooling may be required to timely phase-down HFCs and maintain geographical balance of trade. The key is to support deep dive analysis on the detailed sectoral actions and build synergies by facilitating multi-stakeholder exchange amongst government, industry, and other stakeholders from developing and developed countries. Coordinated international action on energy-efficient, climate-friendly cooling could avoid as much as 460 billion tonnes of greenhouse gas emissions (roughly equal to eight years of global emissions at 2018 levels) over the next four decades¹.

With this intent, TERI is facilitating an international roundtable discussion at the side event of COP26 bringing together international experts from Government, Funding Agencies and think tanks to share their experience apropos to global influencing centre. The key discussion points are as follows:

- Analysis of funding gaps for climate-friendly cooling in developing countries.
- Building long-term strategic road maps to assist developing countries in this direction.

¹ <https://wedocs.unep.org/bitstream/handle/20.500.11822/33094/CoolRep.pdf?sequence=1&isAllowed=y>