



Global Initiatives and Programmes On Cooling

Lily Riahi, Coordinator, Cool Coalition
United Nations Environment Programme
Lily.Riahi@un.org



Key Policy Action for Sustainable Cooling – India's Cooling Action Plan



"We need all countries to develop National Cooling Action Plans [NCAP] to deliver efficient and sustainable cooling and bring essential life-preserving services like vaccines and safe food to all people."

Antonio Guterres, UN Secretary General
World Ozone Day 2019

→ Why is the development and implementation of NCAP crucial to tackle the cooling challenge?

→ How is the ICAP helping to answer to the call of the Secretary General to accelerate NCAP's for all countries?

Cooling Is Key To Health, Livelihoods & the SDGs



SUSTAINABLE
DEVELOPMENT
GOALS



Cooling Expansion Has To Be Managed



Cooling growth challenges the energy system

Demand for AC > new share of RE

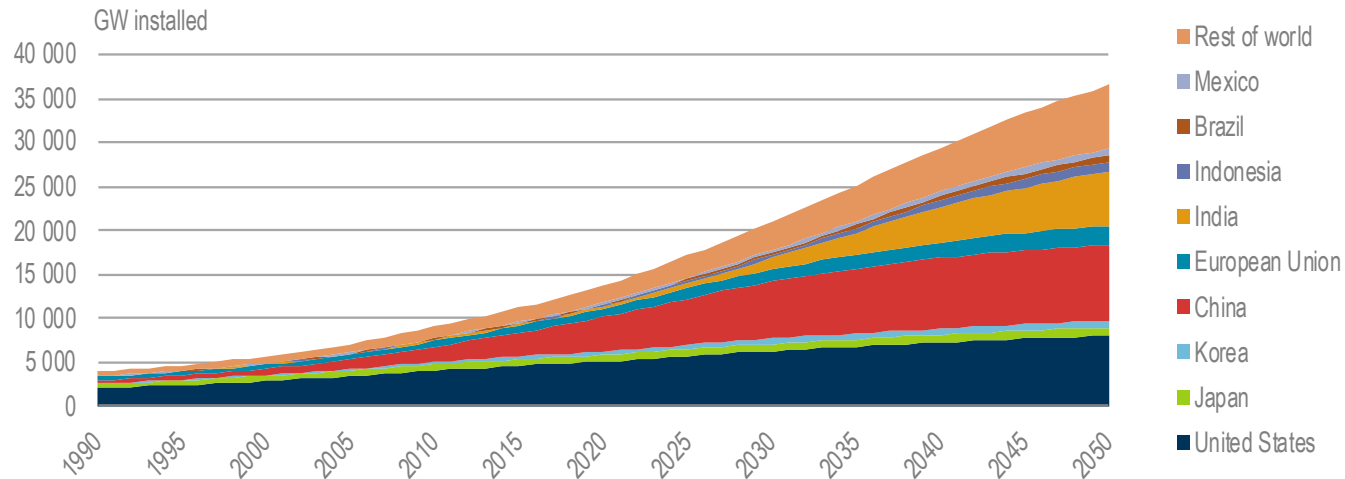


1.6 billion in use today
5.6 billion by 2050.

→ And consumers are not buying the most efficient ACs



USD 2.9 trillion of power generation investment to be met

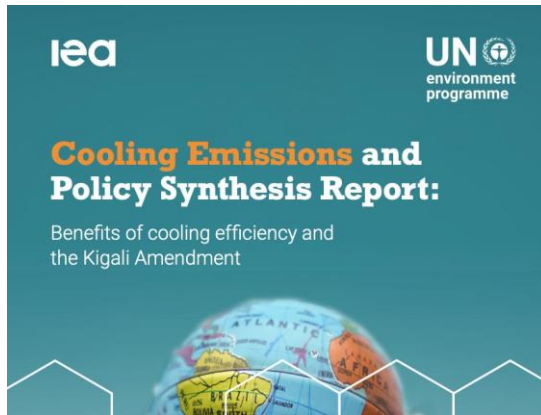


Source: *Cooling capacity projections for residential and commercial air conditioning in baseline scenario of IEA Future of Cooling (2018).*

Today: Conventional cooling causes up to 10% of all global GHG emission: 2X carbon emissions from aviation & maritime transport combined.

BAU: Direct and indirect GHG emissions projected to rise by 90% from 2017 levels by 2050

..... How to Cool more without Heating the Planet? Comprehensive strategy linked to refrigerant transition

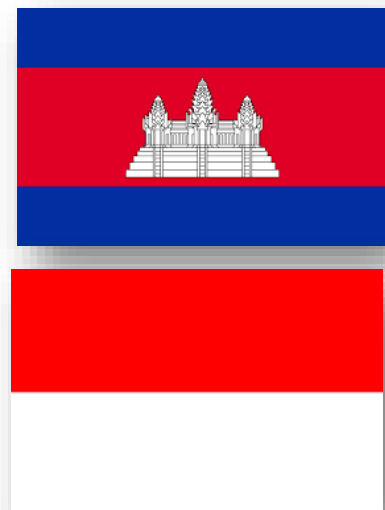


- HFC phase-down can achieve 0.4 of avoided warming, with cooling efficiency could double the climate benefits. → in just four decades could avoid equivalent of 4-8 years GHG emissions (2018 base)
- Not a technology problem, a policy & finance problem

NCAP as blueprint for comprehensive strategy / policies → India's Cooling Action Plan

- assess cooling requirements, refrigerant demand & energy use
- coordinate efficiency with refrigerant transition interventions
- map technologies (avoid, shift, improve) and opportunities not always evident in short-term or siloed analysis
- align existing policies and programmes to match
- multi-stakeholder framework for cross-sectoral implementation





- Based on India's efforts Cool Coalition (led by UNEP) and its partners are preparing a model NCAP methodology (currently being piloted in Cambodia. Indonesia next)
- ICAP is the major building block, inputs from other 20 NCAPs UNEP- UNDP -KCEP
- Lessons learned: Governance, Flexible, Demand Assessment, Integrates Access

1. Foreword
2. Introduction: Why Cooling Matters, Objectives
3. Space Cooling in Buildings
4. Cold Chain (Agriculture, Dairy Health)
5. Mobile Air Conditioning
6. Process Cooling
7. Access to Cooling Needs Assessment
8. Recommendations and Implementation framework: Cross-sectoral integration and synthesis of recommendations and targets.
 - ✓ MEPS and Energy Labels
 - ✓ Building Energy Codes, Thermal Comfort St.
 - ✓ Service sector upskilling for HVAC prof.
 - ✓ User operational efficiency
 - ✓ Promotion of low-GWP refrigerants
 - ✓ Alternative / not-in kind technologies
 - ✓ Training and capacity building, certification
 - ✓ NDC enhancement and HPMP updates
 - ✓ Recycling and waste management
 - ✓ Nature based solutions (cool roofs, greenery)
 - ✓ Heat Action Plans/ Urban Cooling Action Plans
 - ✓ Access to Cold Chain (off-grid micro cooling)
 - ✓ Public Procurement of EE Cooling equipment
 - ✓ Funding and financial mechanisms

Demand Assessment:
 Baseline; technologies; future growth scenarios (reference & intervention) with associated refrigerant demand and energy use; and suggested interventions.
 → Country driven - each country to decide on priority sectors - not necessary to cover all .



- Cool Coalition** to collaborate on a transition to efficient, climate-friendly cooling contributing to SDGs, the Kigali Amendment, and Paris Agreement
- voluntary platform, 100 partners including 30 countries
 - knowledge exchange, outreach, science, joint action (e.g. urban cooling methodology, renewable energy for cooling best practice, cold chain)
 - S-S exchange and trainings on how to develop NCAPs (AEEE)
 - Collaboration between India Cooling Coalition and Cool Coalition to respond to the call to help all countries adopt NCAP
-

“India chapter” of the Cool Coalition – reflecting India’s leadership

Support implementation of ICAP through pilot activities and develop best practice to facilitate south-south exchange building on India’s example :

- urban cooling (including extreme heat action planning)
- efficient practices in cold chains
- standards and labeling programs
- building codes (integrated passive cooling strategies)
- urban cooling methodology tailored to the region

Mainstreaming cooling action within COVID recovery strategies

GCF Readiness and Investment Projects

Scaling-up GCF Projects on Energy-Efficient and Climate Friendly Cooling

August 5, 2020 at 9:00 AM CEST

Hosted by:



UN
environment
programme

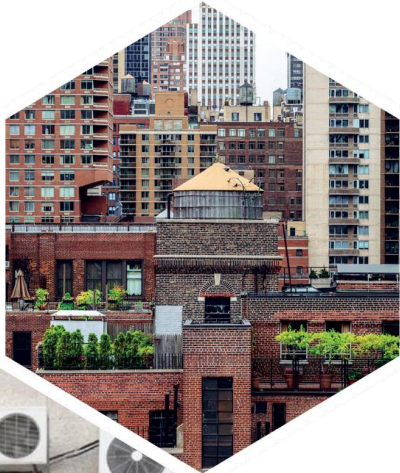


iea
International
Energy Agency

With:

KIGALI
COOLING EFFICIENCY PROGRAM





Thank you!

Contact us

Lily Riahi, Coordinator, Cool Coalition, UNEP

lily.riahi@un.org

Atul Bagai, Head, India Office, UNEP

Atul.Bagai@un.org

www.coolcoalition.org