

Webinar on

**Implementation strategies for  
India Cooling Action Plan**

2<sup>nd</sup> September 2020

Dr. Satish Kumar

Escalating cooling energy needs, and increasing recognition for access to cooling as a social imperative, **need to be balanced** with India's sustainable growth requirements and international commitments



## Country level

- India's Stimulus package - COVID-19 fiscal response

## Space Cooling in Buildings

- Energy Conservation Building Code (ECBC)
- Eco Niwas Samhita (ENS) for residential buildings
- Standards & Labelling Programme (S&L)
- Pradhan Mantri Awas Yojana - Housing for All
- Smart Cities Mission
- National Mission on Sustainable Habitats
- National Mission on Enhancing Energy Efficiency

## Cold Chain and Refrigeration

- Doubling Farmers' Income (DFI) initiative
- National Logistic Policy
- Agriculture Infrastructure Fund
- Gramin Agricultural Markets (GrAMs)
- Mission For Integrated Development of Horticulture

## Global Cool Coalition

- Launched in March 2019 under the leadership of UNEP; aims to facilitate knowledge exchange, advocacy and joint action towards efficient and climate-friendly cooling

## National Cooling Action Plans (NCAP):

- Equipping national governments to conduct holistic assessments of their countries' cooling needs and develop National Cooling Action Plans (NCAPs). Led by **UNEP** and **UNESCAP** for ASEAN Countries.

## K-CEP (Kigali Cooling Efficiency Program)

- Identifying organizations to partner with countries to include efficient, climate-friendly cooling into their enhanced NDCs

## World Bank

- Study on Cold Chain Energy Efficiency in India: Analysis of EE Opportunities in Pack Houses

## GIZ initiative on Cooling

- Initiated to support the BEE and the Ozone Cell, MoEF&CC in the implementation of the ICAP related to energy-efficient centralized space cooling systems

- **SHEETAL project:** support national government to facilitate the implementation of ICAP and achieving the critical objectives of ICAP and for improvisation in India's climate policies
- **Key Beneficiaries:** Ozone Cell, BEE, MIDH, MoAFW, MoHFW, ClimateSmart Cities Alliance, State Governments and ULBs

## Appliances

Energy performance standards and labelling and no refrigerant climate-friendly cooling solutions.



## Cold-Chain

Energy efficient and climate friendly horticulture cold-chain



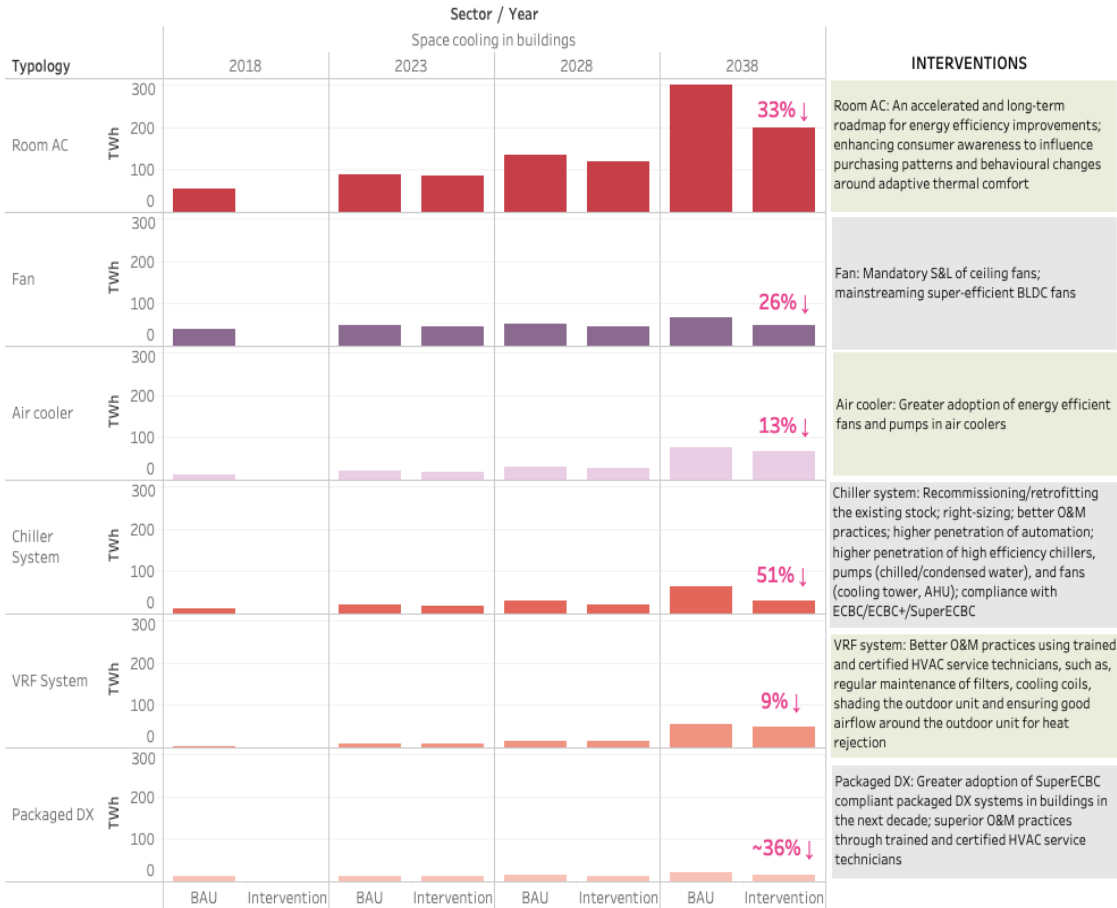
## Buildings and Cities

Residential building code adoption and implementation

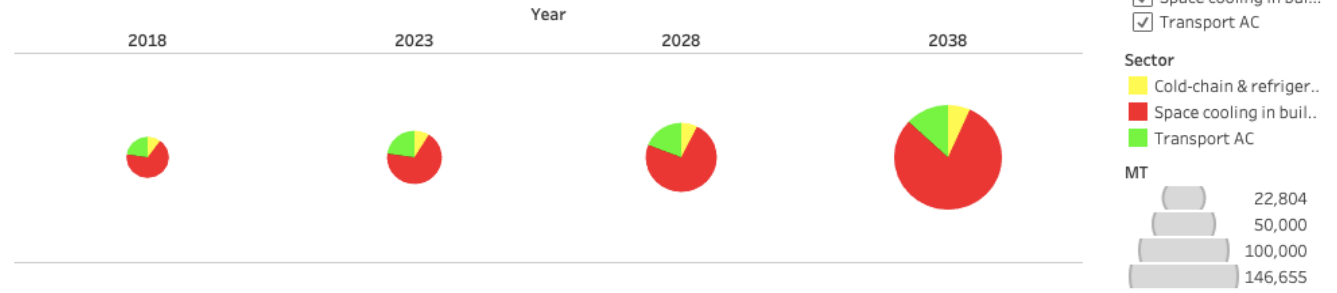
# ONGOING WORK RELATED TO ICAP

- **Creating easily understandable and accessible data stories on Tableau using ICAP data assessment**
- **Planned for launch in the 2<sup>nd</sup> Week of September**

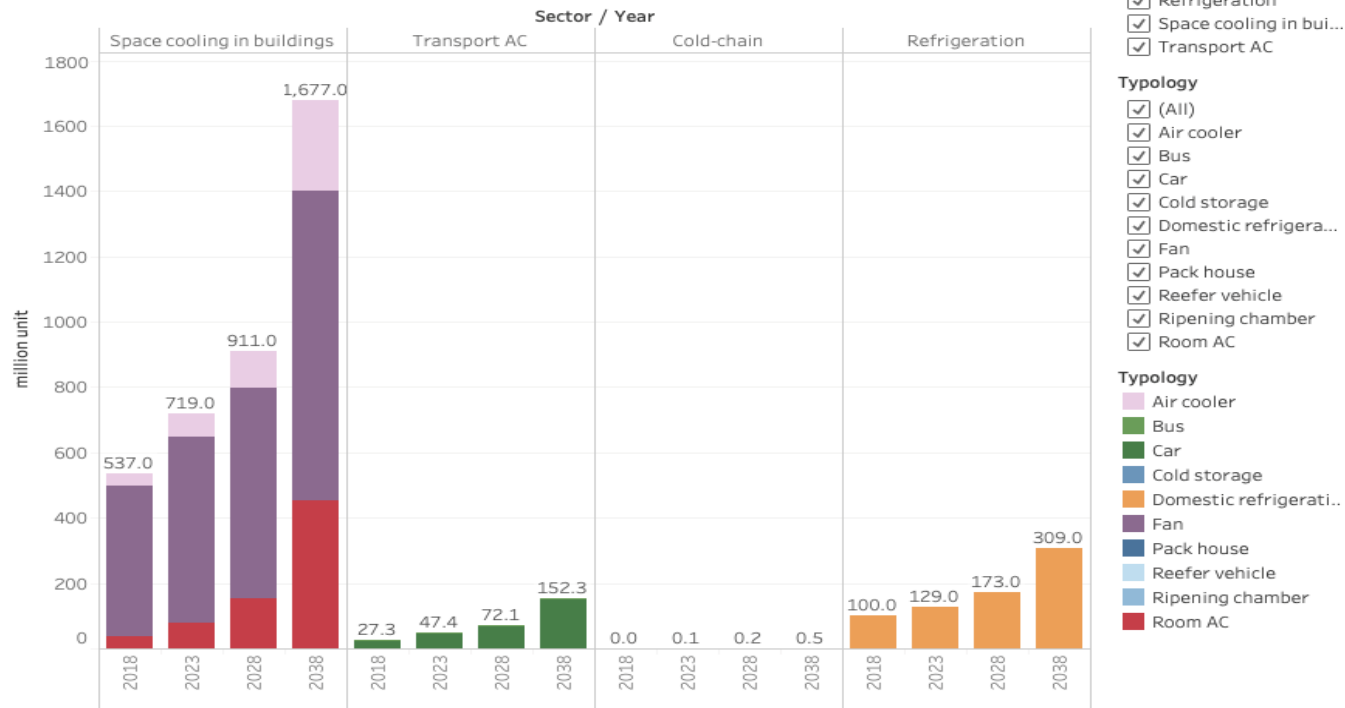
BAU & intervention future scenarios: Growth in annual electricity consumption for space cooling in buildings by typology (TWh)



BAU future scenario: Growth in annual refrigerant demand for cooling (by sector) incl. service sector demand (MT)



Growth in refrigerant & non-refrigerant-based annual cooling demand by sector & typology (million units)



- **Capacity building at the state and local government level**
  - Current efforts in affordable housing for lower income groups in different states can be tied back with the cooling action plan
  - ‘Cool roof’ programmes have been implemented in Telangana and some initiatives have been taken in Ahmedabad as well
- **Consumer Awareness:** Unless there is market demand, local municipalities and state governments will not be willing to adopt best practices
- **Research and Development:** Global cooling prize has encouraged innovation in cooling by the private sector with the objective of reducing emissions
- **Enforce compliances and implement efforts** to improve cooling efficiency and reduce cooling load
  - Evaluating where under the ICAP the largest impact can be made

## Research

- Develop and share evidence on:
  - Innovative Technological & Behavioral alternatives
  - Mechanisms to remove barriers for widespread uptake of sustainable cooling solutions

## Innovation

- Develop ideas/projects to incentivize businesses to strive towards greater innovation in the cooling sector
- Showcase and demonstrate alternative cooling solutions and business models



## Lead by Example

- Commit to raise awareness and shift behaviors on cooling through concrete actions
- Strongly advocate and come up with solutions to avoid the need for active cooling

## Awareness Raising

- Bring together public, private and civil society stakeholders in cooling domain
- Establish common interests and identify avenues to collectively accelerate progress towards affordable, efficient and climate-friendly cooling for all

## Advocacy

- Engage in policy discussions aimed at designing and implementing cooling policies (ICAP) to ensure these are sufficiently ambitious to live up to the cooling challenge
- Elevate cooling for all as a strategic development, infrastructure and security priority and imbibe it as a cultural imperative in India



**THANK YOU**