





Climate Actions through ICAP Implementation

Setting priorities for the Decade of Action

Date: 25th November 2021

About the Event

'Cooling' has been linked with economic growth. It is defined as a catalyst for good health, well-being, and better productivity for the occupants residing in hot climate zones, along with being one of the essential cornerstones for achieving the sustainable development goals (SDG), as per India Cooling Action Plan (ICAP) 2019. The <u>Alliance for an Energy Efficient</u> <u>Economy (AEEE)</u> is hosting a one-day-event "Climate Actions through ICAP Implementation: Setting priorities for the Decade of Action" under the project <u>SHEETAL</u>-Alliance for Sustainable Habitat, Energy Efficiency and Thermal Comfort for All, supported by Children's Investment Fund Foundation (CIFF). This event is being hosted on 25th November 2021.

The event "Climate Actions through ICAP Implementation: Setting priorities for the Decade of Action" envisions setting priorities for a decade of action from 2021-2030. This event aims to unravel the key challenges and opportunities across the sectors, which would be instrumental in moving ahead towards a sustainable future for all through ICAP implementation. The event will also showcase work done by AEEE, under the SHEETAL project in the thematic areas of Cold-Chain, Buildings, Behaviour Change and Appliances while providing a platform to deliberate discussions to arrive at priorities for the decade via plenary sessions with businesses, government and the civil society organisations.

AGENDA

10:30-11:00 Hrs	Registration and Welcome Tea and Coffee
11:00-11:45 Hrs	Inaugural Session
	 Keynote address by Mr. Jigmet Takpa, Joint Secretary, Ministry of Environment, Forest and Climate Change (MoEF&CC)
	 Special address by Shri Arijit Sengupta, Director, Bureau of Energy Efficiency (BEE)
	 Thematic address by Dr. Shirish Sinha, Director, Climate Children Investment Fund Foundation (CIFF)
	 Setting the context by SHEETAL consortium partners:
	 Dr. Satish Kumar, President and Executive Director, Alliance for an Energy Efficient Economy (AEEE)







	 Dr. Vibha Dhawan, Director General, The Energy and Resource Institute (TERI) Dr. Arunabha Ghosh, Chief Executive Officer, Council for Energy, Environment and Water (CEEW)
11:45-12:00 Hrs	TEA BREAK

Plenary 1: The Ins and Outs of Cold-chain in India – Through the Governance and Policy lens

Globally, India has emerged as the world's second-largest producer of vegetables and fruits. However, the country faces several challenges, which includes a rapidly growing population facing undernutrition, hunger, food loss and wastage at multiple levels. These challenges can be mitigated up to a certain extent by developing a sustainable cold-chain in India. The pathway to develop sustainable cold-chain in India will require a concerted effort from diverse actors, which includes the government by providing a policy push, industries to enable innovative and affordable technology for agriculture, civil society organizations, and ground-level actors such as farmer groups for conducting research and development, creating awareness and capacity development. This webinar is a step to provide a platform for a diverse stakeholder group from governance to academia to initiate a dialogue on the urgency to develop a more climate-friendly and affordable cold chain in India, which employs energy-efficient technologies. Additionally, the cold-chain's impact on farmers' livelihood and food loss in the country.

AEEE will also present the significant findings from the report titled "Enabling Cold-chain Infrastructure Development in India: Evolution and Assessment of Policies and Institutional Mapping," prepared under SHEETAL. This session is structured as a report launch and a brief discussion on:

- Role of actors and government initiatives to further cold-chain development in India
- Integrating energy efficiency in Indian cold-chain
- Way forward to advance energy efficiency in cold-chain development in India
- The positive impact of cold-chain development on reducing food loss and improving farmers' livelihood

12:00-12:10 Hrs	Report Presentation: Enabling cold-chain infrastructure development in India: Evolution and assessment of policies and institutional mapping
	Presenters: Mr. Tarun Garg, Program Lead and Dr. Khushboo Gupta, Senior Research Associate, Alliance for an Energy Efficient Economy (AEEE)
12:10-12:45 Hrs	Panel Discussion
	Moderator: Dr. Satish Kumar, President and Executive Director, Alliance for an Energy Efficient Economy (AEEE)
	Panellists:
	 Mr. Asheesh Fotedar, Chief Operating Officer, National Centre for Cold-chain Development (NCCD)
	 Mr. Angshuman Siddhanta, Sustainable Cold Chain Expert, United Nations Environment Programme (UNEP)
	 Dr. Vijay Yadav Tokala, President, Postharvest Education Foundation (PHEF)
12:45-13:00 Hrs	Q&A Session







13:00-14:00 Hrs LUNCH

Plenary 2: Getting Down to Action: Implementing Eco-Niwas Samhita

SHEETAL intends to work towards the implementation of ICAP recommendations and reduce the space cooling requirements in buildings. Administering building Energy codes developed by BEE in the building approval process can become the very first step towards this. Understanding the administrative process, barriers in the implementation of code compliance becomes an inevitable process towards ensuring its implementation.

Focusing on Eco-Niwas Samhita, the Residential Energy Conservation Building Code, this session would ponder upon the challenges in its implementation and mitigation strategies that can be worked to ensure effective implementation, considering the quantum of residential floor space that can be covered through the code's mandate.

14:00-14:10 Hrs	Report Presentation: Framework for ENS implementation
	Presenters: Ms. Shatakshi Suman, Senior Research Associate, Alliance
	for an Energy Efficient Economy (AEEE)
14:10-14:45 Hrs	Panel Discussion
	Moderator: Mr. Sanjay Seth, Senior Director, Sustainable Habitat Program, The Energy and Resource Institute (TERI) & Chief Executive Officer of GRIHA Council
	Panellists:
	Mr. Saurabh Diddi, Director Bureau of Energy Efficiency (BEE)
	 Dr. Umamheshwaran Rajasekar, Head, C Cube, National Institute of Urban Affairs (NIUA)
	 Mr. S Vikash Ranjan, Deutsche Gesellschaft f ür Internationale Zusammenarbeit (GIZ) GmbH
14:45-15:00 Hrs	Q&A Session
15:00-15:30 Hrs	TEA BREAK

Plenary 3: Harnessing behaviour change for promoting energy efficiency in space cooling

In leveraging different policy tools for fostering sustainable and efficient energy consumption in the residential sector, individuals' choices and behaviour are vital factors to consider along with the technical efficiency of the products and infrastructure used. Human behaviour has a critical role to play in fostering deeper energy savings. Decisions relating to energy use, including indoor temperature settings, adoption of star-labelled appliances, or participation in demand-response programs, are all intricately linked with human behaviour. The actions and attitudes of individuals play a key role in cumulative energy consumption. Humans are the center of energy efficiency action and behaviour change can be a vital force to generate and sustain energy efficient action.

The session would provide an opportunity to comprehend the need, significance and design of behavioural interventions for promoting energy efficient behaviour in the Indian residential sector. The session intends to have a comprehensive discussion on the following elements:

- Key areas of behavioural interventions for promoting energy efficiency
- Learnings from behavioural science and international best practices







 Building cons 	sumer engagement and designing behaviour change communications
15:30-15:40 Hrs	Report Presentation: Harnessing behaviour change for promoting energy efficiency in space cooling
	Presenters: Ms. Simrat Kaur, Research Associate, Alliance for an Energy Efficient Economy (AEEE)
15:40-16:05 Hrs	Panel Discussion
	Moderator: Mr. Tarun Garg, Program Lead, Alliance for an Energy Efficient Economy (AEEE)
	Panellists:
	 Ms. Shikha Bhasin, Senior Programme Lead, Council for Energy, Environment and Water (CEEW)
	Mr. Sabyasachi Pattanaik, Director-Opower, Oracle Utilities
	Mr. Abhishek Ranjan, VP, BSES Delhi
16:05-16:15 Hrs	Q&A Session

PLENARY 4: Cool is the New Hot !!

Opportunities and Pathways for transitioning towards Super Energy Efficient Space Cooling Solutions to achieve Thermal Comfort for a Billion Lives (TCBL)

India is one of the fastest-growing economies and the second-most populous country globally with around 4 trillion-person cooling degree days. However, India is also one of the countries with the lowest access to cooling with per capita space cooling energy consumption at 69 kWh compared to the world's average of 272 kWh. In addition to this India's current housing demand is 272 million and is expected to rise by almost 100 million in the coming decade. The rising urban population will exacerbate these problems and affect the quality of life in the urban regions, making cooling a necessity and increasing the demand for climate-resilient housing and thermal comfort for all. As per India Cooling Action Plan (ICAP) 2019, the overall space cooling appliances consume around 135 TWh of which Room Air Conditioners (RACs) contribute to 40%, Fans contribute 30% Fans, and Evaporative air coolers (EACs) contribute 8%. Therefore, space cooling appliances are contributing significantly to India' overall energy consumption. Thus, there is a need for mainstreaming energy efficient, low energy and alternative cooling appliances and technologies in India.

The objective of this panel discussion is to provide insights on the opportunities and pathways for transitioning towards super energy efficient space cooling solutions to achieve thermal comfort for a billion lives (TCBL). This panel will focus on the following:

- Policy Trends: Global trends and initiatives for improving energy efficiency of space cooling appliances.
- Challenges: Limiting factors for the upscale of super energy efficient, not-in-kind and no/low-refrigerant based space cooling technologies.
- Opportunities: Recommendations for reducing space cooling energy consumption and bringing market transformation.

16:15-16:20 Hrs	Session Brief Presentation: Opportunities and pathways for achieving
	thermal comfort for a billion lives (TCBL)







	Presenter: Ms. Srishti Sharma, Research Associate, Alliance for an Energy Efficient Economy (AEEE)
16:20-17:00 Hrs	Panel Discussion
	Moderator: Dr. Bhaskar Natrajan, Senior Advisor, Alliance for an Energy Efficient Economy (AEEE)
	Speakers:
	 Mr. Markus Wypior, Dy. Programme Coordinator, Deutsche Gesellschaft f ür Internationale Zusammenarbeit (GIZ)
	 Mr. Amit Kumar, Executive Director and Group Chief Executive Officer, Symphony Ltd.
	 Mr. Mayur Karmarkar, Managing Director, International Copper Association (ICA)
17:00-17:15 Hrs	Q&A Session
17:15-17:20 Hrs	Closing Remarks by Dr Satish Kumar
17:20-18:00 Hrs	High Tea