

WORLD SUSTAINABLE DEVELOPMENT SUMMIT 2021

REDEFINING OUR COMMON FUTURE:
SAFE AND SECURE ENVIRONMENT FOR ALL

February 10-12, 2021



SHEETAL

Alliance for Sustainable Habitat, Energy Efficiency
and Thermal Comfort for All



**CHILDREN'S
INVESTMENT FUND
FOUNDATION**

Industry dialogue: Towards Sustainable Urban Cooling Solutions

Virtual Thematic Track @ WSDS 2021

Date: 12th February, 2021 | Time: 13:45 – 15:30 (IST)

Background:

Globally, cooling is fast becoming a necessity than a luxury due to its social & economic benefits linked to enhanced productivity, improved lives & livelihood, and better healthcare access. The cooling sector, with its cross-dimensional nature, caters to the requirements of residential, commercial, industry, automobile, and cold chain. Urbanization in India has significantly transformed the natural surfaces into impervious urban structures, and the modification of land surfaces, changes in the surface material of buildings, and anthropogenic heat emission cause the urban heat island (UHI) effect, which results in the higher temperature in urban areas than the surrounding rural areas. The current situations emerging from the Covid-19 Pandemic, where citizens are facing the lockdowns and spending more time inside reveals thermally comfortable buildings as one of the necessities of our livelihood and highlights the need to shift focus from reactive to proactive approach towards sustainable urban cooling. As countries intend the accelerated economic recovery that enables business as usual while preventing climate breakdown, this scenario has unfolded the importance of the social resilience aspect of cooling and its associated surge in energy requirements thereby sharp increase in emissions. The government of India has released a strategic document 'India Cooling Action Plan (ICAP)' in March 2019, presenting the country's vision for achieving sustainable cooling targets over the next two decades. Sectoral roadmap, sub-national actions, and understanding stakeholder specific needs and priorities would be key for its implementation.

The diffusion of energy-efficient practices in the urban cooling segment remains an intrinsic challenge for the nation, due to gaps associated with capacity building; technology and manufacturing capacity; financial and affordability barriers; application enhancement, and policy implementation. Adoption of climate-friendly building designs, super-efficient ACs technologies, district energy systems, and efficient building technologies through ensuring availability of low GWP refrigerant-based cooling solutions are key focus areas, which demand immediate actions. Carrying forward the objectives of technology-driven ICAP implementation, the key is to promote National and International industry collaborations to facilitate fast action for the sectoral transition towards sustainable cooling.

At the TERI's flagship World Sustainable Development Summit (WSDS – 2021), we are organising a dialogue under the SHEETAL (Alliance for Sustainable Habitat, energy efficiency, and Thermal Comfort for All) initiative to engage experts from government, industry, and academia to deliberate on the aspects of opportunities through sustainable building design, technology management & applied innovation, sub-national policy actions, and the need for integrated efforts to maximize the policy impact in achieving ICAP goals. Also, during the event, 12th edition of newsletter for servicing technicians 'News-TRAC' apprising capacity building of field

technicians in air conditioning sector and a TERI **policy brief** “Super-efficient AC deployment: Opportunities through business models in India” will be E-released.

Key Discussion points:

- Role of sustainable cooling in next generation urban habitat; Involving stakeholders in Long-Term strategies and Facilitating knowledge exchange through best practices in policy, technology, and business model interventions.
- Integrated and holistic cooling technology solutions through Industry collaborations and bridging the gaps associated with technological sufficiency and economic feasibility aspects of cooling through accelerated policy and industry actions.
- Understanding India's specific needs to promote technological advancement in building thermal comfort, district energy systems, and low- GWP energy efficient cooling solutions to facilitate the ICAP implementation.

Target participants include: Representatives from Government, Industry, Public Sector Units, Global Think tanks, Academic Institutions, Industries, Multi-lateral Organizations, Policy Institutions, and Private Sector.