



Workshop on Sustainable Cooling Cooling-as-a-Service

Date: 15 June 2026

Time: 10:00-15:30 PM

Partners: Bureau of Energy Efficiency (BEE), Ministry of Power, Government of India, Energy Efficiency Services Limited (EESL), United Nations Environment Programme (UNEP), and Basel Agency for Sustainable Energy (BASE) – a UNEP collaborating centre and the global team which executed the CaaS Global Initiative

Venue

Marigold Room : Habitat World at India Habitat Centre, Lodhi Road. New Delhi

Background and Objectives

India is projected to become the world's largest consumer of space cooling with cooling likely to contribute to 45% of the country's peak electricity demand by 2050. Driven by key growth sectors including commercial, retail, data centres, cold-chain and agriculture, Cooling as a Service (CaaS) is gaining traction in India as a pay-per-use servitization business model. India Cooling Action Plan (ICAP) advocates for innovative business models that can speed adoption of high-efficiency cooling systems using low-Global Warming Potential refrigerants in an affordable manner, bring in Not-In-Kind technologies and enhance maintenance to ensure efficiency, reduce refrigerant leakage and manage water use.

The model entails third party providers making upfront capital investment, owning and maintaining efficient cooling equipment on behalf of customers who in turn make fixed and variable monthly payments for usage whilst the CaaS provider also guarantees higher reliability, performance standards, energy efficiency and lower costs for cooling. In a country like India, CaaS can eventually serve as an important bridge toward wider adoption of utility-scale District Cooling systems.

International private sector companies like Keppel, and Daikin have taken the lead to bring investments and know-how to execute CaaS projects in the country and several large domestic players like Tata Power, Adani Cooling, Smart Joules and EESL have now also entered the CaaS sector. EESL, one of the implementing partners of the Asis Low Carbon Building Transition (ALCBT) Project has a mandate to undertake 60 cooling projects in India. Despite the new emerging market for CaaS, the sector has several barriers preventing CaaS from scaling to capture its full market potential.

Through this workshop, we will engage with stakeholders from government, municipalities, developers, industry bodies, HVAC operators, multilaterals and diplomats, to meet the following objectives:



- Provide baseline definition for what constitutes CaaS, how this is different from ESCO or other business models and why through a shared taxonomy and standardization of approach there can be greater opportunity to rapidly scale such solutions in India,
- Examine global best practices and successful adoption of CaaS; a discussion on contracts, pricing tools, financial structures, awareness and capacity building efforts that have worked in similar markets
- Understand market potential for adoption of CaaS vis a vis District Cooling; if there is a market for both, and what specific policy and regulatory actions are needed to create opportunities for both.
- Understand challenges and risks of adopting CaaS in India to help tailor CaaS models specific to the Indian market including the need for an aggregator entity to scale adoption of CaaS in public building in India to meet ICAP goals.

Sectoral Background

Private sector companies like Tabreed and KAER have taken major steps to bring in foreign direct investments and know-how to execute CaaS projects in the country. For example, Tabreed in its partnership with Tata Realty provides cooling through a 30-year concession agreement for a 3.5 million square feet commercial real estate development in Gurugram whilst KAER, a Singapore based provider is deploying CaaS across multiple sites, targeting commercial buildings, offices, shopping malls and universities. Keppel, in partnership with Daikin is executing a long-term energy efficiency improvement contract at the Exora Business Park, Bengaluru, to retrofit and operate a 4,300-refrigeration ton (RT) chiller plant whilst Tata Power, ASCL, EESL are now looking to enter the market to deploy CaaS solutions across India. Further, Energy Service Companies (ESCOs) like Smart Joules are also adapting their business models to consider CaaS solutions serving hospitals (e.g. a recent project with KIMS Sunshine Hospital) and similar such real estate developments.

Agenda

Time	Session	Speaker	Description
10:00	Registration		
10:30 - 10:40 (10 min)	Opening	Mr Benjamin Hickman, Programme Manager, UNEP India Mr Aditya Narayan Singh, Director/Scientist F	Introduction on the objective of the session.



		<p>Ministry of Environment, Forest and Climate Change, Govt. of India <i>(tbc)</i></p> <p>Mr Arijit Sengupta, Director, BEE <i>(tbc)</i></p>	
10:40 - 11:10 (30 min)	Setting the Scene: Demystifying Cooling-as-a-Service	<p>Mr Sudheer Perla, Senior Advisor, UNEP India</p> <p>Mr Dimitris Karamitsos, Sustainable Finance Team Lead, BASE</p>	UNEP and BASE offer the existing baseline and background on CaaS in India, including current initiatives and future goals.
11:10 – 12:30 (80 min)	Session 1: Adoption across Public Sector; Market, Definitions and Challenges	<p>Session Lead: UNEP and Energy Efficiency Services Limited (EESL)</p> <p>Facilitated by Mr Benjamin Hickman, Program Manager, UNEP India</p> <p>Key Interventions:</p> <ul style="list-style-type: none"> • Mr Rasmus Wendt, Energy Counsellor, Royal Danish Embassy in India • Mr Tatsuki Hiramawa, Second Secretary (Environment), Embassy of Japan in India • Mr Rajesh Yadav, Senior Investment Officer, Asian Infrastructure Investment Bank 	<p>UNEP and EESL outline definition of CaaS, presents the public sector market for projects, and discusses obstacles for adoption across their project pipeline.</p> <p>Perspectives from regions on establishing consumer trust in CaaS; what has worked for each country, and what India can replicate and repurpose across its business and policy frameworks.</p> <p><u>Session guiding questions:</u></p> <ol style="list-style-type: none"> 1. How can CaaS be used to accelerate the public sector market for cooling in India with immediate effect? 2. Catalysing factors for transitioning from one-off efforts to larger-scale initiatives.



12:30 – 13:30 (60 min)	Group Photo and Lunch	-	-
13:20 – 14:40 (80 min)	Session 2: From Market to Practice; Trends and Challenges across Standardisation, Scale and Support	<p>Session Lead: Keppel/Tata Power</p> <p>Moderated by Mr Sudheer Perla, Senior Advisor, UNEP India</p> <p>Key Interventions:</p> <ol style="list-style-type: none"> 1. Mr Bhaskar Sarkar, Chief Business Officer, Adani Energy Solutions Ltd (<i>tbc</i>) 2. Mr Shelendra Chauhan, Assistant General Manager, Daikin India 3. Mr David Mackerness Director, Corporate Communications Director, Senior Manager Customer Success, KAER 4. Mr Tarun Patil, Director of Operations, Circolife 	<p>Discussion with OEMs and private players on current trends, challenges, and projects in India. Inputs from developers on CaaS models in future developments, and financiers on derisking and investing potential.</p> <p><u>Session guiding questions:</u></p> <ol style="list-style-type: none"> 1. The role of developers, private actors, and public sector projects in sustaining market potential. 2. Policymakers' role in creating standards and regulations for adoption, scale, and expansion of CaaS in India.
14:40 – 14:50 (10 min)	Tea/Coffee and Bio-Break	-	-



<p>14:50 - 15:30 (40 min)</p>	<p>Closing Session: From Practice to Intent; Key Takeaways and Next Steps</p>	<p>Closing Remarks by Mr Benjamin Hickman, Program Manager, UNEP India Mr Gennai Kamata, Associate Programme Officer, UNEP/Global ABC</p>	<p>This session will discuss actions that both the public and private stakeholders can take to create systems for better market mobilisation for CaaS in India.</p>
<p>15:30 –17:00 (90 min) (Special Session)</p>	<p>CaaS Masterclass – Hybrid</p>	<p>Facilitated by Mr Dimitris Karamitsos, Sustainable Finance Team Lead, BASE Ms Emma Wink, Sustainable Finance Specialist, BASE</p>	<p>Voluntary masterclass for those seeking a deeper understanding on best practices across:</p> <ul style="list-style-type: none"> • pricing methodologies • contract design • procurement guidelines • IoT / SW requirements