



IFC-UK Sustainable Cooling Innovation Summit

Edgbaston Park Hotel & Conference Centre

OCTOBER 3-5, 2023

University of Birmingham, United Kingdom



UNIVERSITY OF
BIRMINGHAM

Agenda

(**please refer to the event app for the most updated agenda)

October 2	
<p>Welcome Reception Fry Suite 6:00-8:00pm</p>	<p>Participants will network and discuss the learning opportunities and sessions ahead.</p>

Day 1: IFC TechEmerge Sustainable Cooling (SCI) Pilots and Lessons Learned

During moderated panels, adopters and innovators share their experiences of the TechEmerge pilot process, lessons learned, and commercialization and scaling opportunities in emerging markets.

October 3	
<p>Welcome Remarks 9:00am - 9:30am</p>	<p>Welcome remarks by representatives from IFC and the UK Department for Energy Security and Net Zero.</p> <p><u>Speakers:</u></p> <ul style="list-style-type: none"> Selçuk Tanatar, Principal Operations Officer, IFC Frances Pimenta, Head of Climate Innovation Programmes – Policy & Delivery, UK Department for Energy Security and Net Zero
Topic 1: Space Cooling	
<p>Space cooling already accounts for more than 40 percent of energy used for cooling worldwide. With demand for space cooling forecast to grow at a faster rate during the next decade than any other type of cooling, we look at the latest advances, challenges, and opportunities.</p>	

<p>Space Cooling Session 1</p> <p>Large-Scale Commercial Cooling: Lessons from the Hospitality Sector</p> <p>9:30-10:15am</p>	<p>Large commercial operations need energy-efficient, cost-effective, climate-smart cooling. Representatives from two leading hotel chains in India and TechEmerge innovators will discuss their joint pilots to reduce energy consumption in large commercial settings, as well as the impact of IoT and AI in maximizing cooling efficiency.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Dipta Shah, Consultant, IFC <p><u>Panelists</u></p> <ul style="list-style-type: none"> • Sireesha Chandana, Vice President, Sustainability and Learning & Development, Indian Hotels Company Limited • Pragnesh Doctoria, AVP – Projects & Engineering Operations, Chalet Hotels Limited • Alok Sharma, Director, IOTomation • Tanmay Tathagat, Director, Environmental Design Solutions
<p>10:15-10:30am</p>	<p>Break</p>
<p>Space Cooling Session 2</p> <p>Residential & Small-Scale Commercial Operations</p> <p>10:30-11:15am</p>	<p>Discover smarter solutions for residential cooling and how scaling innovations for small-scale commercial space cooling has the potential to reduce energy consumption by up to 80 percent.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Kristina Turilova, Operations Officer, IFC <p><u>Panelists</u></p> <ul style="list-style-type: none"> • Anuj Bhagwati, Managing Director, ATE • Lars Munkoe, CEO, Purix • Juan Portilla, CEO, OT Services • Melva Herrera Godina, Professor, Universidad de Guadalajara
<p>11:15-11:30am</p>	<p>Break</p>

<p>Topic 2: Temperature Controlled Logistics / Cold Chains</p>	
<p>Up to 50 percent of all food produced is lost or wasted before reaching a customer, largely due to a lack of/or inefficient cold chains. In emerging markets, existing cold chain technologies are expensive and do not always fit the needs of the agri/food sectors. These sessions examine how the TechEmerge SCI program is building efficient, affordable cold chains all the way from farm gate to retail outlets.</p>	
<p>TCL & Cold Chains Session 1</p> <p>Storage and Off-Grid Solutions</p> <p>11:30-12:15pm</p>	<p>In India and Nigeria, TechEmerge pilots are tapping into sustainable energy resources such as biomass, solar, and waste heat, and finding new ways to provide cooling completely off-grid.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Yashpal Jain, Consultant, IFC <p><u>Panelists</u></p> <ul style="list-style-type: none"> • Ganapati Subramanyam, Head of Innovations, Bigbasket • Akash Agarwal, CEO, New Leaf Dynamic Technologies • Ravindra Dolare, President, Ecozen • Chuma Maduekwe, Managing Director, Tak Logistics • Michael Keane, Executive Chairman, ChillTechnologies
<p>12:15-1:30pm</p>	<p>Lunch</p>
<p>TCL & Cold Chains Session 2</p> <p>Advances in Long to Medium-Haul TCL</p>	<p>Panelists who piloted innovations in Latin America and Africa will discuss medium and long-haul transport solutions that reduce energy needs for cooling during transport and significantly improve cooling capability during transit times of up to 70+ hours, while lowering the cost of cooling to almost the same level as dry-bulk transport.</p>

<p>1:30-2:30pm</p>	<p><u>Moderator</u></p> <ul style="list-style-type: none"> • Radhia Jihane Guizani, Program Officer, IFC <p><u>Panelists</u></p> <ul style="list-style-type: none"> • Yashpal Jain, Consultant, IFC • Samit Jain, Managing Director, Pluss • Sunil Nair, CEO, Snowman Logistics
<p>2:30-2:45pm</p>	<p>Break</p>
<p>TCL & Cold Chains Session 3</p> <p>Short-Haul and Last-Mile Innovations</p> <p>2:45-3:45pm</p>	<p>Cooling innovations for small-scale mobile cooling can resolve the challenges of preserving product quality and on-time first- and last-mile delivery for aggregators, retailers, pharmaceutical companies, and traders. We hear from panelists who piloted solutions in India and Nigeria.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Selçuk Tanatar, Principal Operations Officer, IFC <p><u>Panelists</u></p> <ul style="list-style-type: none"> • Yusuf Bilesanmi, Founder/CEO, Eja-Ice • Rafael Matamoros, CEO, BiofreshTech • Michelle Cabrera Beruete, CFO, Refrigeración Starr • Aisha Bashir, CEO, Câm Dairy Foods • Natalie Casey, Chief Business Officer, Koolboks
<p>3:45-4:15pm</p>	<p>Wrap-up and Takeaways from Day 1</p>
<p>4:00-5:00pm</p>	<p>Campus Tour</p>
<p>6-8pm Noble Room (2nd floor of Staff House)</p>	<p>Dinner</p>

Day 2: Market Trends and Enabling Environments

Top experts in sustainable cooling will present their latest findings and cutting-edge technologies, while TechEmerge innovators and adopter companies will be joined by financial experts to discuss ways to enable continuous innovation.

October 4	
<p>Keynote Address 9:30-10:00am</p>	<p>Keynote address by representatives from IFC and University of Birmingham.</p> <p><u>Speakers</u></p> <ul style="list-style-type: none"> • Jamie Fergusson, Global Director, Climate Business, IFC • Leyla Sayin, Deputy Director, Centre for Sustainable Cooling, University of Birmingham
<p>Topic 3: Emerging Technologies</p>	
<p>Alternative refrigerants, passive cooling tech, new approaches to evaporation, and other cutting-edge innovations have the potential to leap-frog the development of sustainable cooling solutions. Hear from researchers and engineers developing new and better ways to cool off.</p>	
<p>Emerging Sustainable Cooling Innovations 10:00-10:45am</p>	<p>Experts in sustainable cooling will explore their use of metamaterials, nanoparticles and other new technologies, the impact they have achieved so far, and the future of sustainable cooling.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Manoj Gaur, Director, Indian Institute of Technology Janmu <p><u>Presenters</u></p> <ul style="list-style-type: none"> • Romy Fain, CEO, Heat Inverse • Anthony Atti, CEO, Phononic • Alessandro Pastore, Co-founder and Executive Director, Camfridge
10:45-11:00am	Break
<p>Topic 4: Cooling as a Service (CaaS) /Localization</p>	
<p>Despite their willingness to trial innovative cooling solutions, many adopters find the initial costs of implementing solutions prohibitive or they face challenges in installation and maintenance. This has fueled interest in Cooling as a Service (CaaS) business models, which eliminate high upfront investment costs for end users and reduce risks associated with adopting innovative cooling solutions.</p>	
<p>Cooling as a Service (CaaS) /Localization 11:15-12:00pm</p>	<p>TechEmerge innovators and adopter companies discuss how they are leveraging the CaaS model and lessons learned.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Selcuk, Principal Operations Officer, IFC <p><u>Speakers</u></p> <ul style="list-style-type: none"> • Carlos Gracida, Director, Graco Mexicana • Sagi Feldman, Business Development Director, Elgressy • Sudheer Perla, Country Manager, Tabreed India • Yusuf Bilesanmi, Founder/CEO, Eja-Ice
12:00-1:00pm	Lunch
<p>Topic 5: Financing Opportunities</p>	

<p>Securing the right type of finance is a key challenge facing innovators when seeking to commercialize and scale their solutions. We look at innovative private sector financing opportunities.</p>	
<p>Financing Opportunities Session 1</p> <p>Private Sector Financing for Cooling Innovation</p> <p>1:00-1:45pm</p>	<p>Entities that provide private sector financing will discuss funding opportunities at different stages of an innovators' evolution.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Dipta Shah, Consultant, IFC <p><u>Panelists</u></p> <ul style="list-style-type: none"> • Anthony Atti, CEO, Phononic • Jonathan Naimon, Sustana Cooling Partners
1:45-2:00pm	Break
<p>Financing Opportunities Session 2</p> <p>Public Sector Financing for Sustainable Cooling</p> <p>2:00-2:45pm</p>	<p>Representatives from multilateral development banks and development agencies will discuss initiatives to support companies in the sustainable cooling space.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Johannes Heister, Senior Environmental Specialist, World Bank <p><u>Panelists</u></p> <ul style="list-style-type: none"> • Nihar Shah, Presidential Director, Global Cooling Efficiency Program, Lawrence Berkeley National Laboratory • Mehul Jain, Climate Change Specialist, World Bank • Alan Miller, Managing Director, Sustana Cooling Partners
2:45-3:00pm	Break
<p>Topic 6: Enabling Environment and Support Structures</p>	
<p>The regulatory landscape can profoundly impact innovation from research to technology diffusion. We look at a range of challenges and opportunities for sustainable cooling innovators and adopters when dealing with regulatory ecosystems and the enabling environment in emerging markets.</p>	
<p>Enabling Environment and Support Structures</p> <p>3:00-3:45pm</p>	<p>How can innovators and adopters best navigate regulatory ecosystems in emerging markets? Experts share lessons learned and best practices when dealing with R&D labs and incubators, IP filing, verification and validation, advisory and financial support, and accessing qualified talent.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Gian Modgil, Consultant, IFC <p><u>Panelists</u></p> <ul style="list-style-type: none"> • Claudia Sanchez, Executive Director, ACAIRE • Manoj Guar, Director, Indian Institute of Technology Jammu • Malin Emmerich, Advisor, GIZ • Bas Hettterscheid, Partnerships Manager, Wageningen University & Research
3:45-4:00pm	Break
<p>Topic 7: Building Skills and Gender Equality in the Cooling Sector</p>	
<p>Gender equality is a key contributor to economic growth, but cooling remains a male-dominated sector. We will explore best practices that companies can use to promote gender inclusion and tackle another key challenge—building a workforce with the right skills to grow the sector.</p>	

<p style="text-align: center;">How Businesses Benefit from Gender Equality in the Cooling Sector & Building a Skilled Cooling Workforce</p> <p style="text-align: center;">4:00-5:00pm</p>	<p>Discover new research into gender gaps in the cooling sector in Latin America, the business benefits that gender equality can generate for companies worldwide, and practical strategies to promote inclusion in your workforce.</p> <p>Innovations in areas such as industrial IoT, AI, new materials have translated into a rising demand for highly skilled workers in these areas, and cooling is no exception. In fact, many manufacturing companies including those working in cooling or adjacent areas like IoT and digitalization have been experiencing shortage of qualified workers.</p> <p>This session focuses on best practices and resources for jobs and skills creation to scale up sustainable cooling in emerging markets.</p> <p><u>Moderator</u></p> <ul style="list-style-type: none"> • Alice Moreau, ACES SPOKES and Partnership Specialist, UNEP <p><u>Panelists</u></p> <ul style="list-style-type: none"> • Roberta Evangelista, Senior Digitalization Specialist, BASE Foundation • Aisha Bashir, CEO, Câm Dairy Foods • Claudia Sanchez, Executive Director, ACAIRE • Pragnesh Doctoria, AVP – Projects & Engineering Operations, CHL
<p style="text-align: center;">5:00-5:30pm</p>	<p style="text-align: center;">Takeaways from Day 2</p>
<p style="text-align: center;">6:30-8:30pm Fry Suite</p>	<p style="text-align: center;">Dinner</p>

Day 3: Networking/Site Visit

Delegates take stock of what they have learned and discuss ways to move forward. They can also network or visit Birmingham’s innovative Tyseley Energy Park.

October 5	
9-9:30am	Key takeaways from the summit
9:30-10:30am	<p>Group discussion:</p> <ul style="list-style-type: none"> • How do continue innovating? • How do we continue and grow our collaboration? • How do we improve the flow of financing? • How do we solve the challenge of CaaS?
10:30-11:00am	Closing Remarks
11:00-12:00pm	Celebration
12:00-1:00pm	Lunch
Afternoon	<p>Networking or site visit to Birmingham’s Tyseley Energy Park.</p> <p>Tyseley Energy Park harnesses the vision, passion and innovation of industry, academics, and local government to deliver low and zero carbon power, transport, heat, waste, and recycling solutions for a greener, cleaner, healthier Birmingham.</p>