

UNIDO Sustainable Cooling Forum: Rising to the Global Challenge

8–10 April 2026 | UNIDO Headquarters and Hofburg, Vienna

Concept note and provisional programme (First draft)

Scheduled to take place from 8 to 10 April 2026 at UNIDO Headquarters and Hofburg Palace in Vienna and expected to gather more than 200 participants from around 100 countries, the Sustainable Cooling Forum will serve as a platform for rising to the global cooling challenge by accelerating the emergence, deployment, and large-scale adoption of sustainable cooling solutions. The Forum will support UNIDO Member States in meeting their commitments under the Montreal Protocol and its Kigali Amendment while addressing broader cooling demand through inclusive and sustainable industrial development.

Sessions will examine technology innovation, policy and regulatory frameworks, financing and business models, stakeholder roles, and demand management as enablers of sustainable cooling. Building on UNIDO's experience in supporting countries under the Montreal Protocol, the Forum aims to strengthen understanding of systems-based approaches to cooling and generate actionable recommendations. On 9 April, the Forum will converge with the International Vienna Energy and Climate Forum and International Hydrogen Conference at Hofburg Palace as part of UNIDO's sixtieth anniversary celebration.

Global demand for cooling is accelerating rapidly driven by rising temperatures, population growth, industrialization and increasing incomes. Cooling has become critical for sustainable development. Yet access to cooling remains unequal, while unmanaged growth in cooling demand can strain electricity grids and increase greenhouse gas emissions. It has wide-ranging impacts that cut across environmental, economic, and social dimensions. Addressing these multifaceted interconnected challenges requires a systems approach that aligns policy, technology, finance for scaling solutions, managing demand and providing equitable cooling access.

The Montreal Protocol, widely recognized among the most successful environmental treaties, guide the global shift to low-carbon, safe refrigerants, reducing ozone layer depletion and global warming. Implementing its Kigali Amendment on Phasing Down HFCs coupled with additional measures such as energy efficiency and life cycle chemical management can deliver significant long-term climate benefits.

As an implementing agency under the Protocol, UNIDO helps its Member States achieve these goals by promoting energy-efficient cooling, facilitating the transfer of climate-friendly technologies, strengthening regulatory frameworks, and building technical capacity in the refrigeration and air-conditioning sector (cooling). Building on its mandate of Inclusive and Sustainable Industrial Development, UNIDO can accelerate deployment and uptake of low-carbon cooling solutions, promote market creation and transformation while enhancing climate resilience in industry and society.

The Sustainable Cooling Forum scheduled to take place on 8-10 April 2026, Vienna, Austria will serve as a platform to rise to this global challenge by accelerating the emergence, deployment and large-scale adoption of sustainable cooling solutions. The outcomes of the Forum will enhance the support to the Member States in inclusive and sustainable industrial development and inform UNIDO sustainable cooling strategy through a system approach.

Key questions to be addressed at the Forum include:

- What sustainable cooling solutions exist and can be promoted for larger adoption?

- Which policy and regulatory frameworks can enable market transformation and solutions deployment?
- What type of financing and models of business engagement will accelerate adopted and accessible?
- What role can industry, the private sector, and civil society play in driving sustainable cooling transitions?
- How to manage growing demand for cooling while ensuring energy efficiency, climate protection and equitable access?
- How can a system approach, i.e. engaging across all enablers of change - technology, finance, policy, and society - address the ever-growing challenge of sustainable cooling?

Objectives of the Forum will be to:

1. Showcase the impact of UNIDO's Montreal Protocol-funded projects on sustainable cooling;
2. Share insights on existing solutions in technologies, policies, capacity-building, and financing that support the emergence, deployment, and large-scale adoption of sustainable cooling;
3. Facilitate engagement with national counterparts from Member States supported by UNIDO;
4. Strengthen understanding of approaches and measures needed to rise to the global cooling challenge; and
5. Discuss UNIDO's systems approach to sustainable cooling

Format

The Forum will run over three days. On 8 and 10 April it will take place at UNIDO Headquarters, Vienna International Centre and include one-hour sessions on various topics with presentations by experts, structured discussions, breakout sessions, and dialogue among participants. On 9 April, the Forum will converge with the International Vienna Energy and Climate Forum and International Hydrogen Conference at Hofburg Palace, also as part of UNIDO's sixtieth anniversary celebration.

Expected outcomes

- ✓ Stronger partnerships between UNIDO and national counterparts;
- ✓ Shared knowledge of available cooling technologies, policies, and solutions;
- ✓ Clearer understanding of how to finance sustainable cooling at scale;
- ✓ Improved capacity to plan and implement innovative sustainable cooling projects;
- ✓ Better understanding of approaches that help rise to cooling challenges;
- ✓ Increased momentum for action and recommendations for UNIDO's sustainable cooling strategy

DAY 1 – 8 April 2026, Vienna International Centre

Session 1: Opening

This session will set the stage for the Forum, take stock of existing experience and results under the Montreal Protocol and outline the global cooling challenge.

The introduction will highlight UNIDO's longstanding support to countries under the Montreal Protocol and its Kigali Amendment. Participants will also receive an overview of key global trends driving cooling demand, including ever-rising temperatures, population growth and urbanization, economic and industrial development and changing diets. The session will explain how these trends contribute to rising emissions and how a system approach integrates mitigation, adaptation of both industries and societies while increasing equitable access.

Session 2: Enabling policies and regulatory frameworks for sustainable cooling

Policies and regulations are essential enablers for market transformation and deployment of sustainable cooling solutions. This session will examine the role that public policies and public administration can play in shaping the markets for efficient and low-emission cooling solutions. Presentations will address refrigerant policies, energy efficiency, refrigerant management and national cooling action plans and integration of cooling within climate, industrial, building and urban planning strategies. Practical experiences from UNIDO projects will be presented, including cross-ministerial coordination and alignment with broader industrial development programmes.

Session 3: Technology innovation, development and deployment

This session will focus on best available and emerging technologies for sustainable cooling across sectors. It will give insights into UNIDO Montreal Protocol projects supporting technology transition in manufacturing and servicing sector. Examples will address energy-efficient equipment, natural refrigerants, district cooling, heat pump and cold chain technologies. Presentations will also cover technology supply chains, innovation needs and ways to enhance participation of small and medium enterprises. Evidence from demonstration projects will be used to explain these considerations.

Session 4: Alternative cooling technologies and solutions

As the cooling solutions landscape is rapidly evolving, the session will examine the breadth of alternative cooling solutions available today and emerging technologies on the horizon, enabling informed decision-making on technology selection and deployment strategies for different contexts and applications. Participants will gain insights into illustrative examples such alternative options, technology maturity, market readiness, economic barriers, and practical applications across different cooling needs.

Session 5: Financing sustainable cooling

Scaling sustainable cooling requires access to tailored finance. This session will explore public and private financing instruments, blended finance, ESCO and mini-ESCO models, bulk procurement and incentives for consumers and MSMEs. Presentations will include examples of grant schemes, blended financing instruments market-based instruments and investment planning linked to national cooling action plans. Financing gaps and opportunities for collaboration with the financial sector will be discussed.

Session 6: How UNIDO works?

This session will introduce participants to UNIDO's role within the United Nations system and its value proposition. The session will provide insights into the operational and implementation modalities offered by the agency to support Member States including in achieving the objectives of the Montreal Protocol and cooling.

DAY 2 – 9 April 2026, Hofburg Palace

Jointly with the [International Vienna Energy and Climate Forum](#) and [International Conference on Hydrogen in Industry](#)

High-level panel: Pathways for System Transformation

Discussions on pathways for system transformation and the role of sustainable cooling in climate, energy and industrial agendas. The content will focus on solutions, innovation, integration, and partnerships as well as foresight on future development.

Side-events on Montreal Protocol and Cooling

DAY 3 – 10 APRIL 2026, Vienna International Centre

Session 7. Business models for sustainable cooling

This session will explore innovative business models that can accelerate the adoption and scaling of sustainable cooling solutions. Key models include "Cooling as a Service" (CaaS), which shifts from equipment ownership to performance-based service delivery, reducing upfront costs and ensuring ongoing efficiency and maintenance. Another option will be on life cycle refrigerant management and circularity approaches that address the full value chain—from production and use to recovery, recycling, and safe disposal of refrigerants. Participants will gain insights into how alternative business models can overcome financial barriers, align incentives between providers and users, engage the private sector, and create sustainable market transformation in the cooling sector.

Session 8: Engaging the private sector and partnerships for sustainable cooling

The private sector brings essential innovation, technical capacity, and market knowledge to the advancement of sustainable cooling solutions under the Montreal Protocol framework. This session will examine how to effectively engage industry as a partner in achieving sustainable cooling objectives—ensuring that commercial innovation aligns with climate protection, energy efficiency, and equitable access. UNIDO is well positioned to facilitate these partnerships, combining its role and technical expertise, convening power with Member States to bridge public and private collaboration. The session will present UNIDO's ideas on such engagement strategy and explore how to structure partnership models: from technology transfer and capacity building to co-investment and market creation in the cooling sector.

Session 8: Adaptation in cooling: building resilience

Rising temperatures are increasing cooling demand while simultaneously making cooling itself a critical climate adaptation strategy for health, productivity, and food security. This session explores the dual role of cooling in climate adaptation: as an essential solution for communities and sectors facing heat stress, and as an industry that must itself become more resilient to climate impacts. Participants will discuss strategies for expanding cooling access to underserved communities, integrating cooling into national adaptation plans, and building climate-resilient cooling systems. The session will explore how industry can serve such needs and also prepare for climate-related disruptions, design solutions that contribute to long-term climate resilience and adaptation goals.

Session 9. Breakout discussions

Groups can take stock of the discussion at the Forum and make recommendations for the way forward in their work and joint activities with UNIDO.

Session 10. Way forward and closure

Facilitators will summarize discussion points and potential actions. The session will identify priorities for cooperation between UNIDO and Member States, highlight opportunities for new projects, alignment with the Montreal Protocol and engagement with partners. It will also reflect on how the Forum outcomes will inform UNIDO's programme expansion.
