

## **COP26 Event Summary**

# **Sustainable and Efficient Cooling for a Warming Planet: Challenges, Opportunities and Solutions**

**Date:** 10 November 2021

**Time:** 16:45-18:00 GMT

**Location:** Glasgow, UK

**Organizers:** Japan, Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC), Institute for Governance and Sustainable Development (IGSD), Alliance for Responsible Atmospheric Policy and Overseas Environmental Cooperation Center, Japan (OECC)

**Link to recording:** [https://youtu.be/AODL7\\_2Ufbg](https://youtu.be/AODL7_2Ufbg)

### **Key Messages**

- Cooling contributes to 7% of global GHG emissions. In a warming planet, tackling these emissions is critical to reach net zero by 2050 and achieve a resilient future.
- Japan has committed to reducing its GHG emissions by 46% by 2030 and to reducing its HFC emissions by 55% by 2030.
- Breaking the cycle of using unsustainable and energy consuming RACs is paramount, as cooling demand increases.
- Bringing everyone together under one tent with one vision on cooling, and combining the right technology with the power of the natural world is the key to cooling our warming planet.

### **Welcome remarks from Sophie Bordat, COP26 Climate Champion's Cooling Transformation Lead**

Sophie Bordat thanked the Government of Japan for hosting the event and UNEP for its leadership on sustainable cooling, emphasising that cooling contributes to 7% of GHG emissions and the need to tackle these emissions to reach net zero by 2050 and achieve a resilient future for a warming planet. She concluded by demonstrating the urgent need for action by all state and non-state actors to achieve a climate resilient future.



### **Keynote: H.E. Mr. Yutaka Shoda, Vice-Minister for Global Environmental Affairs, Ministry of the Environment, Government of Japan**

H.E. Mr. Yutaka Shoda welcomed everyone with opening remarks on the historic importance of COP26 as well as the role of cooling on the global agenda. Cooling needs are growing particularly as consumers in developing countries increase their purchasing capacity, and since the pandemic, the need to cool vaccines. H.E. Mr Yutaka Shoda articulated the symbiotic necessity to phase down HFCs in accordance to the Kigali Amendment and addressing access to sustainable and efficient cooling. He explained that Japan has committed to reducing its GHG emissions by 46% by 2030, specifically reducing its HFC emissions by 55% by 2030. Japan will achieve this through strict regulations on its RACs and life cycles of equipment as part of its HFC-phase down strategy.

Japan is not only committed to net zero emissions nationally, but also supporting developing countries to achieve net zero. H.E. Mr Yutaka Shoda emphasised that life cycle management is the key to addressing end of life emissions from refrigerants, which is why in 2019 Japan launched the Initiative on Fluorocarbons Life Cycle Management. For this event, improving efficiency, addressing life cycle management, and accelerating the Kigali Amendment are central to enhancing our actions on sustainable cooling. H.E. Mr Yutaka Shoda concluded by welcoming distinguished guests and experts to the event.



## **Keynote: Inger Andersen, Under-Secretary-General of the United Nations, UNEP Executive Director**

Inger Andersen began her keynote by thanking Japan for their leadership and by welcoming other panelists. She continued by setting the scene by saying that the purpose of COP26 is to keep the planet cool, but that, unfortunately, even the latest NDCs do not take strong enough action to achieve this. Inger Andersen conveyed the need to cut GHG emissions by half by 2030 to stay within the 1.5°C target. If this is not achieved, more than 2 billion people could be vulnerable to severe heatwaves. She echoed the urgent need to break the cycle of using unsustainable and energy consuming RACs as the cooling demand increases, and stated that sustainable cooling solutions are critical for the prosperity of the planet.



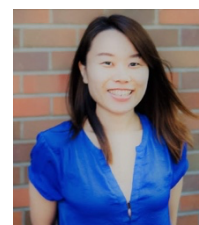
**Inger Andersen Under-Secretary-General of the United Nations, Executive Director of the United Nations Environment Programme**

Today around 10% of the world's energy consumption is used on cooling appliances, and this is set to double by 2030. The way we cool our homes, offices, cities, require a rapid transition away from drivers of climate change (RACs) and to protect people from the effects of extreme heat. Inger Andersen demonstrated that it is obvious that this transition is entirely possible: implementing the Kigali Amendment, meaning phasing out climate warming HFCs in conjunction with energy efficient improvements, can avoid 4-8 years of the total annual GHG emissions by 2050. This is one part of the cooling puzzle together with a myriad of other solutions, such as nature-based solutions and smart buildings to reduce the need to mechanical cooling and reduce urban temperatures. For example, it was proven that a \$100 million annual investment in urban trees could give 77 million people a 1°C reduction in maximum temperatures. At national level, policymakers can adapt the market towards energy efficient products using MEPS, incentivize the production of renewable power, and the shift to climate-friendly refrigerants. By implementing energy performance labelling and standards on cooling products in developing and emerging economies, we can cut around \$100 billion in energy bills, improve energy grid stability, and reduce pollution.

Inger Andersen noted that countries can adopt National Cooling Action Plans (NCAPs) to map strategies to cool down sustainably, improving cold chains for food production, and vaccine rollout. UNEP offers a comprehensive cooling approach for countries to accelerate action on the ground to address the cross cutting nature of the cooling sector. The Efficient Cooling Initiative under CCAC and UNEP's Cool Coalition provide a coordinated and comprehensive approach to cooling to support countries and businesses to deliver on the Paris Agreement, Montreal Protocol, Kigali Amendment, and Agenda 2030. CCAC, Cool Coalition, the Ozone Secretariat, OzonAction, FAO, and Italy have joined forces to help countries slow climate change and reduce hunger through sustainable cold chains. Inger Andersen noted that mobilizing finance is important for addressing cooling and said that the Cool Coalition have established the 'The Cooling Finance Working Group' with GCF, World Bank, E3G to build capacity for financing cooling action. Inger Andersen concluded by portraying how important it is to bring everyone together under one tent with one vision on cooling that keeps our homes and work places cool by combining the right technology with the power of the natural world.

## **Presentations from Yurie Osawa, Ministry of the Environment, Japan & Makoto Kato, Overseas Environmental Cooperation Center, Japan**

Yurie Osawa presented Japan's action on HFC phase-down on Refrigerants Life Cycle Management. Japan's ambitious targets for reducing HFC emissions by 55% by 2030 require comprehensive and coordinated action, regulations on recycling domestic refrigerants is not enough. Therefore, life cycle management, proper management of refrigerants and RACs, registered operators, and approved recycling operators are part of the regulations on HFC use in Japan to achieve a smooth phase-down of HFC emission reduction.



**Yurie Osawa, Ministry of the Environment, Japan**



**Makoto Kato, Overseas Environmental Cooperation Center, Japan**

Comprehensive action is crucial as HFCs are important for both ozone layer protection and climate change mitigation, especially as the demand for refrigerants will increase. Japan calls for worldwide action in the life cycle management of HFCs to create a holistic approach. The Initiative on Fluorocarbons Life Cycle Management (IFL),

established after COP25, works internationally with developing countries to support their HFC phase-down and includes: assistance strengthening policy measures, capacity building training, and project support.

Makoto Kato presented on the Draft Resource Book for the Life Cycle Management of Fluorocarbons which will be circulated and used by policymakers to assist on their HFC phase-down. The Resource Book showcases policy measures at life stages of management to promote countries action on the Kigali Amendment. Policy measures include: standards, regulations, financial instruments, tracking, and certification schemes. These good practices are demonstrated with 25 case studies. The Draft Resource Book, developed in partnership with the CCAC, is available on the [OECC website](#).

### **Panel Discussion**

Sophie Bordat began the panel discussion by asking Luong Quang Huy why action on cooling for Viet Nam is key to its climate targets and what has been incorporated into Viet Nam's NDCs to reflect its commitments. Luong Quang Huy explained Viet Nam's efforts on F-gas phase-down and net zero targets. Luong Quang Hoy noted that consumption of RACs have increased with the rapid urbanisation of growing cities. Luong Quang Hoy explained efforts undertaken by Viet Nam, including the Draft Decree which includes regulations to help deliver on the Montreal protocol, NDC action, and address sustainable cooling emphasising on engaging industry to deliver on the Kigali Amendment.



Luong Quang Huy,  
Head, Climate Change  
Mitigation Division,  
Department of Climate  
Change,  
Ministry of Natural  
Resources and  
Environment, Viet Nam



Faustin Munyazikwiye  
Deputy Director General,  
Rwanda Environment  
Management Authority,  
Ministry of Environment,  
Rwanda



Eleni Myrivili  
Senior Advisor for  
the Arsht-Rockefeller  
Resilience Centre of  
the Atlantic Council,  
City of Athens Chief  
Heat Officer

Sophie turned to Faustin Munyazikwiye next to hear about Rwanda's best practices. Faustin Munyazikwiye explained Rwanda's climate targets which included its plan to reduce emissions by 38% by 2030. Faustin Munyazikwiye spoke on Rwanda's National Cooling Strategy as well as conducting its market assessment to gather the challenges Rwanda is facing in order to address Rwanda's challenges with targeted and informed action. Further, Rwanda's Africa Centre of Excellence for Sustainable Cooling and Cold Chain (ACES) has created synergy of work and knowledge-sharing to address cooling comprehensively, and hopes to become a pan-Africa center to accelerate the transition in the region.

Eleni Myrivili spoke about the new Chief Heat Officers appointed in Athens (herself), Miami-Dade, and Freetown with the support of the Extreme Heat Alliance and the Arsht-Rockefeller Foundation and the Atlantic Council. In her role, she focuses on awareness raising, communication, and policy. For example, due to the recognition of importance of extreme heat events, Chief Heat Officers will ensure that heatwaves will be named and categorised to improve the dissemination of knowledge to inhabitants. Eleni Myrivili spoke about the policy approach and data collection for cooling, particularly as many parts of Athens experience energy poverty. Eleni Myrivili noted that Athens will use the newly launched [Beat The Heat: A Sustainable Cooling Handbook for Cities](#), illustrating the importance of the Handbook to help cities approach cooling comprehensively, which is critical for the global agenda under the Race to Resilience and Race to Net Zero.

All panellists concluded by echoing the call to action to implement concrete efforts with coordinated approaches and dialogue to accelerate solutions on cooling.

## **Closing Remarks from Kevin Fay, Executive Director, Alliance for Responsible Atmospheric Policy**

Kevin Fay delivered closing remarks focusing on access to cooling in the face of a warming, the need for cooperation, the requirement for lifecycle management, and incorporating the private sector to provide support for technology and innovation. Kevin mentioned the programme that the Climate & Clean Air Coalition (CCAC) are hosting with the [Global Food Cold Council](#). Kevin highlighted the lessons learned from the session from Viet Nam, Rwanda, Japan, and Greece that demonstrate the ability of national action as well as their best practices. Kevin conveyed that the key challenges will be finance mechanisms to assist with the capacity building and for other countries to include cooling on their national agendas. Kevin concluded by thanking all guests and reiterating the call to action as well as encouraging industry partners, states, and NGOs, to pursue these paths for action on sustainable cooling for a warming planet.

