



## Thirty-Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer

**3 November 2022, from 11.30 a.m. to 1 p.m.**  
**High-level Roundtable Discussion**

### **MP@35: The Kigali Amendment and its potential impact on climate**

#### **CONCEPT**

Over the past thirty-five years, the Montreal Protocol has produced important climate benefits while protecting the ozone layer. By avoiding emissions of ozone-depleting substances with high global warming potential and protecting the carbon sink from ultraviolet radiation, the Protocol has helped to avoid additional warming of an estimated 2.5° degrees Celsius by the end of the century<sup>1</sup>.

The Kigali Amendment to the Montreal Protocol, which entered into force on 1 January 2019, added 18 hydrofluorocarbons (HFCs) to the list of controlled substances under the Protocol. While HFCs do not deplete the ozone layer, they are potent greenhouse gases.

It is estimated that the implementation of the Kigali Amendment can prevent up to 0.4° degrees Celsius of global warming by the end of this century. This could potentially double if the phase-down of HFCs also incorporates energy efficiency improvements in the cooling sector. Together with the effects of emissions already avoided, the implementation of the Montreal Protocol can represent a significant mitigation of global warming.

At the same time, it is also forecasted that energy demand due to the growing use of air-conditioning in an increasingly warmer world will triple by mid-century. If the rate of energy consumption by the cooling sector remains unabated and current refrigerants in cooling systems do not switch to ozone and climate-friendlier alternatives, the sector will contribute to global warming that by 2030 could surpass the 1.5° degrees Celsius target of the Paris Agreement on climate change<sup>2</sup>.

At this roundtable, the panellists will discuss the legacy of the Montreal Protocol and focus on the Kigali Amendment implementation and its potential impact on climate. Particularly, the panellists will address the following issues:

- Kigali Amendment and the challenges ahead in its implementation.
- Importance of addressing energy efficiency improvements and other additional opportunities associated with the Kigali Amendment to contribute to mitigating climate change.
- Effective strategies and tools the parties can use to continue the successes under the Montreal Protocol during the Kigali Amendment implementation.
- Actions being taken by industries, successes they have achieved, issues and challenges they face.
- Lessons learned from the Montreal Protocol for tackling other global environmental issues and achieving Sustainable Development Goals.

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<sup>1</sup> Young, P.J., Harper, A.B., Huntingford, C. et al. The Montreal Protocol protects the terrestrial carbon sink. *Nature* 596, 384–388 (2021). <https://doi.org/10.1038/s41586-021-03737-3>

<sup>2</sup> TEAP May 2022: Decision XXXIII/5 - Continued provision of information on energy-efficient and low-global-warming-potential technologies (Volume 3)

## FORMAT

Maximum of ten panellists consisting of ministers and high-level officials will discuss the legacy of the Montreal Protocol at its 35th anniversary and on the Kigali Amendment implementation and its potential to contribute to climate change mitigation directly and also indirectly through, for example, energy efficiency improvements.

The roundtable will comprise an interactive discussion between the moderator, panellists and the audience.

At the end, the moderator will provide a summary of the main points discussed.

## PANELLISTS

**Ms. Cécile Siewe**

Associate Assistant Deputy Minister, Environmental Protection, Environment and Climate Change  
Canada

**Hon. Mr. Jan Dusík**

Deputy Minister for Climate Protection  
Czechia

**Mr. Dawda Badjie**

Executive Director of the Environmental Protection Agency  
Gambia

**Hon. Ms. Kerryne James**

Minister for Climate Resilience, Environment, and Renewable Energy  
Grenada

**Hon. Dr. Abdulla Naseer**

Minister of State for Environment, Climate Change and Technology  
Maldives

**Ms. Kylie Farrelley**

General Manager of Refrigerant Reclaim Australia

**Mr. Klaus Peter Schmid Spilker**

President of Chilean Chamber of Refrigeration and Air-Conditioning

## MODERATOR

**Dr. Mona Nemer**

Chief Science Advisor of Canada