



MOP34

MONTREAL, CANADA

31 OCT —

04 NOV 2022



34th Meeting of the Parties to the
Montreal Protocol on Substances
that Deplete the Ozone Layer

3 November 2022 – 11.30 a.m. to 1 p.m.

High-level Roundtable Discussion

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

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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.¹

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 forecast 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.²

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 around the world, 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.

¹ 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>

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

Panelists biographies



Dr Cécile Siewe (Canada)

Dr Cécile Siewe is currently the Acting Associate Assistant Deputy Minister for the Environmental Protection Branch (EPB) in the Department of Environment and Climate Change Canada (ECCC). Dr Siewe joined the department in May 2021 as the Director General for the Industrial Sectors and Chemicals Directorate (ISCD). Before that she spent 5 years with the department of Natural Resources Canada as Director General of CanmetENERGY-Devon a federal research and technology development facility for energy innovation. Dr Siewe previously spent 5 years working at the Canada Revenue Agency as a Regional Technology Advisor for Oil & Gas in the Scientific Research & Experimental Development Program (SRED).

Prior to re-joining the federal government, Dr Siewe worked in the private sector in the oil sands and heavy oil. She worked at Shell Canada for over 10 years, during which time she held a number of different technical and commercial management positions including Research & Development, Refinery Planning & Optimization, and Joint Venture Business Optimization.

Dr Siewe has a Ph.D. in Chemical Engineering from Imperial College, University of London, UK. She also holds an MBA from the University of Calgary, and a Bachelor of Science in Industrial Chemistry from City University in London, UK.

Dr Siewe is a Fellow of the Canadian Academy of Engineering, and is also Co-Champion for Diversity Inclusion & Employment Equity for ECCC.



Jan Dusík (Czechia)

Jan Dusík is currently serving as Deputy Minister of the Environment for Climate Protection and Government's Envoy representing the Czech Republic in international negotiations on climate change during the Czech Presidency in the Council of the European Union in 2022. Mr Dusík has over 20 years of experience in international environmental agenda as well as legislative and legal matters. He is a former Minister of the Environment in the Czech Republic and was also serving as UNEP Regional Director for Europe and Principal Adviser for Strategic Engagement for the Arctic and Antarctic.

Throughout his career, which included assignments with the Directorate General for the Environment in the European Commission, the WWF Arctic Programme and the Ministry of the Environment of the Czech Republic in different capacities, he has been engaged in a broad array of issues related to the environment and sustainable development.

Mr Dusík holds a Doctorate from the Faculty of Law at Charles University in Prague and a Master of Science (MSc) in Environmental Change and Management from University of Oxford.



Dr Dawda Badgie (The Gambia)

Dr Dawda Badgie is the Executive Director of the Environmental Protection Agency of The Gambia.

Dr Badgie has held several professional and technical responsibilities which include Global Environment Facility (GEF) Operational Focal Point, The Gambia, National Liaison Officer for International Atomic Energy Agency for The Gambia, ISO External Experts Committee Member and focal point for Gambia, Scientific and Technical Committee Member for RAMPAO in West Africa, as well as Adjunct Lecturer, Physical and Natural Sciences Department at the School of Arts and Sciences and the Department of Public & Environmental Health, School of Medicine and Allied Health Sciences at the University of The Gambia.

He holds a Bachelor of Science (Hons) Degree in Agriculture and Environment obtained in 2005 from the University of The Gambia, Masters in Environmental Science from the University Putra, Malaysia, and a PhD Agriculture and Climate Change.

Dr Badgie has authored a book; co-authored book chapters as well as published environmental related articles.



Kerryne James (Grenada)

Kerryne James is the Minister for Climate Resilience, the Environment and Renewable Energy of Grenada.

She obtained a Bachelor of Science Degree Psychology (Magna Cum Laude) from St. George's University, Grenada.

In her previous political career, Ms. James was the Member of Parliament for St. John (National Democratic Congress), Senator of the Upper House, Parliament of Grenada from 2018-2020 and is the Chairperson of the National Democratic Congress Youth Movement since 2021.

Ms. James is the youngest sitting Senator and Parliamentarian of Grenada and the Commonwealth of Nations.



Dr Abdulla Naseer (Maldives)

Dr Abdulla Naseer is the Minister of State for Environment, Climate Change and Technology of the Republic of the Maldives.

He completed his studies in Biology at Dalhousie University, Halifax, Canada, with a doctorate. Until 2018, Dr Naseer worked as a Senior Lecturer at The Maldives National University.

Dr Naseer also worked as the Permanent Secretary of Ministry of Fisheries and was responsible for administrative and financial management of the Ministry as well as for the implementation of policies and programmes of the Ministry, under the direction of the Minister of Fisheries and Agriculture.

Over the past 19 years, Dr Naseer has acquired a deep understanding of the dynamism of Coral reef biology, ecology and management and the Study of large-scale processes affecting coral reef formation and growth characteristics. He also focuses on the Environmental impact assessment on coral reefs, Management and policy development for coral reef ecosystems.



Kylie Farrelley (Australia)

Kylie Farrelley has over 20 years' experience in the Refrigeration & Air Conditioning Industry spending most of that time working for speciality chemical producer, Arkema, as Business Manager for their Fluorochemical division in Australia.

During this time, Kylie has been an active participant in several Industry Associations and other industry lead initiatives.

3 years ago, Kylie was appointed General Manager of Refrigerant Reclaim Australia.



Klaus Peter Schmid Spílker (Chile)

Klaus Peter Schmid Spílker has over 25 years' experience in the refrigeration and industrial air conditioning sector. He is the founder and general manager of FRIGORENT Frigorífico S.p.A., a company dedicated to the freezing process and frozen product storage. Since 1994, Mr. Schmid has worked together with the Chilean Ministry of Environment to support the government in the implementation of the Montreal Protocol.

Mr Schmid is a member of numerous associations and bodies, including ASHRAE, American Society of Heating, Refrigeration, Air Conditioning Engineers U.S.A and founder of the ASHRAE Chile Chapter. More recently, Mr Schmid was re-elected as the President of the Chilean Refrigeration and Air Conditioning Association for a third term.

Moderator



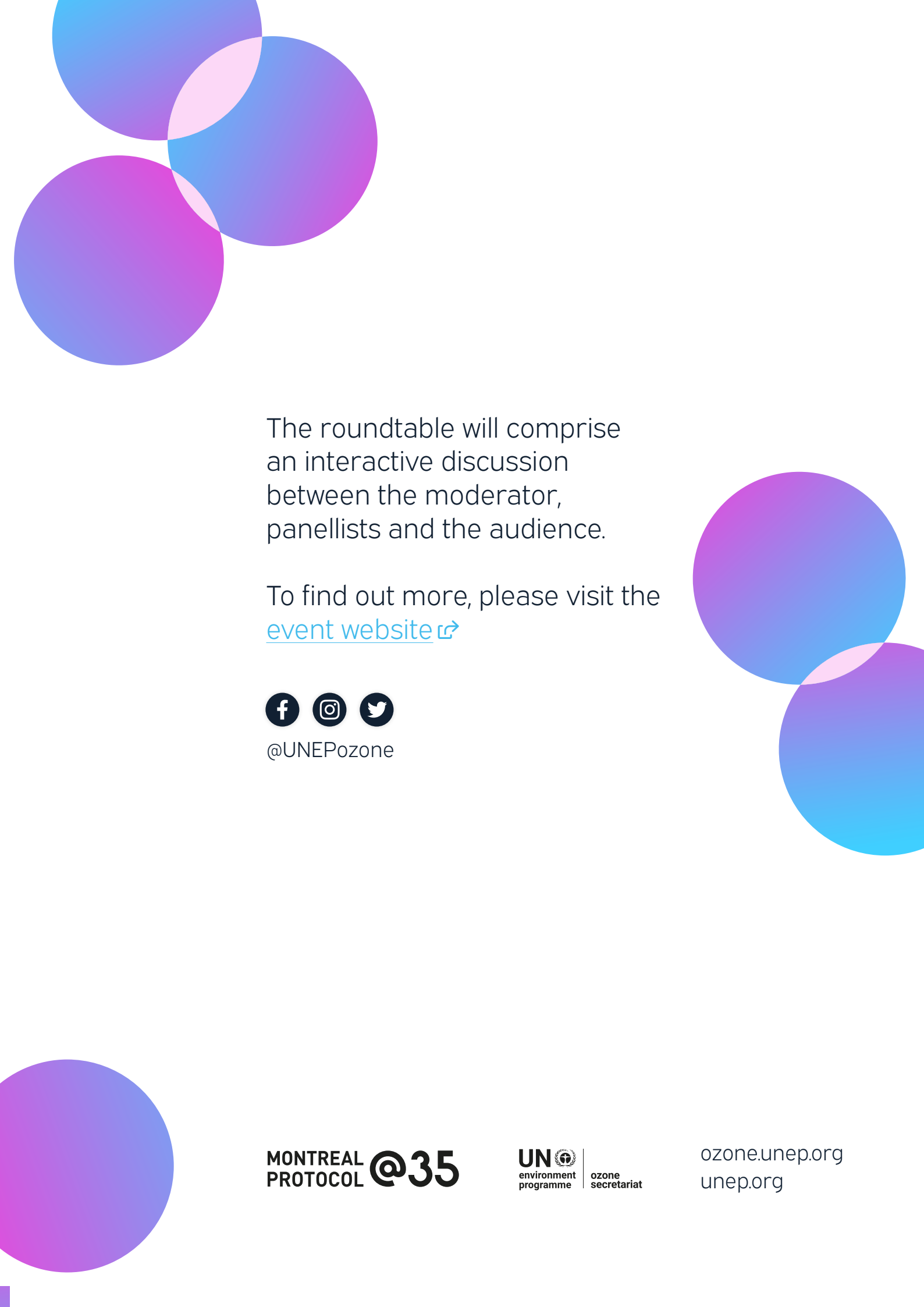
Dr Mona Nemer

Dr Mona Nemer is the Chief Science Advisor to Canada's Prime Minister, Minister of Innovation, Science and Industry, and Cabinet. Her mandate is to provide advice on issues related to science and government policies that support it. This includes advising on ways to ensure that science is considered in policy decisions and that government science is fully available to the public.

Before becoming the Chief Science Advisor, Dr Nemer was Professor and Vice-President of Research at the University of Ottawa and Director of the school's Molecular Genetics and Cardiac Regeneration Laboratory. She holds a PhD in Chemistry from McGill University and did post-doctoral training in molecular biology at the Institut de Recherche Clinique de Montréal and Columbia University.

Dr Nemer is a leader in the area of molecular cardiology; she has discovered several genes essential for normal heart development and function. Her work has contributed to the development of diagnostic tests for heart failure and the genetics of cardiac birth defects. She has published more than 200 highly cited scientific articles and trained over 100 students from around the world.

Dr Nemer is a member of the Order of Canada, a fellow of the Academy of Sciences of the Royal Society of Canada, a knight of the Ordre national du Québec and a knight of the French Republic's Ordre national du Mérite. She is also a fellow of the American Association for the Advancement of Science, and a member of the American Academy of Arts and Sciences. She has also been awarded honorary doctorates from France, Finland and Lebanon. In 2018, Dr Nemer was awarded the Arthur Wynne Gold Medal by the Canadian Society for Molecular Biosciences.



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

To find out more, please visit the [event website](#) ↗



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