3 November 2026

The Montreal Protocol and Kigali Amendment: A Critical Moment in Time

As the Montreal Protocol community marks the 10th anniversary of the Kigali Amendment, and with the 40th anniversary of the Montreal Protocol just around the corner, there is cause for both celebration and renewed resolve.

Although full implementation of the Kigali Amendment is expected to avoid up to 0.5°C of warming by the end of the century, the rate of warming is increasing and global average temperature rise currently teeters at the 1.5°C threshold established in the Paris Agreement, with overshoot now considered inevitable. Every fraction of a degree of warming matters. At the same time, while the ozone layer is recovering, it faces emerging threats that endanger both the ozone and climate legacy of the Montreal Protocol. Against this backdrop, we take this opportunity to reflect upon the past decade of success and prepare for the one ahead.

We welcome the ministerial leadership of the Friends of the Kigali Amendment and emphasise that robust civil society partnership is critical to translating these political commitments into equitable, on-the-ground implementation. As civil society organisations participating in the Montreal Protocol, our priorities in the coming years are twofold. First, we urge parties to achieve universal ratification and support initiatives that strengthen and accelerate implementation of the Kigali Amendment and the HFC phase-down to maximise the climate benefits—which can double by improving the energy efficiency of cooling equipment. These include:

- **Improving licensing systems to enhance their effectiveness and transparency**, by adapting them to the new complexities brought by the HFC phase-down; addressing regulatory and monitoring gaps involving transit, transshipment, free trade zones and e-commerce; and collecting additional data to support reporting;

- **Combating illegal trade and preventing environmental dumping to protect the integrity of the HFC phase-down**, by harmonising customs and national monitoring procedures, incorporating prior informed consent and supply-chain tracking; establishing shared responsibility between exporting and importing countries to halt the dumping of obsolete, energy-inefficient, high-GWP cooling equipment in developing markets; improving insights into trade and illegal flows; and strengthening capacity and inter-agency cooperation;

- **Strengthening HFC-23 emissions control**, by expanding monitoring networks; investigating unaccounted sources, such as fluoropolymer production; developing accounting methodologies and guidelines; and improving transparent and verifiable reporting and abatement;

- **Enhancing government capacity to confront implementation challenges**, by supporting national ozone units with additional resources and tools; equipping customs and enforcement agencies with technologies and training; and improving public awareness and stakeholder engagement;

- **Advancing sectoral approaches to secure cascading climate benefits** by partnering with other stakeholders to scale affordable, energy-efficient, sustainable technologies in key sectors, including cooling, cold chain and shipping; including increasing funding for centres of excellence, technician training and capacity-building, and the servicing sector, while supporting updates to safety standards to facilitate the safe uptake of flammable refrigerants; and

- **Accelerating the HFC phase-down schedule to secure additional climate benefit**, by adopting bans on new HFC-based equipment in key sectors; supporting more ambitious national action during Kigali implementation; and advocating for an accelerated global phase-down schedule through an adjustment to the Kigali Amendment.

Second, address the unresolved gaps and emerging challenges that threaten the Montreal Protocol's achievements and its broader environmental and public health objectives, including:

- **Improving lifecycle refrigerant management**, including ensuring adequate funding, by banning non-refillable cylinders; strengthening refrigerant tracking and leak-prevention mechanisms; advancing recovery, recycling, reclamation (RRR)

and environmentally sound disposal of unwanted refrigerants; equipping and training technicians; and promoting manufacturer and retailer extended producer responsibility and other sustainable financing mechanisms;

- **Addressing emissions from fluorochemical production**, by improving industry transparency and public reporting of information related to products, feedstock use and byproduct handling, production processes and emissions; promulgating regulations to reduce harmful emissions; expanding atmospheric monitoring; and advocating for limiting the Montreal Protocol's feedstock exemption;

- **Addressing rising N_2O emissions**, by establishing a clear evidence base on N_2O emissions sources and impacts; and assessing options under the Montreal Protocol to abate industrial emissions in coordination with other relevant international bodies;

- **Addressing very short-lived substances (VSLS)**, by assessing their impact on stratospheric ozone recovery, evaluating the availability of technically viable alternatives, and exploring options for control measures under the Montreal Protocol; and

- **Reducing per- and poly-fluoroalkyl substances (PFAS) pollution associated with fluorinated refrigerants to protect public health and ecosystems**, by directing Multilateral Fund (MLF) financial support toward PFAS-free alternatives where they are available; phasing out PFAS use in new equipment, where safer alternatives are available; and urging parties to address PFAS pollution from fluorinated gases through their national programmes and policies.

With the Kigali Amendment, the Montreal Protocol demonstrated its ability to respond to scientific evidence and an emerging challenge. Building on this ambitious legacy, the Protocol and its Kigali Amendment must continue to evolve. This will be critical to our ability to navigate a world that exceeds 1.5°C, slow the rate of warming, limit the extent of overshoot and avoid irreversible tipping points while protecting public health in the decades to come.

Supporting organisations:

Carbon Containment Lab (CCL) US

Cascade Climate US

Centre for Environment, Justice and Development (CEJAD) Kenya

CLASP US

Environmental Investigation Agency (EIA) UK

Environmental Investigation Agency (EIA) US

Institute for Energy and Climate Strategies (IECS) US

Institute for Governance & Sustainable Development (IGSD) US

Institute for Governance & Sustainable Development (IGSD) International

International Energy Initiative - IEI Brasil

Natural Resources Defense Council (NRDC)

REGeneration Thailand

Solutions for Our Climate (SFOC) Republic of Korea

Sustainable Research and Action for Environmental Development (SRADev) Nigeria