



**United Nations  
Environment  
Programme**

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HALF-DAY SESSION FOR AN INFORMAL DISCUSSION ON  
STRATEGIC APPROACHES TO KIGALI AMENDMENT IMPLEMENTATION  
Montreal, 26 May 2024

**COMPILATION OF ISSUES SUBMITTED BY MEMBERS AND CO-OPTED  
MEMBERS BROKEN DOWN BY TOPIC**

**Introduction**

1. A half-day session for an informal discussion on strategic approaches to Kigali Amendment implementation is being convened in accordance with decision 93/103. In subparagraph (a) of that decision, the Executive Committee requested “the Secretariat to organize a dedicated half-day session prior to the 94<sup>th</sup> meeting of the Executive Committee for an informal discussion on strategic approaches to Kigali Amendment implementation, including issues related to policies and regulations, cooling and phase-down strategies, energy efficiency, sector approaches and life-cycle refrigerant management”.
2. In subparagraph (b) of that decision, the Committee invited its members to send written views on the issues listed in subparagraph (a) to the Secretariat by 1 March 2024. The views received were posted at the dedicated meeting portal for the half-day session <http://multilateralfund.org/94/pages/Half-day%20Session.aspx>. In line with subparagraph (c) of the same decision, the Secretariat prepared a compilation of inputs, received from Canada, Ghana, India and China as co-opted member, Italy and its constituency, Japan, Sweden and the co-opted European Free Trade Association members, Tunisia and Cameroon as co-opted member, and the United States of America, broken down by topic that can be found in the present document.
3. The Secretariat has organised the agenda for the half-day session in such a way to provide the opportunity for informed discussions on all aspects raised by members through their written inputs. Members, co-opted members, implementing and bilateral agencies are invited to participate in the informal discussions which will be summarized by the Secretariat immediately after the end of the session. The summary of the informal session will be available as an information document for the 94<sup>th</sup> meeting of the Executive Committee. The session will be moderated by a professional facilitator.

## Issues

- *Revisit the strategic priorities every three years to make any necessary adjustments due to the dynamic nature of technology evolution.*

### 1. Strategic directions for the implementation of the Kigali Amendment

#### 1.1. Supporting action beyond Kigali Amendment compliance

- **Incentivize early action to phase down HFCs in advance of the agreed Kigali schedule; front loaded funding for 2035 Kigali HFC implementation plan targets.**
  - Minimize conversions to lower-global-warming-potential (GWP) HFCs;
  - Provide support for low-GWP technologies and avoid alternatives with risks;
  - Provide early actions for promoting low-GWP technologies adoption in high-ambient temperature (HAT) countries;
  - Support suitable incentives for strategic conversion that will avoid further conversions as the HFC phase-down progresses.
- **Promote improved energy efficiency during HFC phase-down, and promote energy efficiency investments in enterprises (manufacturing sector) during the refrigerant transition.**
  - Promote funding models that leverage additional finance to support energy efficiency, supported by relevant authorities and with strong minimum energy performance standards (MEPS);
  - Equally implement MEPS in importing and exporting countries to contribute to the world energy consumption;
  - Gain experience on integrating energy efficiency in Multilateral Fund (MLF)-funded projects in cost-effective way and co-financing with other climate finance institutions in larger energy efficiency investment projects;
  - Apply MEPS for imported and domestic equipment, establish energy efficiency testing and verification laboratory;
  - Implement mandatory labelling mechanism for refrigeration equipment and air-conditioning (AC) equipment;
  - Adopt sustainable cooling technologies, building codes, energy efficiency performance of AC equipment, and conduct technology roadshows;
  - Establish of national/sub-regional centres of excellence for facilitating manufacturing enterprises in transitioning to low-GWP alternatives with specialised training on safe use of low-GWP alternatives, and create opportunity for e-based training and capacity building tools at a global level;
  - Replace traditional refrigeration with more energy efficient and sustainable solutions;
  - Support the use of non-fluorinated alternatives for highly efficient equipment and the accountability of greenhouse gases reduction.

#### 1.2. Supporting national or/and sectoral approaches

- **Support sector investment plans to finance low-GWP energy efficient refrigerant-based technologies in priority sectors, e.g. fisheries, tourism.**
  - Implement sectoral policies and regulations for full phase-out of use of controlled substances;
  - Understand the advantages of sectoral approaches and how to develop them;
  - Follow sectoral approaches by supporting equipment manufacturers and end-users;
  - Finance end-user projects through an incentive programme, including designing sectoral approaches based on HCFC phase-out management plan (HPMP) experience;

- Fund sustainable cooling related demonstration projects (e.g., CO<sub>2</sub>-technologies, mobile air-conditioning (MAC)).
- **Invest in refrigerant management activities that provide concrete and demonstrable additional benefits beyond existing funding models for the servicing sector.**
  - Establish national/sub-regional level low-cost destruction facilities and develop procedures for management of unwanted controlled substances;
  - Implement life cycle refrigerant management, including strengthening regulatory framework, leakage prevention, recycling, recovery, reclamation, and destruction of controlled substances;
  - Develop end of life management decommissioning of equipment and destruction of refrigerants;
  - Enhance opportunities on recovery, reclamation and disposal of all halogenated refrigerants while phasing out chlorinated substances;
  - Consider opportunities to mobilize funding (e.g., carbon credits) for collection, reclamation and destruction of controlled substances, including possible regional cooperation;
  - Implement periodic maintenance and leak prevention of equipment and machinery by trained and certified personnel including the establishment of a registry;
  - Control the placing on the market and the proper take back of unwanted ODS/HFCs substances by authorised dealers, with a clear track of their destinations;
  - Develop mandatory sanctions for those who do not properly manage controlled substances during their life cycle.
- **Support product development and adoption in key sectors – potentially including low-GWP-based energy-efficient cooling equipment and components (compressors, variable speed control drives, etc), low-cost variable speed compressor technologies, low-cost leak detection sensors, low-cost innovative information technology-based solutions for smart cooling.**
  - Develop products (low-GWP based energy efficient cooling equipment and components, low-cost variable speed compressor technologies for adoption by small- and medium-sized enterprises (SMEs), smart cooling);
  - Develop low-cost leak detection sensors and other products for installation and maintenance of refrigeration, air-conditioning and heat pumps (RACHP) equipment to minimize emissions by preventing leaks and proper maintenance.
- **Use the policy framework of the National Cooling Action Plans to identify and finance high-impact investments in HFC phase-down with refrigerant transition, energy efficiency and life-cycle refrigerant management.**
  - Integrate Kigali HFC implementation plans (KIPs) into national cooling action plans and gain experience with not-in-kind technologies.

### **1.3. Targeting investments to key Kigali Amendment implementation issues**

- **Support of KIP implementation.**
  - Focus first on compliance-related measures that can be further adopted for better implementation of both HCFC phase-out and HFC phase-down;
  - Support the development of an overarching strategy for countries with a large number of sectors, to ensure that compliance targets are met at the national and sectoral levels;
  - Ensure actual and sustainable reduction in overall HFC consumption;
  - Understand the challenges of Article 5 countries with the implementation of the Kigali Amendment and explore possibilities to leverage funding;
  - Target KIPs towards RACHP and MAC, sectors where HFCs will be used the most;

- Ensure the supply of alternative refrigerants to local manufacturers and promote manufacturing of alternative refrigerants in Article 5 countries;
  - Address the negative effects of the COVID-19 pandemic on HFCs consumption baseline;
  - Optimize the HCFC phase-out and HFC phase-down with due consideration to appropriate alternatives;
  - Develop domestic strategy that minimize the higher GWP alternatives with the clear map of those alternatives in Article 5 countries including their real availability and prices.
- **Strengthen technical capacity to handle new alternatives with focus on SMEs and installers/assemblers.**
    - Finalise the definition of SMEs in the commercial AC and commercial refrigeration manufacturing sectors to increase the financial support for SMEs to carry out conversions;
    - Strengthen infrastructure and national capacity for testing new refrigerants and blends;
    - Establish centres of excellence to enable SMEs for effective handling and adoption of low-GWP energy-efficient technologies;
    - Develop low-cost variable speed compressor technologies for adoption by SMEs;
    - Control quality through a comprehensive mechanism for testing recovered and recycled refrigerants;
    - Train contractors and installers to promote adoption of low-GWP energy-efficient technologies;
    - Engage retailers and distributors of refrigeration and AC equipment and other equipment for promoting faster adoption of alternatives.
- **Support approaches, measures, and practices to ensure the sustained elimination of HFCs including ideas from document UNEP/OzL.Pro/ExCom/87/45<sup>1</sup> of the 87<sup>th</sup> meeting of the Executive Committee.**
    - Develop policies as a precondition to build institutional strengthening and long-term sustainability;
    - Ensure proper monitoring, verification and reporting mechanisms for long-term sustainability of the outcomes after project completion;
    - Support monitoring and surveillance of use of HFCs and preventing illegal trade of refrigerants import export of HFC-based RACHP equipment including second-hand equipment and components;
    - Continue the work on the production sector to find ways to control emissions related to production of controlled substances.
- **Consider integration of number of activities other than KIPs through project design, submission, implementation, and reporting to achieve greater efficiency and effectiveness.**
- **Take a holistic approach to the HFC phase-down, cognizant of the triple planetary crisis, taking account of synergies and trade-offs with other environmental challenges with ultimate aim for the MLF to provide cost-effective support.**
    - Consider the importance of proper refrigerant transition strategies embracing a precautionary principle and contribute to avoid a triple planetary crisis.

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<sup>1</sup> Document ExCom/87/45: Potential strategies, policy measures and commitments, as well as projects and activities that could be integrated within stage I of HFC phase-down plans for Article 5 countries (decision 85/54(b))

## **2. Strengthening the capacity of MLF institutions and stakeholders to implement the Kigali Amendment**

- **Build institutional capacity including training and awareness.**

- Conduct technology roadshows for emerging low-GWP technologies on a periodic basis for promoting adoption of such technologies;
- Conduct global low-volume-consuming (LVC) countries/very-LVC countries outreach programmes and technology road shows to highlight technologies and pathways for adoption;
- Conduct global HAT outreach programmes and virtual technology road shows to highlight technologies and pathways for adoption including promoting implementation of certification systems for technicians;
- Conduct global/sub-regional programmes focusing on import export of HFC based RACHP equipment including second-hand equipment and components;
- Establish a comprehensive service agencies certification process for maximising use of certified service technicians;
- Strengthen Article 5 countries' capability to integrate green technology in the development of the cold chain;
- Strengthen the capacity in Article 5 countries to assess and ensure refrigerant quality.

- **Promote coordination between institutions at national/regional/international levels.**

- Provide targeted support for institutional coordination in Article 5 countries for promoting adoption of sustainable cooling technologies through synergies with energy efficiency authorities, standards bodies, ministries/departments, industry associations;
- Strengthen sectoral associations/networks for continued awareness and outreach for low-GWP energy efficient alternative technologies, sustainable cooling technologies and passive cooling methods, energy efficiency performance of MAC in electric and other vehicles;
- Collaborate with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) or similar organization for research-based resources;
- Ensure stakeholders' participation for HFCs reduction in cooling and cold chain applications;
- Engage retailers and distributors of refrigeration and AC equipment and other equipment for faster adoption of alternatives;
- Communicate and coordinate at the regional level during implementation;
- Enhance awareness of the Article 5 countries on initiatives and fora regarding non-in-kind solutions while phasing down HFCs;
- Coordinate between different institutions and focal points involved in energy, climate, waste management and climate finance to promote the update of alternatives and strengthen the implementation of the HFC phase-down;
- Collaborate with implementing agencies to assess alternatives and their availability.

- **Build capacity of the MLF institutions and review of existing processes**

- Develop in-house expertise of national ozone units relating to energy efficiency, cold chain and management of end-of-life refrigeration and AC equipment;
- Review the time spent on small size projects including approval and tranche implementation process;
- Build capacity of the MLF Secretariat to cater for emerging needs.

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