

**WRITTEN VIEWS SUBMITTED BY INDIA
AND THE CO-OPTED MEMBER, CHINA, PURSUANT TO DECISION 93/103**

Inputs from the Government of India

Objectives of the half-day consultation

1. The objectives of the half-day consultation are as follows:
 - (a) To focus on holistic approaches that could support countries to achieve and sustain the HCFCs phase-out targets in 2030 and assist strategies for HCFCs tail consumption;
 - (b) To consider innovative approaches, activities and service lines that can be implemented under Kigali HFC implementation plans (KIPs) frameworks to assist the HFC phase-down and align actions towards sustainable cooling interventions;
 - (c) To focus beyond compliance towards achieving maximum climate impact through HFC phase-down, which has been appropriately addressed in decision XXVIII/2 of the Twenty-Eighth Meeting of the Parties; and
 - (d) To focus on long-term HFC phase-down projects including addressing technology related issues as well as issues related to energy efficiency.

Expected outcomes

2. Strategic priorities for achieving the above said objectives, focusing on long term impact of HCFC/HFC consumption reduction with energy efficient low-GWP substances-based technologies need to be identified during the discussions.
3. Given the dynamic nature of the technology evolution, the strategic priorities need to be revisited on a periodic basis (e.g., once in 3 years revisit the decisions and make necessary adjustments)

Main areas for discussion

4. The points mentioned below need to be considered in combination with the existing projects/activities that are considered for HCFC phase-out and HFC phase-down. They should add on to areas that are not addressed and complement areas that are currently being addressed (as well as avoid duplication):

Strengthening technical capacity to handle new alternatives with focus on small and medium-sized enterprises (SMEs) and installers/assemblers

- (a) Strengthening infrastructure and national capacity for testing new refrigerants including emerging blends: Approach to trainings needs to substantially change, as trainings under Multilateral Fund are usually focused on good practices and refrigerant containment; however, new technologies pose different challenges, are fully embodied with electronics, and many times one application has different refrigerants with different characteristics that require specific training (for example, dedicated trainings are required for room air-conditioning that use R-410A, HFC-32 and R-290 because of safety classification, safety systems, additional controls and electronics, working pressure, different charges, etc.);

- (b) Quality control and testing of recovered and recycled refrigerants: a comprehensive mechanism for testing and quality control confirmation is needed;
- (c) Establishment of centres of excellence to enable SMEs for effective handling and adoption of low GWP energy efficient technologies;
- (d) Training of contractors and installers on energy efficient technologies to promote adoption of low-GWP energy efficient options;
- (e) Engagement of retailers and distributors of refrigerators, residential air conditioners and other equipment for promoting faster adoption of alternatives;

Product development and sectoral programmes

- (f) Development of energy efficient low-GWP based cooling equipment and components like compressors, variable speed control drives, brushless DC motors, electronic expansion valves, etc.;
- (g) Development of low-cost variable speed compressor technologies for adoption by SMEs;
- (h) Development of low-cost leak detection sensors and other products for installation and maintenance of refrigeration, air-conditioning and heat pump (RACHP) equipment;
- (i) Product development and technical support for adopting low-cost innovative information technology-based solutions for smart cooling (this would involve both product development for customisation to local needs and support for adoption of the technologies);
- (j) Development of end-of-life safe decommissioning of equipment and destruction of refrigerants;
- (k) Sector plans for financing energy efficient low-GWP refrigerant-based technologies in different sectors (e.g., fisheries, tourism);
- (l) Front loaded funding with clearly defined long term goals (e.g., KIP targets should go up to 2035);
- (m) Financing implementation of end-user conversion projects through an incentive programme: Any action that relates to end-users are now being solely considered under the specific decision 84/84, which is very stringent and do not allow flexibility required for innovative approaches at end-user level, and we know that end-users, more than never, will play a substantial role in the large-scale adoption of low-GWP alternatives;
- (n) Comprehensive service agencies certification process for maximising use of certified service technicians;
- (o) Early actions for promoting low-GWP technologies in air-conditioning applications in high-ambient temperature (HAT) countries – else there is a significant movement to energy efficient high-GWP technologies;

Institutional coordination

- (p) Establishment of national/ sub regional centres of excellence for the following:
 - (i) Facilitating manufacturing enterprises in transitioning to low GWP alternatives

including sustaining transition up to a period of 3-5 years after completion of the transition;

- (ii) Specialised training on safe use of low-GWP alternatives;
 - (iii) Develop and promote use of E-based training and capacity building tools at a global level - can be developed by different agencies in association with IIR, AHRI etc. These tools can be publicized through different national/regional/global programmes and can have certification mechanisms;
- (q) Targeted support for institutional coordination in countries for promoting adoption of sustainable cooling technologies. These include the following:
- (i) Coordination with energy efficiency authorities, standards bodies, industry associations of different RACHP applications);
 - (ii) Develop framework to promote synergies with energy efficiency authorities, standards bodies, nodal line ministries/departments, industry associations and avoid duplication of programmes and activities;
- (r) Strengthening sector associations / networks for continued awareness and outreach for the following:
- (i) Energy efficiency and its relevance while phasing down HFCs including strengthening and adopting building codes;
 - (ii) Low-GWP energy efficient alternative technologies;
 - (iii) Sustainable cooling technologies and passive cooling methods;
 - (iv) Energy efficiency performance of mobile air-conditioning in electric and other vehicles;
- (s) Development of national / sub-regional level low-cost destruction facilities and procedures for management of unwanted controlled substances;
- (t) Technology roadshows for emerging low-GWP technologies on a periodic basis for promoting adoption of such technologies;
- (u) Global low-volume-consuming / very-low-volume-consuming countries outreach programmes and technology road-shows – highlighting technologies and pathways for adoption;
- (v) Global HAT outreach programmes and virtual technology road-shows – highlighting technologies and pathways for adoption. This should include promoting implementation of certification systems for technicians;
- (w) Support for monitoring and surveillance of use of HFCs and preventing illegal trade of refrigerants;
- (x) Annual global/sub-regional programmes focusing on import export of HFC-based RACHP equipment including second hand equipment and components;
- (y) Strengthen national ozone units including develop in-house expertise to address activities relating to energy efficiency, cold chain and management of end-of-life refrigeration and

air-conditioning equipment including disposal through continuous training and capacity building;

- (z) Need for restructuring the Multilateral Fund Secretariat for catering to the emerging needs – staff strength and staff technical skills; and
- (aa) Time spent on review of small size projects – approval and tranche implementation.

Inputs from the Government of China

Policy and regulations

5. The Executive Committee should implement paragraph 13 of decision XXVIII/2, taking into account the actual situation and specific needs of Article 5 countries, and support Article 5 countries to develop phase-out strategies in line with their national circumstances on the basis of considering technologically and economically feasible alternative technologies, applications in related sectors, and the development needs of the refrigeration and air-conditioning sector. For countries with a large number of sectors, support should be given to the development of overarching strategy to ensure that compliance targets are met at the national and sectoral levels.

6. The Executive Committee should agree on the draft guidelines for funding the phase-down of HFCs as soon as possible, and to provide guidance to Article 5 countries in preparing and submitting the first stage of KIPs in the context of the Kigali Amendment. Additional support should be given to low-GWP alternative technologies in the cost guidelines to encourage the promotion and application of such technologies. The definition of SMEs in the commercial air-conditioning and commercial refrigeration manufacturing sectors should be finalized to increase the financial support for SMEs to carry out conversions.

7. Noting the challenges brought by the COVID-19 pandemic on the implementation of the Kigali Amendment across many Article 5 countries, when discussing the policy measures on the comprehensive approach for the implementation of the Kigali Amendment, the Executive Committee should fully consider the negative effects of the pandemic on HFCs consumption baseline for Article 5 countries during the years 2020-2022 and provide corresponding support to Article 5 countries to ensure that the compliance targets stipulated in the Montreal Protocol and the Kigali Amendment could be achieved.

Cooling and phase-down strategies

8. Synergies between sustainable cooling and climate action in the context of the Kigali Amendment should continue to be promoted. The Multilateral Fund should support Article 5 countries to carry out cooling related demonstration projects, and activities related to the research and development and promotion of low-GWP and energy-efficient alternative technologies. Besides, the comprehensive implementation of the Kigali Amendment should promote the active participation of relevant stakeholders in the industrial chain, including the manufacturing, use and maintenance of refrigeration equipment, so that the whole chain can jointly promote HFCs reduction in the areas related to cooling.

Energy efficiency

9. Article 5 countries are facing multiple challenges in terms of funding, technology and capacity building in HFCs reduction and energy efficiency issues. In addition to pilot projects on energy efficiency, the Executive Committee should take substantive action to develop an operational framework for energy efficiency in a timely manner, determine the funding policy and provide financial support for maintaining and/or enhancing energy efficiency during HFCs reduction, so as to help Article 5 countries enhance energy efficiency during HFCs reduction and further increase the climate benefits.

Sector approaches

10. Building on the past success of the Multilateral Fund, countries are supported to continue to follow the sector approach to phase out the controlled substances under the Kigali Amendment. At the same time, considering that HFCs reduction also involves energy efficiency, life-cycle refrigerant management, disposal and other issues, the Executive Committee should encourage countries to adopt innovative ways to carry out HFCs reduction actions based on their national circumstances.

11. Article 5 countries are encouraged to further strengthen communication and coordination at the regional level during the implementation of the Kigali Amendment, and to communicate and exchange information on the progress of phase-out of controlled substances, the research and development and promotion of alternative technologies, and capacity building during the implementation of KIPs, to jointly promote the comprehensive implementation of the Kigali Amendment at the regional level.

Life-cycle refrigerant management

12. It is noted that Article 5 countries are facing multiple challenges in terms of funding, technology and capacity building in leakage prevention, recovery, recycling, reclamation and destruction of refrigerants. In accordance with decision XXXV/11, TEAP was requested to prepare a report on life-cycle refrigerant management and submit it to the 46th meeting of the Open-ended Working Group. We will continue to follow and actively participate in the discussion on this issue.
