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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
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Montreal, 7–11 December 2026
Item 10 of the provisional agenda[1]

OVERVIEW OF APPLYING DEDUCTIONS FROM THE STARTING POINT FOR SUSTAINED AGGREGATE REDUCTIONS IN HFC CONSUMPTION IN CASES WHERE A KIGALI HFC IMPLEMENTATION PLAN INCLUDED A CONSUMPTION REDUCTION TARGET BEYOND 10 PER CENT, INCLUDING CASES WITH LARGE FLUCTUATIONS IN CONSUMPTION DURING THE BASELINE YEARS (DECISION 98/24)

Background

1. At the 98th meeting, a discussion ensued regarding Kigali HFC implementation plans (KIPs) that established commitments for reductions in HFC consumption beyond the 10 per cent target under the Kigali Amendment, wherein a member noted that the approach to making a deduction from the starting point was unclear and had historically varied from one project to another and suggested that it would be helpful for the Secretariat to prepare a brief document on the matter. Several members expressed appreciation for the proposal and noted that a document could provide useful guidance applicable to future projects.

2. After discussion in an informal group, the Executive Committee decided to request the Secretariat to prepare, for consideration by the Executive Committee at its 99th meeting, a brief document on applying deductions from the starting point for sustained aggregate reductions in HFC consumption in cases where a KIP included a consumption reduction target beyond 10 per cent, including cases with large fluctuations in consumption during the baseline years (decision 98/24). The Secretariat has prepared the present document in line with that decision.

Definitions

3. Total deduction refers to the sum of HFC consumption contained in rows 4.1.1 and 4.1.2 of the Agreement (i.e., "Deductions of HFCs from this Agreement" plus "Deductions of HFCs from previously approved projects") that will be subtracted from the starting point for aggregate reductions eligible for

[1] UNEP/OzL.Pro/ExCom/99/1

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funding once it is defined by the Executive Committee.[2] This is also referred to as total deductions of HFCs from the starting point.

4. Calculated reduction refers to the difference between the HFC baseline and the final target of stage I specified in row 1.2 of the Agreement (i.e., "Maximum allowable consumption of Annex F substances").

Data

5. Out of the 90 KIPs approved as of the 98th meeting,[3] 36 KIPs specify deductions of HFCs from the country's starting point as reflected in rows 4.1.1 and 4.1.2 in Appendix 2-A of their Agreements, while the remaining 54 KIPs do not specify such deductions, in line with decision 96/50(e).

6. Of those 36 KIPs that specify deductions of HFCs from the country's starting point:

(a) Twenty-one KIPs have no difference in CO_2-eq tonnes between the total deduction and calculated reduction;[4]

(b) Ten KIPs have total deductions that are greater than the calculated reductions;

(c) Three KIPs have total deductions that are less than the calculated reduction, of which one also included a provision for potential additional deductions from the starting point; and

(d) Two KIPs have no difference between the total deductions and calculated reductions and where the decision approving the KIP included a provision for potential additional deductions from the starting point.

7. Annex I provides further information for the 13 countries where there is a difference between the total deduction and calculated reduction and for the two countries where there may be an additional deduction from the starting point, and includes the total deductions, calculated reductions, difference between those two values, relevant decisions, and reasons for the differences. While consistency is aimed, and in the majority of approved KIPs the total deduction equals the calculated reduction, the lack of definition of the starting point, which was unknown when countries prepared their strategies, and the specific circumstances of countries when considering those strategies, required a case-by-case treatment in line with their national circumstances. For example, for countries that had consumption already above the baseline (e.g., Chile and Costa Rica), funding was approved for more than 10 per cent to first reach the baseline and then achieve the 10 per cent reduction target, resulting in a total deduction of HFCs from the starting point larger than the calculated HFC reduction. In other cases, the total deduction was smaller than the reduction from the baseline for different reasons specific to the circumstances of the country, as further explained in the annex.

8. As reflected in annex I, the reasons for the differences between the total deductions and calculated reductions vary based on the inclusion of phase-out from standalone HFC conversion projects approved prior to stage I of the KIPs and based on national circumstances, including the phase-in of HFCs with lower global-warming potential during a manufacturing conversion, the association of a deduction with the project management unit, the implementation of bans on equipment or specific HFCs, and possible stockpiling in the baseline years. In addition, in some cases, additional deductions to the country's remaining HFC consumption and reduction targets are possible based on the submission of additional data. The Secretariat

[2] The level of the starting point will be considered at the last Executive Committee meeting of 2029 (decision 96/50(f)).
[3] Excluding Nicaragua, which was cancelled, and Indonesia, which is not a full KIP and does not having an Agreement but includes in the decision, a provision that an additional deduction of up to 5,163,613 CO_2-eq tonnes associated with stockpiled HFCs that had been imported into the country during the baseline years for use in subsequent years would also be deducted from the starting point (decision 96/41(b)(ii)).
[4] Not including the two KIPs specified in subparagraph (d).

will continue to carefully assess the total deductions and calculated reductions based on national circumstances during its reviews of KIPs and when recommending draft KIP agreements.

Recommendation

9. The Executive Committee may wish to note the overview of applying deductions from the starting point for sustained aggregate reductions in HFC consumption in cases where a Kigali HFC implementation plan included a consumption reduction target beyond 10 per cent, including cases with large fluctuations in consumption during the baseline years (decision 98/24), contained in document UNEP/OzL.Pro/ExCom/99/79.

Annex I

OVERVIEW OF CASES WITH DIFFERENT TOTAL DEDUCTIONS AND CALCULATED REDUCTIONS

Country / decision number	Total deductions in KIP Agreement from starting point once agreed (CO_2-eq tonnes)	Calculated reductions between baseline and target (CO_2-eq tonnes)	Difference (CO_2-eq tonnes)	Information related to difference
Brazil *Decision 98/45*	7,305,034 (equivalent to 10.0% reduction from the baseline)	8,747,722 (agreed 12.0% reduction from the baseline)	1,442,688 Total deductions lower than calculated reductions	Funding was approved for activities to phase out 7,289,768 CO_2-eq tonnes of HFCs. This amount, together with 15,266 CO_2-eq tonnes associated with Refrisat's self-funded conversion of its remaining products, would be deducted from the starting point. The total deduction would therefore be 7,305,034 CO_2-eq tonnes, equivalent to 10 per cent of the baseline. During discussions on the KIP proposal, the Government of Brazil committed to an additional reduction equivalent to 2 per cent of the baseline in 2032, bringing the total HFC reduction target to 12 per cent. This additional reduction amounts to 1,457,954 CO_2-eq tonnes. No funding was requested for this additional reduction, and the corresponding amount was not deducted from the starting point.
Chile *Decision 93/57*	847,086 (equivalent to 12.65% reduction)	669,811 (agreed 10.0% reduction)	177,275 Total deductions higher than calculated reductions	At the time of submission of the KIP, HFC consumption was already above the HFC baseline level. The KIP included activities to reduce HFC consumption to 12.65% of the baseline, in order to first reduce consumption to the baseline level in 2024 and then achieve the first 10% reduction from the baseline in 2029. Accordingly, the entire 12.65% of the baseline was deducted from the starting point while the reduction commitment from the baseline was 10%.
Costa Rica *Decision 95/63*	211,399 (equivalent to 14.57% reduction)	145,080 (agreed 10% reduction)	66,319 Total deductions higher than calculated reductions	At the time of submission of the KIP, HFC consumption was already above the HFC baseline level and growing. The KIP included activities to reduce the equivalent to 14.57% of the baseline, in order to first reduce consumption to the baseline level in 2024 and then achieve the first 10% reduction from the baseline in 2029. Accordingly, the entire 14.57% of the baseline was deducted from the starting point while the reduction commitment from the baseline was 10%.
Dominican Republic *Decision 93/60 and Appendix 2-A footnote*	389,732 (equivalent to 10.2% reduction)	383,409 (agreed 10.0% reduction)	6,323 Total deductions higher than calculated reductions	The additional deduction is due to a project to phase out HFC-134a and R-404A at the commercial refrigerator manufacturing enterprise Fábrica de Refrigeradores Comerciales, SRL (decision 81/57).
Egypt *Decision 96/38*	5,795,458 (equivalent to 30% reduction)	4,243,877 (agreed 22.0% reduction)	1,551,581 Total deductions higher than calculated reductions	Total deduction includes the phase out of R-410A from the conversion projects in residential air-conditioning manufacturing under the HPMP, in line with decision 96/38(b)(v).

Country / decision number	Total deductions in KIP Agreement from starting point once agreed (CO_2-eq tonnes)	Calculated reductions between baseline and target (CO_2-eq tonnes)	Difference (CO_2-eq tonnes)	Information related to difference
Guinea *Decision 96/40*	316,926* (equivalent to 17.3% reduction) * Does not include additional reduction up to 323,002 from the starting point as per decision.	316,926* (agreed 17.3% reduction)	0 Possible additional deductions subject to provision of additional information	During the review of the KIP, it was noted that the HCFC baseline had been found to be overestimated but had not been corrected. The KIP approval decision noted that the Government submitted a request for revision of the HCFC and HFC baseline and that, if the HCFC baseline was not revised, an additional reduction of up to 323,002 CO_2-eq tonnes associated with the adjustment of the HCFC component of the HFC baseline, would be deducted from the starting point (decision 96/40(b)(iii)).
Jordan *Decision 93/64 and Appendix 2-A footnote*	1,442,634 (equivalent to 51.4% reduction)	1,529,570 (agreed 54.5% reduction)	86,936 Total deductions lower than calculated reductions	Calculated deductions reflect funded activities, including the phaseout of 211,530 CO_2-eq tonnes of HFCs from the conversion of the manufacturing of large commercial unitary roof-top air-conditioning units of up to 400 kilowatts at Petra Engineering Industries Co. (decision 81/62). The country proposed additional reductions when setting its final target.
Lebanon *Decision 96/42*	1,226,877 (equivalent to 48.0% reduction)	1,022,613 (agreed 40.0% reduction)	204,264 Total deductions higher than calculated reductions	Total deductions reflect additional deductions agreed by the Executive Committee that differ from those proposed by the Secretariat, as well as those associated with the project for the conversion from HFC-134a and R-404A in domestic and commercial refrigeration at Lematic Industries (decision 81/63). The calculated reductions from the baseline similarly reflect additional reductions agreed by the Committee that differ from those proposed by the Secretariat.
Malaysia *Decision 93/67*	2,763,452 (equivalent to 10.3% reduction)	2,670,372 (agreed 10.0% reduction)	93,080 Total deductions higher than calculated reductions and possible additional deductions subject to provision of additional information	Additional deductions relative to calculated reduction reflect implementation of bans on installation of new HFC-23- and HFC-125-based fire suppression systems by 1 January 2026; by 1 January 2029, the manufacturing and import of HFC-based stand-alone commercial refrigeration equipment, HFC-based domestic refrigeration, components for refrigerated transport using HFC-134a, R-452A and R-404A, and split air conditioners and heat pumps using R-407C; and new installations of chillers using R-407C. In addition, it was agreed that the World Bank would include as part of the next tranche report detailed information that would inform whether and the extent to which the imports of R-404A, HFC-125, and HFC-143a in 2022 were due to stockpiling, inter alia noting that the availability of data on longer-term HFC consumption trends will allow more clarity on the issue.
Mexico *Decision 98/47 and Appendix 2-A footnote*	23,510,003 (equivalent to 30.5% reduction)	23,094,799 (agreed 30.0% reduction)	415,204 Total deductions higher than calculated reductions	Deduction from the starting point includes the HFC phased out from individual investment projects approved prior to the KIP (415,204 CO_2-eq tonnes) and 23,094,799 CO_2-eq tonnes corresponding to an agreed 30 per cent reduction target from the HFC baseline at the Executive Committee. This reduction target was agreed upon analysis of HFC consumption trends and market demand in Mexico in line with decision 93/68(c)(vi) to (viii)).

Country / decision number	Total deductions in KIP Agreement from starting point once agreed (CO_2-eq tonnes)	Calculated reductions between baseline and target (CO_2-eq tonnes)	Difference (CO_2-eq tonnes)	Information related to difference
Senegal *Decision 95/72*	571,135* (equivalent to 20.5% reduction) * Does not include additional reduction up to 324,937 from the starting point as per decision.	571,135* (agreed 20.5% reduction)	0 Additional deductions subject to provision of additional information	During the review of the KIP, it was noted that the HCFC baseline had been found to be overestimated but had not been corrected. The KIP approval decision urged the Government to submit revised HCFC consumption data for baseline years and noted that an additional reduction of up to 324,937 CO_2-eq tonnes associated with an adjustment to the HCFC component of the HFC baseline would be deducted from the starting point (decision 95/72 (b)(v)).
Thailand *Decision 98/51 and Appendix 2-A footnote*	2,843,369* (equivalent to 4.8% reduction) * Does not include additional reduction of up to 10,417,599 from the starting point as per decision.	11,854,190 (agreed 20.0% reduction)	9,010,821 Total deductions lower than calculated reductions and additional deductions subject to provision of additional information	Funding was approved for activities to phase out 2,843,369 CO_2-eq tonnes of HFCs, including the phase-out of 12,555 CO_2-eq tonnes associated with project approved pursuant to decision 78/3(g) for Pattana Intercool Co. Limited. An additional reduction of up to 10,417,599 CO_2-eq tonnes associated with stockpiled HFCs that had been imported into the country during the baseline years for use in subsequent years would also be deducted from the starting point (decision 98/51(b)(iv)). In approving the KIP, the Committee also noted that the Government would continue to monitor its HFC consumption to understand local market needs and assess what future HFC demand would be and would provide that analysis when submitting the second tranche of its KIP (decision 98/51(c)).
Tunisia *Decision 94/53*	629,563 (equivalent to 26.6% reduction)	564,146 (agreed 23.8% reduction)	65,417 Total deductions higher than calculated reductions	The phase in of HFC-32 of 65,417 CO_2-eq tonnes was considered when determining the country's final target. In line with decision 96/50, that phase in was not considered when determining the deduction from the starting point.
Viet Nam *Decision 93/76*	1,438,128 (equivalent to 10.3% reduction)	1,399,136 (agreed 10.0% reduction)	38,992 Total deductions higher than calculated reductions	Additional deductions relative to calculated reduction reflect implementation of bans on the use of HFC-23 in new installations of fire-suppression systems by 1 January 2025; on the manufacturing and import of stand-alone commercial refrigeration and domestic refrigeration equipment using HFCs by 1 January 2029; on the manufacturing and import of mobile air-conditioning systems using R-407C by 1 January 2029; and on the manufacturing and import of residential air-conditioning units and heat pumps below 60,000 British thermal units/hour using R-410A and R-417A by 1 January 2029.
Zimbabwe *Decision 95/77*	469,849 (equivalent to 38.8% reduction)	449,114 (agreed 37.1% reduction)	20,735 Total deductions higher than calculated reductions	The additional deductions include the phase-out of 20,735 CO_2-eq tonnes of HFC-134a at the domestic refrigerator manufacturer Capri (decision 82/81).