

**United Nations
Environment
Programme**Distr.
GENERALUNEP/OzL.Pro/ExCom/85/63
8 May 2020

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-fifth Meeting
Montreal, 25-29 May 2020
Postponed to 19-22 July 2020*

**KEY ASPECTS RELATED TO HFC-23 BY-PRODUCT CONTROL TECHNOLOGIES
(DECISIONS 83/67(D), 84/90 AND 84/91)**Background

1. At its 84th meeting, the Executive Committee considered the document on Key aspects related to HFC-23 by-product control technologies,¹ which consisted of three parts on policy issues arising in projects in Argentina and Mexico; policy issues arising in the project in Argentina; and policy issues arising in the project in Mexico.
2. The document made reference to paragraph 6 of Article 2J of the Montreal Protocol as amended, stating that “Each Party manufacturing Annex C, Group I, or Annex F substances shall ensure that for the twelve-month period commencing on 1 January 2020, and in each twelve-month period thereafter, its emissions of Annex F, Group II, substances generated in each production facility that manufactures Annex C, Group I, or Annex F substances are destroyed to the extent practicable using technology approved by the Parties in the same twelve-month period.”
3. In preparing the document, the Secretariat had sought advice from the Ozone Secretariat in regard to the compliance obligations of a concerned Party to the Kigali Amendment that manufactures Annex C, Group I, or Annex F substances. While emphasizing that the interpretation of the provisions of the Montreal Protocol is the responsibility of the Parties, the Ozone Secretariat understands the term “to the extent practicable” may apply to either “destruction” (i.e., destroy to the extent practicable), or to the “use of the technology” (i.e., using approved technology to the extent practicable). Accordingly, as long as a Party that generates the HFC-23 submits the new data reporting form for HFC-23 emissions and informs the Ozone Secretariat in 2021 that it has destroyed HFC-23 emissions to the extent practicable in 2020 (irrespective of amount of HFC-23 by-product that has been destroyed), it would be understood by the Ozone Secretariat that such Party has met its obligations under paragraph 6 of Article 2J of the Amendment. Further, there are no reduction targets, schedules, or baselines specified for the HFC-23 by-product emission reduction,

* Due to coronavirus disease (COVID-19)

¹UNEP/OzL.Pro/ExCom/84/70.

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

nor does paragraph 6 of Article 2J require Parties to demonstrate decrease in HFC-23-by product emissions from one year to the next.

Discussion by Executive Committee members

4. Members stressed the importance of addressing the policy issues at the 84th meeting, particularly given that the Governments of Argentina and Mexico had both ratified the Kigali Amendment and had compliance obligations to meet as of 1 January 2020. A number of considerations were highlighted, including the importance of: basing the level of financial support on the most cost-effective option in situations where HFC-23 by-product emissions were not already being controlled; basing incremental operating costs (IOCs) on HCFC-22 production from prior rather than future years; taking into account production process improvements that would reduce generation rates over time; ensuring the sustainability of the HFC-23 emissions phase-out; considering the role played by domestic policies and regulations in ensuring sustained HFC-23 destruction; and considering the eligibility of back-up systems, if they were needed at all. It was also noted that controlling HFC-23 emissions generated by the production of HCFC-22 that was exported to non-Article 5 countries was a new concern that needed careful consideration.

5. Several members also had concerns regarding the understanding in the document of paragraph 6 of Article 2J of the Montreal Protocol. It was felt that the understanding could be taken to mean that Parties simply had to report their HFC-23 by-product emissions rather than making their best efforts to reduce them using approved technologies, as called for in the Protocol. At the same time, members recognized that the Executive Committee did not have the authority to decide what constituted compliance with paragraph 6 of the Protocol.

6. The Committee agreed to establish a contact group to discuss the issues related to HFC-23 by-product emission control raised in the document. The group was, however, unable to reach consensus. One member, supported by two others, expressed concern that the Committee was not making the progress required to enable Parties to the Kigali Amendment to comply with the 1 January 2020 control measure. The Committee agreed to hold additional discussions in the contact group. Subsequently, the convener of the contact group reported that despite substantial discussions, the group had again been unable to resolve the issues.

7. Subsequently, one member made a statement, saying, that despite the Montreal Protocol's proud history of achievements, the present meeting would likely be remembered for the failure of the mechanism to find a solution that would enable Article 5 countries producing HCFC-22 to comply with the HFC-23 control measures. Article 10 of the Protocol contained the obligation to provide financial assistance to Article 5 countries, but the Executive Committee had failed in that regard. That was a problem not only for Article 5 countries that produced HCFC-22, but also for all Article 5 countries. The country would therefore raise that matter with the Implementation Committee and the Open-ended Working Group.

Scope of the document

8. The Secretariat has prepared the present document in line with decisions 83/67(d), 84/90, and 84/91. The document only presents the policy issues related to control of HFC-23 by-product emissions in Article 5 countries that arose from the Secretariat's review of the projects in Argentina² and Mexico.^{3,4}

² UNEP/OzL.Pro/ExCom/85/64.

³ UNEP/OzL.Pro/ExCom/85/65.

⁴ UNEP/OzL.Pro/ExCom/85/54 presents information related to a new scientific study on HFC-23 emissions.

9. The document consists of the following three parts, and a recommendation:

- I Policy issues arising in the projects in Argentina and Mexico
- II Policy issues arising in the project in Argentina
- III Policy issues arising in the project in Mexico
- Recommendation

10. In each part, the document briefly explains each of the issues identified, and seeks guidance from the Executive Committee on how to address those issues.

I. Policy issues arising in the projects in Argentina and Mexico

Timeline for HFC-23 by-product emission control

11. The Kigali Amendment entered into force on 1 January 2019. Both Argentina and Mexico have ratified the Kigali Amendment and have continued to generate HFC-23 by-product and emit that HFC-23 without controls to the atmosphere. For the project in Argentina, such emissions would continue until 1 January 2021 in the case of refurbishment of the incinerator, and cease by August 2020 in the case of closure. For the project in Mexico, such emissions would continue until 1 January 2021 given the time needed to refurbish the plasma-arc destruction unit.

12. At the 84th meeting, members recognized that the Executive Committee did not have the authority to decide what constituted compliance with paragraph 6 of Article 2J of the Montreal Protocol. Accordingly, the Executive Committee may wish to seek guidance from the Parties on this matter.

Duration for which funding support for HFC-23 by-product emission controls is provided

13. During the discussion of the duration for which funding support for HFC-23 by-product emission controls should be provided, the Executive Committee have expressed different views. Some members have suggested that IOCs should be provided as long as the destruction of HFC-23 is taking place; others have suggested a more limited duration. Some members have suggested that IOCs are intended to incentivize early action, and the need for such an incentive may change as the cost of adopting control measures becomes the regular cost of business. Other members have suggested that the costs of destruction should not be considered as IOCs but recurring costs. In contrast to IOCs, which are expected to decrease as the cost of the alternative to be phased in goes down and the cost of the controlled substance that is phased out goes up, many of those recurring costs are not expected to change with time and, therefore, funding should continue to be provided for them.

14. The Executive Committee may wish to provide guidance on:

- (a) The duration of the IOCs; and/or
- (b) Whether to develop guidelines to determine recurring or operating costs for HFC-23 by-product control projects.

Level of agency support costs

15. In line with decision 67/15,⁵ projects amounting to US \$250,000 and above would receive agency support costs of 7 per cent, and for projects in the production sector, the agency support costs would be no greater than 6.5 per cent, to be determined on a case-by-case basis. The current practice in the production sector is that the costs of independent verification are included in the agency support costs. It is not clear

⁵ Administrative cost regime for the 2012–2014 triennium, which has been maintained.

whether HFC-23 by-product control projects would be considered as projects in the production sector (i.e., up to 6.5 per cent agency support costs, to be determined on a case-by-case basis), or as investment projects (i.e., 7 per cent agency support costs).

16. The Secretariat considers that for HFC-23 by-product control projects where there would be continued production of HCFC-22, and hence continued generation of HFC-23 by-product that must be controlled (either on- or off-site), continued agency support would be expected. Accordingly, in such cases, the agency support costs for investment projects (at 7 per cent) would be applicable.

17. In contrast, in projects where closure of the HCFC-22 production facility is the modality used to comply with HFC-23 by-product control obligations, the agency support costs for the production sector (6.5 per cent, to be determined on a case-by-case basis) would be applicable.

18. Since Quimobásicos, the HCFC-22 production facility in Mexico, is expected to continue producing HCFC-22, including for feedstock uses, for the foreseeable future, the Secretariat recommended agency support costs of 7 per cent for that project. In the case of Frio Industrias Argentinas (FIASA), the HCFC-22 production facility in Argentina, it is unclear whether the Executive Committee would choose the option of closure, or continued production of HCFC-22 and control of HFC-23 by-product.

19. UNIDO considers that its portfolio is more relevant in determining the agency support costs, rather than on a project-by-project basis; and that projects in the production sector always took into consideration lost profits and, in such cases, it was understandable that lower agency support costs were applied. For HCFC production swing plants where it is not yet clear whether lost profits will be eligible, UNIDO considers that 7 per cent may be appropriate.

20. The Executive Committee may wish to consider providing guidance on:

- (a) The level of agency support costs for HFC-23 by-product control projects that control HFC-23 through destruction;
- (b) The appropriate level of agency support costs for HFC-23 by-product control projects, that control HFC-23 through closure of HCFC-22 production facilities; and
- (c) Whether the costs of annual independent verification on the amounts of HFC-23 by-product generated, and amounts of HFC-23 by-product destroyed to the extent practicable using technology approved by the Parties to the Montreal Protocol, if applicable, should be included under agency support costs or in the project costs.

II. Policy issues arising in the project in Argentina

Basis for HCFC-22 production to be used in determining IOCs

21. At its 83rd meeting, the Executive Committee considered for the first time the project proposal from the Government of Argentina to control HFC-23 by-product emissions at the HCFC-22 production facility FIASA. Rather than using the level of production of HCFC-22 on the basis of either the year, or an average of the three years, immediately preceding project preparation, in line with the decision adopted by the Executive Committee at its 16th meeting,⁶ the proposal was based on the forecast production of HCFC-22 for the duration of the project (i.e., from 2020 to 2030), taking into account the maximum allowable levels of production under the Montreal Protocol.

⁶ Paragraph 32(b) of document UNEP/OzL.Pro/ExCom/16/20.

22. In determining the level of the production of HCFC-22 and the associated HFC-23 by product emissions, the Secretariat has followed the decision adopted by the Executive Committee at its 16th meeting.

23. The Executive Committee may wish to provide guidance on whether the decision adopted at the 16th meeting should be used as a basis for calculating the level HCFC-22 production and associated HFC-23 by-product generated, as the basis for determining IOCs, or to use another method.

Extent to which profitability of HCFC-22 production should be based on the local or international price of HCFC-22

24. In 2018, FIASA was able to charge local consumers a price for HCFC-22 that was approximately twice the international market price. Information provided at the 85th meeting indicates that the enterprise further increased its price of HCFC-22, reaching a factor of three higher than the international market price in 2019; and further increasing its price in January 2020. The Secretariat considered a scenario based on that increased price, which was a key determinant of whether, under that scenario, the enterprise was profitable, and the extent of those profits; at international market prices, the enterprise would not be financially viable.

25. The Executive Committee may wish to provide guidance on the extent to which the profitability of HCFC-22 production should be based on the local or the international market price of HCFC-22.

III Policy issues arising in the project in Mexico

Eligibility of HFC-23 by-product associated with HCFC-22 exported to a non-Article 5 country

26. At its 15th meeting, the Executive Committee endorsed guidelines to apply in projects which benefit enterprises that export part of their production to non-Article 5 countries.⁷ In line with those guidelines, HCFCs that were exported to non-Article 5 countries were deducted when determining the funding compensation as those exports were not considered eligible.

27. If the guidelines endorsed at the 15th meeting were to be applied to the project at Quimobásicos, the cost of the project would be reduced by 49 per cent, noting that the enterprise's average 2017-2019 exports⁸ to a non-Article 5 country was 59 per cent.⁹ The Government of Mexico considers that those guidelines are applicable to conversion projects; in the case of the project at Quimobásicos, the substance exported is HCFC-22, not HFC-23, which is the substance that needs to be controlled under the Kigali Amendment and would be emitted in Mexico. Accordingly, the Government of Mexico does not consider the guidelines applicable to projects related to the control of HFC-23 by-product emissions.

28. HFC-23 by-product control obligations are new and different from those previously considered by the Executive Committee. HFC-23 by-product will be generated where the HCFC-22 production facility is located, and, unless controlled, will be emitted there, irrespective of whether the HCFC-22 produced was exported to a non-Article 5 country.

29. The Executive Committee may wish to provide guidance on whether or not to apply the guidelines on funding enterprises that export part of their production to non-Article 5 countries endorsed at the 15th meeting, to projects in which the beneficiary enterprise exports HCFC-22 to a non-Article 5 country.

⁷ Paragraphs 146 and 147 of document UNEP/OzL.Pro/ExCom/15/45.

⁸ "The average over the three years prior to submission of the project shall be used to determine production and exports to non-Article 5 countries."

⁹ "Where exports to non-Article 5 countries exceed 10 per cent of production but do not exceed 70 per cent, there shall be a reduction equivalent to the percentage of total production represented by such exports less 10 per cent."

Eligibility of HFC-23 by-product associated with HCFC-22 production for feedstock use

30. The Parties to the Montreal Protocol had determined that production (and consumption) of controlled substances for feedstock uses should be excluded from control measures, based on the understanding that the controlled substance would be transformed during the manufacture of other chemicals and, therefore, would result in insignificant emissions into the atmosphere.

31. HFC-23 by-product control measures were intended to provide climate benefits irrespective of whether the HCFC-22 production that generated the HFC-23 by-product is used for controlled or feedstock uses.

32. The Executive Committee may wish to confirm that the eligibility of HFC-23 by-product controls would be independent of whether the production of HCFC-22 is for controlled or for feedstock uses.

RECOMMENDATION

33. The Executive Committee may wish to:

- (a) Note the key aspects related to HFC-23 by-product control technologies (decisions 83/67(d), 84/90 and 84/91) contained in document UNEP/OzL.Pro/ExCom/85/63;
- (b) Provide guidance on the following issues related to HFC-23 by-product control projects:
 - (i) Whether to seek guidance from the Parties to the Montreal Protocol on what constituted compliance with paragraph 6 of Article 2J of the Montreal Protocol, in particular in relation to the term “destroyed to the extent practicable;”
 - (ii) Whether the level of the production of HCFC-22 and the associated HFC-23 by-product emissions should be calculated on the basis of either the year, or an average of the three years, immediately preceding project preparation, in line with the decision adopted at the 16th meeting, or to use another method;
 - (iii) Whether or not to apply the guidelines endorsed by the Executive Committee at its 15th meeting to projects in which the beneficiary enterprise exports HCFC-22 to a non-Article 5 country;
 - (iv) The extent to which the profitability of HCFC-22 production should be based on the local or the international market price of HCFC-22; and
 - (v) The duration of the incremental operating costs and/or whether to develop guidelines to determine recurring or operating costs to HFC-23 by-product control projects;
- (c) To consider the level of agency support costs for HFC-23 by-product control:
 - (i) For projects that control HFC-23 through destruction;
 - (ii) For projects that control HFC-23 through closure of HCFC-22 production facilities; and
 - (iii) Whether the costs of annual independent verification on the amounts of HFC-23 by-product generated, and amounts of HFC-23 by-product destroyed to the extent practicable using technology approved by the Parties to the Montreal Protocol, if

applicable, should be included under agency support costs or in the project costs;

- (d) Confirm that HFC-23 by-product controls would be eligible independent of whether the HCFC-22 production that generated the HFC-23 is for controlled or for feedstock uses.
