

# United Nations Environment Programme

Distr. GENERAL

UNEP/OzL.Pro/ExCom/87/54 8 June 2021

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Eighty-seventh Meeting Montreal, 28 June - 2 July 2021<sup>1</sup>

## KEY ASPECTS RELATED TO HFC-23 BY-PRODUCT CONTROL TECHNOLOGIES: MEXICO (DECISION 86/96)

## Background

1. At its 84<sup>th</sup> meeting, the Executive Committee considered project proposal options to control and phase out HFC-23 emissions at Quimobásicos (an enterprise producing HCFC-22 in Mexico), at a total cost of US \$9,669,876, plus agency support costs of US \$676,891 for UNIDO,<sup>2</sup> as originally submitted, in line with decision 83/67. Subsequent to a discussion, the Executive Committee decided to defer consideration of the project to the 85<sup>th</sup> meeting (decision 84/91). In line with the intersessional approval process established for the 85<sup>th</sup> meeting, the project proposal was deferred to the 86<sup>th</sup> meeting.<sup>3</sup>

2. At its 86<sup>th</sup> meeting, the Executive Committee considered the project proposal options to control and phase out HFC-23 emissions at Quimobásicos. Subsequent to a discussion during the online formal meeting, followed by a discussion in a contact group (through virtual meetings), the Executive Committee decided (decision 86/96):

- (a) To note the project proposal options to control and phase out HFC-23 by-product emissions at Quimobásicos, contained in document UNEP/OzL.Pro/ExCom/86/96, Key aspects related to HFC-23 by-product control technologies: Mexico (decision 84/91);
- (b) To approve, in principle, US \$3,833,384, plus agency support costs of US \$268,337 for

<sup>&</sup>lt;sup>1</sup> Online meetings and an intersessional approval process will be held in June and July 2021 due to coronavirus disease (COVID-19).

<sup>&</sup>lt;sup>2</sup> UNEP/OzL.Pro/ExCom/84/72.

<sup>&</sup>lt;sup>3</sup> In light of the COVID-19 pandemic, the Executive Committee agreed to postpone its 85<sup>th</sup> meeting, originally scheduled from 25 to 29 May 2020, and to hold it back-to-back with the 86<sup>th</sup> meeting in November 2020. In order to ensure continuity of compliance-related activities in Article 5 countries, and to reduce its workload when convened, the Executive Committee decided to implement an intersessional approval process for projects and activities that were to be submitted to the 85<sup>th</sup> meeting; agenda items that were not considered intersessionally would be included in the agenda of the 86<sup>th</sup> meeting. Given the evolution of the pandemic, the Executive Committee further deferred both meetings to March 2021.

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.

UNIDO, to enable the Government of Mexico to comply with the HFC-23 by-product emission control obligations under the Kigali Amendment to the Montreal Protocol, on the understanding that:

- (i) The Government of Mexico would ensure that, by 1 January 2022 and thereafter, emissions of HFC-23 by-product from HCFC-22 production lines were destroyed in compliance with the Montreal Protocol, such that emissions for both lines were at or below 0.1 kg of HFC-23 per 100 kg of HCFC-22 produced;
- (ii) The Government of Mexico had the flexibility to use the funding approved in principle in sub-paragraph (b) above to refurbish either of the two, or both, plasma-arc destruction units installed at Quimobásicos, as described in document UNEP/OzL.Pro/ExCom/85/65, on the understanding that any additional funding required would be covered by Quimobásicos;
- (iii) A maximum amount of US \$2,995,047, out of the total funding approved, was associated with incremental operating costs (IOCs) and would be divided into annual tranches to be provided to Mexico upon verification of the quantity of HFC-23 by-product destroyed;
- (iv) The IOCs in each annual tranche would be calculated by multiplying the number of kilogrammes of HFC-23 destroyed by US \$3.28/kg;
- (v) The project would be completed by 1 January 2031;
- (vi) The Government of Mexico committed to ensuring that there would be no additional funding from other sources, including HFC-23 credits or offsets, for the control of HFC-23 by-product emissions from the production lines concerned, during or after completion of the project;
- (c) To note:
  - The commitment by Quimobásicos to suspend production of HCFC-22 for up to two weeks to allow for the repair of the plasma-arc destruction unit if the Government of Mexico were to choose Option 1A in document UNEP/OzL.Pro/ExCom/85/65;
  - (ii) The commitment by the Government of Mexico to ensure that emissions of HFC-23 by-product from HCFC-22 production by Quimobásicos would continue to be controlled and verified in the same manner after the completion of the project, including by means of policies and legislation;
  - (iii) That the funding approved in principle specified in sub-paragraph (b) above was the total funding that would be available to the Government of Mexico from the Multilateral Fund for the control of HFC-23 by-product emissions;
  - (iv) The funding provided reflected reductions for non-Article 5 ownership and exports to non-Article 5 Parties;
  - The costs agreed for the project recognized the special circumstances of the project in Mexico and did not set a precedent for any other projects related to the control of HFC-23 by-product emissions;
- (d) To request the Secretariat, in cooperation with UNIDO, to prepare a draft Agreement

between the Government of Mexico and the Executive Committee for the control of HFC-23 by-product emissions for consideration at the 87<sup>th</sup> meeting, in light of the guidance provided by the Executive Committee at the 86<sup>th</sup> meeting;

- (e) To invite the Government of Mexico, after the completion of the project, to consider requesting additional funding, for independent verification of the HFC-23 by-product generated, destroyed, sold, stored and emitted, under the subsequent stage of its HCFC phase-out management plan, until approval of the HFC phase-down plan for the country, at which time verification would continue under that plan; and
- (f) To approve the first tranche of the project to control and phase out HFC-23 by-product emissions at Quimobásicos, Mexico, and the corresponding 2021–2022 implementation plan, in the amount of US \$483,058, plus agency support costs of US \$33,814 for UNIDO.

#### Draft Agreement for the control of HFC-23 by-product emissions

3. In line with decision 86/96(d), and in cooperation with UNIDO, the Secretariat has prepared the draft Agreement for the destruction of emissions of HFC-23 generated in the production of HCFC-22 at Quimobásicos contained in Annex I to the present document.

#### Incentivizing process optimization to reduce the HFC-23 by-product generation rate

4. In preparing the draft Agreement, the Secretariat identified one issue for which it sought the Executive Committee's guidance: whether to include in the draft Agreement provisions intended to incentivize process optimization to reduce the HFC-23 by-product generation rate, as explained below.

5. The agreed costs of the project proposal were based on the amount of HFC-23 by-product generated from the total production of 6,454 mt of HCFC-22 from 2022 to 2030. The production processes in place and the optimized operation of the enterprise have resulted in an HFC-23 by-product generation rate of 1.57 per cent of the total production of HCFC-22.<sup>4</sup> On this basis, the IOCs of the project were agreed based on an annual<sup>5</sup> destruction of 101.54 mt of HFC-23, noting that the IOCs would be adjusted according to the verified quantity of HFC-23 by-product destroyed (at an agreed cost of US \$3.28 per kilogramme of HFC-23 destroyed), in line with decision 86/96(b)(iii) and (iv).

6. During its discussions on key aspects related to HFC-23 by-product control technologies, Executive Committee members expressed a wish to avoid creating perverse incentives.<sup>6</sup> In this regard, the Secretariat noted that sub-paragraphs (b)(iii) and (iv) of decision 86/96 could have an inadvertent consequence in the following possible scenarios:

- (a) If Quimobásicos were to produce less than 6,454 mt of HCFC-22 in a given year but inadvertently increase its generation of HFC-23 by-product, no reduction in funding would be assessed;
- (b) If Quimobásicos were to produce more than 6,454 mt of HCFC-22 in a given year and undertake measures to optimize its production process to reduce its generation of HFC-23, a reduction in funding would be assessed; and
- (c) If Quimobásicos were to produce less than 6,454 mt of HCFC-22 in a given year and

<sup>&</sup>lt;sup>4</sup> As noted in Table 6 and footnote 5 of document UNEP/OzL.Pro/ExCom/85/65, Quimobásicos' HFC-23 waste stream generation rate is 1.851 per cent; that waste stream consists of 85 per cent HFC-23, and 15 per cent non-condensables and HCFC-22, resulting in a (pure) HFC-23 by-product generation rate of 1.571 per cent.

<sup>&</sup>lt;sup>5</sup> Costs were calculated based on destruction commencing on 1 January 2022.

<sup>&</sup>lt;sup>6</sup> Paragraph 316 of document UNEP/OzL.Pro/ExCom/82/72.

optimize its production process to reduce its generation of HFC-23 by-product, an additional reduction in funding would be assessed beyond the reduction due to the lower production of HCFC-22.

7. In order to incentivize process optimization in the three scenarios above, the Secretariat proposed that the approved funding in any given year would be reduced from that specified in Appendix 1-A of the draft Agreement for that year according to Table 1:

Table 1. Reduction in annual funding (US \$) based on production of HCFC-22 and HFC-23 by-product generation rate in that year

	$x_{w,i} \ge 1.57\%$	$x_{w,i} < 1.57\%$				
$P_{HCFC-22,i} \leq 6,454$	$IOC_{max,i} - \min(1000 \times P_{HCFC-22,i} \times 0.0157, D_{HFC-23,i}) \times 3.28$	$IOC_{max,i} - \max(1000 \times P_{HCFC-22,i} \times 0.0157, D_{HFC-23,i}) \times 3.28$				
$P_{HCFC-22,i} > 6,454$	$IOC_{max,i} - \min(1000 \times 6,454 \times 0.0157, D_{HFC-23,i}) \times 3.28$	0				

Where:

 $P_{HCFC-22,i} = \text{production of HCFC-22 in year } i \text{ (mt)}$   $Q_{HFC-23,i} = \text{quantity of HFC-23 by-product generated in year } i \text{ (kg)}$   $D_{HFC-23,i} = \text{quantity of HFC-23 by-product destroyed in year } i \text{ (kg)}$   $x_{w,i} = \frac{Q_{HFC-23,i}}{P_{HCFC-22,i}} (\%)$ 

 $IOC_{max,i}$  = the agreed maximum IOCs in year  $i = 6,454 \times 0.0157 \times 3.28 = US \$332,355$ 

8. The Government of Mexico required additional time to consider the Secretariat's proposal. In particular, the unprecedented situation due to the COVID-19 pandemic led to dramatic changes in market demand;<sup>7</sup> uncertainties in planning its HCFC-22 production to address that rapidly changing market demand resulted in repeated start-up and shut-down of Quimobásicos' HCFC-22 production, which is expected to increase HFC-23 by-product generation relative to continuous and stable HCFC-22 production. Accordingly, the Government required additional time to analyze the 2020 data to better understand the implications of the Secretariat's proposal; the relevant paragraph (paragraph 6) in the draft Agreement contained in Annex I is therefore presented in square brackets.

9. The Secretariat recalled the data provided by the enterprise at the 84<sup>th</sup> meeting indicating that the HFC-23 by-product generation rate depends *inter alia* on the number of shut-downs and start-ups (with more frequent stops tending to increase the quantity of HFC-23 by-product generated), production volume (with a lower production volume tending to reduce the quantity of HFC-23 by-product generated), and other factors. As the extended intersessional approval process for the 86<sup>th</sup> meeting only concluded on 7 May 2021, limited time was available for UNIDO and the Secretariat to discuss how provisions to incentivize process optimization might be included in the draft Agreement. Accordingly, the Secretariat will update the Executive Committee on the outcomes of its further discussions with UNIDO on the matter.

## Secretariat's recommendation

10. The Executive Committee may wish to consider approving the draft Agreement between the Government of Mexico and the Executive Committee for the destruction of emissions of HFC-23 generated in the production of HCFC-22 at Quimobásicos contained in Annex I to document UNEP/OzL.Pro/ExCom/87/54, in light of any additional information provided during the 87<sup>th</sup> meeting on the outcomes of further discussions between UNIDO and the Secretariat on incentivizing process optimization to reduce the HFC-23 by-product generation rate.

<sup>&</sup>lt;sup>7</sup> Quimobásicos' 2020 HCFC-22 production was 74 per cent below the 2017-2019 average production.

## Annex I

## DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF MEXICO AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE DESTRUCTION OF EMISSIONS OF HFC-23 GENERATED IN THE PRODUCTION OF HCFC-22 IN QUIMOBASICOS

#### Purpose

1. This Agreement represents the understanding of the Government of Mexico (the "Country") and the Executive Committee to ensure that by 1 January 2022 and thereafter, emissions of Annex F, Group II substance ("HFC-23") generated in each HCFC-22 production line at Quimobásicos were destroyed in compliance with the Montreal Protocol.

2. The Country agrees to meet the annual emission limits of up to a maximum of 0.1 kilogramme of HFC-23 per 100 kilogrammes of HCFC-22 produced by 1 January 2022, until the completion of the project on 1 January 2031, as set out in row 1.1 of Appendix 1-A ("The Targets, and Funding"), and commits that annual emissions will continue to be controlled and verified in the same manner after the completion of the project, including by means of policies and legislation.

#### Funding

3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 2.1 of Appendix 1-A to the Country following any reductions as specified in paragraph 6. The Executive Committee will, in principle, provide this funding at the first Executive Committee meeting of the years specified in Appendix 1-A.

4. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3:

- (a) The Country is precluded from applying for or receiving further funding from the Multilateral Fund in respect to the control of emissions of Annex F, Group II, substances generated in each production facility that manufactures Annex C, Group I, or Annex F substances;
- (b) In accordance with sub-paragraph 7(b), the Country will accept independent verification of the achievement of the annual emission control limits of HFC-23 as set out in row 1.1 of Appendix 1-A. The aforementioned verification will be commissioned by the Lead implementing agency;
- (c) The cost for the destruction of every kilogramme of HFC-23 by-product above the maximum allowable kilogrammes eligible for funding of 913,876 kilogrammes under this Agreement, throughout the duration of the project, will be covered by Quimobásicos, under the supervision of the Country;
- (d) Any remaining funds held by the Lead implementing agency or the Country will be returned to the Multilateral Fund upon financial completion of the last tranche under this Agreement; and
- (e) There will be no additional funding from other sources outside the Multilateral Fund, including HFC-23 credits or offsets, for the control of HFC-23 by-product emissions from the HCFC-22 production lines concerned, during or after completion of the project.

#### UNEP/OzL.Pro/ExCom/87/54 Annex I

5. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decisions that may affect the funding provided by the Multilateral Fund of any other projects or any other related activities in the Country.

6. [The Country accepts that the funding specified in row 1.1 of Appendix 1-A in 2023 and in any given year thereafter will be reduced according to the following table:

	$x_{w,i} \ge 1.57\%$	$x_{w,i} < 1.57\%$				
$P_{HCFC-22,i} \leq 6,454$	$IOC_{max,i} - \min(1000 \times P_{HCFC-22,i} \times 0.0157, D_{HFC-23,i}) \times 3.28$	$IOC_{max,i} - \max(1000 \times P_{HCFC-22,i} \times 0.0157, D_{HFC-23,i}) \times 3.28$				
<i>PHCFC-22,i</i> > 6,454	$IOC_{max,i} - \min(1000 \times 6,454 \times 0.0157, D_{HFC-23,i}) \times 3.28$	0				

Where:

 $\begin{aligned} P_{HCFC-22,i} &= \text{production of HCFC-22 in year } i \text{ (mt)} \\ Q_{HFC-23,i} &= \text{quantity of HFC-23 by-product generated in year } i \text{ (kg)} \\ D_{HFC-23,i} &= \text{quantity of HFC-23 by-product destroyed in year } i \text{ (kg)} \\ x_{w,i} &= \frac{Q_{HFC-23,i}}{P_{HCFC-22,i}} (\%) \\ IOC_{max,i} &= \text{the agreed maximum incremental operating costs in year } i = 6,454 \times 0.0157 \times 3.28 = US \$332,355] \end{aligned}$ 

#### Conditions for funding release

7. The Executive Committee will only provide the Funding when the Country satisfies the following conditions at least 10 weeks in advance of the first Executive Committee meeting of the years specified in Appendix 1-A:

- (a) That the Country has emitted up to a maximum of 0.1 kilogramme of HFC-23 per 100 kilogrammes of HCFC-22 produced for all relevant years. Relevant years are all years since the year in which this Agreement was approved except for 2021;
- (b) That the meeting of the Targets referred to in sub-paragraph (a) has been independently verified for all relevant years, by a verifier who will be commissioned by the Lead implementing agency;
- (c) That the Country has submitted a Tranche Implementation Report in the form of Appendix 2-A ("Format of Tranche Implementation Reports and Plans") for all the activities required for the destruction of HFC-23 by-product from the HCFC-22 production lines concerned, and that it has achieved a significant level of implementation of activities initiated with previously approved tranches; and
- (d) That the Country has submitted a Tranche Implementation Plan in the form of Appendix 2-A covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

## Flexibility in the reallocation of funds

8. The Country agrees to document in advance either in a Tranche Implementation Plan, or as a revision to an existing Tranche Implementation Plan to be submitted at least 10 weeks in advance to any meeting of the Executive Committee, for its approval:

- (a) Reallocations categorized as major changes related to *inter alia*:
  - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
  - (ii) Changes which would modify any clause of this Agreement;
  - (iii) Changes in the annual levels of funding allocated for the different tranches;
  - (iv) Provision of funding for activities not included in the current approved Tranche Implementation Plan, or removal of an activity in the Tranche Implementation Plan, with a cost greater than 20 per cent of the total cost of the last approved tranche; and
  - (v) Using a different technology for the destruction of HFC-23 by-product that has already been selected in the project proposal, on the understanding that any submission for such a request would identify the associated incremental costs, confirmation that the annual emission limits of up to a maximum of 0.1 kilogramme of HFC-23 per 100 kilogrammes of HCFC-22 produced will be maintained, and that potential savings related to the change of technology will decrease the overall funding level under this Agreement; and
- (b) Reallocations not categorized as major changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the subsequent Tranche Implementation Report.

#### Flexibility in the date of commencement of destruction of HFC-23

9. Notwithstanding paragraphs 1 and 2, and due to the extraordinary circumstances brought about by the COVID-19 pandemic, the Country will have flexibility to commence destruction of HFC-23 by 1 May 2022, on the understanding that:

- (a) The funding for the 2023 tranche will be reduced by US \$3.28 for every kilogramme of HFC-23 that was not destroyed between 1 January 2022 and 1 May 2022; and
- (b) The Country would be exempt from any penalty for emissions of HFC-23 generated in the production of HCFC-22 between 1 January 2022 and 1 May 2022.

#### Lead implementing agency

10. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNIDO has agreed to be the Lead implementing agency (the "Lead IA"). The role of the Lead IA is contained in Appendix 4-A. The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in rows 2.1 of Appendix 1-A.

## Monitoring

11. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 3-A ("Monitoring Institutions and Roles") will monitor and report on implementation of the activities in the previous Tranche Implementation Plans in accordance with their roles and responsibilities set out in the same appendix. This monitoring will also be subject to independent verification as described in sub-paragraph 7(b) above.

12. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead IA taking part in this Agreement.

## Non-compliance with the Agreement

13. Should the Country, for any reason, not meet the Targets for the destruction of HFC-23 generated in the production of HCFC-22 set out in row 1.1 of Appendix 1-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Targets, and Funding. At the discretion of the Executive Committee, funding will be reinstated according to a revised schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Targets, and Funding. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 5-A ("Reductions in Funding for Failure to Comply") in respect of each kilogramme emitted of HFC-23 generated in the production of HCFC-22 beyond the target specified in row 1.1 in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once decisions are taken, the specific case of non-compliance with this Agreement will not be an impediment for the provision of funding for future tranches as per paragraph 7 above.

14. The Country will comply with any reasonable request of the Executive Committee and the Lead IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA with access to the information necessary to verify compliance with this Agreement.

#### Date of completion

15. This Agreement will be concluded on 1 January 2031. Should at that time there still be activities that are outstanding, and which were foreseen in the last Tranche Implementation Plan, the completion of the Plan will be delayed until the end of the year following the implementation of the remaining activities upon approval by the Executive Committee. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(c), and 1(d) of Appendix 2-A will continue until the time of the completion of the Plan unless otherwise specified by the Executive Committee.

## Validity

16. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

17. This Agreement may be modified or terminated only by mutual written agreement of the Country and the Executive Committee.

## APPENDICES

## **APPENDIX 1-A: THE TARGETS, AND FUNDING**

Row	Particulars	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
	Maximum allowable emissions of Annex F,											
1.1	Group II substances per 100 kg of Annex C,	n/a	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	n/a
	Group I substances produced (kg)											
2.1	Lead IA (UNIDO) agreed funding (US \$)*	483,058	-	492,160	374,381	473,131	433,131	414,381	374,381	414,381	374,380	3,833,384
2.2	Support costs for Lead IA (US \$)	33,814	-	34,451	26,207	33,119	30,319	29,007	26,207	29,007	26,206	268,337
3.1	Total agreed funding (US \$)	483,058	-	492,160	374,381	473,131	433,131	414,381	374,381	414,381	374,380	3,833,384
3.2	Total support costs (US \$)	33,814	-	34,451	26,207	33,119	30,319	29,007	26,207	29,007	26,206	268,337
3.3	Total agreed costs (US \$)	516,872	-	526,611	400,588	506,250	463,450	443,388	400,588	443,388	400,586	4,101,721

\* The agreed funding in any given year will be reduced in line with paragraph 6 of this Agreement.

## APPENDIX 2-A: FORMAT OF TRANCHE IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Tranche Implementation Report and Plans for each tranche request will consist of the following parts:

- (a) A narrative report, with data provided by tranche, describing the progress achieved since the previous report, reflecting the situation of the Country in regard to destruction of HFC-23 by-product from the production lines of HCFC-22 concerned. The report should include *inter alia* the amounts of HCFC-22 produced, the amounts of HFC-23 by-product generated in the production lines concerned, and the amounts of HFC-23 that were destroyed, stored, sold, and/or vented, and the destruction technology used, to allow the Secretariat to assess the results achieved in terms of amounts of HFC-23 that had been destroyed and emitted. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information on and justification for any changes vis-à-vis the previously submitted Tranche Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, or other changes;
- (b) An independent verification report providing *inter alia* the amounts of HCFC-22 produced, the amounts of HFC-23 by-product generated, and the amounts of HFC-23 that were destroyed, stored, sold, and/or vented, provided together with each tranche request;
- (c) A written description of the activities to be undertaken during the period covered by the requested tranche, highlighting implementation milestones, the time of completion and the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year; and
- (d) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(c).

#### **APPENDIX 3-A: MONITORING INSTITUTIONS AND ROLES**

1. The Ministry of the Environment and Natural Resources (SEMARNAT) is in charge of the protection, restoration and conservation of all ecosystems, natural resources and environmental services in order to promote a sustainable development. It is also responsible for carrying out national policies regarding climate change and ozone layer protection. The National Ozone Unit (under SEMARNAT) monitors the production of HCFC-22 and emissions of HFC-23 generated during that production through regional teams. Inspections at HCFC-22 production lines are foreseen to ensure that control of HFC-23 continues after project completion.

2. The Country has offered and intends to offer continuity of activities and endorsement for the project over subsequent years as specified in the institutional support component and the list of activities of the institutional strengthening project. This will guarantee the success of any activity approved for Mexico.

3. Close monitoring of all activities and coordination between stakeholders is key to reach compliance. There will be regular coordination meetings with industry stakeholders, Government stakeholders (i.e., Ministries of Economy, Energy and Health), various industrial associations, and all sectors involved, in order to enact the necessary agreements and measures to carry out the investment and non-investment activities on time and in a coordinated manner. The implementation process and the achievement of the required destruction of HFC-23 will be monitored through site visits at enterprise level.

4. Yearly monitoring will be carried out. Verification site visits will be undertaken by independent international experts.

## APPENDIX 4-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

- 1. The Lead IA will be responsible for a range of activities, including at least the following:
  - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements;
  - (b) Assisting the Country in preparation of the Tranche Implementation Reports and Plans as per Appendix 2-A;
  - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated tranche activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 2-A;
  - (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future Tranche Implementation Plans consistent with sub-paragraphs 1(a) and 1(c) of Appendix 2-A;
  - (e) Fulfilling the reporting requirements for the Tranche Implementation Reports and Plans and the overall plan as specified in Appendix 2-A for submission to the Executive Committee;
  - (f) Ensuring that appropriate independent technical experts carry out the technical reviews;
  - (g) Carrying out required supervision missions;
  - (h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
  - (i) In case of reductions in funding for failure to comply in accordance with paragraph 13, to determine, in consultation with the Country, the allocation of the reductions to the different budget items;
  - (j) Ensuring that disbursements made to the Country are based on the use of the indicators;
  - (k) Providing assistance with policy, management and technical support when required; and
  - (l) Timely releasing funds to the Country/participating enterprise for completing the activities related to the project.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the destruction of HFC-23 generated in each HCFC-22 production line as per sub-paragraph 7(b) and sub-paragraph 1(b) of Appendix 2-A.

#### **APPENDIX 5-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY**

1. In accordance with paragraph 13, the amount of funding provided may be reduced by US \$9.84 per kilogramme of emission of HFC-23 generated in each HCFC-22 production line beyond the level defined in row 1.1 of Appendix 1-A for each year in which the target specified in row 1.1 of Appendix 1-A has not

been met, on the understanding that the maximum funding reduction would not exceed the funding level of the tranche being requested. Additional measures might be considered in cases where non-compliance extends for two consecutive years.