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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Eighty-sixth Meeting  
Montreal, 2-6 November 2020  
Postponed to 8-12 March 2021<sup>1</sup>

**PROJECT PROPOSAL: CUBA**

This document consists of the comments and recommendation of the Secretariat on the following project proposal:

Phase-out

- HCFC phase-out management plan (stage II, first tranche) UNDP

<sup>1</sup> Due to coronavirus disease (COVID-19)

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.

## PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

## CUBA

| (I) PROJECT TITLE              | AGENCY |
|--------------------------------|--------|
| HCFC phase-out plan (stage II) | UNDP   |

| (II) LATEST ARTICLE 7 DATA (Annex C Group I) | Year: 2019 | 6.25 (ODP tonnes) |
|----------------------------------------------|------------|-------------------|
|----------------------------------------------|------------|-------------------|

| (III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes) |         |      |               |               |           |         |               | Year: 2019 |                          |
|-----------------------------------------------------------|---------|------|---------------|---------------|-----------|---------|---------------|------------|--------------------------|
| Chemical                                                  | Aerosol | Foam | Fire-fighting | Refrigeration |           | Solvent | Process agent | Lab use    | Total sector consumption |
|                                                           |         |      |               | Manufacturing | Servicing |         |               |            |                          |
| HCFC-22                                                   |         |      |               |               | 6.23      |         |               |            | 6.23                     |
| HCFC-124                                                  |         |      |               |               | 0.01      |         |               |            | 0.01                     |
| HCFC-142b                                                 |         |      |               |               | 0.01      |         |               |            | 0.01                     |

| (IV) CONSUMPTION DATA (ODP tonnes)            |  |       |                                                          |
|-----------------------------------------------|--|-------|----------------------------------------------------------|
| 2009 - 2010 baseline:                         |  | 16.88 | Starting point for sustained aggregate reductions: 30.23 |
| CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes) |  |       |                                                          |
| Already approved:                             |  | 19.26 | Remaining: 10.97                                         |

| (V) BUSINESS PLAN |                            | 2020    | 2021 | 2022    | Total   |
|-------------------|----------------------------|---------|------|---------|---------|
| UNDP              | ODS phase-out (ODP tonnes) | 2.20    | 0.0  | 3.30    | 5.50    |
|                   | Funding (US \$)            | 225,560 | 0    | 333,840 | 559,400 |

| (VI) PROJECT DATA                                  |      |               | 2020    | 2021-2022 | 2023    | 2024  | 2025    | 2026<br>2027 | 2028    | 2029 | 2030    | Total     |
|----------------------------------------------------|------|---------------|---------|-----------|---------|-------|---------|--------------|---------|------|---------|-----------|
| Montreal Protocol consumption limits               |      |               | 10.97   | 10.97     | 10.97   | 10.97 | 5.49    | 5.49         | 5.49    | 5.49 | 0       | n/a       |
| Maximum allowable consumption (ODP tonnes)         |      |               | 10.97   | 10.97     | 10.97   | 10.97 | 5.49    | 5.49         | 5.49    | 5.49 | 0       | n/a       |
| Projects costs requested in principle (US \$)      | UNDP | Project costs | 260,000 | 0         | 260,000 | 0     | 208,000 | 0            | 208,000 | 0    | 104,000 | 1,040,000 |
|                                                    |      | Support costs | 18,200  | 0         | 18,200  | 0     | 14,560  | 0            | 14,560  | 0    | 7,280   | 72,800    |
| Total project costs requested in principle (US \$) |      |               | 260,000 | 0         | 260,000 | 0     | 208,000 | 0            | 208,000 | 0    | 104,000 | 1,040,000 |
| Total support costs requested in principle (US \$) |      |               | 18,200  | 0         | 18,200  | 0     | 14,560  | 0            | 14,560  | 0    | 7,280   | 72,800    |
| Total funds requested in principle (US \$)         |      |               | 278,200 | 0         | 278,200 | 0     | 222,560 | 0            | 222,560 | 0    | 111,280 | 1,112,800 |

| (VII) Request for approval of funding for the first tranche (2020) |                         |                       |
|--------------------------------------------------------------------|-------------------------|-----------------------|
| Agency                                                             | Funds requested (US \$) | Support costs (US \$) |
| UNDP                                                               | 260,000                 | 18,200                |
| Total                                                              | 260,000                 | 18,200                |

|                               |                          |
|-------------------------------|--------------------------|
| Secretariat's recommendation: | Individual consideration |
|-------------------------------|--------------------------|

## PROJECT DESCRIPTION

### Background

1. On behalf of the Government of Cuba, UNDP as the designated implementing agency has submitted a request for stage II of the HCFC phase-out management plan (HPMP), at the amount of US \$1,040,000, plus agency support costs of US \$72,800, as originally submitted.<sup>2</sup> The implementation of stage II of the HPMP will phase out the remaining consumption of HCFCs by 2030.

2. The first tranche of stage II of the HPMP being requested at this meeting amounts to US \$312,000, plus agency support costs of US \$21,840 for UNDP, as originally submitted.

### Status of implementation of stage I of the HPMP

3. Stage I of the HPMP was approved at the 65<sup>th</sup> meeting<sup>3</sup> to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$1,747,527, plus agency support costs, to phase out 19.26 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing (US \$560,000) and the foam manufacturing (US \$1,187,527) sectors. Stage I of the HPMP will be completed by December 2021.

### HCFC consumption

4. The Government of Cuba reported a consumption of 6.25 ODP tonnes of HCFC in 2019, which is 63 per cent below the HCFC baseline for compliance. The 2015-2019 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in Cuba (2015-2019 Article 7 data)**

| HCFC                                       | 2015          | 2016          | 2017          | 2018          | 2019          | Baseline      |
|--------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>Metric tonnes (mt)</b>                  |               |               |               |               |               |               |
| HCFC-22                                    | 239.49        | 229.18        | 173.82        | 177.10        | 113.32        | 259.05        |
| HCFC-124                                   | 0.0           | 0.0           | 0.0           | 0.0           | 0.22          | 0.60          |
| HCFC-141b                                  | 0.0           | 0.0           | 0.0           | 0.0           | 0.0           | 23.61         |
| HCFC-142b                                  | 0.0           | 0.0           | 0.0           | 0.0           | 0.13          | 0.36          |
| <b>Total (mt)</b>                          | <b>239.49</b> | <b>229.18</b> | <b>173.82</b> | <b>177.10</b> | <b>113.67</b> | <b>283.62</b> |
| HCFC-141b in imported pre-blended polyols* | 2.00          | 0.0           | 0.0           | 0.0           | 0.0           | **121.33      |
| <b>ODP tonnes</b>                          |               |               |               |               |               |               |
| HCFC-22                                    | 13.17         | 12.60         | 9.56          | 9.74          | 6.23          | 14.25         |
| HCFC-124                                   | 0.0           | 0.0           | 0.0           | 0.0           | 0.01          | 0.01          |
| HCFC-141b                                  | 0.0           | 0.0           | 0.0           | 0.0           | 0.0           | 2.60          |
| HCFC-142b                                  | 0.0           | 0.0           | 0.0           | 0.0           | 0.01          | 0.02          |
| <b>Total (ODP tonnes)</b>                  | <b>13.17</b>  | <b>12.60</b>  | <b>9.56</b>   | <b>9.74</b>   | <b>6.25</b>   | <b>16.88</b>  |
| HCFC-141b in imported pre-blended polyols* | 0.22          | 0.0           | 0.0           | 0.0           | 0.0           | **13.35       |

\*Country programme (CP) data.

\*\*Average consumption between 2007 and 2009.

5. Consumption of HCFC-22 has been decreasing during the last five years in part due to the implementation of the licensing and quota system, the activities in the refrigeration servicing sector included in the HPMP and the introduction of non-HCFC-based equipment, and also due to an economic slowdown with limited availability and access to consumer goods, including refrigerant gases, especially in 2019.

<sup>2</sup> As per the letter of 14 July 2020 from the Ministry of Science, Technology and Environment of Cuba to UNDP.

<sup>3</sup> Decision 65/24. Preparatory document: UNEP/OzL.Pro/ExCom/65/29.

6. Small amounts of HCFC-124 and HCFC-142b consumed in 2019 were components of the refrigerant blend R-409A as a replacement of CFC-12. Imports of HCFC-141b both in bulk and contained in pre-blended polyols for the manufacture of polyurethane (PU) foams have been banned since 1 January 2016.

#### *CP implementation report*

7. The Government of Cuba reported HCFC sector consumption data under the 2019 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

#### Status of progress and disbursement

#### *ODS policy and regulatory framework*

8. During stage I, the Government of Cuba implemented a national licensing and quota system for controlling HCFC imports, production and exports; established a ban on imports of HCFC-141b in bulk and contained in pre-blended polyols on 1 January 2014 and 1 January 2016, respectively; and established a ban on the import of HCFC-based equipment on 1 January 2015. The Government also provided training to 32 customs officers on the legal framework to control ODS, and included the subject in the instruction that new customs officers receive at the national school of customs training (Escuela Nacional de Formación Aduanera).

9. On 1 January 2020, the Government of Cuba ratified the Kigali Amendment. The national norm on control of HCFCs was updated with actions for the control of HFCs and safety measures in the use of alternative substances.

#### *PU foam sector*

10. Stage I of the HPMP included the conversion of five PU foam enterprises manufacturing panels and insulation foam in commercial refrigeration equipment, with a total consumption of 13.35 ODP tonnes of HCFC-141b contained in imported pre-blended polyols. The three largest enterprises (with an aggregated consumption of 12.65 ODP tonnes of HCFC-141b) converted to cyclopentane. The remaining two small enterprises (Friarc and IDA, with a consumption of 0.70 ODP tonnes) selected water-blown as the alternative technology; however, due to its poor performance, they are temporarily using HFC-365mfc and HFC-227ea.<sup>4</sup> After unsuccessful trials of HFO-based PU systems, the enterprises tested new water-based PU systems with satisfactory initial results.

11. In response to the Executive Committee request through the intersessional approval process (IAP) for the 85<sup>th</sup> meeting to report progress on this issue at the 86<sup>th</sup> meeting, UNDP reported that additional tests with water-based PU systems were completed with satisfactory results and, on this basis, the two enterprises decided to convert to this technology and stopped the temporary use of HFC-365mfc and HFC-227ea. Both enterprises are currently using water-based technology and have secured supply of the PU systems and additives. Consequently, further reporting on the temporary use of high-global-warming potential (GWP) technology by Friarc and IDA is no longer required.

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<sup>4</sup> This issue has been reported at each meeting since the 77<sup>th</sup> meeting; UNDP was requested *inter alia* to continue assisting the Government in securing the supply of low-GWP technology and to report on the status of the use of interim technology at each meeting, until a low-GWP technology had been fully introduced and the enterprises had been converted (decision 77/50(b)), along with a detailed analysis of the incremental capital and operational costs in the event of use of a technology other than that selected when the project was approved and an update from the suppliers on the progress made towards ensuring that the selected technologies, including associated components, were available on a commercial basis in the country (decision 81/10(b)).

### *The RAC manufacturing sector*

12. At the 65<sup>th</sup> meeting, the Government was invited to submit, as part of the HPMP, an investment project to phase out 1.32 ODP tonnes of HCFC-22 used to manufacture RAC equipment by the enterprise Frioclima. However, at the 82<sup>nd</sup> meeting,<sup>5</sup> UNDP reported that Frioclima had converted with its own funds to HFC-134a and that the project to prepare this investment project (US \$50,000, plus agency support costs) had been closed and the funds returned to the Fund at the 82<sup>nd</sup> meeting.

### *Refrigeration servicing sector*

13. During stage I, 14 specialists and engineers were trained as trainers, and 4,604 specialists, technicians and mechanics were trained in good RAC servicing practices; 16 technical institutes were provided with equipment for technical training; 442 small commercial refrigeration equipment units were converted to HFC-134a and 66 refrigeration systems to R-404A during the first two years of the stage. This activity was later refocused to technical assistance for the introduction of alternative refrigerants including the procurement of four R-290-based and seven R-600a-based equipment to train local technicians on the safe use of flammable refrigerants in several applications.

### Level of fund disbursement

14. As of 15 September 2020, of the US \$1,747,527 approved so far, US \$1,638,369 (including US \$42,128 from the US \$56,000 approved for the fifth and final tranche) had been disbursed by UNDP. The balance of US \$109,158 will be disbursed in 2020-2021.

## **Stage II of the HPMP**

### Remaining consumption eligible for funding

15. After deducting 19.26 ODP tonnes of HCFCs associated with stage I of the HPMP, the remaining consumption eligible for funding amounts to 10.97 ODP tonnes of HCFC-22.

### Sector distribution of HCFCs

16. There are approximately 6,100 technicians and 29 technical schools in the refrigeration servicing sector, consuming HCFC-22 to service commercial refrigeration units (display cabinets, freezers, vending machines and cold rooms), industrial refrigeration (cold rooms, chillers and ice factories), refrigerated transport (wagons, containers, ships and trucks), residential and commercial air-conditioning (AC), and chillers, as shown in Table 2. HCFC-22 represents only 22 per cent of all refrigerants used in the servicing sector, while the most commonly used substance is HFC-134a (26 per cent). Other refrigerants used include R-407A (24 per cent), R-410A (15 per cent) and R-407C (13 per cent).

**Table 2. Estimation of demand for HCFC-22 in the RAC servicing sector in Cuba**

| Sector/Applications using HCFC-22 |                    | Equipment inventory | Installed HCFC (mt) | Equipment served each year (%) | Consumption (mt) |
|-----------------------------------|--------------------|---------------------|---------------------|--------------------------------|------------------|
| Commercial refrigeration          | Stand-alone        | 23,528              | 6.46                | 15                             | 0.97             |
|                                   | Condenser unit     | 3,542               | 17.19               | 15                             | 2.58             |
|                                   | Centralised system | 1,046               | 52.30               | 15                             | 7.85             |
| Industrial refrigeration          |                    | 808                 | 50.32               | 15                             | 7.55             |
| Transport refrigeration           |                    | 120                 | 5.61                | 15                             | 0.84             |
| Residential AC                    |                    | 497,858             | 448.07              | 15                             | 67.21            |
| Commercial AC                     |                    | 59,814              | 217.66              | 15                             | 32.65            |
| Chillers                          |                    | 354                 | 23.56               | 15                             | 3.53             |
| Others                            |                    | 3,060               | 6.12                | 15                             | 0.92             |
| <b>Total</b>                      |                    | <b>590,130</b>      | <b>827.29</b>       | <b>15</b>                      | <b>124.09</b>    |

<sup>5</sup> UNEP/OzL.Pro/ExCom/82/46

Phase-out strategy in stage II of the HPMP

17. Stage II of the HPMP for Cuba aims to achieve a 67.5 per cent reduction from its HCFC baseline consumption by 2025 and a 100 per cent reduction by 2030, and will build upon the experience gained during implementation of stage I. The Government of Cuba intends to maintain a maximum annual consumption of 2.5 per cent of the HCFC baseline in the period from 2030 to 2039 to manage the servicing tail.

Proposed activities in stage II of the HPMP

18. Stage II of the HPMP proposes the following activities:

- (a) *Strengthening of policies and legal frameworks to control HCFC consumption:* review, update and enforcement of additional technical norms and regulations to control the trade and use of HCFCs; assessment of the implementation of the quota and licensing system to import HCFCs; and establishment of an electronic link between the national ozone unit (Oficina Tecnica de Ozono – OTOZ) and the customs department's electronic system (US \$45,000);
- (b) *Application of good refrigeration practices in the RAC servicing sector:* training update for 40 trainers and 5,000 technicians on good servicing practices and alternative refrigerants, with emphasis on low-GWP refrigerants; development of a nationwide technician certification process; distribution of tool kits to additional 25 to 30 workshops and technicians (i.e., vacuum pumps, welding kits, precise balance, hoses kits, manometers, and leak detectors for flammable refrigerants); standardization and consolidation of existing databases of importers/distributors of refrigerants and RAC equipment, workshops and refrigeration technicians; and development of awareness materials for importers/distributors of refrigerants and RAC equipment, RAC workshops and refrigeration technicians (US \$225,000);
- (c) *Strengthening of formal education technical institutes:* provision of equipment and tools to the teaching laboratories of seven technical schools (e.g., RAC training equipment, recovery and recycling (R&R) units, cylinders, vacuum pumps, precision scales, manifolds, refrigerant identifiers, hoses, manifolds, welding kits, scales, leak detectors and protection equipment) and formal agreements to incorporate into their curriculum the subjects in the training programmes set out in stages I and II of the HPMP (US \$185,000);
- (d) *Strengthening of the refrigerant R&R network:* procurement of additional sets of equipment and tools (e.g., R&R units, cylinders, vacuum pumps, precision scales, manifolds, refrigerant identifiers and protection equipment) to enable the existing network to continue providing R&R services across the RAC sector; training of 320 technicians in refrigerant R&R; and development of a refrigerant containment strategy for the introduction of best practices to avoid refrigerant emissions (US \$130,000);
- (e) *Promotion of alternative technologies for the reduction of HCFC consumption and the use of low-GWP refrigerants in key sectors:* ten training seminars on alternative technologies for 200 RAC end-users; preparation of technical brochures on best options for conservation, replacement and appropriate disposal of HCFC-based RAC equipment, and promoting voluntary agreements with end-users (US \$225,000); and
- (f) *Public awareness activities to promote the phase-out of HCFCs:* implementation of 15 awareness-raising campaigns to promote responsible consumption of HCFCs, aimed at the end-users of HCFC-based RAC equipment and at decision-makers in Government institutions; and distribution of awareness material on low-GWP alternatives at the RAC

equipment sales sites (US \$90,000).

### *Project implementation and monitoring*

19. As was the case in stage I, OTOZ and UNDP will be in charge of implementing and monitoring activities under stage II. This includes the design of projects; identification and selection of stakeholders; local procurement of goods and services; preparation of quarterly and annual monitoring reports; implementation of corrective measures identified during implementation; follow-up on technological advances, including attendance at technical meetings and seminars on technology to exchange experiences and promote south-south cooperation with other countries. The cost of the activities, as submitted, amounts to US \$140,000, including national consultants (US \$15,000), meetings with stakeholders (US \$15,000), exchange experiences (US \$100,000) and contingencies (US \$10,000).

### *Gender policy implementation*

20. In line with decision 84/92 (d),<sup>6</sup> the Government of Cuba will consider support for hiring female consultants, supervisors, trainers and designers to develop the activities in each of the projects in stage II of the HPMP. Efforts will be made to increase the number of female trainers and technicians, particularly in projects involving workshops and training sessions for the RAC servicing sector.

21. OTOZ will collect data to produce gender-disaggregated indicators; present reports with the disaggregated figures; collect data to establish an *ex post* baseline of women technicians in the RAC sector and compare it with the number of women involved in RAC activities; introduce gender-sensitive language in communications; incorporate gender aspects in the recruitment of new consultants and staff of OTOZ; and consider adding a gender-related element in each job description and terms of reference, such as undertaking gender training.

### Total cost of stage II of the HPMP

22. The total cost of stage II of the HPMP for Cuba has been estimated at US \$1,040,000 (plus agency support costs), as originally submitted, to achieve a 67.5 per cent reduction from its HCFC baseline consumption by 2025 and 100 per cent reduction by 2030. The proposed activities and cost breakdown are summarized in Table 3.

**Table 3. Total cost of stage II of the HPMP for Cuba as submitted**

| Activity                                                                                                          | Cost (US \$)     |
|-------------------------------------------------------------------------------------------------------------------|------------------|
| Strengthening of policies and legal frameworks to control HCFC consumption                                        | 45,000           |
| Elimination of HCFCs in the RAC servicing sector:                                                                 |                  |
| - Application of good refrigeration practices in the RAC servicing sector                                         | 225,000          |
| - Strengthening of formal education technical institutes                                                          | 185,000          |
| - Strengthening of the refrigerant R&R network                                                                    | 130,000          |
| - Promotion of alternative technologies for the reduction of HCFC consumption and the use of low-GWP refrigerants | 225,000          |
| Public awareness activities to promote the phase-out of HCFCs                                                     | 90,000           |
| Monitoring and reporting                                                                                          | 140,000          |
| <b>Total</b>                                                                                                      | <b>1,040,000</b> |

### Activities planned for the first tranche of stage II

23. The first funding tranche of stage II of the HPMP at the total amount of US \$312,000 will be implemented between January 2021 and December 2023 and will include the following activities:

<sup>6</sup> Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

- (a) *Strengthening of policies and legal frameworks to control HCFC consumption:* one local consultant to assess the current legal framework for HCFC phase-out and determine additional regulatory measures required; visits to importers to determine the HCFC import needs for each sector; and design and printing of material to raise awareness among importers and users about the HCFC phase-out obligations and the identification of potential low-GWP alternatives to be adopted (US \$10,000);
- (b) *Application of good refrigeration practices in the RAC servicing sector:* recruitment of an international expert to provide update training on low-GWP alternatives to 20 trainers and 100 technicians; local consultant to organize training sessions; design and printing of technical material on the contents of the training, and procurement of the 25 to 30 planned tool kits for technicians (i.e., vacuum pumps, welding kits, precise balance, hoses kits, manometers, and leak detectors for flammable refrigerants) (US \$142,750);
- (c) *Strengthening of formal education technical institutes:* recruitment of a local consultant to visit and screen technical institutes to select the seven beneficiary centres based on their needs, impact (number of technicians that can be trained) and relevance in their region (US \$11,500);
- (d) *Strengthening of the refrigerant R&R network:* recruitment of an international expert to review the existing R&R technology, provide support in the preparation of technical specifications of equipment to be procured and provide training on the operation of equipment and R&R centres; local consultant to organize three workshops on R&R for 96 technicians; procurement of equipment and tools for two centres (e.g., R&R units, cylinders, vacuum pumps, precision scales, manifolds, refrigerant identifiers and protection equipment); and one visit to a R&R network in the region to obtain information on its operation (US \$90,750);
- (e) *Public awareness activities to promote HCFC phase-out:* two awareness-raising campaigns (one per year) on HCFC alternatives aimed at end-users of HCFC-based RAC equipment and at decision-makers in Government institutions, and design and printing of information material on the country's commitments and potential low-GWP alternatives (US \$23,500); and
- (f) *Monitoring and project implementation:* monitoring of activities initiated during the first tranche and production of three annual reports and three trips to exchange experiences in the use of new technologies in the RAC sector (US \$33,500).

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

24. The Secretariat reviewed stage II of the HPMP in light of stage I, the policies and guidelines of the Multilateral Fund, including the criteria for funding HCFC phase-out in the consumption sector for stage II of HPMPs (decision 74/50), and the 2020-2022 business plan of the Multilateral Fund.

#### Overarching strategy

25. The Government of Cuba proposes to meet the 100 per cent reduction of its HCFC baseline consumption by 2030, and to maintain a maximum annual consumption of 2.5 per cent of the HCFC baseline in the period of 2030 to 2039 to manage the servicing tail. This is consistent with Article 5, paragraph 8 ter(e)(i) of the Montreal Protocol, which indicates that HCFC consumption may exceed zero

in any year so long as the sum of its calculated levels of consumption over the ten-year period from 1 January 2030 to 1 January 2040 divided by 10, does not exceed 2.5 per cent of Cuba's baseline, and provided that such consumption is restricted to the servicing of RAC equipment existing on 1 January 2030, as provided by the Montreal Protocol.<sup>7</sup> The Government commits to continue establishing strict import and control methods to monitor the level of import and the uses of HCFC between 2030 and 2040 to ensure that they are limited to the conditions established by the Montreal Protocol.

### HCFC phase-out covered by stage II

26. The Secretariat queried the rationale for selecting annual HCFC consumption targets in stage II equal to the Montreal Protocol control measures, noting that HCFC consumption in 2019 was 63 per cent below the HCFC consumption baseline and 43 per cent below the 2020 target (10.97 ODP tonnes), and that the national import quotas for the last four years had been lower than the Montreal Protocol targets and not fully utilized. Upon further consultation with the Government, UNDP reported that it was not possible for the Government to establish lower reduction targets that would go beyond the requirements of the Montreal Protocol, because the lower imports in recent years did not represent the real need for HCFC-22, but rather a challenging economic situation the country was facing. As a result, a large amount of HCFC-22-based equipment has not received adequate servicing.

27. The Government decided to prepare stage II of the HPMP for the total HCFC phase-out as the activities included in the stage (i.e., strengthening of the regulatory framework, training, R&R, certification and promotion of low-GWP alternatives) require time to be implemented. Establishing a long-term plan in a single stage gives stability to the implementation process, as the Government will meet the commitments already acquired, independently of any administrative or political change, and reduces administrative and transaction costs.

28. Noting the justification provided, that the comprehensive strategy of stage II of the HPMP was developed through extensive consultations with stakeholders, and that Cuba is classified as a low-volume-consuming country, the Secretariat supports the total HCFC phase-out approach in a single stage II selected by the Government of Cuba.

### Technical and cost-related issues

29. The Secretariat and UNDP discussed the characteristics of the planned technician certification scheme. UNDP clarified that every RAC technician in Cuba must have graduated from a Government technical school, and thus certification would be established to update technicians on emerging technologies and safe handling of low-GWP refrigerants, to reinforce and update knowledge on best practices in refrigerant containment, avoiding emissions and venting, and to promote service practices that maintain the energy efficiency of equipment. The system is expected to be fully operational in five years. UNDP also confirmed that an estimated 5,000 technicians will receive training as part of this project (the original submission indicated 500 technicians but the revised number has already been reflected in the description of the activity in paragraph 18(b) of the present document).

30. The Secretariat noted that the CFC national phase-out plan and stage I of the HPMP already included activities aimed at strengthening the existing R&R network. UNDP confirmed that previous projects allowed the establishment of a R&R network with one centre in each of the 14 provinces. At present, due to COVID-19, operation is at a low level and the centres are being renovated. Stage II proposes to procure additional equipment to strengthen the centres based on their needs.

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<sup>7</sup> Other applications where HCFCs can be used include the servicing of fire suppression and fire protection equipment existing on 1 January 2030; solvent applications in rocket-engine manufacturing; and topical medical aerosol applications for the specialized treatment of burns.

31. UNDP explained that the R&R operation had been and would continue to be economically feasible in Cuba as the Government assumed the associated operational costs. UNDP also provided additional information on the existing regulations, indicating that Cuba already had a resolution banning the venting of refrigerants and that a regulation was being finalized to make compulsory the recovery and transportation of refrigerant to the R&R centres for recycling or destruction. The containment strategy component of this project aims to review the current resolution that includes the ban on venting and the procedures to avoid leaks. The result of this review will be included in an updated guide to the containment of refrigerants and will be included in the training in good practices of refrigeration.

32. The component to promote alternative technologies and use of low-GWP refrigerants includes pilot demonstrations of replacement of HCFC-based equipment in end-users, and will only start in 2024 as part of the second tranche. UNDP explained that the main objective was to identify technologies that Cuba could introduce to replace HCFC-22 used in RAC equipment with low-GWP refrigerants. It is expected to assist at least three end-users, who will co-finance 40 per cent of the cost of replacement (including labour, installation and servicing, adaptations to the locations, administration, materials, electric parts and transportation). The potential applications to be addressed are cold rooms of different capacities that could be designed for use of hydrocarbons. The project is linked with other HPMP activities, as it will streamline low-GWP technologies, allowing technicians and a larger number of end-users to access those technologies at a lower cost. UNDP also confirmed that the Government will not promote retrofitting of HCFC-based equipment.

33. UNDP was advised that, as this is an activity that includes funding for the demonstration of alternative technologies in end-users (US \$100,000), in order to be considered for funding by the time of submission of the second tranche, detailed information would need to be provided on how the demonstrations are in compliance with the requirements of decision 84/84, before the activity could be recommended for funding.

34. Regarding the monitoring component, UNDP explained that the budget line “exchange experiences” for US \$100,000 was included based on the successful approach followed by previous-projects funded under the Multilateral Fund, which relied on the development of national capacity through the sharing of experiences, including visits by national experts to other countries to learn from their experience in refrigerant management, or visits by industry experts and Government officials to technology providers to get acquainted with emerging technologies and to identify ways to adopt them to conditions prevailing in the country. Noting that these activities were related to the R&R scheme, the technician training and the promotion of low-GWP alternative technologies, funds amounting to US \$80,000 were reallocated to those projects. The agreed cost of monitoring was US \$60,000.

#### Total project cost

35. The total cost for stage II of the HPMP amounts to US \$1,040,000, based on decision 74/50(c)(xii). The revised cost of activities and the variations in the first tranche as a result of the discussions are included in Table 4.

**Table 4. Agreed costs for stage II of the HPMP for Cuba (US \$)**

| Activity                                                                                              | Total cost       | First tranche  |
|-------------------------------------------------------------------------------------------------------|------------------|----------------|
| Strengthening of policies and legal frameworks to control HCFC consumption                            | 45,000           | 9,000          |
| Elimination of HCFCs in the RAC servicing sector:                                                     |                  |                |
| - Application of good refrigeration practices in the RAC servicing sector                             | 255,000          | 168,000        |
| - Strengthening of formal education technical institutes                                              | 185,000          | 9,000          |
| - Strengthening of the refrigerant R&R network                                                        | 150,000          | 36,500         |
| - Promotion of alternatives for the reduction of HCFC consumption and the use of low-GWP refrigerants | 255,000          | 0              |
| Public awareness activities to promote the phase-out of HCFCs                                         | 90,000           | 25,000         |
| Monitoring and reporting                                                                              | 60,000           | 12,500         |
| <b>Total</b>                                                                                          | <b>1,040,000</b> | <b>260,000</b> |

36. Regarding the number of tranches and their distribution, the Secretariat noted that 90 per cent of the funding would have been disbursed by 2026, while a significant number of activities would still be under implementation for several years. UNDP agreed to redistribute the funding tranches, including a small reduction in the first tranche, and to have five tranches instead of four, as shown in Table 5.

**Table 5. Agreed tranche distribution for stage II of the HPMP for Cuba (US \$)**

| Item         | 2020    | 2023    | 2025    | 2026    | 2028    | 2030    | Total     |
|--------------|---------|---------|---------|---------|---------|---------|-----------|
| As submitted | 312,000 | 312,000 | 0       | 312,000 | 0       | 104,000 | 1,040,000 |
| As agreed    | 260,000 | 260,000 | 208,000 | 0       | 208,000 | 104,000 | 1,040,000 |

*Plan of action for the first tranche and implementation amid COVID-19*

37. The Secretariat noted the efforts made by the Government of Cuba and UNDP to ensure the continued implementation of activities supported by the Multilateral Fund during the COVID-19 pandemic. The Government recognized that several stage II activities would be complimentary to the economic recovery phase of the country. The Government and UNDP consider that the activities proposed and their respective timelines can be implemented subject to the constraints imposed by the COVID-19 pandemic. With regard to the first tranche, UNDP confirmed that equipment and tool procurement could be conducted during this period; as for meetings with stakeholders, travel and virtual training, UNDP expects that restrictions will be loosened by the time stage II will effectively be initiated (i.e. in early 2021). In addition, UNDP has conducted three webinars in Latin America on best practices, and on how the RAC sector can help stop the spread of the virus. This information and best practices have been shared with OTOZ.

Impact on the climate

38. The proposed activities in the servicing sector, including better containment of refrigerants through training and provision of equipment, will reduce the amount of HCFC-22 used for RAC servicing. Each kilogram of HCFC-22 not emitted due to better refrigeration practices results in savings of approximately 1.8 CO<sub>2</sub>-equivalent tonnes. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by the Government of Cuba, including efforts to provide training on good servicing practices and to promote low-GWP alternatives, as well as refrigerant R&R, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

**Co-financing**

39. Although an estimation of the level of co-financing was not specified in the HPMP, UNDP indicated that the Government would provide co-financing in-kind through the provision of personnel, office and storage space, communications, transportation and administration. In addition, the end-users assisted through pilot demonstrations on low-GWP alternative technologies would provide around 40 per cent of the cost of the replacement of HCFC-based equipment.

**2020-2022 draft business plan of the Multilateral Fund**

40. UNDP is requesting US \$1,040,000, plus agency support costs, for the implementation of stage II of the HPMP for Cuba. The total requested value of US \$278,200, including agency support costs for the period of 2020–2022, is US \$281,200 below the amount in the business plan.

**Draft Agreement**

41. A draft Agreement between the Government of Cuba and the Executive Committee for the phase-out of HCFCs in stage II of the HPMP is contained in Annex I to the present document.

## RECOMMENDATION

42. The Executive Committee may wish to consider:

- (a) Noting with appreciation the report provided by UNDP and the efforts made by the Government of Cuba and UNDP to discontinue the temporary use of a technology with high global-warming potential (GWP) and to introduce the approved low-GWP technology at the polyurethane foam enterprises Friarc and IDA, under stage I of the HCFC phase-out management plan (HPMP) for Cuba;
- (b) Approving, in principle, stage II of the HPMP for Cuba for the period from 2020 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$1,040,000, plus agency support costs of US \$72,800 for UNDP, on the understanding that no more funding would be provided from the Multilateral Fund for the phase-out of HCFCs;
- (c) Noting the commitment of the Government of Cuba to completely phase out HCFCs by 1 January 2030, and that HCFCs would not be imported after that date, except for the allowance for a servicing tail between 2030 and 2040 where required, and consistent with the provisions of the Montreal Protocol;
- (d) Deducting 10.97 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (e) Approving the draft Agreement between the Government of Cuba and the Executive Committee for the reduction in consumption of HCFCs, in accordance with stage II of the HPMP, contained in Annex I to the present document; and
- (f) Approving the first tranche of stage II of the HPMP for Cuba, and the corresponding tranche implementation plan, in the amount of US \$260,000, plus agency support costs of US \$18,200 for UNDP.

## **Annex I**

### **DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF CUBA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE II OF THE HCFC PHASE-OUT MANAGEMENT PLAN**

#### **Purpose**

1. This Agreement represents the understanding of the Government of Cuba (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of zero ODP tonnes by 1 January 2030 in compliance with Montreal Protocol schedule.
2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in rows 4.1.3 , 4.2.3, 4.3.3, 4.4.3 and 4.5.3 (remaining consumption eligible for 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 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A (“Funding Approval Schedule”).
4. The Country agrees to implement this Agreement in accordance with the stage II of the HCFC phase-out management plan (HPMP) approved (“the Plan”). In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.

#### **Conditions for funding release**

5. The Executive Committee will only provide the Funding in accordance with the Funding Approval Schedule when the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
  - (a) That the Country has met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. Years for which there are no due country programme implementation reports at the date of the Executive Committee meeting at which the funding request is being presented are exempted;
  - (b) That the meeting of these Targets has been independently verified for all relevant years, unless the Executive Committee decided that such verification would not be required;
  - (c) That the Country had submitted a Tranche Implementation Report in the form of Appendix 4-A (“Format of Tranche Implementation Reports and Plans”) covering each previous calendar year; that it had achieved a significant level of implementation of

activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and

- (d) That the Country has submitted a Tranche Implementation Plan in the form of Appendix 4-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.

### **Monitoring**

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-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.

### **Flexibility in the reallocation of funds**

7. The Executive Committee agrees that the Country may have the flexibility to reallocate part or all of the approved funds, according to the evolving circumstances to achieve the smoothest reduction of consumption and phase-out of the Substances specified in Appendix 1-A:

- (a) Reallocations categorized as major changes must be documented in advance either in a Tranche Implementation Plan as foreseen in sub-paragraph 5(d) above, or as a revision to an existing Tranche Implementation Plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
  - (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 to individual bilateral or implementing agencies for the different tranches;
  - (iv) Provision of funding for activities not included in the current endorsed Tranche Implementation Plan, or removal of an activity in the Tranche Implementation Plan, with a cost greater than 30 per cent of the total cost of the last approved tranche; and
  - (v) Changes in alternative technologies, on the understanding that any submission for such a request would identify the associated incremental costs, the potential impact to the climate, and any differences in ODP tonnes to be phased out if applicable, as well as confirm that the Country agrees that potential savings related to the change of technology would decrease the overall funding level under this Agreement accordingly;
- (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;
- (c) Any remaining funds held by the bilateral or implementing agencies or the Country under the Plan will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

### **Considerations for the refrigeration servicing sector**

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sector included in the Plan, in particular:

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
- (b) The Country and relevant bilateral and/or implementing agencies would take into consideration relevant decisions on the refrigeration servicing sector during the implementation of the Plan.

### **Bilateral and implementing agencies**

9. 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. United Nations Development Programme has agreed to be the lead implementing agency (the “Lead IA”) in respect of the Country’s activities under this Agreement. 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.

10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). The role of the Lead IA is contained in Appendix 6-A. The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in row 2.2 of Appendix 2-A.

### **Non-compliance with the Agreement**

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-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 Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval 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 Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A (“Reductions in Funding for Failure to Comply”) in respect of each ODP kg of reductions in consumption not achieved 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 5 above.

12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decisions that may affect the funding of any other consumption sector projects or any other related activities in the Country.

13. The Country will comply with any reasonable request of the Executive Committee, 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**

14. The completion of the Plan and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in

Appendix 2-A. Should at that time there still be activities that are outstanding, and which were foreseen in the last Tranche Implementation Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion of the Plan will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion of the Plan unless otherwise specified by the Executive Committee.

## Validity

15. 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.

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

## APPENDICES

### APPENDIX 1-A: THE SUBSTANCES

| Substance                                           | Annex | Group | Starting point for aggregate reductions in consumption (ODP tonnes) |
|-----------------------------------------------------|-------|-------|---------------------------------------------------------------------|
| HCFC-22                                             | C     | I     | 14.25                                                               |
| HCFC-124                                            | C     | I     | 0.01                                                                |
| HCFC-141b                                           | C     | I     | 2.60                                                                |
| HCFC-142b                                           | C     | I     | 0.02                                                                |
| Subtotal                                            |       |       | 16.88                                                               |
| HCFC-141b contained in imported pre-blended polyols | C     | I     | 13.35                                                               |
| Total                                               |       |       | 30.23                                                               |

### APPENDIX 2-A: THE TARGETS, AND FUNDING

| Row   | Particulars                                                                         | 2020    | 2021-2022 | 2023    | 2024  | 2025    | 2026-2027 | 2028    | 2029 | 2030    | Total     |
|-------|-------------------------------------------------------------------------------------|---------|-----------|---------|-------|---------|-----------|---------|------|---------|-----------|
| 1.1   | Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)    | 10.97   | 10.97     | 10.97   | 10.97 | 5.49    | 5.49      | 5.49    | 5.49 | 0.00    | n/a       |
| 1.2   | Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)     | 10.97   | 10.97     | 10.97   | 10.97 | 5.49    | 5.49      | 5.49    | 5.49 | 0.00    | n/a       |
| 2.1   | Lead IA UNDP agreed funding (US \$)                                                 | 260,000 | 0         | 260,000 | 0     | 208,000 | 0         | 208,000 | 0    | 104,000 | 1,040,000 |
| 2.2   | Support costs for Lead IA (US \$)                                                   | 18,200  | 0         | 18,200  | 0     | 14,560  | 0         | 14,560  | 0    | 7,280   | 72,800    |
| 3.1   | Total agreed funding (US \$)                                                        | 278,200 | 0         | 278,200 | 0     | 222,560 | 0         | 222,560 | 0    | 111,280 | 1,112,800 |
| 4.1.1 | Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)  |         |           |         |       |         |           |         |      |         | 10.94     |
| 4.1.2 | Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)              |         |           |         |       |         |           |         |      |         | 3.31      |
| 4.1.3 | Remaining eligible consumption for HCFC-22 (ODP tonnes)                             |         |           |         |       |         |           |         |      |         | 0.00      |
| 4.2.1 | Total phase-out of HCFC-124 agreed to be achieved under this Agreement (ODP tonnes) |         |           |         |       |         |           |         |      |         | 0.01      |
| 4.2.2 | Phase-out of HCFC-124 to be achieved in the previous stage (ODP tonnes)             |         |           |         |       |         |           |         |      |         | 0.00      |
| 4.2.3 | Remaining eligible consumption for HCFC-124 (ODP tonnes)                            |         |           |         |       |         |           |         |      |         | 0.00      |

|       |                                                                                                                                |       |
|-------|--------------------------------------------------------------------------------------------------------------------------------|-------|
| 4.3.1 | Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)                                           | 0.00  |
| 4.3.2 | Phase-out of HCFC-141b to be achieved in the previous stage (ODP tonnes)                                                       | 2.60  |
| 4.3.3 | Remaining eligible consumption for HCFC-141b (ODP tonnes)                                                                      | 0.00  |
| 4.4.1 | Total phase-out of HCFC-142b agreed to be achieved under this Agreement (ODP tonnes)                                           | 0.02  |
| 4.4.2 | Phase-out of HCFC-142b to be achieved in the previous stage (ODP tonnes)                                                       | 0.00  |
| 4.4.3 | Remaining eligible consumption for HCFC-142b (ODP tonnes)                                                                      | 0.00  |
| 4.5.1 | Total phase-out of HCFC-141b contained in imported pre-blended polyols agreed to be achieved under this Agreement (ODP tonnes) | 0.00  |
| 4.5.2 | Phase-out of HCFC-141b contained in imported pre-blended polyols to be achieved in the previous stage (ODP tonnes)             | 13.35 |
| 4.5.3 | Remaining eligible consumption for HCFC-141b contained in imported pre-blended polyols (ODP tonnes)                            | 0.00  |

### **APPENDIX 3-A: FUNDING APPROVAL SCHEDULE**

1. Funding for the future tranches will be considered for approval at the first meeting of the year specified in Appendix 2-A.

### **APPENDIX 4-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 five 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 phase-out of the Substances, how the different activities contribute to it, and how they relate to each other. The report should include the amount of ODS phased out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. 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. The report should also include 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, as provided for in paragraph 7 of this Agreement, or other changes;
- (b) An independent verification report of the Plan results and the consumption of the Substances, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
- (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. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall Plan that are foreseen. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;

- (d) A set of quantitative information for all Tranche Implementation Reports and Plans, submitted through an online database; and
  - (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).
2. In the event that in a particular year two stages of the HPMP are being implemented in parallel, the following considerations should be taken in preparing the Tranche Implementation Reports and Plans:
- (a) The Tranche Implementation Reports and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement; and
  - (b) If the stages under implementation have different HCFC consumption targets under Appendix 2-A of each Agreement in a particular year, the lower HCFC consumption target will be used as reference for compliance with these Agreements and will be the basis for the independent verification.

#### **APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES**

1. Supervision will be provided by the Ministry of Science Technology and Environment, through the Ozone Technical Office (OTOZ), with assistance from the Lead IA.
2. Consumption will be monitored and determined from official data on the import and export of substances registered by the relevant government departments.
3. OTOZ will compile and report the following data and information each year or before the deadlines:
  - (a) Annual reports on the consumption of the substances to be submitted to the Ozone Secretariat, and
  - (b) Annual reports on progress in implementing the Plan will be submitted to the Executive Committee of the Multilateral Fund.
4. The OTOZ and the Lead IA will jointly hire a qualified independent entity to conduct a qualitative and quantitative performance assessment of the implementation of the Plan.
5. The agency responsible for evaluation will have full access to relevant technical and financial information related to the implementation of the Plan.
6. The agency responsible for evaluation shall prepare and submit to the OTOZ and the Lead IA a draft consolidated report at the end of each annual implementation plan, which will include the findings of the assessment and, where appropriate, recommendations to make the improvements or adjustments. The draft report will include the Country's situation with regard to compliance with the provisions of this Agreement.
7. After incorporating the comments and explanations, if any, from the OTOZ and the Lead IA, the agency responsible for evaluation will finalize the report submitted to the OTOZ and the Lead IA.
8. The OTOZ will endorse the final report and the Lead IA will transmit it to the relevant meeting of the Executive Committee with the implementation plan and annual reports.

## **APPENDIX 6-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 as set out in the Country's HPMP;
  - (b) Assisting the Country in preparation of the Tranche Implementation Reports and Plans as per Appendix 4-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 4-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(c) and 1(d) of Appendix 4-A;
  - (e) Fulfilling the reporting requirements for the Tranche Implementation Reports and Plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee;
  - (f) In the event that the last funding tranche is requested one or more years prior to the last year for which a consumption target had been established, annual tranche implementation reports and, where applicable, verification reports on the current stage of the Plan should be submitted until all activities foreseen had been completed and HCFC consumption targets had been met;
  - (g) Ensuring that appropriate independent technical experts carry out the technical reviews;
  - (h) Carrying out required supervision missions;
  - (i) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
  - (j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country, the allocation of the reductions to the different budget items and to the funding of the Lead IA;
  - (k) Ensuring that disbursements made to the Country are based on the use of the indicators;
  - (l) Providing assistance with policy, management and technical support when required; and
  - (m) Timely releasing funds to the Country/participating enterprises 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 HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

## **APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY**

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$180 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for

each year in which the target specified in row 1.2 of Appendix 2-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.

2. In the event that the penalty needs to be applied for a year in which there are two Agreements in force (two stages of the HPMP being implemented in parallel) with different penalty levels, the application of the penalty will be determined on a case-by-case basis taking into consideration the specific sectors that lead to the non-compliance. If it is not possible to determine a sector, or both stages are addressing the same sector, the penalty level to be applied would be the largest.