EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-third Meeting
Montreal, 4-8 April 2011

PROJECT PROPOSAL: LIBERIA

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

Phase-out

- HCFC phase-out management plan (stage I, first tranche) Germany
# PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

## Liberia

### (I) PROJECT TITLE  
HCFC phase-out management plan (stage I, first tranche)  

### AGENCY  
Germany (lead)

### (II) LATEST ARTICLE 7 DATA  

| Year: 2009 | 5.0 (ODP tonnes) |

### (III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP)  

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Aerosol</th>
<th>Foam</th>
<th>Fire</th>
<th>Refrigeration</th>
<th>Solvent</th>
<th>Process</th>
<th>Lab</th>
<th>Total sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCFC123</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>HCFC141b</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>HCFC142b</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>HCFC22</td>
<td>5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.0</td>
</tr>
</tbody>
</table>

### (IV) CONSUMPTION DATA (ODP tonnes)  

- **2009 - 2010 baseline (estimate):** 5.5  
- **Starting point for sustained aggregate reductions:** 5.5  
  
**CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)**

| Already approved: | 0.0 | Remaining: | 3.6 |

### (V) BUSINESS PLAN  

#### Germany  

<table>
<thead>
<tr>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding (US $)</td>
<td>80,000</td>
<td>0</td>
<td>110,000</td>
<td>130,000</td>
<td>36,000</td>
<td>356,000</td>
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</tr>
</tbody>
</table>

### (VI) PROJECT DATA  

- **Montreal Protocol consumption limits (estimate):**  
- **Maximum allowable consumption (ODP tonnes):**  

**Project Costs Requested in Principle (US$):**

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>Project costs</td>
<td>157,500</td>
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<td>0</td>
<td>0</td>
<td>126,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>315,000</td>
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<tr>
<td>Support costs</td>
<td>20,475</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16,380</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>40,950</td>
</tr>
</tbody>
</table>

**Total project costs requested in principle (US $):** 157,500  
**Total support costs requested in principle (US $):** 20,475  
**Total funds requested in principle (US $):** 177,975

<table>
<thead>
<tr>
<th>Agency</th>
<th>Funds requested (US $)</th>
<th>Support costs (US $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>157,500</td>
<td>20,475</td>
</tr>
</tbody>
</table>

**Funding request:** Approval of funding for the first tranche (2011) as indicated above  
**Secretariat's recommendation:** For individual consideration
PROJECT DESCRIPTION

1. On behalf of the Government of Liberia, the Government of Germany has submitted to the 63rd Meeting of the Executive Committee stage I of the HCFC phase-out management plan (HPMP) at a total cost of US $1,489,500 plus agency support costs of US $173,845, as originally submitted. The first tranche for stage I being requested at this meeting amounts to US $474,500 plus agency support costs of US $55,381 for Germany.

Background

2. Liberia, with a total population of about 3.49 million inhabitants, has ratified all the amendments to the Montreal Protocol.

ODS regulations

3. The ODS regulations enacted by the Government of Liberia in 2004 established among other measures the monitoring system that provided for the monitoring of imports of all controlled substances under the Protocol, including HCFCs. Under the ODS regulations, ODS are not allowed to enter the country without a permit issued by the Ozone Unit. The regulations also banned imports of CFCs and CFC-based equipment (including mobile air-conditioning) starting in 2007. A quota for HCFC imports has not yet been established. The Government has already drafted an amendment to the current regulations to improve control of HCFCs and set an annual import quota based on the HCFC baseline for compliance (HCFCs can be controlled under the existing ODS regulations).

4. The Ministry of Commerce and Industry issues notices and trade regulations requiring all importers and distributors of ODS and ODS-based equipment to obtain import permits from the Environmental Protection Agency. The Ministry of Finance (Customs Office) is responsible for enforcing the licensing system; inspecting and checking for ODS in shipments, trucks and vessels; detecting illegal trade in ODS and ODS-based equipment; and seizing illegal imports, as well as storing and disposing of controlled substances.

HCFC consumption and sector distribution

5. According to the survey conducted for the preparation of the HPMP, HCFC-22 is the only HCFC used in the installation and servicing of refrigeration and air-conditioning equipment in Liberia. HCFC blends are not currently used in the country. Between 2005 and 2009, HCFC consumption increased from 15.1 metric tonnes (mt) (0.8 ODP tonnes) to 90.5 mt (5.0 ODP tonnes), as shown in Table 1.

Table 1. HCFC consumption in Liberia (2005-2009)

<table>
<thead>
<tr>
<th>Source</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article 7 data (ODP tonnes)</td>
<td>0.80</td>
<td>1.20</td>
<td>1.90</td>
<td>2.80</td>
<td>5.00</td>
</tr>
<tr>
<td>Survey (ODP tonnes)</td>
<td>0.83</td>
<td>1.20</td>
<td>2.60</td>
<td>4.40</td>
<td>5.00</td>
</tr>
<tr>
<td>Survey (mt)</td>
<td>15.10</td>
<td>21.97</td>
<td>47.20</td>
<td>79.90</td>
<td>90.50</td>
</tr>
</tbody>
</table>

6. HCFC-based equipment in operation increased from 14,290 units to 40,756 units since 2005. In 2009, there were some 17,500 air conditioning units in operation representing 85 per cent of the total population of equipment. HCFC-22 commercial refrigerators are used in eleven supermarkets. The installed chiller capacity mostly uses HCFC-22, with a few systems based on HFC refrigerants. There are also a few refrigerated trucks that use HCFC-22 (Table 2).
Table 2: Sector consumption of HCFC-22 in Liberia (2009)

<table>
<thead>
<tr>
<th>Sector</th>
<th>HCFC-22 (mt)</th>
<th>HCFC-22 (ODP tonnes)</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-conditioning units (*)</td>
<td>77.00</td>
<td>4.24</td>
<td>85.0%</td>
</tr>
<tr>
<td>Chillers</td>
<td>9.50</td>
<td>0.52</td>
<td>10.0%</td>
</tr>
<tr>
<td>Commercial refrigerator systems</td>
<td>3.60</td>
<td>0.20</td>
<td>4.0%</td>
</tr>
<tr>
<td>Transport refrigerated trucks</td>
<td>0.90</td>
<td>0.05</td>
<td>1.0%</td>
</tr>
<tr>
<td>Total</td>
<td>90.50</td>
<td>4.98</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

(*) Installed in households, hotels, restaurants and offices.

7. There are approximately 960 refrigeration service technicians, 445 of them with formal training. There are 146 refrigeration and air-conditioning service workshops, 40 per cent of which are registered. The current prices of HCFCs and alternative refrigerants per kilogram in the country are: US $3.30 for HCFC-22, US $5.88 for HFC-134a; US $6.62 for R-404A; US $7.96 for R-410A US $10.15 for R-290 (propane); and US $10.15 for R-600A (isobutane). The higher cost of alternative refrigerants has generated low demand among importers.

HCFC phase-out strategy

8. The objective of the HPMP for Liberia is to meet the freeze on HCFC consumption in 2012, followed by a 30 per cent reduction of the HCFC baseline in 2015, and to achieve the complete phase-out of HCFCs by 2020 with a 2.5 per cent servicing tail until 2025. It will be based on the consolidated experience gained during the implementation of the refrigerant management plan (RMP) and the terminal phase-out management plan (TPMP). In addition to the activities outlined below, the Government proposes to amend the ODS regulations of 2004 to cover HCFC quotas, impose tax incentives/disincentives on HCFC and HCFC-based equipment, and promote climate-friendly equipment. The Government further proposes to have all HCFC-based equipment replaced or retrofitted with natural refrigerants by 2018.

9. The HPMP for Liberia proposes to implement the following programmes:

   (a) Refrigeration awareness and outreach support for importers, small enterprises, industrial end-users and consumers to promote equipment retrofitted to non-HCFC technology;

   (b) Phase-out policy and enforcement, to strengthen the existing ODS import licensing system through introduction of quotas for HCFCs along with mandatory registration and reporting, issuance of an import ban on HCFC-based equipment by 2017, the introduction of a labelling system and periodic reporting of HCFCs and HCFC-based equipment;

   (c) Technicians training and certification programme to improve retrofitting/drop-in practices, to provide basic equipment and tools to technicians and service workshops (the training will be based on experiences from the implementation of the RMP and TPMP);

   (d) Technical assistance programme for the refrigeration sector to reduce the demand for HCFC-22 by establishing reclamation centres (to be operated by trained servicing technicians) and providing incentives to end-users to retrofit their HCFC-based equipment;

   (e) Project coordination, monitoring and management to ensure that the proposed activities under the HPMP are implemented on time, and satisfactorily completed.

10. The total cost for the complete phase-out of HCFCs in Liberia has been estimated at US $2,189,500, of which US $1,489,500 is requested by the Government from the Multilateral Fund and the remaining US $700,000 is to be co-financed by the Government and the private sector, as shown in Table 3.
Table 3. Total cost of the HPMP for Liberia

<table>
<thead>
<tr>
<th>Tranches</th>
<th>HCFC-22 phased out</th>
<th>Funding (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mt</td>
<td>ODP tonnes</td>
</tr>
<tr>
<td>1st tranche (2011-2013)</td>
<td>18.50</td>
<td>1.02</td>
</tr>
<tr>
<td>2nd tranche (2014-2017)</td>
<td>45.00</td>
<td>2.48</td>
</tr>
<tr>
<td>3rd tranche (2018-2020)</td>
<td>45.00</td>
<td>2.48</td>
</tr>
<tr>
<td>Total</td>
<td>108.50</td>
<td>5.97</td>
</tr>
</tbody>
</table>

11. The Ozone Unit will play a key role by coordinating and implementing the country’s HCFC phase-out programme. It will be responsible for disseminating information, setting HCFC import quotas, allocating quotas to licensed importers, and monitoring and reporting. The Liberian refrigeration and air-conditioning engineers and technicians union will provide technical support to the Ozone Unit. A project management unit will be established, with representatives from the Environment Protection Agency, the Ozone Committee, the Liberian refrigeration union, and Customs.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

12. The Secretariat reviewed the HPMP for Liberia in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding HCFC phase-out in the consumption sector agreed at the 60th Meeting (decision 60/44), subsequent decisions on HPMPs made at the 62nd Meeting and the 2011-2014 business plan of the Multilateral Fund.

Starting point for aggregate reduction in HCFC consumption

13. The Government of Liberia agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the average level of actual reported consumption in 2009 and estimated consumption in 2010, which has been estimated at 5.5 ODP tonnes (100 mt). The business plan indicated a baseline of 5.2 ODP tonnes (94.1 mt).

HCFC consumption

14. Upon a request for clarification, the Government of Germany explained that the almost two-fold increase in HCFC consumption between 2008 and 2009 was due to the fact that data in previous reports did not accurately reflect the level of consumption in the country, as there were difficulties associated with data collection. Also, the economic growth experienced after the 2007 elections in the country allowed for an increased in the importation of goods, including refrigeration equipment, major reconstruction works and an electrification programme.

Accelerated phase-out of HCFCs

15. The overarching strategy developed by the Government is based on an accelerated HCFC phase-out schedule from the freeze at the baseline level by 1 January 2012 to 2.5 per cent of the baseline level by 1 January 2020. Although the commitment by the Government of Liberia to completely phase out its consumption of HCFCs well in advance of the Protocol’s schedule is commended, attention was drawn to several factors, many of which were not under the Government’s control that would have a major impact on meeting this goal. Specifically:

(a) HCFC-22 is widely available and its current price is two to three times lower than alternative refrigerants. It appears that this situation will prevail for the foreseeable future. Furthermore, the alternative refrigerants currently available for the majority of the applications in Liberia have high global warming potentials (i.e., HFC-134a, HFC-407C,
HFC-410A), and their availability in the local market might be limited. Increased market availability of new cost-effective and possibly energy-efficient alternative technologies in the refrigeration sector (as HCFC phase-out progresses) is similarly beyond the Government’s control;

(b) By the end of 2015, there would be some 180,000 pieces of HCFC-based refrigeration equipment in operation in Liberia, with a remaining lifetime of 10 to 20 years. The amount of HCFC-22 required for servicing this equipment would be high (over 250 mt/year). Retrofitting this equipment would be expensive and could negatively affect the equipment’s efficiency;

(c) The number of old HCFC-based refrigeration equipment that could be retired at this time is relatively small and would have only a reduced impact on the current level of HCFC consumption. Also, retrofitting HCFC-based equipment might not be economically viable at this time;

(d) As HCFC phase-out progresses, the demand for new cost-effective and possibly energy-efficient alternative technologies in the refrigeration sector will increase. However, the time when these technologies would be available in the market would depend on factors many of which are external to the control of the Government of Liberia.

16. Based on the above observations, it was suggested to the Government of Germany that, through the implementation of stage I of the HPMP, the Government of Liberia should commit itself to reducing the level of HCFC consumption by 35 per cent in 2020, as agreed by the Parties at their 19th Meeting. By that time, issues related to the availability of cost-effective and environmentally sound alternative technologies will likely be resolved, and the Government would be in a better position to reconsider whether it wishes to pursue accelerated HCFC phase-out. In the meantime the Government, in consultation with major stakeholders, could, among other things, undertake a cost/benefit analysis of the introduction of high-energy efficiency refrigeration equipment under the local climatic conditions in Liberia; review alternative technologies in the refrigeration sector and select the most cost-effective and sustainable technologies; strengthen the curriculum of the training/vocational schools for refrigeration technicians and customs officers; and enhance the technical capabilities of the technicians in the country.

17. Having considered the above comments, the Government of Liberia redesigned its overarching strategy to follow the HCFC phase-out schedule as agreed by the Parties to the Montreal Protocol, with the following specific activities at a total cost of US $315,000 from the Multilateral Fund and US $45,853 as counterpart funding by the Government:

(a) Awareness and outreach campaign (US $49,500 from the Fund plus US $7,425 counterpart funding), to create awareness among stakeholders, especially the business community, on HCFC quota system and phase-out strategies; implement educational activities on the protection of the ozone layer and the need for total phase-out of ODS; and information dissemination;

(b) HCFC phase out policies and enforcement (US $47,790 from the Fund plus US $7,168 counterpart funding), to amend the ODS regulations to include HCFC phase-out issues and management; establish an electronic system for the issuance and control of HCFC quotas and permits for HCFC-based equipment; establish a reporting system for registered importers of HCFCs; promote importation of non-HCFC-based equipment through reduced tariffs and import duties; monitor and control HCFC sales and establish a sales system in the country; and further strengthen the capacity of customs and other law enforcement officers through training in monitoring and enforcing regulations;
Training and certification programme for refrigeration technicians (US $72,950 from the Fund plus US $10,940 counterpart funding), to provide training in code of good refrigeration practices with emphasis on climate friendly refrigerants, training equipment and basic service tools;

Technical assistance programme for the refrigeration servicing sector (US $117,000 from the Fund plus US $17,550 counterpart funding), to strengthen the existing retrofit centres established through the TPMP, reduce the demand for HCFCs through recovery/reclamation practices, and potential cost-effective and sustainable end-users replacement/retrofit programme; and

Coordination and monitoring activities (US $27,760 from the Fund plus US $2,770 counterpart funding), to establish the project coordination and monitoring unit.

Impact on the climate

18. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogram (kg) of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO₂-equivalent tonnes saved. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by Liberia, in particular its above-average efforts to improve servicing practices and reduce associated refrigerant emissions indicate that it is likely that the country will achieve a reduction of 12,668.3 CO₂-equivalent tonnes that would not be emitted into the atmosphere as estimated in the 2011-2014 business plan. However, at this time, the Secretariat is not in a position to quantitatively estimate the impact on the climate. The impact might be established through an assessment of implementation reports by, inter alia, comparing the levels of refrigerants used annually from the commencement of the implementation of the HPMP, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22 based equipment being retrofitted.

Co-financing

19. In response to decision 54/39(h) on potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth Meeting of the Parties, the Government of Liberia has pledged US $45,853 towards the implementation of the activities in the HPMP to be co-financed by the Government and the private sector.

2011-2014 business plan of the Multilateral Fund

20. Germany is requesting US $315,000 plus support costs for implementation of stage I of the HPMP. The total value requested for the period 2011-2014 of US $177,975 including support cost is within the total amount in the business plan. Furthermore, based on the estimated HCFC baseline consumption in the servicing sector of 5.5 ODP tonnes (100 mt), Liberia’s allocation up to the 2020 phase-out should be US $315,000 in line with decision 60/44.

Draft Agreement

RECOMMENDATION

22. The Executive Committee may wish to consider:

(a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Liberia for the period 2011 to 2020, at the amount of US $355,950, comprising of US $315,000 and agency support costs of US $40,950 for Germany.

(b) Noting that the Government of Liberia agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the estimated baseline of 5.5 ODP tonnes calculated using actual consumption reported in 2009 and estimated 2010 consumption;

(c) Approving the draft Agreement between the Government of Liberia and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;

(d) Requesting the Secretariat, once the baseline data were known, to update Appendix 2-A to the draft Agreement to include the figures for maximum allowable consumption and to notify the Executive Committee of the resulting levels of maximum allowable consumption, and of a potential related impact on the eligible funding level with any adjustments needed being made when the next tranche was submitted; and

(e) Approving the first tranche of stage I of the HPMP for Liberia, and the corresponding implementation plan, at the amount of US $177,975, comprising of US $157,500 and agency support costs of US $20,475 for Germany.

- - - -
Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF LIBERIA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

1. This Agreement represents the understanding of the Government of Liberia (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 3.57 ODP tonnes prior to 1 January 2020 in compliance with Montreal Protocol schedules, with the understanding that this figure is to be revised one single time in 2011, when the baseline consumption for compliance would be established based on Article 7 data, with the funding to be adjusted accordingly, as per decision 60/44.

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 which exceeds the level defined in row 1.2 of Appendix 2-A (“maximum allowable total consumption of Annex C, Group I Substances”; the Target) 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 which exceeds the level defined in row 4.1.3 (remaining eligible consumption).

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 (“Targets and Funding”) 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 will accept independent verification, to be commissioned by the relevant bilateral or implementing agency, of achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) of this Agreement as described in sub-paragraph 5(b) of this Agreement.

5. The Executive Committee will not provide the Funding in accordance with the Funding Approval Schedule unless the Country satisfies the following conditions at least 60 days prior to the applicable Executive Committee meeting set out in the Funding Approval Schedule:

   (a) That the Country has met the Targets for all relevant years. Relevant years are all years since the year in which the hydrochlorofluorocarbons phase-out management plan (HPMP) was approved. Exempt are years for which no obligation for reporting of country programme data exists at the date of the Executive Committee Meeting at which the funding request is being presented;

   (b) That the meeting of these Targets has been independently verified, except if the Executive Committee decided that such verification would not be required;
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 plan in accordance with their roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in sub-paragraph 5(b).

7. The Executive Committee agrees that the Country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances to achieve the smoothest phase-down and phase-out of the Substances specified in Appendix 1-A. Reallocations categorized as major changes must be documented in advance in a Tranche Implementation Plan and approved by the Executive Committee as described in sub-paragraph 5(d). Major changes would relate to reallocations affecting in total 30 per cent or more of the funding of the last approved tranche, issues potentially concerning the rules and policies of the Multilateral Fund, or changes which would modify any clause of this Agreement. 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 Tranche Implementation Report. Any remaining funds will be returned to the Multilateral Fund upon closure of the last tranche of the plan.

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sub-sector, 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 the bilateral and implementing agencies involved will take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the plan.

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. Germany has agreed to be the lead implementing agency (the “Lead IA”) 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 any of the agencies taking part in this Agreement.

10. The Lead IA will be responsible for carrying out the activities of the plan as detailed in the first submission of the HPMP with the changes approved as part of the subsequent tranche submissions, including but not limited to independent verification as per sub-paragraph 5(b). The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in row 2.2 of Appendix 2-A.
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 amounts set out in Appendix 7-A in respect of each ODP tonne 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 these decisions are taken, this specific case will not be an impediment for future tranches as per paragraph 5.

12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decision 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, and the Lead IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA with access to information necessary to verify compliance with this Agreement.

14. The completion of the HPMP and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption has been specified in Appendix 2-A. Should at that time activities be still outstanding which were foreseen in the Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per Appendix 4-A (a), (b), (d) and (e) continue until the time of the completion if not specified by the Executive Committee otherwise.

15. All of the agreements 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.
APPENDICES

APPENDIX 1-A: THE SUBSTANCES

<table>
<thead>
<tr>
<th>Substance</th>
<th>Annex</th>
<th>Group</th>
<th>Starting point for aggregate reductions in consumption (ODP tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCFC-22</td>
<td>C</td>
<td>I</td>
<td>5.5</td>
</tr>
</tbody>
</table>

APPENDIX 2-A: THE TARGETS, AND FUNDING

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.50</td>
<td>4.95</td>
<td>3.57</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)</td>
<td>5.50</td>
<td>4.95</td>
<td>3.57</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Lead IA Germany agreed funding (US $)</td>
<td>157,500</td>
<td>126,000</td>
<td>31,500</td>
<td>315,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Support costs for Lead IA (US $)</td>
<td>20,475</td>
<td>16,380</td>
<td>4,095</td>
<td>40,950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Total agreed funding (US $)</td>
<td>177,975</td>
<td>142,380</td>
<td>35,595</td>
<td>355,950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 Total support cost (US $)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Total agreed costs (US $)</td>
<td>177,975</td>
<td>142,380</td>
<td>35,595</td>
<td>355,950</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 4.1.1 Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes) | 1.93 |
| 4.1.2 Phase-out of to be achieved in previously approved projects (ODP tonnes)       | 0.00 |
| 4.1.3 Remaining eligible consumption for HCFC-22 (ODP tonnes)                        | 3.57 |

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval not earlier than the second 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 Plan will consist of five parts:

   (a) A narrative report regarding the progress in the previous tranche, reflecting on 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 further highlight successes, experiences and challenges related to the different activities included in the Plan, reflecting on changes in the circumstances in the Country, and providing other relevant information. The report should also include information about and justification for any changes vis-à-vis the previously submitted tranche plan, 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. The narrative report will cover all relevant years specified in sub-paragraph 5(a) of the Agreement and can in addition also include information about activities in the current year;
A verification report of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, 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;

A written description of the activities to be undertaken in the next tranche, highlighting their interdependence, and taking into account experiences made and progress achieved in the implementation of earlier tranches. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall plan foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain any revisions to the overall plan which were found to be necessary;

A set of quantitative information for the report and plan, submitted into a database. As per the relevant decisions of the Executive Committee in respect to the format required, the data should be submitted online. This quantitative information, to be submitted by calendar year with each tranche request, will be amending the narratives and description for the report (see sub-paragraph 1(a) above) and the plan (see sub-paragraph 1(c) above), and will cover the same time periods and activities; it will also capture the quantitative information regarding any necessary revisions of the overall plan as per sub-paragraph 1(c) above. While the quantitative information is required only for previous and future years, the format will include the option to submit in addition information regarding the current year if desired by the Country and the Lead IA; and

An Executive Summary of about five paragraphs, summarizing the information of above sub-paragraphs 1(a) to 1(d).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. Due to the limited funds available under the HPMP, monitoring will be done by the Country either directly through designated officers of the Ozone unit and when required, consultants might be hired to assist with specific monitoring activities.

2. Monitoring by the Country will be done in cooperation and coordination with the Lead IA. Where guidance will be sought by the Country from the Lead IA on monitoring, determining any gaps, errors and omissions.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities. These can be specified in the project document further, but include 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 phase-out plan;

(b) Assisting the Country in preparation of the Tranche Implementation Plans and subsequent reports as per Appendix 4-A;
(c) Providing verification to the Executive Committee that the Targets have been met and associated annual 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 tranches and the overall Plan as specified in Appendix 4-A as well as project completion reports 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 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 each implementing or bilateral agency involved;

(j) Ensuring that disbursements made to the Country are based on the use of the indicators; and

(k) Providing assistance with policy, management and technical support when required.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent organization 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.

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