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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-fifth Meeting
Bali, Indonesia, 13-17 November 2011

PROJECT PROPOSAL: OMAN

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)

UNIDO and UNEP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Oman

(I) PROJECT TITLE	AGENCY
HCFC phase out plan (Stage I)	UNEP, UNIDO (lead)

(II) LATEST ARTICLE 7 DATA	Year: 2010	32.2 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2010	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC-141b		0.1			1.8				1.9
HCFC-141b in imported pre-blended polyol		2.4							2.4
HCFC1-42b		0.9							0.9
HCFC-22		0.5			28.9				29.4

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline	32.47	Starting point for sustained aggregate reductions:	32.6
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.0	Remaining:	5.1

(V) BUSINESS PLAN		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
UNIDO	ODS phase-out (ODP tonnes)	4.4			0.2							4.6
	Funding (US \$)	387,587	0	0	13,723	0	0	0	0	0	0	401,310
UNEP	ODS phase-out (ODP tonnes)	0.8		0.8								1.6
	Funding (US \$)	67,413	0	37,770	0	0	0	0	0	0	0	105,183

(VI) PROJECT DATA				2011	2012	2013	2014	2015	Total
Montreal Protocol consumption limits				n/a	n/a	31.4	31.4	28.3	
Maximum allowable consumption (ODP tonnes)				n/a	n/a	31.4	31.4	28.3	
Project Costs requested in principle(US\$)		UNEP	Project costs	65,000			20,000		85,000
			Support costs	8,450			2,600		11,050
		UNIDO	Project costs	314,120			35,000		349,120
			Support costs	23,559			2,625		26,184
Total project costs requested in principle (US \$)				379,120	0	0	55,000	0	434,120
Total support costs requested in principle (US \$)				32,009	0	0	5,225	0	37,234
Total funds requested in principle (US \$)				411,129	0	0	60,225	0	471,354

(VII) Request for funding for the first tranche (2011)		
Agency	Funds requested (US \$)	Support costs (US \$)
UNEP	65,000	8,450
UNIDO	314,120	23,559

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 the Oman UNIDO, as the lead implementing agency, has submitted to the 65th meeting of the Executive Committee stage I of an HCFC phase-out management plan (HPMP) at a total cost, as originally submitted, of US \$434,120 plus agency support costs of US \$26,184 for UNIDO and US \$11,050 for UNEP. The HPMP covers strategies and activities to achieve a 10 per cent reduction in HCFC consumption by 2015.

2. The first tranche for stage I being requested at this Meeting amounts to US \$314,120 plus agency support costs of US \$23,559 for UNIDO and US \$65,000 plus agency support costs of US \$8,450 for UNEP, as originally submitted.

Background

ODS regulations

3. The Ministry of Environment and Climate Affairs is the national body responsible for the implementation of the Montreal Protocol. The National Ozone Unit (NOU) was established within the ministry to allocate quotas, operate the permit system and supervise the implementation of all Multilateral Fund approved projects including the HPMP. The NOU is also responsible for data collection for the purpose of reporting the annual consumption of ODS including HCFCs as per Article 7 of the Montreal Protocol. The Government of Oman has issued a number of ministerial decisions on the ODS legislation, the last one in 2005 to introduce controls on import of ODS and ODS-containing equipment, including provision for an ODS licensing and quota system. While the control of the import and export of all ODS is in place, in the particular case of HCFCs it is presently only necessary to register the importer and obtain a permit to import. As of writing of this document, a license/quota system has not been established.

HCFC consumption

4. All HCFCs used in Oman are imported as the country does not produce these substances. The survey undertaken during the HPMP preparation showed that three types of HCFCs were imported during the previous four years, namely HCFC-22, HCFC-141b and, in 2010 only, HCFC-142b. Of the total HCFCs imported in 2010, 94.6 per cent (weight) are HCFC-22. In terms of ODP tonnes, more than 90 per cent of the consumption is used in the refrigeration and air conditioning sector. Table 1 shows the HCFC consumption from 2007 to 2010; for all years, the consumption has been reported under Article 7.

Table 1: HCFC consumption between 2007 and 2010

HCFC	2007		2008		2009		2010	
	MT	ODP	MT	ODP	MT	ODP	MT	ODP
HCFC-22	321.82	17.701	387.10	21.292	517.10	28.440	535.1	29.4
HCFC-141b	10.440	1.148	18.470	2.032	12.660	1.399	17.3	1.9
HCFC-142b	0.00	0.00	0.0	0.00	0.0	0.00	13.3	0.86
Total (Survey)	332.26	18.849	405.57	23.324	529.66	29.839	565.65	32.15
Total (A7)	n/a	19.5	n/a	24.7	n/a	30.7	n/a	32.2

5. For 2010, the HPMP provides a detailed list of imports of various HCFCs and alternative substances, used as refrigerants, foam blowing agents and solvents. The imports amount to 535 metric tonnes (mt) of HCFC-22; 37.7 mt of HCFC-141b, of which 20.4 mt are contained in pre-blended polyol; 13.3 mt of HCFC-142b; 18.5 mt of HFC-404A; 5.3 mt of HFC-407C; 3.3 mt of HFC-410A; 191.5 mt of HFC-134a; 0.2 mt of HFC-507; 0.3 mt of HC-600a; 280.4 mt of HC-290; and 46 mt of NH₃ (R-717).

Sectoral distribution of HCFCs

6. HCFC-141b and HCFC-142b have been used in the foam sector, and so has a small quantity of HCFC-22. HCFC-141b has also been used in the solvent sector. Table 2 provides an overview over the use of HCFCs in the different relevant sectors.

Table 2: HCFC consumption in different sectors for 2009 and 2010

Substance	(ODP tonnes)							
	Foams		Solvent uses		RAC servicing		Total	
	2009	2010	2009	2010	2009	2010	2009	2010
HCFC-141b	1.2	0.1	0.2	1.8	0.0	0.0	1.4	1.9
HCFC-142b	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.9
HCFC-22	0.0	0.5	0.0	0.0	28.4	28.9	28.4	29.4
Overall totals	1.2	1.5	0.2	1.8	28.4	28.9	29.8	32.2

7. The major use of HCFC is in the servicing sector, where the servicing of small air conditioners accounts for a substantial portion of the overall consumption. There are no manufacturers of refrigeration or air conditioning systems in Oman. The foam sector produces extruded polystyrene (EPS) foam insulation, sandwich panels from pre-blended polyols, foam sealant for use during drilling operations for copper and gold, and in the manufacture of profile sandwich panels, water heaters, spray foam for insulation as well as for waterproofing applications, and foam for insulation in construction projects for the military.

Baseline for HCFC consumption

8. The baseline of the HCFC consumption was established as 31.5 ODP tonnes by the Government of Oman, using the average of the 2009 consumption of 30.7 ODP tonnes (529.8 mt) and the 2010 consumption of 32.2 ODP tonnes (565.6 mt), both reported under Article 7.

Forecast of future HCFC consumption

9. Oman estimated its future demand for HCFCs based on the need for servicing of existing refrigeration equipment, charging of new installations and continued foam production. This demand is estimated to grow at approximately 10 per cent annually. Table 3 below provides a summary of the forecast of HCFC consumption in Oman, showing the difference between constrained growth (i.e. in line with the Protocol) and unconstrained growth.

Table 3: Forecasted consumption of HCFCs

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015
HCFC consumption forecast – unconstrained growth (mt)	332.3	405.6	529.7	565.7	622.2	684.4	752.9	828.2	911
Increase per annum		22.1%	30.6%	6.8%	10.0%	10.0%	10.0%	10.0%	10.0%
HCFC consumption forecast - with HPMP	n/a				622.2	600	547.7	520.3	492.9
Montreal Protocol obligation (mt)	n/a						547.7	547.7	492.9

HCFC phase-out strategy

10. Oman proposed to follow the reduction steps for HCFCs under the Montreal Protocol, with a complete phase-out in 2030. This submission is focusing on the activities needed to achieve compliance with the freeze in 2013 and the 10 per cent reduction in consumption in 2015.

11. This stage I will commence with technical assistance and an investment project to curtail HCFC-141b and HCFC-142b uses, including uses related to the import of HCFC-containing pre-blended polyol. A quota system will enable reducing the consumption in the servicing sector. At the same time, the country aims to facilitate the implementation of the soon-to-be finalised Gulf Co-operation Council (GCC) “unified regulation with respect to ozone-depleting substances” through enforcement of the regulations, the provision of the necessary training and equipment for the customs. The country is also planning to provide training to the service sector. In order to reduce the use of new HCFC and cover potential shortfalls in HCFC-22 supply, reclaim, recycling and reuse is planned to be facilitated.

12. The HPMP also included information regarding the planned implementation of future stages of the HPMP. By 2015 it is expected that alternatives to HCFC-22 suitable for very warm climates have been identified and marketed. This will allow the efforts in stage II to focus first on the prohibition of the use of HCFC-22 in new and imported small units. It is foreseen that a retrofitting incentive programme and an early retirement incentive programme for large air conditioning units will be introduced and technical support on new alternatives and technologies provided. At the same time, the development introduction of national standards and codes for monitoring HCFC-22 use, and for using hydrocarbons and ammonia will be developed. Finally, an establishment of a second reclamation centre is planned for stage II of the HPMP. For the third stage post 2020, it is expected that natural attrition with continued replacement of HCFC-equipment by non-HCFC-equipment, as well as the application of constantly declining quotas for HCFC imports will reduce the demand and permit reductions consistent with the obligations of the country. In that period it is expected that equipment will be provided to the small and medium scale-servicing sector, related technician will be trained and the incentive programme for early replacement of large HCFC air conditioning applications will continue.

Cost of the HPMP

13. The total cost of stage I of the HPMP for Oman has been estimated at US \$434,120 plus agency support costs. The detailed cost breakdown for activities is listed in Table 4:

Table 4: Proposed activities and cost of all components of stage I of the HPMP

Activity	Total funding (US \$)
Assistance for the foam sector	
Technical assistance for foam sector to identify and introduce non-HCFC blowing agents	25,000
Investment project to convert the National Heater Industries Co. LLC to all water	79,120
Updating policy and regulations	
Establish and make functional a National Ozone Committee and the legal and technical task forces	15,000
National legal consultant to develop the national procedures for implementing the updated GCC regulation	10,000
Setup and implementation of an ODS e-licensing system including development, purchase of the necessary equipment, and training	30,000
Technical assistance for the servicing sector	
Review and update the national vocational curricula and national certification programme to include HCFCs and alternatives and latest technologies	15,000
Develop national codes of good practice for different R&AC servicing professions and implement an associated certification programme for both Omani and non-Omani technicians	15,000
Technical assistance including consultancy, exposure and training on availability of alternatives for different R&AC applications in the fisheries industry	50,000
National HCFC reclamation programme	
Development of national guidelines to promote establishment of refrigerants reclamation centres; visit to similar centres in other countries	25,000
Equipment supply	130,000
Project implementation, monitoring and verification	40,000
Total	434,120

Foam and solvent sectors

14. There are a number of users in the foam sector using either pre-blended polyols or mixing HCFC-141b and polyol in situ. A number of the users are not eligible for funding; others had, despite larger capacity, only a small consumption in the relevant years for establishment of their baseline. A similar situation is in the solvent sector, where historically consistent demand had been in the refrigeration service sector for equipment cleaning, while very recently additional uses had emerged. UNIDO proposed to support those foam-producing companies which are principally eligible but which cannot undertake an investment project due to their size and/or low baseline through a technical assistance project. UNIDO also submitted a request to support the conversion of one company, using imported pre-blended polyol for the production of insulation for water heaters. In this company, the average use of HCFC-141b in pre-blended polyol between 2007 and 2009 was 10.0 mt or 1.1 ODP tonnes per year. The use of HCFC-141b in pre-blended polyol in this particular company has not been reported as HCFC-141b consumption under Article 7 of the Montreal Protocol.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

15. The Secretariat reviewed the HPMP for Oman 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 and the 2011-2014 business plan of the Multilateral Fund.

Import of pre-blended polyols

16. The Secretariat raised a number of questions regarding the import of pre-blended polyols containing HCFC-141b. UNIDO confirmed that the import of such polyols is not monitored or restricted by the current regulations, nevertheless the NOU collected data on pre-blended polyols. The NOU had reported the amount of HCFC-141b contained in pre-blended polyols previously as part of the HCFC-141 imports into the country, treating it similar to a refrigerant mixture. UNIDO advised that the NOU adjusted the procedural instructions within the current legislation to allow monitoring and recording of imports of pre-blended polyols. Once the unified GCC regulation will be enacted, i.e. by the end of 2012, the import of pre-blended polyol containing HCFC-141b will be covered by the new regulation. The country committed to regulating the import of pre-blended polyols containing HCFC-141b, and to subsequently ban the import by January 2015.

Regulatory system

17. The Secretariat raised a number of questions regarding the current status of the quota system and the inclusion of HCFCs. UNIDO informed that the import or export of controlled substances including mixed, recovered, extracted or recycled substances is prohibited without a license; through procedural instructions all HCFCs blends are also included in the regulation. However, the decree includes an appendix reflecting the pre-2007 HCFC control measures. The GCC countries are planning to issue a new unified ODS regulation by the end of 2011, entering automatically into force after its adoption, which will avoid long legal procedures to update the ODS regulations for all GCC countries, including Oman. The NOU is also currently preparing the guidelines for an HCFC quota system, not covered within the existing regulation, and planned to be enacted by January 2012.

18. ODS import permits are mandatory and the related data is verified from different sources. However, there is currently no mechanism to cross check the data with customs due to, *inter alia*, current insufficiencies of customs codes to extract the correct amount registered by Customs. Therefore, an e-licensing system is proposed within the HPMP to ensure real-time registry and recording of all ODS shipments. UNEP advised that this is part of a regional activity in the West Asia region and is a regional effort to enhance the monitoring of ODS trade by accelerating data reporting and compilation, facilitate the identification of gaps between licensed and imported shipments soon after they might occur, support the local and regional efforts to monitor and curb illegal trade, and facilitate the process of ODS licensing through proper share of information amongst NOUs, importers, exporters and boarders' authorities. Moreover, the e-licensing system is already included or will be part of the HPMPs for Bahrain, Iraq, Kuwait, Qatar, Saudi Arabia, the Syria Arab Republic and Yemen. Part of the funds for the e-licensing system are pooled between all participating countries to enable cost effective programming of a generic system catered to the needs in the region, and remaining funds are used for each country to customize the generic version to its particular needs and establish the conditions for its use. The funds for the e-licensing system are part of the overall HPMP funding for the servicing sector and subject to the cost effectiveness value established in decision 60/44(f)(xv).

Foam sector

19. The HPMP includes a request for funding of the conversion at National Heaters Industries Co. and the technical assistance funding for HCFC-141b and HCFC-142b/HCFC-22 replacement technologies. National Heaters Industries Co. has a consumption of 10.0 mt of HCFC-141b in imported pre-blended polyol, calculated as the average between the years 2007 to 2009. The conversion is planned to be completed by January 2013. Complete phase-out in the foam sector is planned for January 2015. The Secretariat raised the issue of eligibility for support for some of the foam enterprises. UNIDO advised that the majority of foam companies identified are eligible, but that they either produce irregularly depending on orders coming in, or their consumption is so small that an investment project would not be justifiable.

Recovery, recycling, and reclamation

20. The Secretariat noted that the Government of Oman planned to establish a number of reclamation centres. The experience from the implementation of the refrigerant management plan (RMP) and the terminal phase-out management plan (TPMP) suggested the recovery and recycling scheme was not very successful. The Secretariat questioned whether funding for recovery and reuse would not be a more efficient way of using limited resources. UNIDO advised that, since currently no acceptable replacement technology exists for the air conditioning sector in countries with high ambient temperatures, until such technology is available the only means to reduce HCFC-22 consumption for servicing is preservation of the inventory through recovery and reuse. UNIDO considered two technically sound options: Central recovery/reclaim/reuse to specified standards and/or de-centralized recovery/simple purification/reuse. The former modality was selected for Oman due to the high share of migrant workers (96 per cent) not consistently employed in Oman's service sector, resulting a sustainable set-up for fully de-centralized recovery and reuse being difficult to operate, as the experience in the RMP and TPMP implementation had shown. Further, a shortfall of previous recovery and recycling projects was the lack of cylinder handling, i.e. cleaning and inspection, as well as the quality control of the reclaimed gas. Such operation requires centralization and could be carried out in a refrigerant reclaim centre. It is foreseen to locate the reclaim centres at private sector companies, selected through a local tendering process, where demonstration of a business model for operation is part of the terms of reference. This concept has been presented to private sector stakeholders in Oman and these showed a high level of support to the approach. A similar set-up exists in the United Arab Emirates where it operated successfully during the last five years.

21. UNIDO also pointed out that the HCFC-22 containing appliances have larger charges than former CFC-12 appliances; hence the quantities to be processed are expected to be substantially larger. Also, the reclaim centres foreseen will be themselves equipped with recovery units and cylinders in order to pro-actively recover HCFC themselves and not only to rely on third party delivery. Finally, contrary to the situation during the CFC phase-out, when counterfeit products labelled as CFC-12 but actually containing HCFC-22 were sold for US \$2.5/kg, the costs of the substance to be recovered is now substantially higher, making recovery and reclamation economically an attractive option.

Starting point for aggregate reduction in HCFC consumption

22. The Government of Oman agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the average level of the reported consumption in 2009 of 30.73 ODP tonnes and 2010 of 32.2 ODP tonnes, plus 1.1 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems not reported under Article 7 of the Montreal Protocol, resulting in 32.56 ODP tonnes. The Multilateral Fund estimated in the business plan the baseline at 32.47 ODP tonnes.

Impact on the climate estimated by the Country in its HPMP

Service sector

23. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices, recovery and reclaim, and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogramme (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 Oman, in particular its above-average efforts to improve servicing practices and reduce associated refrigerant emissions including an elaborate recovery and reclaim scheme indicate that it is likely that the country will surpass the 5,264 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.

Foam and solvent sectors

24. The conversion at National Heaters Industries Co. will reduce the amount of HCFC-141b used in Oman by 10 mt. The replacement technology, CO₂/water, has no significant direct impact on the climate. Consequently, the conversion will lead to a reduction in climate impact of 7,250 tonnes of CO₂-equivalent. A number of additional conversions will be carried out in the foam and solvent sectors without the support of the Multilateral Fund, since the enterprises are not eligible. Since the replacement technologies for the conversion are not known, the Secretariat cannot calculate the climate impact; however, since some of the uses will likely be replaced by low global warming potential technologies, it is expected that the phase-out in the foam and solvent sectors will yield climate benefits.

Co-financing

25. 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, UNIDO explained that efforts had been undertaken to identify ways and means of capturing future climate change-related revenue streams based on current UNFCCC requirements, in order to assist in the funding of this HPMP. To approach the carbon market, project activities in Oman will need to be referenced against existing methodologies under the Clean Development Mechanism (CDM) of the Kyoto Protocol. Existing approved CDM methodologies are not applicable in Oman as relevant CDM methodologies do not cover the servicing sector. It will need a project-based approach to determine whether the service sector in Oman could be addressed via a modified CDM methodology. As a consequence it would have to be further investigated as to whether CDM methodologies could be expanded to a new methodological approach covering the entire HCFC servicing sector in Oman. At this point in time, UNIDO could therefore not provide a definite statement on the availability of co-financing.

2011-2014 business plan of the Multilateral Fund

26. UNIDO and UNEP are requesting US \$433,300 plus support costs for implementation of stage I of the HPMP. The total value requested for the period 2011-2014 of US \$470,473 including support costs is below the total amount in the business plan. The difference in the figures is related to the low level of eligibility in the foam and solvent sectors, leading to comparatively low cost effectiveness values.

Draft Agreement

27. A draft Agreement between the Government of Oman and the Executive Committee for HCFCs phase-out is contained in Annex I to the present document.

RECOMMENDATION

28. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Oman for the period 2011 to 2015, at the amount of US \$471,354, consisting of US \$349,120, plus agency support costs of US \$26,184 for UNIDO and US \$85,000, plus agency support costs of US \$11,050 for UNEP;
- (b) Noting that the Government of Oman had agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 31.46 ODP tonnes, calculated using actual consumption of 30.7 ODP tonnes and 32.2 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol, plus 1.11 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems, resulting in 32.57 ODP tonnes;
- (c) Approving the draft Agreement between the Government of Oman and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document; and
- (d) Approving the first tranche of stage I of the HPMP for Oman, and the corresponding implementation plan, at the amount of US \$411,129, consisting of US \$314,120, plus agency support costs of US \$23,559 for UNIDO, and US \$65,000, plus agency support costs of US \$8,450 for UNEP.

Annex I

DRAFT AGREEMENT BETWEEN THE SULTANATE OF OMAN 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 the Sultanate of Oman (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 28.31 ODP tonnes by 1 January 2015 in compliance with Montreal Protocol schedules.
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, and 4.3.3(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 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 HCFC phase-out sector plans submitted. 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.
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 eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country had 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 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 are exempted;
 - (b) That the meeting of these Targets has been independently verified, unless the Executive Committee decided that such verification would not be required;
 - (c) That the Country had submitted annual implementation reports in the form of Appendix 4-A (“Format of 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;

- (d) That the Country has submitted an annual 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; and
- (e) That, for all submissions from the 68th meeting onwards, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and, where applicable, production and exports is in place and that the system is capable of ensuring the Country's compliance with the Montreal Protocol HCFC phase-out schedule for the duration of this Agreement.

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 annual implementation plans 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 paragraph 4 above.

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 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 an annual implementation plan submitted as foreseen in sub-paragraph 5(d) above, or as a revision to an existing annual 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; and
 - (iv) Provision of funding for programmes or activities not included in the current endorsed annual implementation plan, or removal of an activity in the annual implementation plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
- (b) Reallocations not categorized as major changes may be incorporated in the approved annual implementation plan, under implementation at the time, and reported to the Executive Committee in the subsequent annual implementation report; and
- (c) Any remaining funds will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

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. UNIDO has agreed to be the lead implementing agency (the “Lead IA”) and UNEP has agreed to be the cooperating implementing agency (the “Cooperating IA”) under the lead of 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 any of the agencies 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). This responsibility includes the necessity to co-ordinate with the Cooperating IA to ensure appropriate timing and sequence of activities in the implementation. The Cooperating IA will support the Lead IA by implementing the activities listed in Appendix 6-B under the overall co-ordination of the Lead IA. The Lead IA and Cooperating IA have reached consensus on the arrangements regarding inter-agency planning, reporting and responsibilities under this Agreement to facilitate a co-ordinated implementation of the Plan, including regular co-ordination meetings. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 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 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 these decisions are taken, this specific case will not be an impediment 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 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, the Lead IA and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to the information necessary to verify compliance with this Agreement.

14. The completion of stage I 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 level has been specified in Appendix 2-A. Should there at that time still be activities that are outstanding, and 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 sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion unless otherwise specified by the Executive Committee.

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.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	29.57
HCFC-141b	C	I	2.21
HCFC-142b	C	I	0.79
Total			32.57

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2011	2012	2013	2014	2015	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	n/a	31.46	31.46	28.31	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	n/a	31.46	31.46	28.31	n/a
2.1	Lead IA (UNIDO) agreed funding (US \$)	314,120	0	0	0	35,000	349,120
2.2	Support costs for Lead IA (US \$)	23,559	0	0	0	2,625	26,184
2.3	Cooperating IA (UNEP) agreed funding (US \$)	65,000	0	0	0	20,000	85,000
2.4	Support costs for Cooperating IA (US \$)	8,450	0	0	0	2,600	11,050
3.1	Total agreed funding (US \$)	379,120	0	0	0	55,000	434,120
3.2	Total support costs (US \$)	32,009	0	0	0	5,225	37,234
3.3	Total agreed costs (US \$)	411,129	0	0	0	60,225	471,354
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)						3.54
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)						0
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)						26.03
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)						1.1
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)						0
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)						1.11
4.3.1	Total phase-out of HCFC-142b agreed to be achieved under this Agreement (ODP tonnes)						0
4.3.2	Phase-out of HCFC-142b to be achieved in previously approved projects (ODP tonnes)						0
4.3.3	Remaining eligible consumption for HCFC-142b (ODP tonnes)						0.78

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

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

APPENDIX 4-A: FORMAT OF IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Implementation Report and Plan for each tranche request will consist of five parts:

- (a) A narrative report, with data provided by calendar year, regarding the progress since the year prior to 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 ODS phase-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 Annual 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. The narrative report will cover all relevant years specified in sub-paragraph 5(a) of the Agreement and can in addition also include information on activities in the current year;
- (b) 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;
- (c) A written description of the activities to be undertaken until and including the year of the planned submission of the next tranche request, highlighting 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 cover the years specified in sub-paragraph 5(d) of the Agreement. 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 annual implementation reports and annual implementation plans, submitted through an online database. 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), the annual implementation plan and any changes to the overall plan, and will cover the same time periods and activities; and
- (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(e).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The National Ozone Unit (NOU) is the central administrative unit established within the administrative structure of Ministry of Environment and Climate Affairs, responsible for the co-ordination of governmental activities with respect to the ozone layer protection and facilitation of ODS phase-out.
2. The NOU will be responsible for the overall co-ordination of national activities towards the HPMP implementation.
3. The management of the implementation of the planned project activities will be allocated to the NOU in cooperation with UNIDO as the Lead IA.

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 Implementation Plans and subsequent reports as per Appendix 4-A;
 - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the 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 annual implementation plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
 - (e) Fulfilling the reporting requirements for the annual implementation reports, annual implementation plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee. The reporting requirements include the reporting about activities undertaken by the Cooperating IA;
 - (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 Implementation Plan and accurate data reporting;
 - (i) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
 - (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 and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;

- (k) Ensuring that disbursements made to the Country are based on the use of the indicators; and
- (l) 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 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 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCY

1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the overall plan, including at least the following:

- (a) Providing assistance for policy development when required;
- (b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities; and
- (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per 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 \$187 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.
