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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Seventy-fifth Meeting Montreal, 16-20 November 2015

OVERVIEW OF ISSUES IDENTIFIED DURING PROJECT REVIEW

- 1. This document consists of the following sections:
 - (a) An analysis of the number of projects and activities submitted by bilateral and implementing agencies to the 75th meeting;
 - (b) Issues identified during the project review process:
 - (i) Calculation of incremental operational cost (IOC) of HFO technology reduced with CO₂; and
 - (ii) Verification reports of low-volume-consuming (LVC) countries' compliance with their HPMP agreement in 2014;
 - (c) Projects to demonstrate low-global warming potential (GWP) technologies pursuant to decision 72/40;
 - (d) Projects and activities submitted for blanket approval; and
 - (e) Investment projects for individual consideration.

Projects and activities submitted by bilateral and implementing agencies

- 2. Bilateral and implementing agencies submitted to the 75th meeting 213 funding requests for tranches of approved multi-year agreements, projects and activities amounting to US \$138,418,844, including agency support costs where applicable. The funding requests covered:
 - (a) Six stage II of the HCFC phase-out management plan (HPMP) for one LVC countries and five non-LVC countries;

^{*} Re-issued for technical reasons on 2 November 2015

- (b) Second/third/fourth/fifth/sixth tranches of approved HPMPs for 32 countries and a request for the fourth tranche of stage I of the HCFC production phase-out management plan for China;
- (c) Renewals of institutional strengthening (IS) projects in 29 countries;
- (d) Project preparation for stage II of the HPMP/HCFC phase-out investment activities for six countries;
- (e) Preparation of a HCFC production phase-out management plan (stage II) for China;
- (f) One project preparation, nine projects to demonstrate low-global-warming potential (GWP) technologies and two feasibility studies on district cooling pursuant to decision 72/40;
- (g) Inventories or surveys on alternatives to ozone-depleting substances (ODS) in 44 countries (decision XXVI/9 of the Meeting of the Parties);
- (h) Compliance assistance programme (CAP) for UNEP and core unit costs for UNDP, UNIDO and the World Bank; and
- (i) Verification reports on the implementation of the HPMP for 17 low-volume consuming (LVC) countries.
- 3. Following the project review process, 123 projects and activities totalling US \$18,216,848 including support costs, are recommended for blanket approval and 74 projects and activities totalling US \$116,560,160 are being forwarded for individual consideration. Together, the projects for blanket approval and those for individual consideration amount to US \$134,777,008.

IS renewal requests

- 4. The Secretariat reviewed the terminal reports and requests for extension of IS funding for 29 countries against relevant decisions including decision 74/51(c) on the funding level for IS projects and renewals and decision 74/51(e) on the need to include performance indicators for planned activities. All requests were cross-checked against: previous IS reports; progress reports on the implementation of country programmes; progress reports on the implementation of country programmes; data reported under Article 7 of the Montreal Protocol; the latest reports on implementation of HPMPs; bilateral and implementing agencies' progress reports submitted to the 75th meeting; and relevant decisions on compliance adopted by the Parties to the Montreal Protocol.
- 5. All the requests submitted by UNDP and UNEP included performance indicators for the planned activities for the next phase of the IS projects in accordance with decision 74/51(e). The Secretariat and UNEP worked together on developing performance indicators for IS projects being implemented by UNEP in order to clearly describe the obligation of the NOU, which would be used for monitoring IS activities.

Requests for project preparation funding for stage II of HPMPs

6. Implementing agencies submitted a request for funding for the preparation of stage II of HPMPs for six countries at a total amount of US \$560,000, plus agency support costs of US \$44,600. These requests were reviewed in light of the guidelines in decision 71/42, phase-out priorities¹ and previous funding provided for the preparation of stages I and II of HPMPs.

¹ Bilateral agencies, implementing agencies and Article 5 countries were reminded to prioritize the phase-out of HCFC-141b and compliance with the 2020 target, when requesting and using project preparation funds for projects in non-LVC countries (decision 72/18).

7. The Secretariat noted that the requests were comprehensive, and provided the information required in line with the guidelines. Recommendations were made after all outstanding issues were satisfactorily addressed.

Projects and activities submitted and subsequently withdrawn

- 8. During the project review process, issues associated with the tranches of stage I of the HPMPs for Senegal (second tranche) and Tunisia (second tranche), at a total cost of US \$1,268,878, could not be addressed on time, and therefore, were withdrawn by the relevant lead implementing agency. The reasons for the withdrawal of these tranches are described in the document on tranche submission delays², and summarized below:
 - (a) The request for Senegal was withdrawn since HCFC consumption verification reports for 2013 and 2014 were not submitted. The Secretariat had raised issues in connection with substantial fluctuations in the levels of HCFC consumption and requested UNEP and UNIDO to discuss with the country an adjustment to the starting point for sustained aggregate reduction in HCFC consumption if the verified consumption was significantly lower than the established baseline. In that case, a revision of the funding level, the HPMP strategy and activities to be implemented (based on the revised funding eligibility); and the Agreement between the Government and the Executive Committee would be required; and
 - (b) The request for Tunisia was withdrawn due to lack of progress in the implementation of the first tranche with a disbursement below the 20 per cent threshold. UNIDO advised that the tranche will be submitted to the 76th meeting.

Issues identified during project review

Uncertainty in calculation of IOCs for the foam sector

- 9. Decision 60/44 established incremental operating costs (IOC) for conversions in stage I in the foam sector of up to US \$1.60/kg. For stage II, decision 74/50 allows for higher IOCs to be considered when the conversion is to a low-GWP alternative (up to US \$5.0/kg), and even higher IOCs for conversion of small-and medium-sized enterprises (SMEs). The Secretariat has undertaken a detailed review of the IOCs for the stage II of HPMPs submitted to the 75th meeting and found that small changes in assumptions in the calculation of the IOCs can have a large effect on the costs.
- 10. Moreover, the IOC for reduced HFO formulations is uncertain and could not be determined. The uncertainty is driven primarily by the unknown quantity of additional water that would be co-blown with the HFO; how the polyol formulation would be changed given the additional water; the quantity of polymeric MDI that would be needed for the formulation; and the ratio of blowing agent plus polyol to MDI. While large foam enterprises with sufficient expertise and equipment could use formulations based on a 1:1 ratio, this is not necessarily the case for SMEs where a small variation ratio can have a large effect on the IOC.
- 11. The conversions to cyclopentane in several projects have requested increases in the foam density that the Secretariat has found difficult to justify. This is in contrast to conversions to water-blown technology, where an increased density is often required to ensure comparable foam properties when HCFC-141b blowing agent was used. For those conversions, however, there is uncertainty of how the polyol formulation would be changed based on the additional water, and what effect this would have on the price of the formulated polyol.

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² UNEP/OzL.Pro/ExCom/75/6.

12. Given that formulations with new blowing agents have been (or are being) optimized and introduced in local markets in Article 5 countries, the Executive Committee may wish to consider requesting the Secretariat to prepare a document on the calculation of the incremental operating costs for the foam sector for consideration to the 76th meeting.

Verification reports of LVC countries compliance with their HPMP agreement in 2014

- 13. In line with decision $61/46(c)^3$, at the 74^{th} meeting the Secretariat selected a sample of 17 countries for the purpose of verifying compliance with their HPMP agreement. The Executive Committee accordingly requested relevant bilateral and implementing agencies to include in their respective amendments to the work programmes for submission to the 75^{th} meeting, funding for verification reports for those countries.
- 14. Preparatory funds for the verification report associated with the HPMP for Seychelles and the request for the third tranche of the HPMP for Seychelles⁴ had been submitted to the 75th meeting. During the review of the tranche request, it was noted that the request for the fourth tranche would be submitted only in 2025; given the importance of verifying HCFC consumption reported in HPMPs, it was agreed that the verification of 2013 and 2014 consumption will be conducted immediately after the funding is approved at the 75th meeting and the report will be submitted to the Secretariat prior to the 76th meeting. The Secretariat will report the result of the verification to the 76th meeting.
- 15. Upon further review of other preparatory funding for verification reports authorized at the 74th meeting, it was noted that in the case of the HPMP for Montenegro the next tranche request is programmed for 2019. In order to avoid having the preparatory funding approved at the 75th meeting for a number of years until the next tranche of the HPMP is submitted, the Secretariat requested UNIDO not to include the request in its 2015 amendments to the work programme⁵, noting that this request would be included in a future work programme of UNIDO. To avoid this situation in the future, the Secretariat will only select LVC countries that would submit the subsequent funding tranche within the next year after the preparatory funding for the verification of HCFC consumption had been approved by the Executive Committee.

Projects to demonstrate low-GWP technologies and feasibility studies on district cooling pursuant to decision 72/40

Background

16. At the 74th meeting, the Executive Committee considered 26 demonstration projects on low-GWP technologies in 17 countries and in three regions, and three feasibility studies for district cooling, in line with decision 72/40. Following discussions, funding was approved for one feasibility study for district cooling and for the preparation of 13 projects to demonstrate low-GWP technologies as part of the work programmes of UNDP, UNIDO and the World Bank, with full proposals to be submitted to the 75th and 76th meetings.⁶ In addition, the Executive Committee agreed on the submission for consideration at the 75th meeting of a limited number of additional requests for the preparation of projects to demonstrate low-GWP technologies in the air-conditioning manufacturing sector, the resubmission of two full demonstration projects proposals for Colombia and Egypt that were submitted to the 74th meeting but not considered by the Executive Committee, and additional feasibility studies for district cooling (decision 74/21).

³ The Secretariat was requested to provide, at the first meeting of each year, a list representing 20 per cent of countries with an HCFC consumption baseline of up to 360 metric tonnes (mt), and with an approved HPMP, to approve funding for them for the purposes of verification of that country's compliance with the HPMP agreement for that year.

⁴ UNEP/OzL.Pro/ExCom/75/65.

⁵ UNEP/OzL.Pro/ExCom/75/31.

⁶ In addition, the Executive Committee also considered the request for funds for the preparation of a regional centre of excellence for demonstration and training of low-GWP ozone-safe alternative technologies in the Europe and Central Asia to be implemented by the Government of the Russian Federation.

An overview of the submissions

- 17. In response to decision 74/21, bilateral and implementing agencies submitted 11 proposals for consideration at the 75th meeting with a total funding request of US \$6,165,330 plus agency support costs of US \$434,033 for demonstration projects, and US \$200,000 including agency support costs for feasibility studies, described as follows:
 - (a) Five demonstration projects out of the 13 project concepts where funding for preparation was approved at the 74th meeting, with a total funding request amounting to US \$3,695,050 plus agency support costs of US \$258,653;
 - (b) Two demonstration projects for the foam sector in Colombia and Egypt amounting to US \$622,480 plus agency support costs of US \$43,574 that were submitted to the 74th meeting;
 - (c) Two demonstration projects for Colombia and Saudi Arabia in the air-conditioning manufacturing sector amounting to US \$1,806,800 plus agency support costs of US \$126,476. No funding was provided for the preparation of these two projects;
 - (d) One funding request for project preparation for the Federated States of Micronesia amounting to US \$41,000 plus agency support costs of US \$5,330;
 - (e) One concept note for a demonstration project in West Asia with no funding requested at the 75th meeting (PRAHA II⁷); and
 - (f) Two feasibility studies on district cooling in Egypt and Kuwait with a total request of US \$200,000 including agency support costs (i.e. US \$100,000 per study), which are contained in the 2015 work programme amendments of UNEP⁸ and UNIDO⁹.
- 18. The breakdown of all the funding requests is summarized in Table 1.

Table 1. Overview of submission of demonstration projects and feasibility studies for district cooling

Country				s considered at the ing (US \$)	Fund requested (US\$)
(document number)	Agency	Sector	Approved project	Estimated cost of full project at 74 th	
			project	meeting	
	Proje	cts submitt	ed to the 75 th meeting	g	
China (ExCom/75/41)	UNDP	RAC	24,000	2,500,000	2,412,263
Colombia (ExCom/75/42)	UNDP	Foam	n/a	459,450	282,480
Egypt (ExCom/75/45)	UNDP	Foam	n/a	340,000	340,000
Morocco (ExCom/75/58)	UNIDO	Foam	40,000	250,000	280,500
Saudi Arabia (ExCom/75/64)	UNIDO	Foam	30,000	240,000	274,016
South Africa (ExCom/75/66)	UNIDO	Foam	40,000	400,000	372,366
Thailand (ExCom/75/68)	World Bank	Foam	30,000	1,046,100	355,905
Colombia (ExCom/75/42)	UNDP	RAC	n/a	n/a	500,000
Federated states of Micronesia	Japan	RAC	n/a	n/a	41,000
(ExCom/75/28)					
Saudi Arabia (ExCom/75/64)	World Bank	RAC	n/a	n/a	1,306,800

⁷ Promoting refrigerant alternatives for countries with high-ambient temperature. Concept note is found in UNEP business plan for 2016-2018 (UNEP/OzL.Pro/ExCom/75/24)

⁸ UNEP/OzL.Pro/ExCom/75/30

⁹ UNEP/OzL.Pro/ExCom/75/31

Constant				ts considered at the ting (US \$)	Fund requested (US\$)
Country (document number)	Agency	Sector	Approved project preparation	Estimated cost of full project at 74 th meeting	
Regional: West Asia (n/a)*	UNEP	RAC	n/a	n/a	n/a
Cost	n/a	n/a	164,000	n/a	6,165,330
Support costs	n/a	n/a	11,480	n/a	434,033
Total cost	n/a	n/a	175,480	n/a	6,599,363
Projects with approved pro	ject preparatio	n funding at	the 74 th meeting for	submission to the 76 th	neeting
Costa Rica	UNDP	Asmb	40,000	590,000	n/a
India	UNDP	Foam	30,000	2,300,000	n/a
Kuwait	UNDP	RAC	20,000	300,000	n/a
Maldives	UNDP	Serv	15,000	200,000	n/a
Saudi Arabia	UNIDO	RAC	30,000	1,800,000	n/a
Europe and Central Asia	UNIDO/ Russian Federation	Serv	50,000	n/a	n/a
Tunisia and Argentina	UNIDO	Asmb	60,000	1,000,000	n/a
Global	UNIDO	Serv	150,000	n/a	n/a
Cost	n/a	n/a	395,000	6,190,000	n/a
Support costs	n/a	n/a	27,650	437,300	n/a
Total Cost	n/a	n/a	422,650	6,627,300	n/a
Grand total			·	13,824,793	
Feasibility studies for distri	ct cooling			<u> </u>	
Egypt (ExCom/75/30-31)	UNIDO/ UNEP	n/a	n/a	100,000**	100,000**
Kuwait (ExCom/75/30-31)	UNIDO/ UNEP	n/a	n/a	100,000**	100,000**
Total	n/a	n/a	n/a	200,000	200,000

Total | n/a | n/a | n/a | 200,000 | 200,000 | * The concept note for the PRAHA II project estimates that the cost of the project would be US \$750,000 when submitted at the 76th meeting

- 19. With regard to the demonstration projects submitted to the 75th meeting, five were in the refrigeration and air-conditioning sector and six in the foam sector. Detailed information concerning the projects submitted is contained in individual project documents, the document on bilateral cooperation¹⁰, and the work programme amendments of the implementing agencies.
- 20. The assessment of the feasibility studies for district cooling for Egypt and Kuwait took into consideration additional information provided by UNEP and UNIDO.

Review of proposals by the Secretariat

- 21. The Secretariat appreciated the efforts made by Article 5 countries, with the assistance from bilateral and implementing agencies, to develop project proposals on alternative technologies.
- 22. Following the methodology used at the 74th meeting, the Secretariat undertook an assessment of all of the demonstration projects proposals taking into consideration the following criteria:
 - (a) Increase in current know-how with respect to low-GWP alternative technology;
 - (b) Added value of the project for established technologies;

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^{**}Including agency support costs

¹⁰ UNEP/OzL.Pro/ExCom/75/28

- (c) Description of technology and link to other activities in a country;
- (d) Replicability (i.e., facilitating its introduction in HPMPs);
- (e) Geographical distribution;
- (f) Sector (i.e., refrigeration and air-conditioning, particularly air-conditioning manufacturing, as priority; for the foam sector, the added value as compared to projects completed in stage I of HPMPs);
- (g) Energy efficiency promotion and consideration of other environmental impacts; and
- (h) Commitment from an eligible manufacturing enterprise to undertake the conversion to the alternative technology.
- 23. The Secretariat provided comments to bilateral and implementing agencies on all the demonstration projects, followed by discussions that clarified outstanding issues. In addition, the Secretariat sought technical advice from independent refrigeration and foam experts. The assessment for each project is contained in Table 2.

Assessment of ODS demonstration projects

- 24. In considering the demonstration projects submitted to the 75th meeting, the Executive Committee might wish to note the following:
 - (a) Two projects in the refrigeration and air-conditioning sector in China (ExCom/75/41) and Colombia (ExCom/75/42) largely comply with the criteria and could be recommended for approval at the 75th meeting;
 - (b) One project in the air-conditioning sector in Saudi Arabia (ExCom/75/64) could be reviewed at the 76th meeting, noting that funding for preparation of a similar project in Saudi Arabia was approved for UNIDO for submission to the 76th meeting;
 - (c) Three projects on reduced-HFO formulations in the foam sector in Colombia (ExCom/75/42), Saudi Arabia (ExCom/75/64) and Thailand (ExCom/75/68) have similarities in the proposed demonstration activities and are recommended to be jointly discussed;
 - (d) Three projects on new equipment/technology in the foam sector in Egypt (ExCom/75/45), Morocco (ExCom/75/58) and South Africa (ExCom/75/66) have similarities in the proposed demonstration activities and are recommended to be jointly discussed;
 - (e) One project preparation in the air-conditioning sector in the Federated States of Micronesia, noting that if funding is approved, the full project could be submitted to the 76th meeting (ExCom/75/28); and
 - (f) A concept note for PRAHA II project with no funding request for project preparation, noting that the full project proposal would be submitted the 76th meeting.
- 25. The results of the assessment for each individual demonstration project are summarized in Table 2 per sector:

Table 2. The results of the assessment for demonstration projects

Refrigeration and air-conditioning sector

Document number	ExCom/75/41
Country	China
Agency	UNDP
Project title	Demonstration project for ammonia semi-hermetic frequency convertible screw refrigeration compressor unit in the industrial and commercial refrigeration industry at Fujian Snowman Co. Ltd
Subsector/application	Industrial/ commercial/ screw compressor
Alternative(s)	NH ₃ , CO ₂
PRP approved at 74 th meeting	Yes
Funding requested (US \$)	2,412,263
Support costs (US \$)	168,858

Description

The objective is to establish the suitability of NH_3/CO_2 refrigeration system using semi-hermetic compressor for small- and medium-sized ICR systems as a replacement for HCFC-22-based compressors. The demonstration will test and standardize the technology and make it possible to produce the NH_3/CO_2 system on a commercial scale. Prototypes of three modules will be produced and tested in laboratory environment to validate the technology.

Assessment

The demonstration addresses a priority area for HCFC phase-out and is closely linked with the activities in the HPMP. The success of the demonstration will assist in the introduction of NH₃/CO₂ technology in manufacturing of small- and medium-sized refrigeration equipment used in supermarkets and cold storage. Potential phase out in the enterprise is 359 mt of HCFC-22 consumption per year, if the demonstration is successful. The overall cost of the project is very high (almost 25 per cent of the total US \$10 million available for all projects). The project would offer a good demonstration if the total cost can be reduced.

	reduced.	
Document number	ExCom/75/42	
Country	Colombia	
Agency	UNDP	
Project title	Demonstration project for the use of R-290 (propane) as an alternative	
	refrigerant in commercial air conditioning manufacturing at Industrias	
	Thermotar ltda	
Subsector/application	Commercial AC	
Alternative(s)	R-290	
PRP approved at 74 th meeting	No	
Funding requested (US \$)	500,000	
Support costs (US \$)	35,000	

Description

The project will demonstrate the use of HC-290 (propane) in commercial air-conditioning equipment with a capacity between 3.5-17.5 kW, contributing to the elimination of HCFC-22 use in the RAC subsector. The project will design, construct and test prototypes, carry a safety risk assessment, convert a production line for commercial air-conditioning equipment to HC-290. The project includes training for operators and technical assistance to endusers to improve the risk management framework.

Assessment

Development of HC-290 commercial AC equipment with this cooling capacity would be a novel development. Project output will include a report with lessons learned from the project implementation, and approaches to replicate the technology in other enterprises in the country and the region. Project impact is to achieve the phase-out of 0.73 ODP tonnes (13.27 mt) of HCFC-22 in the beneficiary enterprise (Industrias Thermotar). The enterprise may include design optimization to enhance the energy efficiency of units. Some similarities to the demonstration project in the Philippines submitted but subsequently withdrawn at the 74th meeting, though smaller enterprise, smaller units. Dissemination and replicability of this project appear to be more limited to the regional level.

Document number	(Preparatory funding requested)
Country	Federated States of Micronesia
Agency	Japan

Project title	Demonstration of low GWP technologies performance in air-conditioning	
	applications	
Subsector/application	AC	
Alternative(s)	HFC-32	
PRP approved at 74 th meeting	No	
Funding requested (US \$)	41,000	
Support costs (US \$)	5,330	

Description

The project objectives would be to install, monitor and evaluate the performance of HFC-32 AC equipment provided by Daikin (e.g., energy efficiency, cooling of the installed equipment); identify any issues faced during installation and maintenance of equipment; and provide training for technicians servicing this equipment.

Assessment

The project seeks to address performance parameters of low-GWP based AC equipment already commercially available (i.e. Daikin HFC-32 based AC). The project will focus on characteristics of the equipment that would enable it to withstand the high humidity and heavy salt spray typical to the environment in the country. If successful, possible replication would be in the increased uptake of this equipment initially in the country, and potentially in other island countries where similar issues are faced. The project also includes training which should be part of HPMP rather than demonstration.

Document number	ExCom/75/64	
Country	Saudi Arabia	
Agency	World Bank	
Project title	Demonstration project at air-conditioning manufacturers to develop windows	
	and packaged air-conditioners using lower-GWP refrigerant	
Subsector/application	AC	
Alternative(s)	HFC-32, HC-290	
PRP approved at 74 th meeting	No	
Funding requested (US \$)	1,306,800	
Support costs (US \$)	91,476	

Description

The project proposes to build, test, and optimize prototypes of window and packaged air-conditioning (AC) units based on HFC-32 and HC-290 refrigerants; evaluate their energy performance and incremental cost; and disseminate the results to interested manufacturers in Saudi Arabia and other countries. The testing of the prototypes will be carried out in a laboratory.

Assessment

The demonstration proposes to develop AC equipment prototypes based on HFC-32 and HC-290 and evaluate their performance in high ambient temperature environment. Two enterprises have been identified. One of them was established in 2010 therefore is not eligible for assistance under the Multilateral Fund. Given the remaining HCFC consumption in several AC applications, there is potential for replicability. At the 74th meeting, the Executive Committee approved preparation funding for UNIDO for a demonstration project on promoting HFO-based technologies for AC sector in Saudi Arabia. The potential overlap of this demonstration with UNIDO's proposal as well as PRAHA project and the trials being conducted in the HPMP of Bahrain (ExCom/75/37) with the same technologies should be considered.

Document number	Concept note (ExCom/75/24)		
Country	Regional (West Asia)		
Agency	UNEP/UNIDO		
Project title	Promoting refrigerant alternatives for high ambient countries (PRAHA II)		
Subsector/application	AC		
Alternative(s)	Not specified		
PRP approved at 74 th meeting	No		
Funding requested (US \$)	No funding requested to this meeting, estimated cost: US \$750,000		
Support costs (US \$)	n/a		
Description	Assessment		
The project proposes to develop a sta	age II for the PRAHA The proposed activities appear to be more suitable for a		

project, approved at the 69th meeting, with the aim to assess feasibility of low-GWP refrigerants suitable for countries with high-ambient temperature in airconditioning applications. PRAHA is building and testing 18 different prototypes for comparison with HCFC and high-GWP HFC-based units and will be completed by the end of 2015. To ensure smooth deployment of alternatives the current project proposes risk assessment for A2L & A3 alternatives; strengthening capacity of local industry in high ambient countries; field testing of AC units with low-GWP; strengthening the capacities of the A/C supply chain network to safely manage units with low-GWP alternatives; promotion of involvement of local research institutes; and assessment of economic implications of deploying low-GWP alternatives.

technical assistance rather than a demonstration project, as it includes capacity building, risk and economic implications assessment. The currently ongoing project is already testing prototypes and doing comparisons with existing units (which in itself is a demonstration). More information is required to fully assess the project proposal in line with decision 72/40.

Foam sector

Document number	ExCom/75/42
Country	Colombia
Agency	UNDP
Project title	Demonstration project to validate the use of HFOs for discontinuous panels in
	Article 5 countries through the development of cost-effective formulations
Subsector/application	Rigid PU foam: discontinuous panels, spray
Alternative(s)	Reduced HFO-1233zd(E), reduced HFO-1336maam(z)
PRP approved at 74 th meeting	No
Funding requested (US \$)	282,480
Support costs (US \$)	19,774

Description

The project has multiple components including validation of reduced-HFOs formulation for use in polyurethane (PU) discontinuous panels; optimising the cost/performance balance to achieve a similar foam thermal performance to HCFC-141b based formulations; and conducting a cost analysis of different HFO/water formulations versus HCFC-141b-based system. Project activities to be conducted in a systems house include planning, formulation development, testing, analysis of results, field tests and technology replication.

Assessment

Development of reduced HFO pre-blended polyol formulations will decrease the cost of the polyol systems and make HFOs more economically viable for SMEs. Optimization of the water/blowing agent mixture composition would be a valuable contribution. Results may be replicable in other foam applications in Colombia and other Article 5 countries given the potential increase in performance and possible cost reductions. A systems house and a downstream user have been identified. The systems house selected already participated in a demonstration project for supercritical CO₂ in spray foam. There are similarities between this and the foam demonstration projects submitted for Saudi Arabia and Thailand. Some cost elements appear high.

Document number	ExCom/75/45
Country	Egypt
Agency	UNDP
Project title	Demonstration of low cost options for the conversion to non-ODS technologies
	in polyurethane foams at very small users
Subsector/application	Rigid PU, pour-in-place
Alternative(s)	methyl formate, methylal
PRP approved at 74 th meeting	No
Funding requested (US \$)	340,000
Support costs (US \$)	23,800

Description

The project proposes to develop a low-cost foam dispensing unit for pour-in-place (PIP) applications that includes an air compressor or explore options for

Assessment

The demonstration will develop low-cost equipment for use with low-GWP alternatives (i.e. methyl formate and methylal). Equipment manufacturer has not been

reducing the cost of foam dispensers currently in use; and consider the option of pre-packaging PU foam systems that are sealed, have a long lifetime and can be used upon demand (they are currently in use in Colombia, Mexico, and the United States of America for certain applications) for very small users (VSU).

identified and will be selected through UNDP bidding process. If successful, this equipment may be used in a large number of very small enterprises in several Article 5 countries. It is noted that SMEs in Egypt were already provided technical assistance through stage I of the HPMP.

Document number	ExCom/75/58
Country	Morocco
Agency	UNIDO
Project title	Demonstration of the use of low cost pentane foaming technology for the
	conversion to non-ODS technologies in polyurethane foams at small and
	medium enterprises
Subsector/application	Rigid PU foam: several
Alternative(s)	Pentane
PRP approved at 74 th meeting	Yes
Funding requested (US \$)	280,500
Support costs (US \$)	19,635

Description

The objective of the demonstration is to develop and validate low-cost pentane foaming technology through designing a simple, standardized and easy-to-handle compact foaming machine capable of operating with flammable pentane. The cost reduction will be realized through standardization of equipment, designing movable ventilation systems and the use of pre-blended polyols systems.

Assessment

The demonstration addresses the issue of high capital costs that limits the applicability of pentane technology for SMEs. If successful the project has a potential for replication due to a large number of SMEs in several Article 5 countries. Although there is no direct phase-out of HCFCs through the demonstration, the enterprise will be converted using the technology if the demonstration is successful together with other SMEs in stage II of the HPMP in Morocco.

	III WII III Wordeed.
Document number	ExCom/75/64
Country	Saudi Arabia
Agency	UNIDO
Project title	Demonstration project for the phase-out of HCFCs by using HFO as foam
	blowing agent in the spray foam applications in high ambient temperatures
Subsector/application	Rigid PU foam: spray
Alternative(s)	HFO-1233zd(E), HFO-1336mzz(Z)
PRP approved at 74 th meeting	Yes
Funding requested (US \$)	274,016
Support costs (US \$)	19,181

Description

The project will demonstrate the use of reduced HFOs pre-blended polyols in the spray foam sector, and explore the feasibility of reducing the operating costs, including optimizing the HFO/water mixture. The project would focus on the application of spray foam in countries with high-ambient temperature.

Assessment

The technology will assist in the introduction of low-GWP HFO alternatives in the spray foam sector where high performance non-flammable, low-GWP alternatives are not available. It adds value to the overall promotion of the use of HFOs, including by optimizing the water/HFO mixture composition. It is noted that several similar demonstration projects are being proposed, for Colombia and Thailand. Saudi Arabia has no remaining consumption of HCFC-141b eligible for funding and stage I included technical assistance to the systems house to customize formulations using hydrocarbons and HFOs. Some cost elements appear high.

Document number	ExCom/75/66
Country	South Africa
Agency	UNIDO
Project title	Demonstration project on the technical and economic advantages of the vacuum assisted injection in discontinuous panel's plant retrofitted from HCFC-141b to pentane

Subsector/application	PU foam
Alternative(s)	Pentane
PRP approved at 74 th meeting	Yes
Funding requested (US \$)	372,366
Support costs (US \$)	26,066

Description

The project will demonstrate the benefit of application of vacuum-assisted injection (VAI) using cyclopentane as a blowing agent in manufacturing of discontinuous panels for commercial refrigeration equipment at an enterprise in South Africa.

Assessment

The project would demonstrate a new technology that will enhance cyclopentane blown technology, an already known and accepted low-GWP technology. VAI would likely result in technology enhancements independent of the blowing agent, suggesting the technology may constitute an upgrade. The proposed demonstration component has been used in several countries, including at least one Article 5 country. All the eligible consumption of HCFC-141b in South Africa has been funded in stage I HPMP and South Africa will implement a ban on HCFC-141b at least one year before the conversion would take place.

Document number	ExCom/75/68
Country	Thailand
Agency	World Bank
Project title	Demonstration project at foam system houses to formulate pre-blended polyol
	for spray polyurethane foam applications using low-global warming potential
	blowing agent
Subsector/application	Rigid PU foam: several including spray
Alternative(s)	Reduced HFO-1233zd (E), HFO-1336mzzz(Z), pre-blended HC,
	reduced HFC-245fa
PRP approved at 74 th meeting	Yes
Funding requested (US \$)	355,905
Support costs (US \$)	24,913

Description

The demonstration includes the development of formulations of pre-blended polyol using HFOs for SMEs in polyurethane (PU) spray foam sector; validating the use of HFOs co-blown with $\rm CO_2$ for spray foam; optimization of the HFC-245fa/HFO ratio to get a similar thermal performance to that of HCFC-141b; and preparation of cost analysis for the different HFC/HFO formulations versus the HCFC-141b-based systems.

Assessment

The development and testing of HFO co-blown with CO₂ will assist in the introduction of this new technology for SMEs in the spray foam sector where high performance non-flammable, low-GWP alternatives are not available. Reduced formulations of HFOs with CO₂, if technically feasible, could increase performance of using only CO₂ and reduce the operating cost of using only HFO. The replicability potential is high given the amount of spray foam enterprises in Thailand as well as China, Indonesia, Viet Nam and the Philippines. There will be a phase out of 35.6 mt of HCFC 141b after successful implementation of the project. The demonstration includes the test of one formulation using HFO and HFC-245fa justified by the need to have a transition formulation while the supply of HFO is limited and prices are high. The project could be considered without the HFC formulation and together with the demonstration projects submitted for Colombia and Saudi Arabia.

Overview of costs of the demonstration projects

26. The current funding requested of US \$6,599,363 (including agency support costs) together with the preparatory funding approved for projects at the 74th meeting of US \$598,130 is below the US \$10 million funding available as per decision 72/40. However, there are still eight projects with preparatory funding approved that are due to the 76th meeting with an estimated cost of US \$6,627,300 (including agency support

costs) for six of them. The total amount of funding already approved or (to be) requested (including project preparation funding and agency support costs) is US \$13,824,793, which surpasses the amount set aside for demonstration projects by US \$3,824,793. This does not include the estimated cost of PRAHA II project of US \$750,000 and three other projects where full costs are yet to be determined.

Secretariat's recommendation

27. The Executive Committee may wish to consider the assessment on the proposals for demonstration projects for low-GWP alternatives to HCFCs contained in document UNEP/OzL.Pro/ExCom/75/27, for selecting the demonstration projects for low-GWP alternatives to HCFCs to be implemented within the funding levels established under decision 72/40.

Projects and activities submitted for blanket approval

28. Annex I to the present document lists 123 projects and activities totalling US \$18,216,848 including support costs that are recommended for blanket approval. The approval of these projects by the Executive Committee would include the relevant conditions or provisions in the corresponding project evaluation sheets as well as the approval of implementation programmes associated with the relevant tranches of multi-year projects.

Investment projects for individual consideration

29. Seventy-four projects/activities, totalling US \$134,777,008 including support costs, after the review by the Secretariat, are proposed for individual consideration. To facilitate the Executive Committee's consideration of the investment projects for individual consideration, the Secretariat has classified the projects by sector, and has grouped them according to the issues, as shown in Table 3. Table 3 also includes a section on the projects to demonstrate low-GWP technologies listed on Table 1.

Table 3. Projects submitted for individual consideration

Country	Project	Agency	ExCom	Issue
Projects to den	nonstrate low-GWP technologies			
Several	Low-GWP demonstration projects	Several	Table 1 above	Demonstration projects to be selected based on the assessment presented above
HPMP stage II				
Brazil	HCFC phase-out management plan stage II - first tranche	UNDP/UNIDO/ Germany	75/40	Pending agreed costs for the project
Colombia	HCFC phase-out management plan stage II - first tranche	UNDP/UNEP/ Germany	75/42	All technical and capital cost issues agreed but operating costs for reduced HFO formulations are uncertain; complete ban on HCFC-141b is proposed while there remains eligible consumption; accelerated phase-out for non-LVC countries
Guyana	HCFC phase-out management plan stage II - first tranche	UNEP/UNDP	75/47	All technical and cost issues agreed; stage II of the HPMP
Lebanon	HCFC phase-out management plan stage II - first tranche	UNDP	75/52	All technical and cost issues agreed; accelerated phase-out for non-LVC countries
Oman	HCFC phase-out management plan stage II - first tranche	UNIDO/UNEP	75/61	All technical and cost issues agreed; ban of HCFC-141b in imported pre- blended polyols delayed
Sudan	HCFC phase-out management plan stage II - first tranche	UNIDO	75/67	All technical and cost issues agreed; stage II of the HPMP

Country	Project	Agency	ExCom	Issue
HPMP stage I	*		•	
Botswana	HCFC phase-out management plan stage I - first tranche	UNEP/UNIDO	75/39	All technical and cost issues agreed; stage I of the HPMP
Libya	HCFC phase-out management plan stage I - first tranche	UNIDO	75/53	All technical and cost issues agreed; stage I of the HPMP; potential non-compliance with the Protocol pending action plan approval at XXVII Meeting of the Parties
HPMP tranche	e request		•	
Bahrain	HCFC phase-out management plan stage I – second tranche	UNEP/UNIDO	75/37	Less than 20 per cent disbursement
Bolivia (Plurinational State of)	HCFC phase-out management plan stage I – third tranche	UNIDO	75/38	Data discrepancies; revised Agreement in light of change of implementing agency at 74th meeting
Brazil	HCFC phase-out management plan stage I – fifth and last tranche	UNDP/Germany	75/40	Return of funds from non-eligible enterprises
China	HCFC phase-out management plan stage I – fifth and last tranche	UNDP/UNIDO/ /The World Bank/ Germany	75/41	PU, XPS, RAC, ICR above US \$5 million
Democratic People's Republic of Korea	HCFC phase-out management plan stage I – second tranche	UNIDO/UNEP	75/44	Transfer of UNEP's component to UNIDO
Guatemala	HCFC phase-out management plan stage I – third tranche	UNIDO/UNEP	75/46	Non-compliance with HCFC consumption in 2013
Indonesia	HCFC phase-out management plan stage I – third tranche	UNDP/ UNIDO/World Bank/Australia	75/49	Potential return of funds and potential revised Agreement; conversion to high-GWP alternatives
Jordan	HCFC phase-out management plan stage I – second tranche	UNIDO/World Bank	75/50	Revised agreement resulting from a bankruptcy and return of associated funds, of tranche 2 of stage I
Malaysia	HCFC phase-out management plan stage I – third tranche	UNDP	75/54	Withdrawal of a technical assistance project
Maldives	HCFC phase-out management plan stage I – third tranche	UNEP/UNDP	75/55	Use of a high GWP alternative for retrofitting in the fishery sector
Peru	HCFC phase-out management plan stage I – second tranche	UNDP/UNEP	75/62	Revised work plan for the second and subsequent tranches of stage I
Saudi Arabia	HCFC phase-out management plan stage I – third tranche	UNIDO/UNEP	75/64	Lack of a signed agreement for servicing sector activities; customs clearance of equipment
Venezuela (Bolivarian Republic of)	HCFC phase-out management plan stage I – fourth and final tranche	UNIDO/UNEP	75/73	Transfer of UNEP's component to UNIDO
Viet Nam	Stage I – third tranche	World Bank	75/74	Bankrupt enterprise and possible replacement; potential return of funds or revised Agreement

			Annex I			
Project Title	Agency	ODP		s recommended	, ,	C.E.
		(tonnes)	Project	Support	Total	(US\$/kg)
ALBANIA						
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (stage I, third tranche)	UNEP		\$23,000	\$2,990	\$25,990	
HCFC phase-out management plan (stage I, third tranche)	UNIDO		\$40,000	\$3,600	\$43,600	
Total f	or Albania		\$63,000	\$6,590	\$69,590	
ANGOLA						
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (stage I, third tranche) Noted that the Agreement had been updated to reflect the extension of stage I of the HPMP from 2015 to 2016.	UNDP	1.6	\$31,111	\$2,800	\$33,911	
Preparation of a HCFC phase-out management plan (stage II)	UNDP		\$60,000	\$4,200	\$64,200	
Total	for Angola	1.6	\$91,111	\$7,000	\$98,111	
BAHAMAS						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$20,000	\$2,600	\$22,600	
Noted that eligible funding (US \$40,000) was reduced by 50 per cent to account for surveys funded outside the Multilateral Fund.						
Total fo	r Bahamas		\$20,000	\$2,600	\$22,600	
BAHRAIN						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$60,000	\$7,800	\$67,800	
Survey of ODS alternatives at the national level	UNIDO		\$50,000	\$4,500	\$54,500	
Total f	or Bahrain		\$110,000	\$12,300	\$122,300	
BANGLADESH						
REFRIGERATION						
Preparation of project proposal						
Preparation for HCFC phase-out investment activities (stage II) (refrigeration and air-conditioning sector)	UNDP		\$80,000	\$5,600	\$85,600	

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Project Title	Agency	ODP		s recommende		C.E.	
		(tonnes)	Project	Support	Total	(US\$/kg)	
PHASE-OUT PLAN							
HCFC phase out plan							
Preparation of a HCFC phase-out management plan (stage II)	UNEP		\$30,000	\$3,900	\$33,900		
Preparation of a HCFC phase-out management plan (stage II)	UNDP		\$30,000	\$2,100	\$32,100		
SEVERAL							
Technical assistance/support							
Survey of ODS alternatives at the national level	UNDP		\$55,000	\$4,950	\$59,950		
Noted that eligible funding (US \$110,000) was reduced by 50 per cent to account for surveys funded outside the Multilateral Fund.							
Total for B	Bangladesh		\$195,000	\$16,550	\$211,550		
BARBADOS							
PHASE-OUT PLAN							
HCFC phase out plan							
Verification report on the implementation of the HCFC phase-out management plan	UNEP		\$30,000	\$3,900	\$33,900		
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.							
SEVERAL							
Ozone unit support							
Renewal of institutional strengthening project (phase VI: 11/2015-10/2017)	UNEP		\$149,760	\$0	\$149,760		
Total for	Barbados		\$179,760	\$3,900	\$183,660		
BELIZE							
SEVERAL							
Technical assistance/support							
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200		
Tota	l for Belize		\$40,000	\$5,200	\$45,200		
BENIN							
SEVERAL							
Ozone unit support							
Renewal of institutional strengthening project (phase IX: 1/2016-12/2017)	UNEP		\$85,000	\$0	\$85,000		
	l for Benin		\$85,000		\$85,000		

				Annex I		
Project Title	Agency	ODP (tonnes)	Fund Project	s recommend Support	ed (US\$) Total	C.E. (US\$/kg)
BOSNIA AND HERZEGOVINA			3			
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report for stage I of HCFC phase-out management plan	UNIDO		\$30,000	\$2,700	\$32,700	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						
Total for Bosnia and Ho	erzegovina		\$30,000	\$2,700	\$32,700	
BRAZIL						
SEVERAL						
Ozone unit support						
Extension of institutional strengthening project (phase VIII: $12/2015-11/2017$)	UNDP		\$449,280	\$31,450	\$480,730	
Total	for Brazil		\$449,280	\$31,450	\$480,730	
BRUNEI DARUSSALAM						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report on the implementation of the HCFC phase-out management plan	UNEP		\$30,000	\$3,900	\$33,900	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						
Total for Brunei D	arussalam		\$30,000	\$3,900	\$33,900	
BURUNDI						
SEVERAL						
Ozone unit support						
Extension of the institutional strengthening project (phase VII: 1/2015-12/2017)	UNEP		\$85,000	\$0	\$85,000	
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$70,000	\$9,100	\$79,100	
Total fo	or Burundi		\$155,000	\$9,100	\$164,100	
CAMEROON						
PHASE-OUT PLAN						
HCFC phase out plan						
Preparation of a HCFC phase-out management plan (stage II)	UNIDO		\$70,000	\$4,900	\$74,900	

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Agency	ODP			, ,	C.E.
	(tonnes)	Project	Support	Total	(US\$/kg)
UNEP		\$178,601	\$0	\$178,601	
UNIDO		\$110,000	\$9,900	\$119,900	
Cameroon		\$358,601	\$14,800	\$373,401	
UNEP		\$85,000	\$0	\$85,000	
ape Verde		\$85,000		\$85,000	
UNEP		\$85,000	\$0	\$85,000	
l for Chad		\$85,000		\$85,000	
UNEP		\$786,000	\$87,960	\$873,960	
	UNEP Cameroon UNEP Cape Verde UNEP Il for Chad	UNEP UNEP Cape Verde UNEP UNEP UNEP UNEP UNEP UNEP UNEP	UNEP \$178,601 UNIDO \$110,000 Cameroon \$358,601 UNEP \$85,000 Cape Verde \$85,000 UNEP \$85,000 UNEP \$85,000 UNEP \$786,000	UNEP \$178,601 \$0 UNIDO \$110,000 \$9,900 Cameroon \$358,601 \$14,800 UNEP \$85,000 \$0 UNEP \$85,000 \$0 UNEP \$85,000 \$0 UNEP \$85,000 \$0 UNEP \$85,000 \$0	(tonnes) Project Support Total UNEP \$178,601 \$0 \$178,601 UNIDO \$110,000 \$9,900 \$119,900 Cameroon \$358,601 \$14,800 \$373,401 UNEP \$85,000 \$0 \$85,000 Cape Verde \$85,000 \$0 \$85,000 UNEP \$85,000 \$0 \$85,000 UNEP \$786,000 \$87,960 \$873,960

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Project Title	Agency	ODP (tonnes)	Fund Project	s recommend Support	ded (US\$) Total	C.E. (US\$/kg)	
HCFC phase-out management plan (stage I, third tranche) (solvent sector)	UNDP		\$500,000	\$35,000	\$535,000		
The Government of China and UNDP were requested to submit progress reports on a yearly basis on the implementation of the work programme associated with the final tranche until the completion of the project, verification reports until approval of stage II, and the project completion report to the first meeting of the Executive Committee in 2018. The Treasurer was requested to offset future transfers to UNDP by US \$12,384, representing interest accrued by the Government of China in 2013 and 2014 from funds previously transferred for the implementation of the solvent sector plan for China as per decision 69/24.							
HCFC phase-out management plan (stage I, fifth tranche) (refrigeration servicing sector including enabling programme)	Japan		\$80,000	\$10,400	\$90,400		
The Government of China and UNEP were requested to submit progress reports on a yearly basis on the implementation of the work programme associated with the final tranche until the completion of the project, and the project completion report to the first meeting of the Executive Committee in 2018. The Treasurer was requested to offset future transfers to UNEP by US \$3,148, representing interest accrued by the Government of China in 2012, 2013 and 2014 from funds previously transferred for the implementation of the refrigeration servicing sector plan and the national enabling programme for China, as per decision 69/24.							
Total	l for China		\$1,366,000	\$133,360	\$1,499,360		
COLOMBIA							
SEVERAL							
Technical assistance/support							
Survey of ODS alternatives at the national level	Germany		\$65,000	\$8,450	\$73,450		
Noted that eligible funding (US \$130,000) was reduced by 50 per cent to account for surveys funded outside the Multilateral Fund.							
Total for	Colombia		\$65,000	\$8,450	\$73,450		
COMOROS							
SEVERAL							
Ozone unit support							
Extension of the institutional strengthening project (phase IX: 1/2016-6/2017)	UNEP		\$85,000	\$0	\$85,000		
Total fo	r Comoros		\$85,000		\$85,000		
CONGO							
PHASE-OUT PLAN							
HCFC phase out plan							
Verification report on the implementation of the HCFC phase-out management plan	UNEP		\$30,000	\$3,900	\$33,900		
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.							

UNEP/OzL.Pro/ExCom/75/27 Annex I

	or planner a	pprovur		Annex I		
Project Title	Agency	ODP (tonnes)	Fund: Project	s recommended Support	l (US\$) Total	C.E. (US\$/kg)
SEVERAL						
Ozone unit support						
Extension of the institutional strengthening project (phase IX: 1/2015-12/2017)	UNEP		\$85,000	\$0	\$85,000	
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$70,000	\$9,100	\$79,100	
Tota	al for Congo		\$185,000	\$13,000	\$198,000	
CONGO, DR						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$110,000	\$14,300	\$124,300	
Total for	Congo, DR		\$110,000	\$14,300	\$124,300	
COOK ISLANDS						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$20,000	\$2,600	\$22,600	
Noted that eligible funding (US \$40,000) was reduced by 50 per cent to account for surveys funded outside the Multilateral Fund.						
Total for C	ook Islands		\$20,000	\$2,600	\$22,600	
COSTA RICA						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report for stage I of HCFC phase-out management plan	UNDP		\$30,000	\$2,700	\$32,700	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMF is being sought.						
SEVERAL						
Ozone unit support						
Extension of institutional strengthening project (phase XI: $1/2016$ - $12/2017$)	UNDP		\$179,857	\$12,590	\$192,447	
Total for	Costa Rica		\$209,857	\$15,290	\$225,147	

			Anne			
Project Title	Agency	ODP (tonnes)	Fund Project	s recommend Support	ed (US\$) Total	C.E. (US\$/kg)
COTE D'IVOIRE		(***	110,000	Биррого		
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (stage I, second tranche)	UNEP	3.1	\$190,000	\$22,998	\$212,998	
Noted that the Agreement had been updated to reflect the change in agency support costs owing to the new administrative cost regime. Approved on the understanding that if Côte d'Ivoire were to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and airconditioning equipment originally designed for non flammable substances, it would do so assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.						
Total for Co	te D'Ivoire	3.1	\$190,000	\$22,998	\$212,998	
CUBA						
SEVERAL						
Ozone unit support						
Extension of institutional strengthening project (phase $X: 1/2016-12/2017$)	UNDP		\$190,804	\$13,356	\$204,160	
Technical assistance/support						
Survey of ODS alternatives at the national level	UNDP		\$70,000	\$6,300	\$76,300	
Tota	l for Cuba		\$260,804	\$19,656	\$280,460	
DOMINICA						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report on the implementation of the HCFC phase-out management plan	UNEP		\$30,000	\$3,900	\$33,900	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						
Total for	Dominica		\$30,000	\$3,900	\$33,900	
DOMINICAN REPUBLIC						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNDP		\$55,000	\$4,950	\$59,950	
Noted that eligible funding (US \$110,000) was reduced by 50 per cent to account for surveys funded outside the Multilateral Fund.						
Total for Dominical	n Republic		\$55,000	\$4,950	\$59,950	

				Annex I		
Project Title	Agency	ODP (tonnes)	Funds Project	s recommended Support	(US\$) Total	C.E. (US\$/kg)
EQUATORIAL GUINEA						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report on the implementation of the HCFC phase-out management plan	UNEP		\$30,000	\$3,900	\$33,900	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						
Total for Equator	rial Guinea		\$30,000	\$3,900	\$33,900	
ETHIOPIA						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report on the implementation of the HCFC phase-out management plan	UNEP		\$30,000	\$3,900	\$33,900	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						
Total fo	or Ethiopia		\$30,000	\$3,900	\$33,900	
FIJI						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$35,000	\$4,550	\$39,550	
Noted that eligible funding (US \$70,000) was reduced by 50 per cent to account for surveys funded outside the Multilateral Fund.						
To	otal for Fiji		\$35,000	\$4,550	\$39,550	
GABON						
SEVERAL						
Ozone unit support						
Extension of the institutional strengthening project (phase IX: 1/2016-12/2017)	UNEP		\$85,000	\$0	\$85,000	
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$110,000	\$14,300	\$124,300	
Total	for Gabon		\$195,000	\$14,300	\$209,300	

			Annex I			
Project Title	Agency	ODP (tonnes)	Funds Project	s recommended Support	(US\$) Total	C.E. (US\$/kg)
GEORGIA						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report for stage I of HCFC phase-out management plan	UNDP		\$30,000	\$2,700	\$32,700	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						
Total f	or Georgia		\$30,000	\$2,700	\$32,700	
GRENADA						
SEVERAL						
Ozone unit support						
Extension of the institutional strengthening project (phase V: 1/2016-12/2017)	UNEP		\$85,000	\$0	\$85,000	
Total fo	or Grenada		\$85,000		\$85,000	
GUINEA-BISSAU						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200	
Total for Gui	nea-Bissau		\$40,000	\$5,200	\$45,200	
HAITI						
SEVERAL						
Ozone unit support						
Extension of the institutional strengthening project (phase IV: 11/2015-10/2017)	UNEP		\$128,000	\$0	\$128,000	
Tota	al for Haiti		\$128,000		\$128,000	
HONDURAS						
SEVERAL						
Ozone unit support						
Extension of the institutional strengthening project (phase VIII: 1/2016-12/2017)	UNEP		\$85,000	\$0	\$85,000	
Total for	Honduras		\$85,000		\$85,000	

			Allilex I				
Project Title	Agency	ODP (tonnes)	Fund Project	ls recommen Support	ded (US\$) Total	C.E. (US\$/kg)	
INDIA							
PHASE-OUT PLAN							
HCFC phase out plan							
HCFC phase-out management plan (stage I, third tranche) (refrigeration servicing sector and enabling activities)	UNEP	3.3	\$86,160	\$10,478	\$96,638		
The Government of India, UNDP, UNEP and the Government of Germany were requested to submit progress reports on a yearly basis on the implementation of the work programme associated with the third tranche until the completion of the project, verification reports until approval of stage II, and the project completion report to the second meeting of the Executive Committee in 2017.							
HCFC phase-out management plan (stage I, third tranche) (polyurethane foam sector plan)	UNDP	47.8	\$1,438,490	\$100,694	\$1,539,184		
The Government of India, UNDP, UNEP and the Government of Germany were requested to submit progress reports on a yearly basis on the implementation of the work programme associated with the third tranche until the completion of the project, verification reports until approval of stage II, and the project completion report to the second meeting of the Executive Committee in 2017.							
HCFC phase-out management plan (stage I, third tranche) (refrigeration servicing sector)	Germany	24.4	\$199,440	\$22,938	\$222,378		
The Government of India, UNDP, UNEP and the Government of Germany were requested to submit progress reports on a yearly basis on the implementation of the work programme associated with the third tranche until the completion of the project, verification reports until approval of stage II, and the project completion report to the second meeting of the Executive Committee in 2017.							
Tota	al for India	75.5	\$1,724,090	\$134,110	\$1,858,200		
INDONESIA							
SEVERAL							
Ozone unit support							
Extension of institutional strengthening project (phase X: 1/2016-12/2017)	UNDP		\$347,194	\$24,304	\$371,498		
Total for	r Indonesia		\$347,194	\$24,304	\$371,498		
IRAQ							
SEVERAL							
Technical assistance/support							
Survey of ODS alternatives at the national level	UNEP		\$110,000	\$14,300	\$124,300		
То	tal for Iraq		\$110,000	\$14,300	\$124,300		

			Annex I			
Project Title	Agency	ODP (tonnes)	Fund Project	s recommende Support	d (US\$) Total	C.E. (US\$/kg)
JAMAICA						
SEVERAL						
Ozone unit support						
Extension of institutional strengthening project (phase IX: 12/2015-11/2017)	UNEP		\$85,000	\$0	\$85,000	
Total fo	or Jamaica		\$85,000		\$85,000	
JORDAN						
FOAM						
Preparation of project proposal						
Preparation for HCFC phase-out investment activities (stage II) (foam sector)	IBRD		\$45,000	\$3,150	\$48,150	
Preparation for HCFC phase-out investment activities (stage II) (rigid polyurethane foam sector)	UNIDO		\$55,000	\$3,850	\$58,850	
PHASE-OUT PLAN						
HCFC phase out plan						
Preparation of a HCFC phase-out management plan (stage II)	IBRD		\$70,000	\$4,900	\$74,900	
Total	for Jordan		\$170,000	\$11,900	\$181,900	
KENYA						
PHASE-OUT PLAN						
HCFC phase out plan						
Preparation of a HCFC phase-out management plan (stage II)	France		\$60,000	\$7,800	\$67,800	
HCFC phase-out management plan (stage I, third tranche)	France		\$176,250	\$21,346	\$197,596	
Noted the progress made by the Government of Kenya in improving its licensing and quota system and encouraging the Government of Kenya to continue its efforts to improve it. The Government of Kenya was requested with the assistance from the Government of France to continue improving the licensing and quota system and to report annually on this matter through the progress and financial report submitted to the Executive Committee by the Government of France. Approved on the understanding that if Kenya were to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and air-conditioning equipment originally designed for non-flammable substances, it would do so assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.						
Total	for Kenya		\$236,250	\$29,146	\$265,396	
KIRIBATI						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200	

Project Title	Agency	Agency ODP		Funds recommended (US\$)		
Troject Title	Agency	(tonnes)	Project	Support	Total	C.E. (US\$/kg)
To	otal for Kiribati		\$40,000	\$5,200	\$45,200	
KUWAIT						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$70,000	\$9,100	\$79,100	
Survey of ODS alternatives at the national level	UNIDO		\$50,000	\$4,500	\$54,500	
Т	otal for Kuwait		\$120,000	\$13,600	\$133,600	
LIBERIA						
SEVERAL						
Ozone unit support						
Extension of the institutional strengthening project (ph VI: 11/2015-10/2017)	ase UNEP		\$109,073	\$0	\$109,073	
T	otal for Liberia		\$109,073		\$109,073	
LIBYA						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNIDO		\$110,000	\$9,900	\$119,900	
	Total for Libya		\$110,000	\$9,900	\$119,900	
MACEDONIA, FYR						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report for stage I of HCFC phase-out management plan	UNIDO		\$30,000	\$2,700	\$32,700	
Approved on the understanding that the verification report she submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its Hais being sought.	re					
HCFC phase-out management plan (phase I, sixth trans	che) UNIDO	0.1	\$82,000	\$6,150	\$88,150	
Total for M	lacedonia, FYR	0.1	\$112,000	\$8,850	\$120,850	
MALAYSIA						
SEVERAL						
Ozone unit support						
Extension of institutional strengthening project (phase $1/2016$ - $12/2017$)	XI: UNDP		\$357,760	\$25,043	\$382,803	
Tot	al for Malaysia		\$357,760	\$25,043	\$382,803	

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			Annex I			
Project Title	Agency	ODP (tonnes)	Funds Project	s recommended Support	(US\$) Total	C.E. (US\$/kg)
MALI						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report on the implementation of the HCFC phase-out management plan	UNEP		\$30,000	\$3,900	\$33,900	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$70,000	\$9,100	\$79,100	
Tot	al for Mali		\$100,000	\$13,000	\$113,000	
MARSHALL ISLANDS						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200	
Total for Marsh	all Islands		\$40,000	\$5,200	\$45,200	
MAURITIUS						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report for stage I of HCFC phase-out management plan	Germany		\$30,000	\$3,900	\$33,900	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	Germany		\$70,000	\$9,100	\$79,100	
Total for	Mauritius		\$100,000	\$13,000	\$113,000	

Project Title	Agency	ODP (tonnes)	Fund Project	ls recommen Support	ded (US\$) Total	C.E. (US\$/kg)
MEXICO						
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (stage I, fifth tranche) (foam sector plan for systems houses and local customers)	UNDP	30.0	\$1,122,503	\$84,188	\$1,206,691	
The Government of Mexico, UNIDO and UNDP were requested to submit progress reports on a yearly basis on the implementation of the work programme associated with the final tranche until the completion of the project and the project completion report no later than the first meeting of the Executive Committee in 2019. UNIDO and UNDP were requested to include in the next progres report to be submitted along with the request of the second trancunder stage II to the 77th meeting, the complete list of downstree foam enterprises assisted by the Multilateral Fund under stage I, including their HCFC 141b consumption phased out, subsector, baseline equipment and technology adopted, and a report on the destruction of the baseline equipment in Mabe, the closure of HCFC-based manufacturing capacity and the confirmation of project completion.	on e sss che am					
HCFC phase-out management plan (stage I, fifth tranche) (refrigeration servicing, technical assistance and monitoring	UNIDO	1.4	\$226,317	\$16,974	\$243,291	
The Government of Mexico, UNIDO and UNDP were requested to submit progress reports on a yearly basis on the implementation of the work programme associated with the final tranche until the completion of the project and the project completion report no later than the first meeting of the Executive Committee in 2019. UNIDO and UNDP were requested to include in the next progres report to be submitted along with the request of the second trancunder stage II to the 77th meeting, the complete list of downstre foam enterprises assisted by the Multilateral Fund under stage I, including their HCFC 141b consumption phased out, subsector, baseline equipment and technology adopted, and a report on the destruction of the baseline equipment in Mabe, the closure of HCFC-based manufacturing capacity and the confirmation of project completion.	on e sss che am					
Tota	l for Mexico	31.4	\$1,348,820	\$101,162	\$1,449,982	
MONTENEGRO						
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (stage I, third tranche)	UNIDO		\$98,500	\$7,388	\$105,888	
Total for	Montenegro		\$98,500	\$7,388	\$105,888	
MOROCCO						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$110,000	\$14,300	\$124,300	
Total	for Morocco		\$110,000	\$14,300	\$124,300	

			Annex I				
Project Title	Agency	ODP (tonnes)	Fund Project	ls recommended Support	(US\$) Total	C.E. (US\$/kg)	
NAURU							
SEVERAL							
Technical assistance/support							
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200		
:	Fotal for Nauru		\$40,000	\$5,200	\$45,200		
NEPAL							
PHASE-OUT PLAN							
HCFC phase out plan							
HCFC phase-out management plan (stage I, second tra	nche) UNEP	0.2	\$50,400	\$6,552	\$56,952		
Approved on the understanding that if Nepal were to decide proceed with retrofits and associated servicing to flammable toxic refrigerants in refrigeration and air-conditioning equiporiginally designed for non flammable substances, it would assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.	and ment do so						
HCFC phase-out management plan (stage I, second tra	nche) UNDP	0.1	\$33,600	\$3,024	\$36,624		
Approved on the understanding that if Nepal were to decide proceed with retrofits and associated servicing to flammable toxic refrigerants in refrigeration and air-conditioning equiporiginally designed for non flammable substances, it would assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.	and ment do so						
	Total for Nepal	0.3	\$84,000	\$9,576	\$93,576		
NICARAGUA							
SEVERAL							
Ozone unit support							
Renewal of institutional strengthening project (phase V $4/2016-3/2018$)	/III: UNEP		\$85,000	\$0	\$85,000		
Tota	l for Nicaragua		\$85,000		\$85,000		
NIGER							
SEVERAL							
Ozone unit support							
Extension of institutional strengthening project (phase $1/2016$ - $12/2017$)	X: UNEP		\$85,000	\$0	\$85,000		
	Total for Niger		\$85,000		\$85,000		

			Annex I				
Project Title	Agency	ODP (tonnes)	Fund Project	s recommend Support	led (US\$) Total	C.E. (US\$/kg)	
NIGERIA							
PHASE-OUT PLAN							
HCFC phase out plan							
HCFC phase-out management plan (stage I, fifth tranche) (foam sector and refrigeration servicing)	UNDP	56.0	\$299,974	\$22,498	\$322,472		
Noted that the Agreement had been updated based on the revised baseline. The Government of Nigeria, UNDP and UNIDO were requested to submit the project completion report of stage I of the HPMP to the second meeting of the Executive Committee in 2017 and a verification report of the country's HCFC consumption in 2015, when submitting stage II of the HPMP for consideration of the Executive Committee.							
HCFC phase-out management plan (stage I, fifth tranche) (refrigeration air-conditioning manufacturing sector)	UNIDO	34.1	\$193,908	\$14,543	\$208,451		
Noted that the Agreement had been updated based on the revised baseline. The Government of Nigeria, UNDP and UNIDO were requested to submit the project completion report of stage I of the HPMP to the second meeting of the Executive Committee in 2013 and a verification report of the country's HCFC consumption in 2015, when submitting stage II of the HPMP for consideration of the Executive Committee.	7;						
Total	for Nigeria	90.1	\$493,882	\$37,041	\$530,923		
NIUE							
SEVERAL							
Ozone unit support							
Extension of the institutional strengthening project (phase VI: 12/2015-11/2017)	UNEP		\$85,000	\$0	\$85,000		
Technical assistance/support							
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200		
Tot	tal for Niue		\$125,000	\$5,200	\$130,200		
PALAU							
SEVERAL							
Technical assistance/support							
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200		
Tota	al for Palau		\$40,000	\$5,200	\$45,200		
PANAMA							
SEVERAL							
Ozone unit support							
Extension of institutional strengthening project (phase VII: 12/2015-11/2017)	UNDP		\$191,360	\$13,395	\$204,755		
Total f	or Panama		\$191,360	\$13,395	\$204,755		

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				Annex I		
Project Title	Agency	ODP (tonnes)	Fund Project	s recommended Support	l (US\$) Total	C.E. (US\$/kg)
PAPUA NEW GUINEA						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	Germany		\$40,000	\$5,200	\$45,200	
Total for Papua N	lew Guinea		\$40,000	\$5,200	\$45,200	
PARAGUAY						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNDP		\$70,000	\$6,300	\$76,300	
Total for	r Paraguay		\$70,000	\$6,300	\$76,300	
PERU						
PHASE-OUT PLAN						
HCFC phase out plan						
Preparation of a HCFC phase-out management plan (stage II)	UNDP		\$60,000	\$4,200	\$64,200	
Noted that UNDP may submit a request for project preparation for investment projects in the foam sector during implementation of stage II of the HPMP for consideration and approval by the Executive Committee.	r					
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNDP		\$110,000	\$9,900	\$119,900	
Tot	al for Peru		\$170,000	\$14,100	\$184,100	
PHILIPPINES						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	IBRD		\$130,000	\$11,700	\$141,700	
Total for	Philippines		\$130,000	\$11,700	\$141,700	
RWANDA						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report on the implementation of the HCFC phase-out management plan	UNEP		\$30,000	\$3,900	\$33,900	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						

				Affilex I		
Project Title	Agency	ODP (tonnes)	Fund Project	s recommend Support	led (US\$) Total	C.E. (US\$/kg)
SEVERAL						
Ozone unit support						
Extension of the institutional strengthening project (phas VI: 12/2015-11/2017)	se UNEP		\$85,000	\$0	\$85,000	
Tota	al for Rwanda		\$115,000	\$3,900	\$118,900	
SAINT LUCIA						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200	
Total fo	or Saint Lucia		\$40,000	\$5,200	\$45,200	
SAINT VINCENT AND THE GRENADINE	ES					
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (second tranche)	UNEP		\$140,000	\$18,200	\$158,200	
Approved on the understanding that if Saint Vincent and the Grenadines were to decide to proceed with retrofits and associate servicing to flammable and toxic refrigerants in refrigeration a air-conditioning equipment originally designed for non flamma substances, it would do so assuming all associated responsibility and risks and only in accordance with the relevant standards as protocols.	nd able ities					
Total for Saint Vincent and the	ne Grenadines		\$140,000	\$18,200	\$158,200	
SAMOA						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$20,000	\$2,600	\$22,600	
Noted that eligible funding (US \$40,000) was reduced by 50 p cent to account for surveys funded outside the Multilateral Fundamental Funda						
To	otal for Samoa		\$20,000	\$2,600	\$22,600	
SENEGAL						
SEVERAL						
Ozone unit support						
Extension of institutional strengthening project (phase X 1/2016-12/2017)	II: UNEP		\$194,689	\$0	\$194,689	
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$55,000	\$7,150	\$62,150	
Noted that eligible funding (US \$110,000) was reduced by 50 cent to account for surveys funded outside the Multilateral Fundamental Fundam						
Tot	al for Senegal		\$249,689	\$7,150	\$256,839	

Project Title	Agency	ODP (tonnes)	Fund Project	s recommend Support	ed (US\$) Total	C.E. (US\$/kg)
SEYCHELLES						
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (third tranche)	Germany	0.6	\$180,000	\$22,800	\$202,800	
Approved on the understanding that verification report on HCFC consumption for 2013 and 2014 would be submitted to the 76th meeting; and if Seychelles were to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and air-conditioning equipment originally designed for non flammable substances, it would do so assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.	S					
Verification report for stage I of HCFC phase-out management plan	Germany		\$30,000	\$3,900	\$33,900	
SEVERAL						
Ozone unit support						
Extension of institutional strengthening project (phase VII: $11/2015-10/2017$)	UNEP		\$85,000	\$0	\$85,000	
Total for	Seychelles	0.6	\$295,000	\$26,700	\$321,700	
SIERRA LEONE						
SEVERAL						
Ozone unit support						
Extension of institutional strengthening project (phase VI: 12/2015-11/2017)	UNEP		\$109,824	\$0	\$109,824	
Total for Si	erra Leone		\$109,824		\$109,824	
SOLOMON ISLANDS						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200	
Total for Solon	non Islands		\$40,000	\$5,200	\$45,200	
SUDAN						
SEVERAL						
Ozone unit support						
Extension of institutional strengthening (phase VIII: 12/2015-11/2017)	UNEP		\$186,701	\$0	\$186,701	
Technical assistance/support						
Survey of ODS alternatives at the national level	UNIDO		\$110,000	\$9,900	\$119,900	
Total	l for Sudan		\$296,701	\$9,900	\$306,601	

Project Title	Agency	ODP (tonnes)	Fund Project	s recommend Support	led (US\$) Total	C.E. (US\$/kg)
SURINAME						
PHASE-OUT PLAN						
HCFC phase out plan						
Verification report on the implementation of the HCFC phase-out management plan	UNEP		\$30,000	\$3,900	\$33,900	
Approved on the understanding that the verification report shows be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPM is being sought.						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200	
Total :	for Suriname		\$70,000	\$9,100	\$79,100	
TONGA						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$20,000	\$2,600	\$22,600	
Noted that eligible funding (US \$40,000) was reduced by 50 percent to account for surveys funded outside the Multilateral Fundamental Fund						
То	tal for Tonga		\$20,000	\$2,600	\$22,600	
TRINIDAD AND TOBAGO						
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (stage I, third tranche) UNDP		\$471,833	\$35,387	\$507,220	
Approved on the understanding that if Trinidad and Tobago we to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and airconditioning equipment originally designed for non flammable substances, it would do so assuming all associated responsibilit and risks and only in accordance with the relevant standards an protocols.	ies					
Total for Trinidad	l and Tobago		\$471,833	\$35,387	\$507,220	
TURKEY						
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (stage I, second tranc (refrigeration servicing and monitoring)	he) UNIDO	30.7	\$1,970,550	\$137,939	\$2,108,489	
Approved on the understanding that if Turkey were to decide to proceed with retrofits and associated servicing to flammable an toxic refrigerants in refrigeration and air conditioning equipment originally designed for non flammable substances, it would do assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.	d nt					

				Aimex I		
Project Title	Agency	ODP (tonnes)	Fund Project	ls recommend Support	ded (US\$) Total	C.E. (US\$/kg)
HCFC phase-out management plan (stage I, second trans (technical assistance for small and medium enterprises in the foam sector)		113.3	\$529,450	\$37,061	\$566,511	
Approved on the understanding that if Turkey were to decide a proceed with retrofits and associated servicing to flammable at toxic refrigerants in refrigeration and air conditioning equipme originally designed for non flammable substances, it would do assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.	nd ent					
To	tal for Turkey	144.0	\$2,500,000	\$175,000	\$2,675,000	
TUVALU						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$40,000	\$5,200	\$45,200	
То	tal for Tuvalu		\$40,000	\$5,200	\$45,200	
URUGUAY						
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (stage I, fifth tranche	e) UNDP	1.9	\$45,004	\$3,375	\$48,379	
Noted that in line with decision 65/47(d), the project to phase HCFC 22 in the refrigeration manufacturing assembly of cold rooms will be submitted as part of the stage II of the HPMP. T Government of Uruguay and UNDP were requested to submit project completion report of stage I of the HPMP to the second meeting of the Executive Committee in 2017; and a verification report of the country's HCFC consumption in 2015, when submitting stage II of the HPMP for consideration of the Executive Committee.	The the 1					
SEVERAL						
Ozone unit support						
Extension of institutional strengthening project (phase X 1/2016-12/2017)	II: UNDP		\$193,024	\$13,512	\$206,536	
Tota	l for Uruguay	1.9	\$238,028	\$16,887	\$254,915	
VANUATU						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	UNEP		\$20,000	\$2,600	\$22,600	
Noted that eligible funding (US \$40,000) was reduced by 50 p cent to account for surveys funded outside the Multilateral Fundamental Funda						
Tota	l for Vanuatu		\$20,000	\$2,600	\$22,600	

			Ailliex I			
Project Title	Agency	ODP (tonnes)	Fund Project	ds recommen Support	ded (US\$) Total	C.E. (US\$/kg)
VIETNAM						
SEVERAL						
Technical assistance/support						
Survey of ODS alternatives at the national level	IBRD		\$45,000	\$4,050	\$49,050	
Noted that the funding had taken into account an on-going survey funded outside the Multilateral Fund.						
Total fo	or Vietnam		\$45,000	\$4,050	\$49,050	
ZIMBABWE						
PHASE-OUT PLAN						
HCFC phase out plan						
HCFC phase-out management plan (stage I, third tranche) (refrigeration servicing sector)	Germany		\$112,000	\$13,398	\$125,398	
Noted that the ban on imports of HCFC-141b both pure and contained in imported pre blended polyols was postponed from 1 January 2015 to 1 January 2016 as the five foam enterprises completed their conversion to non HCFC-141b technology in July 2015. Approved on the understanding that if Zimbabwe were to decide to proceed with retrofits and associated servicing to flammable and toxic refrigerants in refrigeration and airconditioning equipment originally designed for non flammable substances, it would do so assuming all associated responsibilities and risks and only in accordance with the relevant standards and protocols.						
Verification report for stage I of HCFC phase-out management plan	Germany		\$30,000	\$3,900	\$33,900	
Approved on the understanding that the verification report should be submitted at least 60 days prior to the applicable Executive Committee meeting where the next funding tranche for its HPMP is being sought.						
Total for	Zimbabwe		\$142,000	\$17,298	\$159,298	
GRA	AND TOTAL	348.5	\$16,937,417	\$1,279,431	\$18,216,848	