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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-fifth Meeting
Montreal, 25-29 May 2020
Postponed to 19-22 July 2020*

UNIDO's WORK PROGRAMME FOR 2020

* Due to coronavirus disease (COVID-19)

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

COMMENTS AND RECOMMENDATION OF THE FUND SECRETARIAT

1. UNIDO is requesting approval from the Executive Committee of US \$747,664, plus agency support costs of US \$52,336, for its 2020 work programme listed in Table 1. The submission is attached to the present document.

Table 1: UNIDO's work programme for 2020

Country	Activity/Project	Amount Requested (US \$)	Amount Recommended (US \$)
SECTION A: ACTIVITIES RECOMMENDED FOR BLANKET APPROVAL			
A1: Renewal of institutional strengthening projects			
Libya	Renewal of institutional strengthening project (phase VI)	174,164	174,164
Subtotal for A1		174,164	174,164
Agency support costs		12,191	12,191
Total for A1		186,355	186,355
A2: Project preparation for HCFC phase-out management plans (HPMPs)			
Algeria	Preparation of an HPMP (stage II)	60,000	60,000
	Preparation for HCFC phase-out investment activities (foam)	50,000	50,000
	Preparation for HCFC phase-out investment activities (air-conditioning)	50,000	50,000
Burundi*	Preparation of an HPMP (stage II)	10,000	10,000
Pakistan**	Preparation of an HPMP (stage III)	50,000	50,000
	Preparation for HCFC phase-out investment activities (foam)	50,000	50,000
	Preparation for HCFC phase-out investment activities (air-conditioning)	40,000	40,000
Senegal*	Preparation of an HPMP (stage II)	20,000	20,000
Subtotal for A2		330,000	330,000
Agency support costs		23,100	23,100
Total for A2		353,100	353,100
A3: Project preparation for HFC-related projects			
Sudan	Project preparation for HFC-related project (air-conditioning)	30,000	30,000
Subtotal for A3		30,000	30,000
Agency support costs		2,100	2,100
Total for A3		32,100	32,100
SECTION B: ACTIVITIES RECOMMENDED FOR INDIVIDUAL CONSIDERATION			
B1: Project preparation for HFC phase-down management plans			
Albania**	Preparation of an HFC phase-down management plan	63,500	***
Jordan	Preparation of an HFC phase-down management plan	150,000	***
Subtotal for B1		213,500	***
Agency support costs		14,945	***
Total for B1		228,445	***
Grand total (A1, A2, A3, B1)		800,000	571,555

* UNEP as lead implementing agency

**UNEP as cooperating implementing agency

***For individual consideration

SECTION A: ACTIVITIES RECOMMENDED FOR BLANKET APPROVAL

A1: Renewal of institutional strengthening projects

Project description

2. UNIDO submitted a request for the renewal of the institutional strengthening (IS) project for one Article 5 country listed in section A1 of Table 1. The description for this project is presented in Annex I to the present document.

Secretariat's comments

3. The Secretariat reviewed the request for the renewal of the IS project for Libya submitted by UNIDO on behalf of the Government concerned against the guidelines and relevant decisions regarding eligibility and funding levels. The request was cross-checked against the original IS work plan for the previous phase, country programme and Article 7 data, the latest report on implementation of the HCFC phase-out management plan (HPMP), the agency's progress report, and any relevant decisions of the Meeting of the Parties. It was noted that this country has submitted its 2019 country programme data and is in compliance with the controlled targets under the Montreal Protocol, and its annual HCFC consumption does not exceed the annual maximum allowable consumption indicated in its HPMP Agreement with the Executive Committee. Furthermore, the request included performance indicators for the planned activities for the next phase of the IS project, in accordance with decision 74/51(e).

Secretariat's recommendations

4. The Secretariat recommends blanket approval of the institutional strengthening renewal request for Libya at the level of funding indicated in section A1 of Table 1 of the present document. The Executive Committee may wish to express to the aforementioned Government the comments presented in Annex II to this document.

A2: Project preparation for HCFC phase-out management plans

Project description

5. UNIDO submitted requests for the preparation of stage II of the HPMP for one Article 5 country as designated implementing agency and for two Article 5 countries as cooperating implementing agency with UNEP as lead implementing agency; and for the preparation of stage III of the HPMP for one Article 5 country as lead implementing agency with UNEP as cooperating implementing agency. In addition, UNIDO requested project preparation funding for investment activities in the polyurethane (PU) foam and air-conditioning sectors as part of stage II of the HPMP for one country and stage III of the HPMP for another country. These requests are shown in section A2 of Table 1.

6. UNIDO provided descriptions of the activities to support the request for project preparation for those Article 5 countries where UNIDO is the lead implementing agency. The submissions for each country included: justification for the requested project preparation funding; a progress report on the implementation of stage I and/or stage II where applicable of their respective HPMPs; and the list of potential activities, including potential enterprises where required, and the corresponding budgets. UNEP as the lead implementing agency for the HPMP for Burundi and Senegal and cooperating implementing agency for the HPMP for Pakistan, has requested US \$70,000, plus agency support costs of US \$9,100, in its work programme for 2020.¹

¹ UNEP/OzL.Pro/ExCom/85/16

Secretariat's comments

7. In reviewing the four requests, the Secretariat took into account the guidelines for funding the preparation of HPMPs for Article 5 countries contained in decision 71/42; stages I and II of HPMPs as approved, and the status of implementation of the tranches as at the preparation of the present document; and decision 82/45(c)(i).² The Secretariat noted that the funding requested for each country is in line with decision 71/42, and that UNIDO confirmed that the remaining funding tranches for these countries will be submitted as scheduled in their Agreements with the Executive Committee.

8. UNIDO confirmed that stage II of the HPMPs for Algeria will phase-out 67.5 per cent of HCFC baseline by 1 January 2025 and stage III of the HPMP for Pakistan will phase-out 97.5 per cent of the HCFC baseline by 1 January 2030.

Secretariat's recommendations

9. The Secretariat recommends blanket approval for project preparation for stage II of the HCFC phase-out management plans (HPMPs) for Algeria, Burundi, and Senegal, and stage III of the HPMP for Pakistan at the level of funding shown in section A2 of Table 1.

A3: Project preparation for HFC-related projects

Project description

10. UNIDO submitted a request for project preparation for the conversion of HFC-134a/R-410A to R-290 in air-conditioning (AC) manufacturing at J.M. Group/Mina Factory in Sudan listed in section A3 of Table 1.

11. The submission included background information on the enterprise, HFC consumption, the key activities to be implemented. Details of the project preparation request is contained in UNIDO's submission attached to the present document.

Secretariat's comments

12. The Secretariat reviewed the request for the preparation of an HFC-related investment project for Sudan based on the guidelines for funding for HFC-investment projects contained in decisions 78/3(g), 79/45, 81/53 and 84/53.³ The Secretariat noted that the funding requested was consistent with relevant decisions related to project preparation funding, and falls within the priority sectors identified in decision 84/53. This project preparation funding was not included in UNIDO's business plan for 2019 to 2021.

13. In light of the requirements of decision 78/3(g) on the status of ratification of the Kigali Amendment, UNIDO provided an email endorsement from the National Ozone Unit confirming their interest in the project and requested that due to the COVID-19 pandemic, the formal letter with all conditions in the decision will be submitted when the full project proposal is submitted for consideration of the Executive Committee in 2021. UNIDO further emphasized that Sudan is committed to ensure the necessary preparation for the ratification of the Kigali Amendment to the Montreal Protocol as soon as possible.

² The inclusion of stage III of HPMPs in the 2019–2021 consolidated business plan only for those countries that had had stage II of an HPMP approved to meet a reduction target by 2020;

³ To consider proposals for HFC-related stand-alone investment projects up to the 87th meeting, in accordance with the criteria set out in decisions 78/3(g), 79/45 and 81/53, and prioritizing projects in the stationary air-conditioning, commercial refrigeration and mobile air-conditioning sectors.

14. Upon a request for additional information, UNIDO confirmed that despite COVID-19 the enterprise is operating at full capacity and will be able to commence implementation of conversion immediately after the funding request is being approved by the Executive Committee.

Secretariat's recommendation

15. The Secretariat recommends blanket approval for the preparation for an HFC-related investment project for Sudan at the level of funding shown in section A3 of Table 1.

SECTION B: ACTIVITIES RECOMMENDED FOR INDIVIDUAL CONSIDERATION

B1: Project preparation for an HFC phase-down management plan

Project description

16. UNIDO submitted requests for the preparation of HFC phase-down management plans for Albania and Jordan as lead implementing agency, with UNEP as cooperating implementing agency for Albania as shown in section B1 of Table 1. UNEP as cooperating implementing agency for Albania requested US \$31,500 plus agency support costs of US \$4,095 in its work programme for 2020.

Secretariat's comments

17. UNIDO as lead implementing agency, provided a description of the activities required for the preparation of an overarching strategy for HFC phase-down for Albania and Jordan and the corresponding costs of each activity, using the format for requests for project preparation of stages of the HPMPs. The submissions included, estimated imports of HFCs and HFC blends for 2015-2018; stakeholder meetings and consultations; HFC phase-down strategy development; development of a communication and outreach plan; and capacity building activities related to refrigeration and air-conditioning sector activities and enforcement. The amount requested for each country was based on its HCFC baseline consumption and its eligible funding level for enabling activities contained in decision 79/46(c)

18. While noting that the Executive Committee is yet to agree on guidelines for funding the project preparation of HFC phase-down management plans, the Secretariat nevertheless reviewed the submission based on past experience analyzing similar project preparation requests for HPMPs, and taking into account guidance and policies provided by the Executive Committee for such projects.

19. Following this review, the Secretariat noted the following:

- (a) Albania ratified the Kigali Amendment on 18 January 2019 and Jordan on 16 October 2019; and both would be eligible for project preparation funding in line with decision 79/46(b)(iii)⁴; the countries have also provided endorsement letters signifying their intention to take early action on HFCs; and
- (b) The activities included in project preparation are similar to those required to prepare HPMPs except for the absence of a survey of HFC consumption; some activities also closely resembled those included under the enabling activities for HFC phase-down for which funding has already been provided, and which has been completed by Albania and currently on-going for Jordan.

⁴ Funding for the preparation of national implementation plans to meet initial reduction obligations for the phase-down of HFCs could be provided, at the earliest, five years prior to those obligations, after a country had ratified the Kigali Amendment and on the basis of guidelines to be approved in the future.

20. UNIDO clarified that the project preparation for the overarching strategy for HFC phase-down for Albania and Jordan would draw on the activities implemented under the enabling activities, as these were the first actions associated with the phase-down of HFCs and had contributed to the ratification of the Kigali Amendment in each country. UNIDO emphasized that duplication of activities already implemented will be avoided.

21. With regard to the survey of HFC consumption, UNIDO explained that it will be undertaken through stakeholder consultations as there are currently no quota and licensing system for HFCs in either country; data from the completed survey on ODS alternatives will be used, as well as information gathered during preparation of each country's stage II of their HPMP which includes data gathering for HCFCs and alternatives including HFCs.

22. The Secretariat informed UNIDO that it will be unable to make a recommendation on this request as guidelines on funding these requests will be discussed at the 85th meeting.

Secretariat's recommendation

23. The Executive Committee may wish to consider, in line with discussions under agenda item 9(a), Overview of issues identified during project review, and agenda item 12(c), Draft guidelines for the preparation of HFC phase-down plans for Article 5 countries (decision 84/54(a)), the requests for the preparation of HFC phase-down management plans for the following countries:

- (a) Albania, in the amount of US \$63,500, plus agency support costs of US \$4,445; and
- (b) Jordan, in the amount of US \$150,000, plus agency support costs of US \$10,500.

Annex I

INSTITUTIONAL STRENGTHENING PROJECT PROPOSALS¹

Libya: Renewal of institutional strengthening

Summary of the project and country profile		
Implementing agency:		UNIDO
Amounts previously approved for institutional strengthening (US \$):		
	Phase I: Dec-00	157,000
	Phase II: Nov-09 & Apr-10	136,065
	Phase III: Dec-13	136,065
	Phase IV: May-15 & Dec-16	155,115
	Phase V: Jun-18	174,164
	Total:	758,409
Amount requested for renewal (phase VI) (US \$):		174,164
Amount recommended for approval for phase VI (US \$):		174,164
Agency support costs (US \$):		12,191
Total cost of institutional strengthening phase VI to the Multilateral Fund (US \$):		186,355
Date of approval of country programme (CP):		1999
Date of approval of HCFC phase-out management plan:		2015
Baseline consumption of controlled substances (ODP tonnes):		
Annex B, Group III (methyl chloroform) (average 1998-2000)		0.0
Annex C, Group I (HCFCs) (average 2009-2010)		118.38
Annex E (methyl bromide) (average 1995-1998)		94.1
Latest reported ODS consumption (2018) (ODP tonnes) as per Article 7:		
Annex B, Group III (methyl chloroform)		0.00
Annex C, Group I (HCFCs)		76.75
Annex E (methyl bromide)		0.00
	Total:	76.75
Year of reported CP implementation data:		2018
Amount approved for projects (as at December 2019) (US \$):		9,728,702
Amount disbursed (as at December 2018) (US \$):		7,397,304
ODS to be phased-out (as at December 2019) (ODP tonnes):		1,593.8
ODS phased-out (as at December 2018) (ODP tonnes):		890.9

1. Summary of activities and funds approved by the Executive Committee:

Summary of activities	Funds approved (US \$)
(a) Investment projects:	7,691,793
(b) Institutional strengthening:	758,409
(c) Project preparation, technical assistance, training and other non-investment projects:	1,278,500
	Total:
	9,728,702
(d) HFC activities funded from additional voluntary contributions	150,000

¹ Data as at December 2018 are based on document UNEP/OzL.Pro/ExCom/84/20.

Progress report

2. In phase V of the institutional strengthening (IS) project, significant efforts have been made, given the political and security situation in the country, to continue with the implementation of the Montreal Protocol activities. Quotas for 2018-2020 have been established and are monitored on a regular basis. The country's HCFC consumption is below the reduction target. The NOU has been fully staffed and has continued to maintain cooperation with other public institutions through regular bilateral, inter-ministerial and steering committee meetings. Country programme (CP) and Article 7 data reports for 2017 and 2018 have been submitted. The International Ozone Day celebrations were organized in 2018 and 2019. The country's officials attended the Meeting of the Party (MOP) and Open-ended Working Group (OEWG) meetings. Libya has successfully achieved nine out of 14 performance indicators for this phase, while three have been partially achieved and two have not been achieved.

Plan of action

3. In phase VI, the NOU will continue to monitor HCFC consumption to maintain compliance with the licensing and quota system. Quotas will be issued for the years 2021 and 2022 to maintain HCFC consumption in line with the Agreement between the Government and the Executive Committee and with its commitments based on decision XXVII/11. Activities planned for phase VI include: CP and Article 7 data reporting; continued monitoring of the licensing system and allocation of quotas to achieve full control over imports of all HCFCs; continued efforts to introduce a ban on importing or manufacturing HCFC-based equipment; continued cooperation with customs authorities and industry representatives; and facilitation of the process of ratification of the Kigali Amendment through implementation of enabling activities for HFC phase-down. Public awareness activities will include celebration of the International Ozone Day. The country plans to participate in regional network and Montreal Protocol meetings.

Annex II

DRAFT VIEWS EXPRESSED BY THE EXECUTIVE COMMITTEE ON RENEWAL OF INSTITUTIONAL STRENGTHENING PROJECTS SUBMITTED TO THE 85th MEETING

Libya

1. The Executive Committee reviewed the report submitted with the request for the renewal of the institutional strengthening project for Libya (phase VI), and noted with appreciation that Libya had reported 2017 and 2018 ODS consumption data under Article 7 of the Montreal Protocol to the Ozone Secretariat and country programme data to the Fund Secretariat, indicating that the country is in compliance with the Montreal Protocol phase-out schedule and with the plan of action to return to compliance set out in decision XXVII/11. The Executive Committee acknowledged that the national ozone unit has been fully staffed, despite the current political and security situation in the country. Annual HCFC consumption quotas were established and monitored on a regular basis. The Executive Committee expressed its appreciation for Libya's efforts to implement stage I of the HPMP and enabling activities for HFC phase-down and is hopeful that it will maintain the HCFC consumption below the reduction target and remain in compliance with the Montreal Protocol phase-out targets and its commitments based on decision XXVII/11.



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO WORK PROGRAMME

Presented to the 85th Meeting of the Executive Committee of the Multilateral Fund

Introduction

The UNIDO Work Programme (WP) for the consideration of the 85th Meeting of the Executive Committee (ExCom) of the Multilateral Fund (MLF) has been prepared following the Government requests as well as based on ongoing and planned activities. The Work Programme will support the implementation of UNIDO's three year Rolling Business Plan 2020-2022.

The 85th UNIDO WP is addressing preparatory assistance and institutional strengthening requests.

Preparatory assistance is submitted for the 85th Executive Committee Meeting consideration for Algeria, Burundi and Senegal to enable the countries to overview and update data necessary for the launch and implementation of HPMP Stage II. Also, preparatory assistance is submitted for the 85th Executive Committee Meeting consideration for Pakistan to enable the country to overview and update data necessary for the launch and implementation of HPMP Stage III. UNIDO is submitting preparatory assistance for HFC phase-down plans for Albania and Jordan to assist the countries with the implementation of the next phases of the Kigali Amendment to the Montreal Protocol.

Institutional strengthening extension request is submitted based on the country request for Libya.

As per decision 81/31(a), Enabling activities for HFC phase-down were approved with a duration of 18 months, however if needed, that period can be extended for additional 12 months, when an official request is submitted¹. UNIDO has received requests from Jordan and Qatar, requesting the duration of the implementation period to be extended for additional 12 months. The reasons for the extensions are provided in Section 3.

The UNIDO Work Programme for the consideration of the 85th ExCom Meeting comprises the following sections:

- **Section 1:** Consolidated list of activities foreseen for the above requests by project types and country;
- **Section 2:** Project concepts indicating details and funding requirements; and
- **Section 3:** Requests for extension of the duration of the Enabling activities for HFC phase down.

¹ With this Work Programme are submitted extension requests for *Enabling activities for HFC phase-down* approved at the 82nd meeting. *Enabling activities for HFC phase-down* approved at earlier meetings that have already approved 30 months duration, but cannot be completed on time due to the pandemic, are not part of this Work Programme and are treated separately.

Funding is requested as follows:

- Preparatory assistance funding for HPMP Stage II in Algeria, Burundi and Senegal² and for HPMP Stage III for Pakistan amounting to US\$ 353,100 (including US\$ 23,100 representing 7.0 % agency support costs);
- Preparatory assistance funding for HFC phase-down plans in Albania and Jordan amounting to US\$ 228,445 (including US\$ 14,945 representing 7.0% agency support costs);
- Preparatory assistance funding for HFC project in Sudan amounting to US\$ 32,100 (including US\$ 2,100 representing 7.0% agency support costs)
- Institutional strengthening project amounting to US\$ 186,355 (including US\$ 12,191 representing 7.0 % agency support costs).

Total: US\$ 800,000 (including US\$ 52,336 agency support cost).

² The Project Concepts for Burundi and Senegal are included in the Lead Agency (UN Environment) Work Programme.

SECTION 1

Country	MLF HCFC Status	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
Preparatory Assistance for HPMP											
Algeria	Non-LVC	PRP	HCFC-141b	FOA-Rigid PU foam	Preparation of Stage II HPMP	50,000	3,500	53,500	7%	24	
Algeria	Non-LVC	PRP	HCFC-22	REF-Manufacturing	Preparation of Stage II HPMP	50,000	3,500	53,500	7%	24	
Algeria	Non-LVC	PRP	HCFC-22	Overarching	Preparation of Stage II HPMP	60,000	4,200	64,200	7%	24	
Burundi	LVC	PRP	HCFC-22	Overarching	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Project concept is in UN Environment Work Programme.
Pakistan	Non-LVC	PRP	HCFC-141b	Foam	Preparation of Stage III HPMP	50,000	3,500	53,500	7%	24	In cooperation with UN Environment.
Pakistan	Non-LVC	PRP	HCFC-22	REF-Air Conditioning	Preparation of Stage III HPMP	50,000	3,500	53,500	7%	24	In cooperation with UN Environment.
Pakistan	Non-LVC	PRP	HCFC-22	Overarching	Preparation of Stage III HPMP	40,000	2,100	32,100	7%	24	In cooperation with UN Environment.
Senegal	Non-LVC	PRP	HCFC-22	Overarching	Preparation of Stage II HPMP	20,000	1,400	21,400	7%	24	In cooperation with UN Environment. Project concept is in UN Environment Work Programme.
SUBTOTAL						330,000	23,100	353,100			
Preparatory Assistance for HFC Phase-Down Plans											
Albania	LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	63,500	4,445	67,945	7%	24	In cooperation with UN Environment.
Jordan	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	150,000	10,500	160,500	7%	24	
SUBTOTAL						213,500	14,945	228,445			

Country	MLF HCFC Status	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
Preparatory Assistance for Demonstration Projects – Based on Executive Committee Decision 78/3 (g)											
Sudan	Non-LVC	PRP	HFC	AC manufacturing	Project preparation for HFC-related projects in the manufacturing of air-conditioning units at J.M. Group/Mina factory to gain experience in ICCs and IOCs associated with the phase-down of HFCs	30,000	2,100	32,100	7%	24	
SUBTOTAL						30,000	2,100	32,100			
Institutional Strengthening											
Libya	Non-LVC	INS	All	SEV	Institutional strengthening	174,164	12,191	186,355	7%	24	
SUBTOTAL						174,164	12,191	186,355			
GRAND TOTAL						747,664	52,336	800,000			

SECTION 2

PROJECT CONCEPT - Algeria

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HPMP PROJECT PREPARATION REQUEST FORM HPMP (Overarching + Inv)

Part I: Project Information

Project title:	Stage 2 - HCFC Phase-out Management Plan (preparation)	
Country:	Democratic and Popular Republic of Algeria	
Lead implementing agency:	UNIDO	
Implementation period:	2020 –2021	
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	60,000
UNIDO	INV - Foam	50,000
UNIDO	INV - REF	50,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government specifying roles of respective agencies (where more than one IA is involved)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Written confirmation – balances from previous PRP funding approved for stage I HPMP had been returned / will be returned (Decision 71/42(i))	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Specify meeting at which PRP funding balance had been returned/will be returned 	Stage I PRP funding balance was returned to the MLF at 67 and 69 ExCom meeting.	

A. Information required to support PRP funding (Overarching strategy)

1. Montreal Protocol compliance target to be met in <input type="checkbox"/> stage II / <input checked="" type="checkbox"/> stage III of the HPMP			
Phase-out commitment (%)	67.5%	Year of commitment	2025
<input type="checkbox"/> Servicing only		<input type="checkbox"/> Manufacturing only	<input checked="" type="checkbox"/> Servicing and manufacturing
2. Brief background on previous stage of the HPMP			
<ul style="list-style-type: none"> Please provide a brief background on the previous stage of the HPMP, when it was approved, a brief description of the progress in implementation of the previous stage of the HPMP to demonstrate that substantial progress had been made. 			
<p>The 66th Meeting of the Executive Committee of the Multilateral Fund for the implementation of the Montreal Protocol (MLF) approved the HCFC phase-out management plan (HPMP) Stage I for the period of 2010 to 2017 to reduce consumption by 20%, with UNIDO as the lead implementing agency. Algeria's starting point for aggregate reductions in its HCFC consumption is the same as its HCFC baseline consumption of 62.1 ODP tonnes (ODPt). The Twenty Fourth Meeting of the Parties which took</p>			

place in Geneva November 12-16, 2012 adopted Decision XXIV/16 with regard to the request of Algeria to change its consumption in 2009 to 60.35 ODPt and for 2010 to 63.88 with a resulting baseline of 62.1 ODPt and communicated to Algeria by the Ozone Secretariat on December 14, 2012. The analysis of the data by substance and by sector showed that HCFC-22 is used almost entirely in the RAC sector and is the most predominant ODS in metric terms. HCFC-141b is used in the servicing sector for flushing, but was banned in 2015. Algeria has implemented strict controls on ODS through its national legislative structure. In accordance with Decision IX/8 of the Parties, Algeria introduced an ODS control system for ODS users, and established ODS import and monitoring procedures as well as policies for discouraging the use of ODS through its awareness activities. A quota system has been established in order to meet the ODS phase-out schedules set by the Montreal Protocol. In 2019, the committee requested UNIDO to submit a verification report as the lead implementing agency.

Algeria has not conducted a national inventory of HFCs and/or a survey on alternatives to ODS. Therefore, there is no reliable data on the current supply and consumption of HFC and ODS alternatives nor future projections of growth patterns by substances and/or sector. Known used alternatives can be obtained from the HPMP, stage I conversions of one foam manufacturing enterprise (Cristor – from HCFC-141b to cyclopentane technology/hydrocarbons) and one assembler of air-conditioning equipment (Condor – from HCFC-22 to HFC-32). Both conversions have been completed.

3. Current progress in implementation of previous stage of the HPMP

Activity	Description	Implementing agency
HCFC-141b phase-out at Cristor	Financially completed	UNIDO
HCFC-22 phase-out at Condor	Final stages of completion	UNIDO
Phase-out of HCFC-141b used as a solvent	The ban on HCFC-141b pure was implemented before the activity to convert four of the largest users to the use of a technology of recycling the solvent between 10 and 30 times, depending on the degree of impurity, by using a kit and a recovery cylinder. Without this technology, users would normally revert to using the same refrigerant that is in the system to flush the circuits and then in most cases vent it to the atmosphere. Expected completion date 12/2020.	UNIDO
Refrigeration service sector	The implementation of activities under this item have been delayed due to changes at the NOU.	UNIDO
Legal/regulatory framework	Same comment as refrigeration service sector	

4. Overview of current HCFC consumption in metric tonnes by substance (last three years)

Substance	Sector	2016	2017	2018
HCFC-22	Manufacturing-Service	24.16	28.52	30.13
HCFC-141b pre-blended polyols	Manufacturing-Foam PU			

5. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

HCFC consumption is used by both manufacturing and servicing. The consumption for 2016-2018 has been below the reduction targets of the Montreal Protocol and the agreement between Algeria and the Executive Committee. However, it is fluctuating depending on the economic development, local political situation and due to imports in one year, which might be used in subsequent years (stockpiling). The new

survey mentioned in the action plan below will help to identify the consumption in the sub-sectors and which AC manufacturers are buying HCFC-22 from refrigerant distributors rather than importing directly.

6. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during preparation for the previous stage of the HPMP.

Information needed	Description	Agency
Updated sectoral consumption information	Review available data and collect additional sector-specific data through questionnaires and interviews. There were no recent surveys done due to a period of NOU inactivity prior to 2018. Same reason applies to other items below.	UNIDO
Market profile of HCFC and alternatives-based equipment by sector	Determine the equipment market landscape, for both locally manufactured and imported units, for HCFCs and other alternatives, especially ozone friendly low-GWP technologies, and incorporate results into the HPMP in stage II.	UNIDO
Consumption data at PU foam and Spray Foam companies and current technology	Update consumption data at PU foam and Spray Foam companies and develop investment projects	UNIDO
Stakeholders' consultations	Identify and discuss with the relevant stakeholders, possible ways of reducing the current consumption of HCFCs in the country.	UNIDO
New information on ODS regulations	Review existing legislation and identify gaps and need for new legislation, amendments and policy development.	UNIDO
Information about the licensing system	The manual licensing system needs to be digitized for quick and efficient control and to facilitate the process for importers. An electronic system will also help to integrate the HFCs in the control process.	UNIDO

7. Activities to be undertaken for project preparation and funding (overarching).

Activity	Indicative funding (US \$)	Agency
Updated data on HCFC consumption in manufacturing and servicing sector; and inventory of HCFC based equipment	15,000	UNIDO
Identify the market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP technologies	15,000	UNIDO
Consultant to conduct surveys, interviews and consultations with key stakeholders including importers, wholesalers, service workshops, end-users, technology providers, training	30,000	UNIDO

institutes, academia, RAC and consumer associations, NGOs, relevant Government bodies and to draft the non-investment components of the HPMP stage II overarching strategy.		
TOTAL	60,000	
8. How will activities related to implementation of the Kigali Amendment to phase down HFCs be considered during project preparation for stage II of the HPMP?		
Algeria needs to implement a plan of HCFC reductions in the manufacturing and servicing sectors. The strategy will be based on updating the existing policies and regulations and strengthening their implementation through promotion and monitoring, as well as the development and capacity building of stakeholders in the refrigeration industry to support the adoption of appropriate ozone and climate friendly alternative technologies. Algeria is committed, to the extent possible, to phase out remaining HCFC consumption while increasing the use of low-GWP alternatives.		
9. How will the Multilateral Fund gender policy be considered during project preparation?		
The sector assessments that will be conducted will incorporate an assessment of the application of gender mainstreaming principles in that sector. All reports and roadmaps that will be developed and produced within this PRP will include a section with specific recommendations related to reinforcing gender mainstreaming aspects in line with the Multilateral Fund gender policy. Budget of each component of HPMP Stage II to be prepared, will take into account allocations for the proposed gender activities (e.g., capacity building activities for female technicians). In addition, during the implementation phase, indicators related to various activities (e.g. no. of trainees, meeting participants, etc.) will be segregated by gender.		

B. Information required for PRP funding request for investment projects as part of the HPMP – Air-conditioning sector

1. Agency:		UNIDO			
2. Sector:		AC			
3. HCFC consumption in item #2 reported under country programme (CP) data?		<input type="checkbox"/> Yes, please specify reported amount and year: <input checked="" type="checkbox"/> NO			
4. Information on remaining eligible consumption					
Substance		Remaining eligible consumption (ODP tonnes)			
HCFC-22		46.1 (Max allowable)			
5. Information on enterprise(s) for which funding is being sought					
Enterprise	Year established	HCFC consumption (ODP tonnes) (last three years)			HCFC phase-out to be achieved
		2017	2018	2019	
AC Sector: The following enterprises were identified during HPMP preparation in 2010. The information needs to be updated through a survey. The entire AC manufacturing sector to be revisited and examined according to MP eligibility criteria (cut of date, consumption of ODS for last three years, list of baseline equipment, ownership and market realization etc.).					
SINTRAX (Allab)	1997	TBA	TBA	TBA	TBA
SOFREL (Cobra)	2006	TBA	TBA	TBA	TBA
SODINCO	2000	TBA	TBA	TBA	TBA
ENIEM	1983	TBA	TBA	TBA	TBA
6. Activities to be undertaken for preparation of the investment project and funding requested					
Activity		Indicative funding (US \$)			
Checking consumption for 2016-2018		10,000			

Site visit to check production lines and tools. Surveys and interviews. Team of consultants to conduct surveys, interviews and consultations with key stakeholders to verify the eligibility for funding and draft the investment components of the HPMP stage II.	15,000
Identification of technology & equipment needed	10,000
Enhancement of the technical capacity of the Montreal Protocol focal point (NOU) to carry out above mentioned Reviewing, evaluating, analysing and verifying technical and techno-economic data and capacity building and expertise in the field of application of the gender policy of the Multilateral Fund.	5,000
Project document drafting	10,000
TOTAL	50,000

C. Information required for PRP funding request for investment projects as part of the HPMP – Foam manufacturing sector

1. Agency:		UNIDO			
2. Sector:		Foam Manufacturing			
3. HCFC consumption in item #2 reported under country programme (CP) data?		<input type="checkbox"/> Yes, please specify reported amount and year: <input checked="" type="checkbox"/> NO			
4. Information on remaining eligible consumption					
Substance			Remaining eligible consumption (ODP tonnes)		
HCFC-141b pre-blended polyols			-		
5. Information on enterprise(s) for which funding is being sought					
Enterprise	Year established	HCFC consumption (ODP tonnes) (last three years)			HCFC phase-out to be achieved
		2017	2018	2019	
Pre-blended polyols: The following enterprises were identified during HPMP preparation in 2010. The information needs to be updated through a survey. The entire foam sector to be revisited and examined according to MP eligibility criteria (cut of date, consumption of ODS for last three years, list of baseline equipment, ownership and market realization etc.).					
INDEFRIGO	1964	TBA	TBA	TBA	TBA
SAEI	1976	TBA	TBA	TBA	TBA
SIMAFE	1993	TBA	TBA	TBA	TBA
INC Royal	2000	TBA	TBA	TBA	TBA
BETICHE	1993	TBA	TBA	TBA	TBA
CHETIOUI	2004	TBA	TBA	TBA	TBA
FROID CLIMAT	1983	TBA	TBA	TBA	TBA
EURL CMF	2004	TBA	TBA	TBA	TBA
6. Activities to be undertaken for preparation of the investment project and funding requested					
Activity			Indicative funding (US \$)		
Checking consumption for 2016-2018			10,000		
Site visit to check production lines and tools. Surveys and interviews. Team of consultants to conduct surveys, interviews and consultations with			15,000		

key stakeholders to verify the eligibility for funding and draft the investment components of the HPMP stage II.	
Identification of technology & equipment needed	10,000
Enhancement of the technical capacity of the Montreal Protocol focal point (NOU) to carry out above mentioned Reviewing, evaluating, analysing and verifying technical and techno-economic data and capacity building and expertise in the field of application of the gender policy of the Multilateral Fund.	5,000
Project document drafting	10,000
TOTAL	50,000

PROJECT CONCEPT – Pakistan

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HPMP PROJECT PREPARATION REQUEST FORM HPMP (Overarching + Inv)

Part I: Project Information

Project title:	PAKISTAN HPMP STAGE III PREPARATION	
Country:	PAKISTAN	
Lead implementing agency:	UNIDO	
Cooperating agency (1):	UNEP	
Implementation period:	2021-2030	
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	INV - Foam PU	50,000
UNIDO	INV - AC	50,000
UNIDO	Overarching	40,000
UNEP	Overarching	10,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government specifying roles of respective agencies (where more than one IA is involved)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Written confirmation – balances from previous PRP funding approved for stage II HPMP had been returned / will be returned (Decision 71/42(i))	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PRP funds for HPMP Stage II were returned at the 81 st and 82 nd meeting.		

A. Information required to support PRP funding (Overarching strategy)

3. Montreal Protocol compliance target to be met in <input type="checkbox"/>stage II / <input checked="" type="checkbox"/>stage III of the HPMP			
Phase-out commitment (%)	97.5%	Year of commitment	2030
<input type="checkbox"/> Servicing only		<input type="checkbox"/> Manufacturing only	<input checked="" type="checkbox"/> Servicing and manufacturing
4. Brief background on previous stage of the HPMP			
<ul style="list-style-type: none"> Please provide a brief background on the previous stage of the HPMP, when it was approved, a brief description of the progress in implementation of the previous stage of the HPMP to demonstrate that substantial progress had been made. 			
<p>Pakistan's HPMP stage II was approved by ExCom 76 in May 2016 to reduce the HCFC consumption to a sustained level of 124.055 ODP tonnes by 1 January 2020, with UNIDO as lead and UNEP as cooperating agency. Tranche 1 was approved for both agencies in May 2016. Tranche 2 was approved by ExCom 83 in May 2019 for both Implementing Agencies. Tranche 3 is scheduled for 2020 and contains both IAs's components as well. Pakistan is in compliance with the Montreal Protocol provisions and the Agreement with the Executive Committee. Pakistan has an enforceable import/export licensing and quota system for HCFCs in place, which is operational, effective and capable of ensuring compliance with the Montreal Protocol phase-out provisions for HCFCs. UNIDO as well as UNEP's preparatory funds for HPMP stage II have fully been disbursed. The endorsement from the Government requesting UNIDO as lead agency and UNEP as cooperating agency to prepare</p>			

HPMP stage III has been received.				
5. Current progress in implementation of previous stage of the HPMP				
Activity	Description			Implementing agency
Manufacturing-Foam PU	Implementation of umbrella project in thermoware sub-sector in progress. Equipment delivered preparations for installations, commissioning, start-up trials and prototyping in progress. Implementation of umbrella project in sandwich panels sub-sector; procurement of equipment is temporary on hold.			UNIDO
Manufacturing-AC	Implementation in progress. Equipment have been purchased; the import procedures still ongoing (at this moment). Exact schedule for installation, commissioning, and prototyping is in an advanced stage of discussions. TOR for prototyping prepared; Contracting still to be organized, while following beneficiary's priority planning for this activity and entire technology conversion process.			UNIDO
Manufacturing-Foam XPS	Project approved by 84th ExCom in December 2019. Preparations of Agreement on Implementation procedures and action plan, including principal decision on implementation modalities, in progress.			UNIDO
Refrigeration servicing sector	Advanced refrigerant identifiers delivered			UNIDO
Refrigeration servicing sector	Procurement of training / servicing equipment / tools in progress			UNIDO
Legal/regulatory framework	Regulatory updates in HCFC trade control frameworks in progress. Capacity building of Customs and Enforcement officers going on			UNEP
Refrigeration servicing sector	Strengthening capacity in the refrigeration servicing sector completed partly			UNEP
Refrigeration servicing sector	Awareness and outreach activities completed partly.			UNEP
6. Overview of current HCFC consumption in metric tonnes by substance (last three years)				
Substance	Sector	2016	2017	2018
HCFC-141b	Manufacturing-Foam PU	552.89	504.16	298.67
HCFC-22	Manufacturing-AC	864.00	817.30	750.00
HCFC-22	Manufacturing-Foam XPS	11.00	30.68	13.30
HCFC-22	RAC servicing	1,927.00	1,848.86	2043.25
HCFC-142b	Manufacturing-Foam XPS	16.50	46.02	46.00
7. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)				
HCFC consumption is below the reduction targets of the Montreal Protocol and the agreement between Pakistan and the Executive Committee. However, it is fluctuating depending on the economic development and due to imports in one year, which might be used in subsequent years (stock-piling).				

8. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during preparation for the previous stage of the HPMP.		
Information needed	Description	Agency
Updated data on HCFC consumption in manufacturing/servicing sector	Review available data and refresh on the variety of different manufacturing technologies in the foam sector for remaining manufacturing capacities in rigid PU as well as examination of funding eligibility in other relevant subsectors, e.g. Flexible Moulded and Integral Skin subsectors. Collect additional sector-specific data and examine funding eligibility according to MLF Criteria, through questionnaires and interviews.	UNIDO
Updated sectoral consumption information	Review available data and collect additional sector-specific data through questionnaires and interviews	UNIDO
Analysis of types of equipment using HCFCs	Review available data and collect additional equipment data through questionnaires and interviews	UNIDO
New information on ODS regulations	Review existing legislation and identify gaps and need for new legislation, amendments and policy development.	UNEP
Others, specify.	Review available Article 7 and CP data, data from ODS alternatives surveys, enabling activities and progress reports and collect additional data as needed to determine didactic, technical and technological needs for training and awareness raising	UNIDO UNEP
9. Activities to be undertaken for project preparation and funding (overarching).		
Activity	Indicative funding (US \$)	Agency
Consultant(s) to conduct surveys, interviews, consultations and workshops with key stakeholders including importers, wholesalers, service workshops, end-users, technology providers, TVET and training institutes, academia, RAC and consumer associations, NGOs, relevant Government bodies and to draft the HPMP stage III as an overarching strategy and tranche 1 request. Evaluation of different long-term strategies of technology conversion and upgrade of servicing procedures and techniques to follow new developments for sustainable alternatives. Each and all abovementioned reviewing,	40,000	UNIDO

evaluating, analysing and decision-making activities to be carried out in consultation and, where appropriate with, direct involvement of the Montreal Protocol focal point (NOU/MoCC). Implementing agency to serve to follow the decisions of the NOU/MoCC and to facilitate and implement the needs of the NOU/MoCC.		
Consultant, based on the survey result to draft the non-investment components of the HPMP stage III overarching strategy and tranche 1 request in consultation with the Montreal Protocol focal point (NOU/MoCC), other stakeholders and lead implementing agency.	10,000	UNEP
TOTAL	50,000	
10. How will activities related to implementation of the Kigali Amendment to phase down HFCs be considered during project preparation HPMP stage III?		
The overarching strategy will focus on the HCFC phase out while promoting ozone-friendly, climate-friendly and energy-efficient technologies to the extent that this is possible. The strategy will also raise awareness of stakeholders on the Kigali Amendment and its future obligations.		
11. How will the Multilateral Fund gender policy be considered during project preparation?		
Due consideration would be given to the gender policy of the Multilateral Fund during project preparation. Budget of each component of HPMP Stage III to be prepared, will take into account allocations for the proposed gender activities (e.g., capacity building activities for female technicians). Also each project component of HPMP Stage III, in terms of Stakeholders and Participation will ensure that both women and men can provide inputs, access and participate in project activities (e.g., through outreach / invitations of female technicians to participate in capacity building activities).		

B. Information required for PRP funding request for investment projects as part of the HPMP – Manufacturing of Air Conditioners

1. Agency:		UNIDO			
2. Sector:		Manufacturing of Air conditioners			
3. HCFC consumption in item #2 reported under country programme (CP) data?		<input checked="" type="checkbox"/> Yes, please specify reported amount and year: 750 MT of HCFC 22 in the year of 2018 <input type="checkbox"/> No			
4. Information on remaining eligible consumption					
Substance			Remaining eligible consumption (ODP tonnes)		
HCFC-22			87.21		
5. Information on enterprise(s) for which funding is being sought					
Enterprise	Year established	HCFC consumption (ODP tonnes) (last three years)			HCFC phase-out to be achieved
		2017	2018	2019	

A group of 19 manufacturers consuming HCFC 22 have been identified in the AC and commercial refrigeration manufacturing sector already in the course of the formulation of the initial overarching strategy. One manufacturer in the sector have been already funded under HPMP Stage II. The rest, as listed below has to be revisited for an update as requested by this MLFS table.					
Orient, Lahore	2005	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
PEL, Lahore	1956	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Digital World Pakistan	2000	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Kentax, Lahore	2002	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
New Allied Electronics	1989	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Shahab Industries	1963	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
SABRO, Islamabad	2003	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
SABRO, Rawalpindi	1958	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP

Petal Engineering	1990	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
PARC	1982	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Waheed Engineering	1992	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
MECO	1956	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Cool Point, Lahore	1999	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Age Co (Pvt.) Ltd	1988	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
PAECO	1971	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
ANZ Insutech Enterprises	1988	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Entire AC and Commercial manufacturing sector which may consume HCFC 22, to be revisited and examined according to MP eligibility criteria (cut of date, consumption of ODS for last three years, list of baseline equipment, ownership and market realization etc.). Enterprises to be selected according to the Government priorities to phase out remaining eligible consumption, 1,585.64 MT (87.21 ODP tonnes)					1,585.64 MT (87.21 ODP tonnes)

6. Activities to be undertaken for preparation of the investment project and funding requested	
Activity	Indicative funding (US \$)
Surveys and interviews. Team of consultants to conduct surveys, interviews and consultations with key stakeholders to verify the eligibility for funding and draft the investment components of the HPMP stage III.	20,000
Consultations with key stakeholders including NOU/MoCC and representatives of the manufacturers in respective manufacturing sectors.: a) Household AC-Manufacturing sector; b) AC and commercial refrigeration manufacturing sector (19 manufacturers consuming HCFC 22 have been identified in the RAC sector already in the course of formulation of the initial overarching strategy). Entire RAC sector has to be carefully re-examined.	10,000
Draft the investment component HPMP Stage III, in the foam sector.	4,500
Reviewing, evaluating, analysing and consultation of each sub-component with the Montreal Protocol focal point (NOU/MoCC).	1,500
Enhancement of the technical capacity of the Montreal Protocol focal point (NOU/MoCC) to carry out above mentioned Reviewing, evaluating, analysing and verifying technical and techno-economic data.	2,000
Enhancement, capacity building and expertise in the field of application of the gender policy of the Multilateral Fund.	2,000
Consolidation of collected techno-economic data and other relevant information and formulation of respective project document.	10,000
TOTAL	50,000

C. Information required for PRP funding request for investment projects as part of the HPMP – Foam Sector

1. Agency:	UNIDO
2. Sector:	Foam
3. HCFC consumption in item #2 reported under country programme (CP) data?	<input checked="" type="checkbox"/> Yes , please specify reported amount and year: 298.67 MT of HCFC 141b in the year of 2018 ____ <input type="checkbox"/> No
4. Information on remaining eligible consumption	
Substance	Remaining eligible consumption (ODP tonnes)
HCFC-141b	8.11

5. Information on enterprise(s) for which funding is being sought					
Enterprise	Year established	HCFC consumption (ODP tonnes) (last three years)			HCFC phase-out to be achieved
		2017	2018	2019	
A group of 26 manufacturers consuming HCFC 141b have been identified in the foam manufacturing sector already in the course of the formulation of the initial overarching strategy, Major manufacturers in the sector have been already funded under HPMP Stage I and II. The rest, as listed below has to be revisited for an update as requested by this MLFS table.					
Zulquarnain Corp.	2004	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Mehran Plastic Ind	1985	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Arm Bros	1983	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Pifcom	1975	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Plasticrafter	1948	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Pakistan Plastic Ind	1991	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Thermocraft Engg.	1988	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
ANZ Insutech	1996	To be updated in	To be updated in	To be updated in	To be updated in the course of this PRP

		the course of this PRP	the course of this PRP	the course of this PRP	
Islamuddin & Sons	1980	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Pak Motors	1953	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Ittehad Insulation	2002	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Razi Sons	1948	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Simpson Wires	1971	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Tariq Engineering	1973	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Workman	1980	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP	To be updated in the course of this PRP
Entire foam sector, which may consume HCFC 141b to be revisited and examined according to MP eligibility criteria (cut of date, consumption of ODS for last three years, list of baseline equipment, ownership and market realization etc.). Enterprises to be selected according to the Government priorities to phase out remaining eligible consumption, 73.73 MT (8.11 ODP tonnes)					73.73 MT (8.11 ODP tonnes)
6. Activities to be undertaken for preparation of the investment project and funding requested					
Activity			Indicative funding (US \$)		
Surveys and interviews. Team of consultants to conduct surveys, interviews and consultations with key			20,000		

stakeholders to verify the eligibility for funding and draft the investment components of the HPMP stage III.	
Consultations with key stakeholders including NOU/MoCC and representatives of the manufacturers in respective manufacturing sectors.: a) PU foam sector (subsectors of Flexible Moulded, Integral Skin and Spray foams as well as eligible residual industries in Sandwich Panels or block sub-sectors. (26 manufacturers consuming HCFC 141b have been identified in the foam manufacturing sector already in the course of formulation of the initial overarching strategy). Entire foam sector has to be carefully re-examined.	10,000
Draft the investment component HPMP Stage III, in the foam sector.	4,500
Reviewing, evaluating, analysing and consultation of each sub-component with the Montreal Protocol focal point (NOU/MoCC).	1,500
Enhancement of the technical capacity of the Montreal Protocol focal point (NOU/MoCC) to carry out above mentioned Reviewing, evaluating, analysing and verifying technical and techno-economic data.	2,000
Enhancement, capacity building and expertise in the field of application of the gender policy of the Multilateral Fund.	2,000
Consolidation of collected techno-economic data and other relevant information and formulation of respective project document.	10,000
TOTAL	50,000

PROJECT CONCEPT – Albania

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HFC PROJECT PREPARATION REQUEST FORM HFC Phase-down Management plan (OVERARCHING)

Part I: Project Information

Project title:	HFC Phase-Down Management Plan Preparation	
Country:	Albania	
Implementing	UNIDO as lead agency and UNEP as cooperating agency	
Implementation period:	July 2020 – June 2022	
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	63,500
UNEP	Overarching	31,500

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government for choice of agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Country has ratified the Kigali Amendment	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A. Information required to support PRP funding (Overarching strategy)

<p>1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down</p> <ul style="list-style-type: none"> Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date. 		
<p>Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/50(d), funding was approved for Albania for Enabling Activities (EA) for HFC phase-down towards the early ratification of the Kigali Amendment. The main objective of the EA project was to prepare Albania for the ratification of the Kigali Amendment to the Montreal Protocol, considering HFC phase-down need in the country. Legal documents, stakeholder engagement, and awareness raising events have been completed in the project, which led to the ratification of the Kigali Amendment on 18 January 2019. Albania operationally completed the EA project on 31 July 2019. Albania has collected preliminary data for HFC for some years. The HFC related legal framework and its implementation for licensing the import and export of new, used, recycled and reclaimed HFC will be put into place by January 2021.</p>		
<p>2. Current progress in implementation of Enabling Activities for HFC phase-down Budget: 95,000 USD</p>		
Activity	Description	Implementing agency
Institutional arrangements	Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain; Training of technicians on reducing refrigerant emissions as well as on the use of flammable and toxic low-GWP alternatives	UNIDO
Licensing systems	Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends and the alignment with the f-gas regulation	UNIDO
Preparation for national strategies	Assessment of the refrigeration and air-conditioning servicing sector; Survey to cover the sectors that have not been analyzed in the ODS alternatives survey;	UNIDO

	Identification of policies and regulations to facilitate the phase-down of HFCs and the introduction of low-GWP alternative technologies			
3. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during preparation for the previous stage of the HPMP.				
Information needed	Description			Agency
Updated ODS alternatives data	Review available data and collect additional sector-specific data for the year 2019 through questionnaires and interviews as this was not included in the enabling activities and previous ODS alternatives data collection only covered data until 2018.			NOU
4. Overview of estimated import of ODS alternatives 2015 – 2018 in kg				
Substance	2015	2016	2017	2018
HCFC				
HCFC	46,971	67,967	54,346	72,257
HFC				
HFC 134a	65,298	99,472	131,731	202,146
HFC blends				
R-152a	500	950	1,100	1,200
R-227ea	600	800	800	820
R-32	530	1,582	1,708	5,875
R 404A	38,819	46,238	58,081	78,282
R 407C	2,476	2,597	5,808	12,048
R 410A	25,980	40,350	60,350	123,897
R 507A	56	875	1,447	8,172
HFC total	134,259	192,864	261,025	432,440
5. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)				
<p>The HCFC baseline of Albania is 6.0 ODP tonnes with the refrigeration and air-conditioning servicing sector only.</p> <p>The preliminary ODS alternative indicates that imports of HCFC from 2013 to 2014 show a decrease of 65% of the total import. For the period 2017 – 2018 on the other hand imports show an increase of 33%. When it comes to HFC imports, we have an increasing pattern running from the year 2015 to 2018. The increase from 2015 to 2016 amounts to 43 % of the total yearly consumption; from 2016 to 2017 amounts to 35 % of the total yearly consumption and subsequently from the year 2017 to 2018 there is an increase of 68 % of the total yearly consumption in the country. From the year 2015 to 2018 there has been an overall increase of 227 % of HFC consumption in the country.</p> <p>HFCs are the main HCFC alternatives which are currently imported in Albania. There is a growth of 11 times in overall HFC consumption during the years 2012-2018. Use of other alternatives such as hydrocarbons or natural refrigerants is currently limited in the country. HFC-134A has been the main substance and represented 46% of the total imports in the country followed by R-410A with 29% of the total imports and R-404A with 18% of the total imports.</p> <p>The data shows that the stationary air-conditioning sector is the most commonly widespread within the country comprising 39.3 % of the HFC consumptions. The commercial sector, the second most commonly used within the country, comprises 34.8 % of the HFC consumption. The MAC sector is the third most commonly used within the country, comprising 18.1 % of the HFC consumption.</p> <p>Small self-contained air-conditioning and small split air-conditioning are two different market sectors. The first sector includes equipment used for the cooling of enclosed spaces in households and commercial buildings, whereas the second sector includes units used for single rooms in commercial and residential buildings. The small self-contained air-conditioning sector consists of window-mounted, portable, and through-the-wall units.</p> <p>Initial funding is requested for preparation of the overarching strategy. Once the preparatory funding is approved and based on the requirements, the need for requesting preparatory funding for investment component will be assessed.</p>				
6. Activities to be undertaken for project preparation and funding				
Activity	Indicative funding (US \$)			Agency
1. Stakeholder consultation: 1 (one) consultant to	25,700			UNIDO

<p>prepare and conduct questionnaires and interviews with relevant stakeholders to update available data as well as measure new data on HFCs and other ODS alternatives, involving Customs in data collection and exchange; 1 (one) consultant to conduct interviews, organizing 4 workshops and 6 consultation meetings with relevant stakeholders (including government, private sector, civil society organisations, vocational centres, academic communities) for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control</p>	<p>National consultant 5 months x 2,300 = 11,500</p> <p>Preparation and collection of questionnaires and interviews Data updating and analysis</p> <p>4 workshops and 6 meetings as well as related travels 14,200</p>	
<p>2. HFC phase-down strategy development: 2 (two) technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed strategy, including assessment of needs to develop/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing 4 (four) workshops with main stakeholders and training institutions, including assessments of the needs for enhancing training programs on recovery, recycling and destruction, using complementary data on servicing sector's capacity obtained from survey in HPMP Stage II</p>	<p>31,500</p> <p>National legal consultant 5 months x 2,500 = 12,500</p> <p>National technical consultants: 4.5 months x 2,500 = 11,250</p> <p>HFC phase own strategy consultation and drafting</p> <p>4 workshops 5,250</p> <p>Translation and printing 2,500</p>	UNIDO
<p>3. Communication and outreach plan: Preparation of a comprehensive communication and outreach plan in consultation with key stakeholders including hotel managers, investors, building planners, end-users, consumer associations, RAC associations, private sector, supermarkets, cold chain, media experts etc. The plan will focus on technology and policy awareness raising to influence the investment and user behavior. It will also assess the possible implications of Albania joining the European Union at some stage in future.</p>	<p>16,000</p> <p>National consultant</p> <p>4 months x 2000 = 8000</p> <p>Desk study, survey and interviews Communication and outreach plan including budget for HFC project Preparation of stakeholder consultations Final report with recommendations Liaising with NOU, UNIDO and UNEP to prepare HFC project</p> <p>Stakeholder consultations</p> <p>4 events x 2000 = 8000</p> <p>Hotel managers & end-users Building planners & investors Cold chain & supermarkets Media experts & representatives</p>	UNEP
<p>4. Capacity building activities related to RAC sector activities and enforcement: Review and assessment of innovative tools and approaches to</p>	<p>15,500</p> <p>National consultant</p>	UNEP

<p>build the capacity of relevant actors including OzonAction's tools related to HFC phase-down, update of training curricula of vocational schools, university and customs, online training and certification tools, participation of key stakeholders in international conferences, review of energy-efficiency and performance standards, case studies in Albanian language, public procurement policies, potential impact of incentives and taxes, gender considerations, HFC-free labeling, equipment inventories / logbooks, potential of not-in-kind alternatives etc.</p>	<p>4,25 months x 2000 = 8,500</p> <p>Desk study, surveys and interviews Review and assessment of innovative tools and approaches Review of training curricula of vocational schools, customs schools and universities Review of energy-efficiency and performance standards Case studies in Albanian language Preparation of stakeholder consultations Final report with recommendation Liaising with NOU, UNIDO and UNEP to prepare HFC project</p> <p>Stakeholder consultations</p> <p>2 events x 2000 = 4000</p> <p>Customs and enforcement officers, environmental inspectors RAC vocational training institutes, RAC associations</p> <p>Participation in international conferences 2 events x 1500 =3000</p>	
<p>5. Validation: Consultations, review and validation of the consolidated overarching strategy</p>	<p>6,300</p>	<p>UNIDO</p>
<p>TOTAL</p>		<p>95,000</p>
<p>7. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan?</p>		
<p>Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development without significant additional costs.</p>		
<p>8. How will the Multilateral Fund gender policy be considered during project preparation?</p>		
<p>In line with the MLF gender policy contained in ExCom document 84/73, special effort will be made to involve female trainees in vocational schools as well as female technicians for awareness-raising activities as well as training events on non-HFC ODS alternatives. The project preparation will aim to advocate the importance of gender-responsive actions and provisions in developing HFC phase-down plan. This project will provide female maintenance workshop owners, building management company managers, retail store business owners with awareness raising and training events with an emphasis on the energy efficiency, associated national standards, flammability and toxicity of non-HFC ODS alternatives as technology options for non-HFC ODS alternatives.</p>		

PROJECT CONCEPT – Jordan

Multilateral Fund FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL PROJECT PREPARATION REQUEST FORM HFC Phase-down Management plan (OVERARCHING)

Part I: Project Information

Project title:	HFC Phase-Down Management Plan Preparation	
Country:	Jordan	
Implementing agency:	UNIDO	
Implementation period:	July 2020 – June 2022	
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	150,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government for choice of agency	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Country has ratified the Kigali Amendment	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A. Information required to support PRP funding (Overarching strategy)

1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down <ul style="list-style-type: none"> Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date. 		
<p>Following the outcomes of the 82th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, funding was approved for Jordan for Enabling Activities towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare Jordan for the ratification and implementation of the KA to the Montreal Protocol, considering HFC phase-down in the country. All project activities are advancing well and including a possible extension, the project will be operationally completed by June 2021. Jordan ratified the Kigali Amendment to the Montreal Protocol on 16 October 2019.</p> <p>Jordan has conducted a national inventory of HFCs and a survey on alternatives to ODS financed by CCAC and the MLF. This survey indicates the current supply and consumption of HFC and ODS alternatives and provides future projections of growth patterns by substances and sector in line with the multilateral fund secretariat decision 75/77.</p> <p>Jordan has started to create an enabling environment for the phasedown of HFCs through the Enabling Activities project as well as the ODS alternative survey and inventory. Taking also into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of January 2019, Jordan is ready to take further early action on HFCs and submit preparatory funding request to prepare its HFC phase-down plans. The Enabling activities for HFC phase-down are preparing the ground works on which will be built up a detailed strategy and action plan for HFC phase-down in line with the reduction targets.</p> <p>Initial funding is requested for preparation of the overarching strategy. Once the preparatory funding is approved and based on the requirements, the need for requesting preparatory funding for investment component will be assessed.</p>		
2. Current progress in implementation of Enabling Activities for HFC phase-down Budget: 150,000USD		
Activity	Description	Implementing agency
Activities to support the early ratification of the KA	Coordination with Government representatives Supporting national ratification instruments	UNIDO
Institutional arrangements	Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain	UNIDO

Review of licensing systems and data reporting	Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends and review of the national mechanisms used for ODS reporting to include HFCs	UNIDO
Assessment of national barriers and opportunities for the use and further uptake of low- and zero-GWP ODS alternative	Assessment of national barriers and opportunities for the use and further uptake of low- and zero-GWP ODS alternative, with a special focus on the availability and accessibility and their related equipment.	UNIDO
Awareness, communication and dissemination	Awareness raising of stakeholders (public and private sectors) on HFC phase-down and energy efficiency improvement options	UNIDO

3. Overview of estimated use of ODS alternatives 2012 – 2015 in Mt

Total consumption of HFC and HFC blends in all sectors during the period 2012-2015.

ODS Alternative in (Mt/Year)	Year				Growth Rate 2012-2015 (%)
	2012	2013	2014	2015	
R-134a	693	723.5	714	773	11.5
FM200 (HFC-227ea)	30	30	30	35	16.7
R-404A	232	218	210	235	1.3
R-407C	113	110	105	150	33.6
R-410A	73	94	100	117	60

The table shows a consistent increase in consumption of HFC, HFC blends and other alternatives. Consumption of HFC is primarily dominated by consumption of R-134a, which is used in the refrigeration and air conditioning sector. This increase in HFCs use can be attributed to the growth in population in the wake of Syrian crisis, local market growth and the magnitude of Jordanian exports of RAC appliances to the neighbouring countries.

Total consumption of other ODS alternatives in all sectors during the period 2012-2015

ODS Alternative in (Mt/Year)	Year				Growth Rate 2012-2015 (%)
	2012	2013	2014	2015	
R-600a	-	-	3	5	66.7
R-717	0.55	0.55	3.2	5.2	945
C-Pentane	355	382	405	405	14.1
Methylene Chloride	238	261	283	270	13.2
HC: LPG	500	500	500	500	0
Butane	145	145	150	150	3.5
CO ₂	12	12	13	13	8.3
NOVEC 1230	10	10	10	10	0
NAF S III	20	20	20	0	-

The increase in consumption of HFC blends is almost equally dominated by consumption of R-404A, R-407C and R-410A in RAC sector. R-600a and R-717 are recently introduced into the market with small amount. Tables 3-22 until 3-29 show the total consumption of HFC, HFC blends and other ODS alternatives by sectors for the period 2012-2015.

4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

The consumption of ODS alternatives in Jordan has been observed in the refrigeration and air-conditioning (RAC) sector including their servicing, MAC, firefighting, aerosol and foam application. Under the RAC sector, it is used in unitary air-conditioning, water chillers, domestic refrigeration (refrigerators and plug-in-freezers), commercial refrigeration (stand-alone system, centralized system), industrial refrigeration (small, medium and large sized cold rooms), mobile air-conditioning, and transport refrigeration (road vehicles such as vans, trucks and trailers). Jordan neither produces nor export ODS or ODS alternatives and entirely relies on imports for its own consumption. Growing population, increase in income levels, increase in number of construction activities in the residential sector, expansion in the commercial and institutional (education institute, office space) sector and expansion in transportation, hospitality and tourism industry are the prime factors that drive the growth in consumption of ODS and ODS alternatives in Jordan.

The survey reveals that R-134a, R-404A, R-407C, R-410A, R-600a and R-717 are the main refrigerants used in the RAC sector. The R-134a is the main ODS alternatives employed and count for 70% of the total alternatives been used during the period 2012-2015 with annual growth rate of up to 10%, followed by R-404A (18%) and R-407C (10%) with annual growth rate of 5% for each. The rest of the alternatives (R-410A, R-600a and R-717) are introduced recently and count for only 2% of the total alternatives. For insulation, the C-Pentane found to be the main alternative for the HFC-141b used in this sector as blowing agent.

The consumption of HFCs and other alternatives of the main refrigerants (R-134a, R-404A, R-407C, R-410A, R-600a and R-717) in Jordan has increased from about 1307 MT in 2012 to 1532 MT in 2015, representing a compound annual growth of about 17% over the said period. Based on projected annual growth rates in demand forecasted for ODS alternatives until 2030, it is estimated that the consumption of these substances is likely to reach about 7638 MT in 2030. This demand of ODS alternatives will be dominated by the RAC and MAC sector.

While the survey indicated a wide range of HFCs uses in the RAC and MAC, there were limited applications of HFCs in firefighting system, aerosol and foam application. Moreover, the survey didn't result in any HFCs applications in the solvent.

Among various alternatives used in the country, consumption of HFC and its blends are likely to increase tremendously by 2030, potentially leading to notable environmental impacts on global warming. The total potential direct emission of HFC in all sector applications is estimated to reach 2650.171 Thousand tCO₂eq. in the year 2015 and this is expected to increase to 15753.28 Thousand tCO₂eq. in the year 2030.

However this can be avoided through introduction of low-GWP based alternatives to replace HCFCs and HFCs.

5. Description of information that needs to be gathered and updated. Explain why this has not been undertaken in previous projects.

Information needed	Description	Agency
Updated ODS alternatives data	Review available data and collect additional sector-specific data for the years 2016-2018 through questionnaires and interviews as this was not included in the enabling activities and previous ODS alternatives data collection only covered data until 2015.	UNIDO

6. Activities to be undertaken for project preparation and funding

Activity	Indicative funding (US \$)	Agency
Ground work: Consultant to prepare and conduct questionnaires and interviews with relevant stakeholders to update available data on ODS alternatives; consultant to contact surveys and consultations with key stakeholders for the integration of national regulations and procedures for KA implementation and	45,000 Number of meetings: 2 Number of experts or consultants: 3	UNIDO

consolidation of technical capacities in the institutions involved in HFC control		
HFC phase-down strategy development: Technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed strategy, including: - assessment and development/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions; - Communication and outreach plan preparation and development of awareness raising activities; - Enhance the training program on recovery and recycling of refrigerants and improve the monitoring and evaluation system of R&R practices	55,000 Number of meetings: 3 Number of experts or consultants: 3	UNIDO
Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency in all sectors, by: - Promoting upgrades for mandatory and voluntary standards;- Promoting the replacement of RAC equipment in homes, businesses and industry; - Promoting efficient practices of operation, maintenance and installation in RAC systems; - Developing detail studies for RAC equipment characterization and project portfolio evaluation for energy efficiency upgrades.	40,000 Number of meetings: 2 Number of experts or consultants: 2	UNIDO
Validation: Consultations, review and validation of the prepared strategy	10,000 Number of meetings: 2 Number of experts or consultants: 0,5	UNIDO
TOTAL	150,000	
7. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan?		
Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development to the extent possible.		
8. How will the Multilateral Fund gender policy be considered during project preparation?		
Consideration to the gender policy of the Multilateral Fund will be given in all possible areas during project preparation. Budget of the components to be prepared, will take into account allocations for the proposed gender activities (e.g., capacity building activities for female technicians). Also each project component in terms of stakeholders and participation will ensure that both women and men can provide inputs, access and participate in		

project activities (e.g., through outreach / invitations of female technicians to participate in stakeholder consultations, expert recruitment etc).

Country: Sudan

Title: Project preparation for HFC-related projects in the manufacturing of air-conditioning units at J.M. Group/Mina factory to gain experience in ICCs and IOCs associated with the phase-down of HFCs

Project Duration: 24 months

Project Budget: US\$ 30,000 (excl. 7.0% Agency Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: National Ozone Unit – Higher Council for Environment and Natural Resources

Project Summary

The Executive Committee has decided in Decision 78/3 (g) *“To consider approving a limited number of HFC-related projects in the manufacturing sector only, without prejudice to different kinds of technology, no later than at the first meeting of 2019, to allow the Committee to gain experience in the ICCs and IOCs that might be associated with phasing down HFCs in Article 5 countries...”*

In response to that above decision, UNIDO has received an official request from the Government of Sudan for the preparation of a demonstration project in the manufacturing sector in order to convert from HFC using equipment to non-GWP alternatives and to gain relevant experience in the associated ICCs and IOCs.

Regarding the Kigali Amendment to the Montreal Protocol the Government of Sudan has made all the necessary preparations for the ratification that is expected soon. The preparation activities include seminars with stakeholders, drafting amendments to the legal frameworks enabling the additional control of HFC imports through quotas and licensing. The phase-down strategy has been compiled and states: *“There are currently three enterprises consuming HFCs as initial charge of the refrigeration and air-conditioning equipment. The enterprises will be converted to use hydrocarbons (propane and isobutane as refrigerants).”*

The air-condition manufacturing of J.M.Group/Mina Factory has been identified as an efficient demonstration platform. The enterprise would be willing to initiate early actions and convert from HFCs to non-GWP alternatives in the air-conditioner manufacturing, where alternative technology is mature and readily available, in order to gain experience in ICCs and IOCs.

The strategy followed by Sudan is based on the following criteria and priorities:

- I. Application of well-known, affordable, available and widely used replacement alternatives and related technologies, while supporting efforts for identification and selection of such alternatives.

- II. To start phasing-down HFCs in those HFC manufacturing sectors, where low/non- GWP and mature alternatives are available.
- III. Through adoption of appropriate alternative technologies, limit climate and adverse environmental impact of converted enterprises and comply with safety, economic and sustainability requirements.

Background on J.M. Group/Mina Factory

J.M. Group/Mina Factory is 100% Sudan-owned enterprise. The Group was established in 1990. The Mina Factory is producing refrigerators and freezers; the production of air-conditioning equipment started in 2011. The Mina Factory has 19 outlets of its own and more than 200 distributors in Sudan. Service activities (especially the warranty service) are partially run by the company itself, partially sub-contracted by individual workshops.

The in addition to the air-conditioners the Factory makes refrigerators and electrical home appliances.

	J.M. Group/Mina Factory
Ownership	100% national
Annual HFC consumption in air-conditioning equipment	Approximately 9,000 kg
HFC-based equipment	Air-conditioner equipment, split units
Baseline equipment	<ul style="list-style-type: none"> - R-134a/R-410A) charging machines - vacuum pump - fixed gas detector - portable gas detectors

In the framework of the proposed project, it is planned that the R134a (or R410a) based products will be converted to R-290 (propane). Choosing propane is based on the prepared national strategy. Sudan prefers to avoid a large variety of different refrigerants anticipating that the future maintenance and service activities and training will be easier when the number of substances is limited. Training of the service technicians is a bottleneck in a large country even though there as on-going and planned training programs.

UNIDO has already procured, for demonstration purposes, from abroad some 80 pieces of R-290 run air-conditioner units to Sudan, which equipment is being distributed among vocational training centers, Sudan Technical University, Refrigeration Technicians' Association and other stakeholders to support the on-going training and enhance the safe use low/non-GWP equipment and introduce local technicians to the operation of this kind of equipment. The Mina Factory is also receiving some pieces.

The J.M. Group/Mina Factory company is still using HCFC-141b foam insulation in the refrigerator manufacturing, but a conversion to hydrocarbon/cyclopentane under the HPMP II is currently taking place and will be soon completed. Further, the Factory has already made some trials on isobutane (R-600a) refrigeration equipment. Thus the management and staff starts to be introduced to the handling of hydrocarbons and related safety issues. It is therefore understood that the implementation proposed conversion project will be technically relatively easy.

Expected results

The project will contribute directly to the phase-down of the HFC consumption in Sudan and indirectly enhance the service and maintenance capacity of hydrocarbon run equipment. It is expected that the project also serves as an example for the conversion of other HFC run installations to low-GWP or no-GWP installations. Information on incremental and operational and capital costs and their elaboration will be utilized for other conversions in the country. The project serves as a demo for other installations and enables them to benefit from the forthcoming financial and technical support when the country has ratified the Kigali amendment and got eligible for MLF finance.

Information on the expected energy savings will be effectively distributed and a workshop/seminar on the issue will be arranged after the conversion is finalized.

Activities to be undertaken

- Data collection, verification and validation at the company and manufacturing plant level including the preliminary (warranty) service procedure of the products
- Technology review of available HC-equipment taking into consideration of the beneficiary company's production scale and including the required safety arrangements together with the existing and foreseen local regulations GWP alternatives
- Cost assessment of conversion (ICC and IOC)
- Evaluation of the climate co-benefits of the selected alternative and possible interventions and related costs for additional climate benefits
- Preparation, review, endorsement and submission of the project document

Funding Requirements

The preparatory funds are requested for UNIDO, as follows:

Activities	Cost US\$
Local activities (national expert, local travel costs, coordination meetings etc.)	10,000
International consultant (project preparation and development)	15,000
International travel costs (staff)	5,000
TOTAL	30,000

Activities to be undertaken

- Detailed data collection, verification and validation at the enterprise level
- Technology review of available, mature technical alternatives and discussion with the enterprises and the Government e.g. on the required safety standards and official requirements regarding occupational health and safety.
- Cost assessment of conversion (ICC and IOC)
- Evaluation of the climate co-benefits of the selected alternative and possible interventions and related costs for additional climate benefits
- Assessment of the energy saving aspects of the hydrocarbon products during their life-cycle
- Preparation, review, endorsement and submission of the project document

Project Concept

Country:	Libya
Title:	Extension of Institutional Strengthening for the implementation of Montreal Protocol in Libya – Phase VI
Project Duration:	24 months (July 2020 – June 2022)
Project Budget:	174,164 (excl. 7% Agency Support Costs)
Implementing Agency:	UNIDO
Coordinating Agency:	National Ozone Unit/ Environmental General Authority

Project Summary

The project is addressing further institutional strengthening and capacity building for the National Ozone Unit/ Environmental General Authority and will ensure that the Government will meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer.

In this context, the role and functions of the National Ozone Unit (NOU) established within the Environmental General Authority of Libya in the past two years remained unchanged.

During phase V, the Libyan NOU was fully staffed. Significant efforts were made, given the country political and security situation, to continue with the implementation of the Montreal Protocol activities. Quotas for the period 2018 – 2020 were established and are being monitored on regular basis. The country consumption is below the control limits. The NOU continued to maintain cooperation with other public institutions through regular bilateral meetings, inter-ministerial meetings and steering committees. Country programme data and Article 7 data reports for 2017 and 2018 were submitted. Ozone Day Celebrations were organized in 2018 and 2019. Libyan officials attended the Meetings of the Party and Open-ended Working Group meetings in the reporting period.

During phase VI the NOU will continue to monitor HCFCs consumption to maintain compliance with quota system and with licensing system. Quotas will be issued for the years 2021 and 2022 to maintain HCFC consumption in line with the Agreement between the Executive Committee and the Executive Committee and with its commitments in decision XXVII/11. Activities planned under the next phase include: CP and Article 7 data reporting; continued monitoring the licensing system and allocate quotas to achieve full control over the imports of all HCFCs; continuing making efforts to introduce a ban importing or manufacturing HCFC equipment; continue cooperation with custom authorities and industry representatives; facilitate the ratification process of the Kigali Amendment through implementation of the enabling activities project. Public awareness activities will include celebration of international ozone day and the country plans to participate in regional network and Montreal Protocol meetings. The country has included 15 performance indicators for phase VI.

Project Concept

SECTION 3

Country	Project Title	Extension Duration (months)	Reason for extending the duration	Official request for extension received?
Jordan	Enabling activities for HFC phase-down (JOR/SEV/82/TAS/104)	12	Priorities were put on the support for the ratification of the Kigali amendment, which was successfully completed. The process of identification and recruitment of experts for the remaining activities needed additional time and an extension kindly requested to achieve results as planned.	Yes
Qatar	Enabling activities for HFC phase-down (QAT/SEV/82/TAS/24)	12	Due to the NOU restructuring, additional time is needed to complete all activities as planned.	Yes