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Project Title: HCFC Phase out Management Plan (HPMP) Stage-II for Compliance with the Post 2015 control targets for Annex-C, Group-1 substances in Lebanon.

Project Number: 00100473 – Award ID 00096549

Implementing Partner: Ministry of Environment

Start Date: 15 August 2016 **End Date:** 31 December 2025

LPAC Meeting date: 08 August 2016

Brief Description

Hydrochlorofluorocarbons (HCFCs) are classified as controlled substances under Annex-C Group-I of the Montreal Protocol and are subject to the adjusted control schedule for Article-5 countries; to freeze the consumption at baseline levels from 2013 and reduction of 10% from baseline levels from 2015.

HCFCs are used in Lebanon in various industry sectors, such as Air Conditioning, Refrigeration, and Foams. The predominant HCFC used is HCFC-22 mainly in the Refrigeration and Air Conditioning Sectors. HCFC consumption in Lebanon increased from 413 metric tons in 2008 to 941 metric tons in 2014, indicating an average annual growth rate of about 15%. The main reason for this growth is the sustained economic development and resulting increase in demand for consumer, commercial and industrial products that use HCFCs.





In order to meet the reduction targets for the years 2020 and beyond, the industry, consumers and government will need to make tremendous efforts. This will involve phasing out HCFC use in major manufacturing sectors as well as the servicing sector and reducing dependence on HCFCs and controlling and reducing HCFC use wherever possible in the servicing sector. The main constraints for transitioning from HCFCs to alternative environment-friendly substitutes is the dependable and economic availability of benign and sustainable substitutes and the limited time available for implementing phase-out actions for compliance. Extraordinary efforts will be needed to curb the momentum of inevitable growth in HCFC consumption in sectors, mainly the Servicing Sector, that are not addressed through this proposal. Besides, this phase-out has to be achieved with minimum or zero phase-in of high GWP substances such as HFCs/HFC blends and energy efficient solutions.

For achieving HCFC phase-out, HPMP Stage-I was prepared and approved in the year 2011 for achieving phase-out targets up to 2017. This was successfully implemented and Lebanon is at final stages of implementation. HPMP Stage-II for achieving phase-out targets up to 2025 was approved in the 75th meeting of the Executive Committee held in Montreal in November 2015 and would help Lebanon progress towards complete phase-out of HCFCs by 2025.

Impact: Upon successful completion, the plan will result in net sustainable reductions of minimum 47.76 ODP tonnes in the national HCFC consumption by 2025, contributing to Lebanon's compliance with the 2020 and 2025 control targets for HCFCs phase-out.

UNSF (2017-2020) Contributing Outcome: Outcome 3.3 Lebanon has improved environmental governance CPD Indicative Output: Output 4.2 National Environmental Management Strengthened	Total resources required:	US\$ 4,203,826.00	
	Total resources allocated:	MLF:	US\$ 4,203,826.00
		Tranche 1 (2016)	US\$ 2,410,000.00
		Tranche 2 (2018)	US\$ 1,114,000.00
		Tranche 3 (2021)	US\$ 420,462.00
		Tranche 4 (2024)	US\$ 259,364.00
		Government In-Kind:	US\$ 330,000.00

Agreed by:

Government	UNDP	Implementing Partner
Mr. Nabil El Jisr, President, Council for Development and Reconstruction  	Mr. Edgard Chehab, Assistant Resident Representative, United Nations Development Programme 	H.E. Mr. Mohamad Al Mashnouk, Minister, Ministry of Environment 
Date: 26 AUG 2016	Date: 12 Aug. 2016	Date: 19/08/2016

I. DEVELOPMENT CHALLENGE

1.1 Background

Country profile

Lebanon is a Mediterranean country with a land area of about 10,500 sq. km and a population of about 4.4 million. About 80% of the population is urban. The key economic sectors are services (about 60% of the gross domestic product), industry (about 26% of the gross domestic product) and agriculture (about 14% of the gross domestic product).

ODS phase-out activities in Lebanon

The dates of ratification by Lebanon of the Montreal Protocol and its amendments were:

Table-1: Dates of Ratification of Montreal Protocol and Amendments

Agreement	Ratification	Entry into Force
Vienna Convention	March 30, 1993	June 28, 1993
Montreal Protocol	March 30, 1993	June 28, 1993
London Amendment	March 31, 1993	June 29, 1993
Copenhagen Amendment	July 31, 2000	July 31, 2000
Montreal Amendment	July 31, 2000	July 31, 2000
Beijing Amendment	November 21, 2008	November 21, 2008

Source: Ozone Secretariat

Lebanon's Country Programme reflecting the national strategy and action plan for controlling the use of ozone depleting substances was prepared with the assistance of the National Working Committee on Ozone Depleting

Substances established in 1994 at the Ministry of Environment was approved at the 17th Meeting of the Executive Committee of the Multilateral Fund in 1995. The Country Programme prioritized ODS phase-out activities in the main ODS consuming sectors, through technology transfer investments, technical assistance, capacity building, and training.

All remaining CFC phase-out actions were addressed through the National Phase-out Management Plan for Annex-A, Group-I Substances (CFCs) in Lebanon (NPMP), which was approved at the 44th ExCom Meeting in November 2004 as a performance-based agreement with annual consumption and phase-out targets and complete phase-out of all remaining consumption of Annex-A, Group-I Substances (CFCs) in Lebanon before 01 January 2009. The country has also completely phased-out consumption of Methyl Bromide by the year 2010.

1.2 Accelerated HCFC Phase-out

HCFCs, which have Ozone Depleting Potential (ODP) up to 15% of that of CFCs, are also classified as controlled substances under Annex-C, Group-I of the Montreal Protocol.

HCFCs therefore, have use restrictions and would eventually have to be phased-out. Initially for developing countries, the scheduled phase-out date for HCFCs was 01 January 2040 with an interim control measure of freezing HCFC production and consumption at 2015 levels, from 01 January 2016.

During the implementation of the CFC phase-out under the Montreal Protocol, HCFCs were approved as interim substitutes for CFCs in many of the projects and activities supported by the Multilateral Fund. HCFCs were also used historically as refrigerants in the refrigeration and air conditioning industry. Due to sustained economic growth experienced by developing countries during the 1980s and thereafter, the demand for consumer and industrial products using HCFCs increased rapidly. Further, due to the high global warming potential (GWP) of HCFCs, their increased use was also a threat to the global climate system.

Recognizing the environmental benefits of reducing HCFC production and consumption earlier than the previous control schedule, the XIXth Meeting of the Parties to the Montreal Protocol in September 2007, through its Decision XIX/6, accelerated the phase-out schedule for HCFCs by 10 years. For Article 5 countries, the first control is the freeze on production and consumption of HCFCs from 01 January 2013, at the Baseline Level (average of 2009 and 2010 consumption levels). The second control step is the reduction of 10% from the Baseline Levels on January 1, 2015. Subsequent control steps are 35% reduction by 2020, 67.5% by 2025, 97.5% by 2030 and complete phase out from January 1 2040. The decision confirmed stable and sufficient funding for Article-5 countries to meet these new obligations.

For preparing an overall strategy for achieving accelerated HCFC phase-out targets, Lebanon prepared HCFC Phase-out Management Plan (HPMP) during the period 2009-2011. This defined an overall strategy and an action plan that would address the initial targets for compliance with HCFC phase-out i.e., 2013 and 2015 targets. HPMP Stage-I had a series of interventions including project support to 2 HCFC consuming enterprises, technical assistance for adopting HCFC free technologies, capacity building and information outreach measures and project management, monitoring and coordination.

HPMP Stage-I for Lebanon was approved in July 2011 in the 64th Meeting of the Executive Committee. The funding approved was about US \$ 2.5 million. Through this, Lebanon committed to achieving reduction of HCFC consumption from its freeze level of 76.5 ODP tons to 60.44 ODP tons by the year 2017. This project is under implementation. As of date, the Government has received the first three tranches of funding under HPMP Stage-I amounting to about USD 2.25 million dollars. Two companies proposed to be converted under HPMP have completed their project implementation and Lebanon has successfully achieved 2013 and 2014 compliance targets.

1.3 HPMP Stage-II Preparation in Lebanon

In order to assist Lebanon for the preparation of its HPMP (Stage-II) for compliance with the post 2015 targets, UNDP, on behalf of Lebanon, submitted a request for preparation funding to the 72nd meeting of the Executive Committee which was held in July 2014 for the preparation of the HCFC phase-out management plan (HPMP Stage-II) for Lebanon for post 2015 targets, i.e., targets beyond the phase-out commitments under HPMP Stage-I and these funds were approved at a level of US\$ 150,000. These funds were to be used for conducting the field survey on HCFC consumption levels and trends including update of data collected during HPMP Stage-I, where found necessary, and developing a strategy for achieving future targets for HCFC phase-out as indicated above. The key expected result of this survey was establishing the HCFC consumption profiles and projected growth rates in HCFC consumption in the remaining sectors in Lebanon. The survey was carried out in 2015, the survey focused on data collection from the remaining enterprises in the Foam and RAC sectors as well as the servicing sector, and

analysis mainly from upstream suppliers of chemicals and equipment, as well as sampling of enterprise-level HCFC use patterns.

The Government of Lebanon designated UNDP to be the implementing agency for the HCFC phase-out management plan (HPMP, Stage-II) in Lebanon.

In June 2014, the Grant Approval Decree No. 1065 of the Council of Ministers was issued, thereby giving the role to the National Ozone Unit at the Ministry of Environment as being responsible for developing sector-level HCFC phase-out strategies as well as Lebanon's overall HPMP Stage-II preparations.

The HPMP Stage-II preparation process consisted of the following steps:

- Stakeholder consultations (regular periodic meetings and interactions with government and industry stakeholders)
- Information dissemination and industry interaction (sector-level workshops and events)
- Data collection at the sector-level (and reconciliation with the national-level)
- Data analysis at the sector-level (and reconciliation at the national-level)
- Preparation of draft sectoral strategies and national strategy
- Stakeholder interactions/consultations (national stakeholders workshop)
- Finalization of the HPMP (Stage-II) proposal

In order to adequately inform the stakeholders, the challenges and opportunities in complying with the adjusted phase-out schedule for HCFCs, the National Ozone Unit (NOU – UNDP Project team established at the Ministry of Environment) conducted several stakeholder interaction meetings for all sectors. Technical experts from the industry shared knowledge and experiences on alternative technologies. Representatives and environment departments of local administrations also participated and provided guidance on the international regulatory scenario.

Appropriate questionnaires and formats for reporting information and data were developed. These questionnaires were sent to enterprises by NOU or distributed during sector-level interaction workshops. Consequently, the data collected covered:

- Primary or secondary HCFC import data.
- Primary or secondary HCFC based equipment population data and HCFC consumption.
- HCFC volume of import from main importer.
- HCFC consumption data by sectors from main distributors.
- HCFC consumption data from main users (Enterprises).
- HCFC consumption and equipment from resource persons and or associations.

The data reconciliation was carried out through interactions with Customs Department, Ministry of Trade and Economy, Ministry of Industry and Central Administration of Statistics.

The data analysis at the sector level included classification based on historical and present HCFC consumption by sub-sector and application, eligible and ineligible enterprises and their consumption, data on first and second conversions, projected growth trends until baseline and thereafter, required reductions in HCFC consumption for meeting the post 2015 reductions and availability of deployable alternative technologies for each application.

Based on the data analysis as described above, the NOU adopted the following approach for prioritizing sub-sectors/applications for the remaining national consumption of HCFC in the different sectors:

- Segregation of eligible and ineligible enterprises (and consumption)

- Segregation of first and second conversions as applicable (and related consumption)
- Availability of zero-ODP and low-GWP mature alternative technology options for each sub-sector/application
- Feasibility of the implementation of the conversions within the available timeframe of about 3 years

The draft national strategy was developed with the involvement of all stakeholders including key government stakeholders, implementing agency, national and international experts and key representatives of the industrial and technical sectors. The comments and recommendations of the stakeholders were collected, collated and incorporated in the national strategy. It must be noted that the national strategy takes into consideration experiences relating to implementation of HPMP Stage-I and policies and guidelines of the Executive Committee of the Multilateral Fund.

The draft national strategy was endorsed by the Government for onward submission to the Multilateral Fund Secretariat for the consideration of the 75th Meeting of the Executive Committee of the Multilateral Fund.

II. STRATEGY

2.1 Principles

The overarching strategy underlying the HCFC Phase-out Management Plan (HPMP, Stage-II) for Lebanon is based on the following guiding principles:

- Reflect national context and priorities, national policies and country-drivenness;
- Develop and demonstrate a strengthened and proactive partnership between government and industry;
- Draw upon the lessons learnt from functioning of institutional arrangements and operational mechanisms, integrate and build upon existing infrastructures and introduce new mechanisms as needed;
- Be dynamic and evolving, and to be open for revisions and adaptation as necessary in response to evolving situations

2.2 Approach for Compliance

Lebanon will develop and implement a staged approach for complying with the adjusted control schedule for Annex-C Group-I substances (HCFCs) under the Montreal Protocol.

Stage-I (2011 to 2015)

HPMP Stage-I activities relating to industry phase-out have been completed before 1 January 2015. This has contributed to decrease in HCFC consumption in the country.

Stage-II (2016 to 2025)

In the Stage-II period from 2015 to 2025, the focal areas for action are identified as below:

- Prioritizing HCFC phase-out of the foam applications in line with Executive Committee guidelines taken in 60th meeting and the 74th meeting.
- Addressing HCFC consumption in air-conditioning sector on priority given the high consumption levels as well as consumption growth coupled with availability of low GWP energy efficient technologies.
- Addressing service sector to build capacity of service agencies for reducing HCFC use in servicing.
- Addressing HCFC consumption in insulation foam in water heating applications through adoption of low GWP options at a future date post 2019.
- Addressing HCFC consumption refrigeration applications through technical assistance and technical information outreach.
- Adopting sectoral/sub-sectoral approach in the phase-out strategy to offer a level playing field to all market players.
- Providing project monitoring support to ensure that HCFC phase-out activities are implemented in a systematic and phased-manner.

Given the status of development of technical options and their cost-effectiveness, the Government recognizes the importance of timing phase-out in different applications appropriately so that ODS phase-out can be achieved cost-effectively and industry competitiveness is not affected due to adoption of ozone friendly technologies that have a high cost at this stage. Wherever cost-effective HCFC free technologies are available, components and chemicals are available cost-effectively and the specific sector/sub-sector

contributes to the needed quantities for phase-out, those activities will be timed early i.e., during the period 2016-2018. The other sectors would be closely monitored so that the activities commence for HCFC phase-out wherever favourable market signals are observed. In these applications i.e., enterprises in refrigeration, small consumers in foam applications, it is expected that phase-out projects would commence during the period 2018- 2020.

The Government also propose to adopt a strategy that would result in adoption of low GWP minimal climate impact technologies as much as possible.

Based on the above considerations, the following phase-out actions will be implemented:

- (a) **Foam Sector:** Conversion at the 6 sandwich panel manufacturing enterprises would be addressed on priority during the period 2016-2018. In these applications, low GWP technologies (hydrocarbons in case of large enterprises) and HFO based technologies (in case of small enterprises) are available. The total HCFC-141b phase-out quantity through this phase-out approach would amount to 29.15 ODP tons (265 MT).

HCFC-141b consumption in foam applications in the remaining users including water heaters is expected to be addressed during the period 2019-2020 keeping in view availability of cost-effective low GWP technical options. The quantity of HCFC-141b phase-out in these applications aggregates to 37.9 MT (4.17 ODP tons).

- (b) **Air Conditioning sector:** Conversion at the 5 air-conditioning equipment manufacturing enterprise would be addressed. R-32 is proposed to be used as a refrigerant for achieving HCFC phase-out in these enterprises except transport refrigeration where options for low GWP blends will be explored. While technical options are available and there is experience in adopting these options, component and spares availability for R-32 based air-conditioning equipment is still evolving. Two of the five enterprises are expected to adopt HFOs or other low GWP chemicals in place of HCFC-141b. Therefore, it is proposed to begin phase-out projects in these applications from the year 2017 or earlier.

The total quantity of HCFC-22 and HCFC-141b phased-out in these applications amounts to about 59.7 MT (3.28 ODP tons) and 16.8 MT (1.86 ODP tons), respectively.

- (c) **Refrigeration Sector:** As mentioned earlier in the refrigeration sector, the consumption quantities are low. The enterprises are also small in size and have limited technical capabilities. It is also known that low GWP technologies are evolving.

The Government therefore proposes to address this sector post 2018. This is timed with an expectation that low GWP technologies for refrigeration equipment would be available then and for the small quantities of HCFC-141b consumption in insulation foam, cost effective low GWP formulations would be available. Given the overall phase-out needs of the country, Executive Committee guidelines on project support for HCFC phase-out including those available for service sector and project management needs, Government proposes to adopt this approach.

This would translate to HCFC-22 and HCFC-141b phase-out of 40.80 MT (3.89 ODP tons) and 12.87 MT (1.42 ODP tons), respectively, in these applications.

- (d) **Air-conditioning and Refrigeration Servicing Sector:** Refrigeration servicing sector is proposed to be addressed in this stage to ensure that the service sector enterprises have technical knowledge and

equipment support to manage good servicing practices of the equipment. Further, to ensure sustainable phase-out in service sector, support is proposed to be provided for identified technical institutions for training service technicians.

In line with Paragraph c (xiii and xvi) of decision 74/50, the HCFC phase-out impact for servicing sector amounts to **180.16 MT (9.91 ODP tons)**.

Through carefully designed policies and targeted regulations supporting the above actions, Lebanon will control the growth in HCFC consumption in sectors unaddressed for phase-out in Stage-II.

The table below presents the summary of the above strategy in terms of its impact on total HCFC phase-out by substances and in total.

Table 2: Summary of HCFC phase-out projects and their impact

Actions		Impact in ODP tons			Requested funds from MLF (USD)	Cost effectiveness in USD /Kg
		HCFC-22	HCFC-141b	Total		
Foam Sector	6 enterprises including 4 large enterprises and 2 small enterprises		265.2	265.2	1,686,310	9.79 (large) 10.96 (small)
Refrigeration and Air-Conditioning sector	5 enterprises in Air-Conditioning (including 2 consuming HCFC-141b) 41 small enterprises in refrigeration	59.65	16.85	76.5	1,038,420	7.34 (all ref. and air-conditioning)
		40.8	12.87	53.67		
Other foam (water heaters)	11 enterprises		37.9	37.9	190,000	5.01
Servicing sector	Good practices and adoption of low GWP technologies	180.16		180.16	434,096	4.8
Project Management and Coordination					855,000	
Total		280.61	332.82	613.43	4,203,826	
Total eligible phase-out in MT (Metric Ton)		247.73	203.9	451.63		
Phase-out in ODP tons (eligible)		13.62	22.43	36.05		

The regulatory interventions that would be put in place to facilitate the process of conversion from HCFC based technologies to achieve phase-out are given below.

- Prohibition on use of HCFC-141b in sandwich panels from 1 January 2019
- Prohibition of manufacturing, import and sales of HCFC based air-conditioners from 1 January 2021 or earlier
- Prohibition of use of HCFCs except in servicing applications by 31 December 2025. This will be reviewed in the year 2021 and in case found necessary, adjustments would be done in the date to 31 December 2023.
- Voluntary registration of service technicians and training participation certification
- Mandatory service training for servicing equipment using flammable refrigerants

The following points may be noted.

- The Government will work systematically with industry and technical experts to make available cost-effective solutions for users of HCFC-141b in foam manufacturing. Though project funding support is not proposed to be included in the phase-out strategy outlined above for the systems house, technical inputs would be provided to the systems house for facilitating the process of making low GWP polyol systems to SMEs. With the recent developments in the markets for some of the new low GWP options, it is expected that such low GWP systems would be available to beneficiaries from 2018 and beyond. It is expected that the systems house may either import or sell low GWP polyol systems or set-up through other resources production facilities for producing HCFC free polyol systems.
- Refrigeration equipment manufacturers in Lebanon are very small in size and they use small quantities of HCFC-22 and HCFC-141b. The Government proposes to provide assistance to these manufacturers through technical information outreach so that they could adopt HCFC free options by themselves. They would also be informed about ongoing phase-out activities and regulations that are expected to be enforced for HCFC phase-out.

Table 3: Overall time plan for project implementation

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Air-conditioning: Large enterprises (5)	■	■	■	■	■	■				
Foam sector: Large enterprises (4)	■	■	■							
Foam sector: Small enterprises (2) and water heater manufacturers (11)				■	■					
Refrigeration manufacturing (41)		■	■	■	■	■	■	■		
Service sector	■	■	■	■	■	■	■	■	■	■
PMU	■	■	■	■	■	■	■	■	■	■

Note: (1) Figures in parenthesis in column 1 indicates the number of enterprises that would be addressed in Stage-II. (2) Post 2026, the left over consumption would be 1.25 ODP tons.

The overall fund flow and targets for HCFC consumption for the period 2016–2025 under HPMP Stage-II are given below. As mentioned earlier, the policies and regulations will be aligned to phase-out

targets in individual sectors/sub-sectors and will eventually result in zero consumption of HCFCs in manufacturing and substantial reduction of HCFCs in servicing by 2025.

Table 4: HCFC consumption targets and funding requirement for Stage-II

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Montreal Protocol limits	66.15	66.15	66.15	66.15	66.15	47.78	47.78	47.78	47.78	47.78	23.88
HPMP Stage-I targets	66.15	66.15	60.64								
HPMP Stage-II targets	66.15	66.15	60.64	60.64	48.71	36.78	36.78	36.78	36.78	27.58	18.39
Fund flow in USD ('000)	2,410			1,114			420			259	

III. RESULTS AND PARTNERSHIPS

1- Expected Results

The project forms an integral component of HCFC Phase-out Strategy of Lebanon and includes a plan for achieving Lebanon's compliance targets as per Decision XIX/6 of the Montreal Protocol. The project, in fact, presents a plan to achieve the targets for Lebanon in an accelerated manner particularly for the period 2016 to 2025. In this project, activities will be implemented addressing sectors involved in manufacturing HCFC based equipment in refrigeration and air-conditioning and foam applications. The foam sector that consumes a higher GWP HCFC i.e., HCFC-141b, will be prioritized and in parallel, HCFCs consumed in air-conditioning, namely HCFC-22, will be phased-out in a systematic manner.

An important element in this project is phase-out of HCFC-22 in servicing sector i.e., HCFCs consumed for servicing equipment in refrigeration and air-conditioning. These are proposed to be done through several interventions that include equipment support and training support. Partnerships would be established with private sector enterprises engaged in selling this equipment for smooth and effective technology transfer.

As presented in the previous sections, the project will support the government to achieve its set targets for phasing out HCFCs from its territory and thus to maintain its commitment to the ratified conventions. The projects results are directly linked to the Country Programme Document, Output titled "National Environmental Management Strengthened" where the volume of ODPs (tons) remains an indicator.

2- Resources Required to Achieve the Expected Results

The project has been approved by the executive committee of the MLF at its 75th meeting. The total funds approved is US\$ 4,203,826 and those funds would be received in multiple tranches from the year 2016-2025 (detailed in section II). These funds are to be used for the identified project components for phasing-out HCFCs including project management and coordination.

The successful implementation of the HCFC Phase-out Management Plan (Stage-II) for Lebanon will result in the reduction of HCFC consumption levels to 23.89 ODP tons by the year 2025. In order to meet the above objective, necessary actions should be taken to ensure a minimum phase-out of 45.72 ODP tons (based on 2014 consumption levels) of HCFC consumption will need to be accomplished in a time span of about 10 years. This phase-out will be addressed in the HPMP Stage-II, through technology conversions in the enterprises manufacturing of discontinuous sandwich panels, refrigeration and air conditioning manufacturing products and those engaged in servicing of RAC equipment.

In addition to this, the project would have contribution-financially and in-kind from the industries for implementing the project (see tables below). The government, mainly the Ministry of Environment (US\$ 330,000 in kind), this relates to time and resources for monitoring, guiding and implementation of different project components, however the consumer's contribution relates to the cost of acquiring HCFCs from technologies sometimes at a higher price which is expected to be in the short run till technologies become mature and product are widely available in the international markets.

The table below represents the summary of the phase-out action in line with the strategy outlined above and total funding required from the MLF. However, it is crucial that the beneficiaries secure co-financing related to funding of non-eligible project components and industry specific investments

for other expansion activities that are linked to their business plans in order to ensure complete phase-out of HCFCs proposed:

Table5: Cost of conversion by sector:

Sector	Impact in ODS tons	Eligible funding cost from MLF (USD)	Co-financing by the companies (USD)	Total cost of conversion (USD)
Foam (6 discontinuous sandwich panels enterprises and 11 solar/water heaters enterprises)	265	1,876,310	1,327,670	3,203,980
Air-conditioning (5 enterprises)	76.6	1,038,420	0	1,038,420
Servicing sector	414.4	434,096	0	434,096
Project management and coordination	0	855,000	0	855,000
Total	756	4,203,826	1,327,670	5,531,496
Total eligible phase-out (MT)	652.6	-	-	-
Total phase-out in ODP tons (eligible)	45.72	-	-	-

Kindly refer to Annex (2) for a detailed baseline data for the enterprises in all sectors along with the breakdown of cost of conversion.

Specific activities: The air conditioning and refrigeration servicing sector is showing a significant growth due to the increased number of existing population of air conditioning and refrigeration systems. As such, there is a need for different types of technical support addressing to over 500 technical workshops, 11 vocational schools and 1000-1500 technicians in this sector. This project plans to provide this technical support throughout the following indicative actions:

- a) Equipment support to servicing workshops (400-500 workshops) and vocational schools (2 schools)
- b) Training on good servicing practices, particularly on recovery and reclamation programs:
 - Train the trainers program (this training will take place in Germany for a total number of 3 trainers). This will be done in 2017 and another one probably by 2020-2022.
 - Training on good practices addressed to service technicians (1000 technicians), an estimate number of 40-50 training sessions (2-3 days per session). This program is scheduled to be conducted before 2020. In 2025, a similar activity will be planned depending on the new hydrocarbon technology that will be introduced in this sector.
- c) Equipment support to service technicians (100-200 technicians)

- d) Production of training manuals to service technicians (1000 copies), containing all applications of non-ODS refrigerants for the RAC sector in general and focusing on theoretical and practical applications and training on ODS alternatives.

Project human resources, organogram and overall budget are detailed in the following sections of the project document.

3- Partnerships

The project involves strong coordination needs among different stakeholders to achieve national targets of Lebanon. The main stakeholders and their roles are given below:

The Government of Lebanon represented by the Ministry of Environment: The Government is responsible for the achievement of overall project results. The Government has a binding agreement with the Executive Committee of the Multilateral Fund. The Government is also responsible, as a partner to UNDP, for project implementation, monitoring and reporting the results of phasing out of HCFCs. The National Ozone Unit would work under the direct guidance of the Government (MoE) and UNDP to implement the project components.

UNDP: UNDP is designated as the lead implementing Agency for this project. UNDP will be responsible for providing technical support and managing the implementation of the project. UNDP will also be responsible for the project reporting and independent verification of achievement of ODS phase-out targets under the Agreement.

The Industries: The Industries will be responsible for achieving their respective phase-out targets. Through the funding support and technical support of the project, and under the overall guidance of the Project Unit, the identified industries would convert to HCFC free technologies. In servicing sector where a large number of small enterprises are involved, the Project Unit will work with industry associations and other industry stakeholders in capacity building for smooth adoption of HCFC free technologies.

Industry associations: Industry associations will closely work with the Project Unit on specific project activities for HCFC phase-out. They would also play an important role in strengthening public-private partnership which is an important element for success of this project.

Other Governmental and non-governmental bodies: There are several Government and Semi-Government bodies that would need to participate in project implementation under this project, which includes institutions responsible for import-export of chemicals, Customs authorities, environment monitoring bodies (NGOs), Ministry of Industry, Industrial Research Institute (IRI) and international cooperation authorities. Their roles would be defined under specific project components. They would also be engaged at various points during project initiation, implementation monitoring and other specific project activities.

The project intends to maintain the coordination and consultation among stakeholders through the below indicative actions and their frequency spread over the duration of the project:

- a) Consultation meetings with customs authorities: 2/year
- b) Consultation meetings with ODS Importers: 1/year

- c) Consultation meetings with the industries using ODSs in their production (undergoing re-conversion of technology to non-ODS): 3-4/Industry
- d) Regular coordination meeting with the Ministry of Environment and UNDP: 3-4/year

4- Risks and Assumptions

Table 6: List and management of risks and assumptions (please refer to annex 3 for detailed risks)

Risks	Risk level	Impact	Mitigating mechanism
Technology development slower than expected	Low	High	(a) Close monitoring of technology development by the Project Unit in consultation with technical experts. (b) Periodic consultations with industries on conversion to HCFC free technologies highlighting benefits of new technology options. (c) Updates on regulations that would prohibit adoption of old HCFC based technologies in advance (2-3 years).
Industry not aware and are reluctant to adopt HCFC free technologies	Medium	High	(a) Workshops and consultations with industries on HPMP Stage-II and support offered for HCFC phase-out project activities (including funding support). (b) Updates on regulations that would prohibit adoption of old HCFC based technologies in advance (2-3 years). (c) Periodic consultations with industries on conversion to HCFC free technologies highlighting benefits of new technology options.
Small /enterprises find it difficult to adopt new technologies	Medium	High	(a) Workshops and consultations with industries on HPMP Stage-II and support offered to service sector for HCFC phase-out project activities (including funding support). (b) Updates on regulations that would prohibit adoption of old HCFC based technologies and its impact on servicing applications. (c) Closer engagement and cooperation with large equipment manufacturers on service sector capacity building support.

5- Stakeholder Engagement

The project would involve close coordination among Government, industries (being the intended beneficiaries), industry associations, regulatory bodies and the implementing agency (UNDP). The project stakeholder engagement and coordination is the foundation for systematic and sustainable HCFC phase-out. The roles and responsibilities of each stakeholder and how they would participate in the “network” for project implementation has been detailed in section on “partnerships” earlier.

The project is expected to be implemented with minimum disruption to business continuity and livelihood of different industry stakeholders. Through funding support and proper timeframe, systematic project implementation process and technology transfer, the project is expected to achieve HCFC phase-out targets with minimum cost to industry and consumer.

6- South-South and Triangular Cooperation (SSC/TrC)

Technical support for project implementation, training and technology transfer would be used in the project throughout the implementation time frame. Industry partnerships are an integral part of project implementation. The project will also use international technical bodies like Technology and Economic Assessment Panel (TEAP), and its subsidiary bodies like the Refrigeration Technical Options

Committee (RTOC) and other NGOs/industry bodies. The TEAP is the technology and economics advisory body to the Montreal Protocol Parties and is constituted by a pool of experts from developed and developing countries.

7- Knowledge

The project results (HCFCs phased out) will be periodically reported to the Executive Committee as a requirement. Concerning knowledge products, training manuals will be produced and distributed to industries during workshops. Finally, worth to highlight that the Project will be regularly updating the database of import/export and in country consumption of ODSs and their alternatives which is owned by the Ministry of Environment. The information is cross checked with data sources from the Ministry of Economy and Trade, Customs authorities and data directly collected from enterprises/industries. The database is also reported to the MLF secretariat.

8- Sustainability and Scaling Up

As mentioned earlier, the project would strengthen national systems and capacities in monitoring import and export of ozone depleting chemicals mainly through the database and through working on amending/updating the legislation related to import/export activities. The database can be used by the Government to manage other Montreal Protocol chemicals and other hazardous industrial chemicals. The timely phasing-out of the HCFCs ensures Lebanon's compliance with its set targets and thus with the Convention.

Furthermore the technical and financial support provided to the industries to convert their technology/production into non-HCFCs products will expand their international market with a limited impact on production costs and consumers. This would reflect a positive economic return on the industries and on the country.

Gender dimension: Although the project activities consist on converting technologies in targeted industries and thus do not explicitly have a gender dimension, the project team will promote the participation of women in consultation meetings, and will address gender inequalities in terms of access to clean production, finance, and decision-making when applicable. If relevant gender empowerment needs are detected during the implementation of the project, they will be adequately reported and addressed.

IV. PROJECT MANAGEMENT

1- Cost Efficiency and Effectiveness

The Project uses a portfolio management approach to improve cost effectiveness and efficiency through synergies with other interventions:

The project is implemented by UNDP through the National Ozone Unit (NOU) in partnership with the Ministry of Environment. The NOU has been managing Lebanon's country programme related to the Montreal Protocol since 1998. Human resources are shared with other project managed by the unit and by the Ministry (not to mention the project stakeholders).

Concerning substantive and technical contributions, the project builds on the consistent and long experience of the NOU in 1) implementing Montreal Protocol related projects (Institutional Strengthening through its 9 phases, Management plans for phasing-out CFCs, and the previous phase of HCFCs), 2) in building and updating the national database, and 3) in mobilising the stakeholders and strengthening their relationship with the NOU which increases their commitment and thus the national commitment towards the achievement of Lebanon's target in phasing out the HCFCs and compliance with the convention.

The current project uses the same structure as the NPMP, a similar project implemented to phase out CFCs as per the Montreal Protocol Convention; noting that the NPMP was successfully completed and National targets and compliance timely met with available resources.

2- Project Management

The project will be managed in accordance with standard UNDP procedures as Support to National Implementation (NIM) modality the Government of Lebanon through its UNDP-managed National Ozone Unit established at the Ministry of Environment and located in its premises. The National Ozone Unit is partially supported through the Institutional Strengthening Project with financial assistance from the Multilateral Fund and implemented by UNDP.

UNDP using the IA fees will be working closely with the MoE; the UNDP Country Office will be responsible for overseeing project budgets and expenditures, recruiting and contracting project personnel and consultant services, procuring equipment, and project evaluation and reporting, result-based project monitoring. Financial transactions, auditing and reporting will be carried out in compliance with UNDP procedures for support to national implementation.

The UNDP Country Office may provide, at the request of the designated institution, the following support services (Direct Project Costing) for the activities of the programme /project (related fees to be collected as directed in the DOA Letter from BPPS (annex 7), based on the Universal Price List (UPL):

- i. Payments, disbursements and other financial transactions
- ii. Recruitment of staff, project personnel, and consultants
- iii. Procurement of services and equipment, including disposal
- iv. Organization of training activities, conferences, and workshops, including fellowships
- v. Travel including visa requests, ticketing, and travel arrangements
- vi. Shipment, custom clearance, vehicle registration, and accreditation
- vii. Security management service and Malicious Acts Insurance Policy

viii. External access to ATLAS for project managers and other staff, Payroll management services and Medical Clearance Services for all staff

The UNDP country office will also provide, the following general oversight and management services for the activities of the project which include the following (as per the DOA, GMS will be credited directly to the CO account based on delivery):

- i. General oversight and monitoring, including participation in project reviews
- ii. Briefing and de-briefing of project staff and consultants
- iii. Resource management and reporting
- iv. Thematic and technical backstopping

The audit of the Support to NIM project is made through the regular external (UN Board of Auditors) or internal audits (audits managed by UNDP's Office of Audit and Investigation).

UNDP will ensure that the Ministry of Environment and the Multi-Lateral Fund of the Montreal Protocol (project Donor) will receive the maximum visibility possible.

UNDP will be responsible for determining when its name and logo are to be displayed and prior written authorisation must be granted by the UNDP Resident Representative on a case by case basis.

V. RESULTS FRAMEWORK

Table 7: Results Framework

Intended Outcome as stated in the UNSF: Outcome 3.3. Lebanon has improved environmental governance.															
Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets: Output 4.2. National Environmental Management Strengthened. Indicator 4.2.3.: volume (tons) of Ozone Depleting substances released; Baseline: 66.15 ODP tons. Targets: 36.78 ODP tons.															
Applicable Output(s) from the UNDP Strategic Plan 2014-2017: Output 1.3. Solutions Developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste. Indicator 1.3.1. Number of new partnership mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national and/or sub-national level, disaggregated by partnership type.															
Project title and Atlas Project Number: HCFC Phase-out Management Plan (HPMP) Stage-II for the compliance with the post 2015 control targets for Annex-C, Group-1 substances in Lebanon – Award ID 00096549; Project ID 001000473															
EXPECTED OUTPUTS	OUTPUTS INDICATORS	DATA SOURCE	BASELINE		TARGETS (ODP tons to be phased-out)										DATA COLLECTION METHODS & RISKS
			Value (tons)	Year	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021-2022	Year 2023	Year 2024	Year 2025	Total	
Output I <i>Phasing out HCFC in line with Montreal Protocol control measures- Control HCFCs imports/ consumption</i>	1.1 <i>Volume (tons) of ODP phased-out</i>	<i>Yearly imports consumption of ODS (NOU, Customs, Ministry of Trade, Importers)</i>	73.5 ODP Tons	2009/2010 Average	7.66	16.85	8.25	1.0	3.20	0.00	2.5	5.20	5.20	49.86	*Quantitative (Surveys) *Stakeholder Consultation *Verification of HCFC Phase-out *Data from Customs and Ministry of Industry

*Survey for A/C & refrigeration workshops; Collection of ODS imports and consumption data is undertaken by the NOU team and reports are submitted to the MLF and Ozone Secretariat once a year.

VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans.

It is intended that 2020 would be the mid-term evaluation this is to ensure that course corrections and HPMP Stage-III preparations can be planned.

Table 8: Monitoring and Evaluation

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any) US\$
Track results progress	Project progress report for implementation to be submitted to the executive Committee of the Montreal Protocol	Along with each request for tranche	Based on specific guidance from the Executive Committee and in consultation with the implementation agency, actions will be taken by the NOU for strengthening the project implementation	UNDP MOE (NOU)	Internal
	Independent verification report of achievement of national consumption targets	Along with each request for tranche			45,000 US\$
Monitor and Manage risk	Technology development risks	Annually	Close monitoring and share information with industry. Provision of support through technical experts if required	UNDP MOE (NOU) Technical experts industry	15,000 US\$
	Project partner coordination and cooperation risks	Bi-yearly (if need be quarterly)	Close monitoring using project management team. Refer to risk log	UNDP MOE (NOU)	Internal
	Policy and regulations development risk	Annually	Close work with the Project management team and partners and senior government officials on implementation of regulations in a timely manner	UNDP MOE (NOU)	Internal

Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	Annually	Relevant lessons are captured by the project team and used to inform management decisions through annual reporting/annual board meetings	UNDP MOE (NOU)	Internal
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project. Noting that the QA is provided by the E&E programme who performs regular (at least quarterly) reviews of the projects.	Annually	Areas of strength and weakness will be required by project management and will be used to inform decisions to improve project performance	UNDP	Internal
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	Annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.	UNDP MOE (NOU)	Internal and through independent verification
Project Report	A progress report will be submitted to the project board and key government focal points, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk along with mitigation measures, and any evaluation or review reports prepared over the period.	Annually and at the end of the project (final report)	The progress report will be reviewed based on the comments received from the MP bodies and UNDP management as well as the Government national focal points	NOU UNDP	Internal
Project Review (Project Board)	The project board will hold regular project review to assess the performance of the project and review the multi-year work plan to ensure realistic budgeting and activities over the life of the project. The project board shall hold an end of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences	Annually	Any Quality concerns or slower than expected progress shall be discussed by the project board and management actions agreed to address the issues identified	UNDP MOE (NOU)	Internal
Total					60,000 US\$

Table 9: Evaluation Plan

Evaluation Title	Partners	Related Strategic Plan Output	UNSF Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
Project evaluation in 2020	UNDP/MOE	Output 1.3. Solutions Developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.	3.3. Lebanon has improved environmental governance.	31 May 2020	NOU/UNDP/MOE	20,000 USD/MLF

VII. MULTI-YEAR WORK PLAN ¹²

Table 10: Multi-Year Work Plan

EXPECTED OUTPUT	PLANNED ACTIVITIES	Planned Budget by Year (US \$' 000)										RESPONSIBLE PARTY	PLANNED BUDGET		
		2016	2017	2018 (2nd Tranche)	2019	2020	2021 (3rd Tranche)	2022	2023	2024 (4th Tranche)	2025		Funding Source	Budget Description & Atlas Code	Amount
Timely phase-out	HCFC Activity: HPMP phase out in foam, air-conditioning, and refrigeration sectors including project management and coordination	5	0	0	0	5	0	0	0	5	0	UNDP/MoE	MLF (63030)	Local Consultant (71300)	15
		0	46	80	120	120	120	120	120	120	120			Contractual Services - Individual (71400)	966
		10	20	8	8	8	8	8	8	8	8			Travel (71600)	94
		1,275	1,000	98	300	35	0	221	0	0	0			Contractual Services – Companies (72100)	2929
		1	0	0	0	2	0	0	1	0	0			Equipment and Furniture (72200)	4
		0	3	0	0	2	0	1	0	2	0			Communication & Audio-visual Equip (72400)	8
		2	2	2	2	2	2	2	0	2	2			Supplies (72500)	18
		5	0	0	0	0	3	0	0	0	0			IT Equipment (72800)	8
		3	3	0	0	0	0	0	0	0	0			Rental & Maint of Other Equip (73400)	6
		0	15	0	0	15	0	0	15	0	0			Professional Services (74100)	45
		0	10	0	0	12	0	0	0	0	0			Audio Visual & Print Prod Costs (74200)	22
5	5	5	10	5	10	5	10	5	8	Miscellaneous Expenses (74500)	68				
Sub-Total for Output 1															
Evaluation	EVALUATION	0	0	0	0	20	0	0	0	0				International Consultant (71200)	20
General Management Support	N/A														
Total		1,306	1,104	193	440	226	143	357	154	142	138				4,203

The workplan for years 2018-2025 is only indicative. The budget breakdown will be updated based on the DOA to be received for each tranche. Budget for years 2016-2017 is cleared.

¹ Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

² Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

As introduced in the “Project Management” section, the project will be implemented following UNDP’s support to national implementation modality (Support to NIM), according to the Standard Basic Assistance Agreement between UNDP and the Government of Lebanon. The implementing agency for this project (Executive) is the UNDP, and the main implementing partner is the Ministry of Environment (MoE). Being the national entity responsible for the implementation of the Montreal Protocol in Lebanon, MoE will play the role of the Senior Beneficiary of the project.

Roles and responsibilities:

Project Management Unit (PMU): The National Ozone Unit (NOU) will act as the PMU.

General responsibilities: The NOU was established within the Ministry of Environment in 1998 by the Government and UNDP for the overall coordination of ODS Phase-out programme in Lebanon and to act as a national focal point for the implementation of the Montreal Protocol. The operations of the NOU are funded by the MLF through the *Institutional Strengthening Programme*, implemented by UNDP and executed nationally by MOE. The overall objectives of the NOU are to effectively and efficiently phase-out ODS in the country through the creation and increase in national awareness on the adverse impacts of ODSs, implementing ODS phase-out activities, monitoring and evaluation of progress of implementation of ODS phase-out activities, dissemination of information on new technologies and ODS substitutes to the industrial sector in the country, reporting on ODS consumption and developing and enforcement of regulations in order to meet the obligations of Montreal Protocol and its Amendments.

The NOU seeks the advice of representatives from governmental authorities, NGOs, the private sector and academia on regular basis.

Specific responsibilities:

The NOU will be responsible for the overall coordination of the project including operational planning, supervision, administrative and financial management. It will run the project (implementation, supervision and management) on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Management Unit function will end when the final project report, and other documentation required by the Montreal Protocol and UNDP, has been completed and submitted to UNDP (including operational closure of the project). The NOU will be supported by national and international technical experts as needed. The roles and responsibilities are listed as follows:

- Overall responsibility of the Technical, financial and operational management of the project;
- Overall responsibility for monitoring and supervision of activities, including the monitoring of consumption;
- Executing performance-based agreements with enterprises participating in the HPMP for technology conversions and HCFC phase-out, and endorsing disbursements to the enterprises based on agreed performance targets;
- Establishing completion of enterprise level technology conversions and phase-out of HCFCs;
- Annual reports on consumption of Substances to be submitted to the Ozone Secretariat;
- Annual reports on the progress of implementation of the HPMP to be submitted to the Executive Committee of the Multilateral Fund;
- Coordination of activities among various stakeholders;
- Coordination of review of policy/regulatory framework among related Government agencies;
- Validation of enterprise-level, sector-level and national-level baseline HCFC consumption data;
- Facilitate industry consultation;
- Communicate and disseminate public information and conduct awareness/outreach initiatives/programmes;

UNDP – Energy and Environment Programme:

UNDP Energy and Environment unit will provide technical and policy backstopping to the project and will ensure coordination of project activities with the MoE and UNDP Country Office (CO) in Lebanon. To ensure effectiveness and cost-efficiency of project implementation, the UNDP E&E unit will be assigned as main executing unit for the project and will provide quality assurance to the project. The roles and responsibilities of UNDP during this project would be as below:

- Recruitment of expert (s) and project staff as required;
- Support NOU/MOE in ensuring an effective and smooth process in the project plans/activities;
- Support NOU/MOE in review and endorsement process on the draft projects/plans/activities, for timely finalization and submission to the ExCom;
- Provide assistance with policy/regulatory, management and technical support to NOU as and when required;
- Assist NOU in the process of consultations with industries on the technical and logistical aspects;
- Providing assistance with policy, management and technical support when required;
- Assisting NOU/MoE and stakeholders on alternative technologies and technology transfer;
- Ensuring performance verification and disbursements in accordance with the HPMP agreement between the Executive Committee of the Multilateral Fund and Government of Lebanon.

The Ministry of Environment:

The Ministry of Environment will act as the Senior Beneficiary of the project.

MoE will appoint a high level official who will serve part time as the National Focal Point (NFP) for the project. The NFP will be a senior person appointed to oversee the project who is accountable to the Government and UNDP for the implementation of the project in line with the signed project document. He/she is the approving officer for the project and will be responsible for providing government oversight and guidance for project implementation. The NFP will not be paid from project funds, but will represent part of the government in-kind contribution to the project.

Among the duties and responsibilities of the NFP are the following:

- Serves as a focal point for coordination of the project with implementing agencies, UNDP, Government and other partners;
- Ensures that Government inputs for the project are available and that the project activities are in line with national priorities;
- Leads and coordinates partners in the selection of the NOU;
- Coordinates with the NOU and facilitates its work and all staff;
- Ensures that the required project work plan is prepared and updated and distributed to the Government relevant entities when applicable;
- Will represent the National Executing Agency at project meetings and annual reviews;
- Will lead efforts to build partnerships for the support of outcomes indicated in the project document;
- Will support resource mobilization efforts to increase resources in cases where additional outputs and outcomes are required;

Project Board

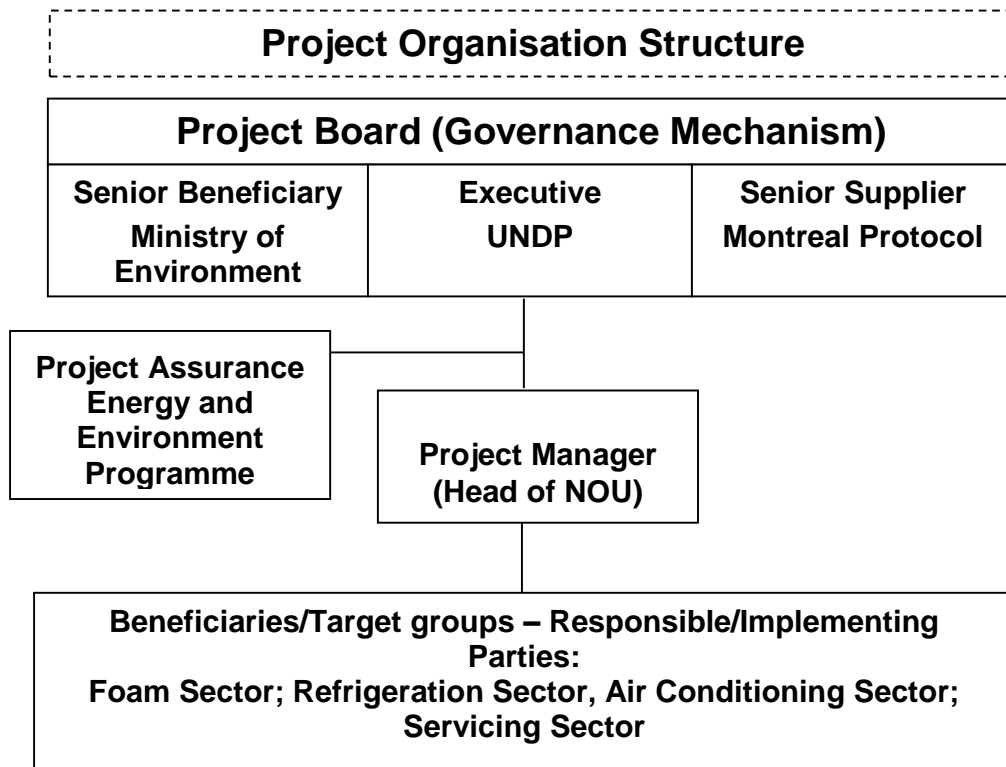
Project Governance will be through the Project Board which will be convened by UNDP in consultation with the government and will serve as the project's governance and decision-making body. The Project Board is responsible for making by consensus, management decisions when guidance is

required by the Project Manager. In order to ensure UNDP’s ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Management.

The Project Board will comprise representatives of UNDP, CDR (National Focal Point for UNDP in Lebanon), MoE (UNDP also representing the Montreal Protocol - Senior Supplier of the project) and other entities as agreed between UNDP and the Government. The Project Manager (Head of NOU) will also be in attendance at Board meetings. It will meet as necessary, but not less than once every 12 months, to review project progress, approve project work plans (including budgets) and approve major project deliverables. The Board is responsible for ensuring that the project remains on course to deliver products of the required quality to meet the outcomes defined in the project document. Its role will include:

- Overseeing the project implementation;
- Approving all project work plans and budgets, as put forward by the NOU;
- Approving any major changes in project plans or programmes;
- Providing technical input and advice;
- Approving major project deliverables;
- Ensuring commitment of resources to support project implementation;
- Arbitrating any conflicts within the project and/or negotiating solutions between the project and any parties beyond the scope of the project; and
- Overall project evaluation.

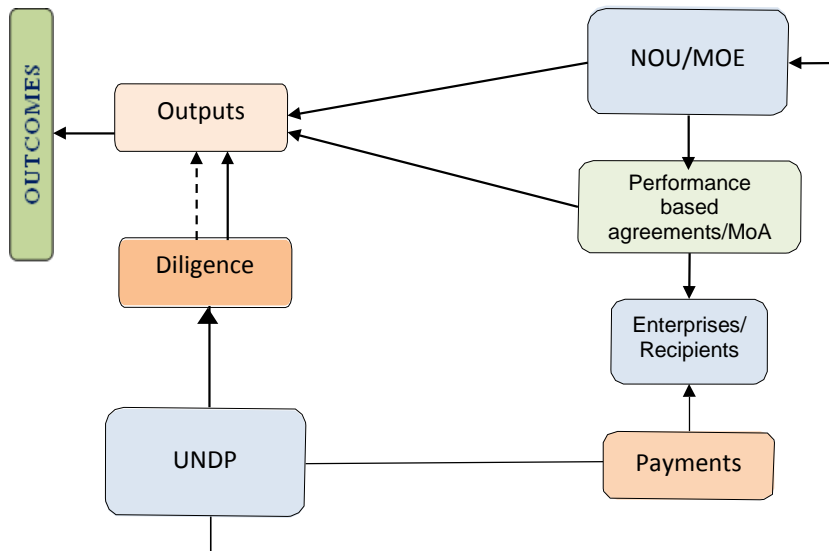
As such, the project organisation structure is as follows:



Responsible Parties

The investment component of the project will be implemented by the enterprises. Performance-based payments will be made by UNDP to the enterprises, based on signed Memorandum of Agreements (MoAs) and upon the achievement of agreed milestones and deliverables (Annex-5 – template for Memorandum of Agreement)

The execution arrangements for the project outputs (related to the MoAs) will follow the structure and process depicted below:



For the non-investment component of the projects, payments will be issued directly to suppliers of goods and services in line with the UNDP procurement rules and regulations under Support to NIM modality.

The recipients targeted in this project were identified for the phase-out actions during the preparation phase of the project (2014-2015) and specifically through a national survey of the sectors validated by consultations; the results incorporated into a proposal were submitted to the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and were approved in its 75th Meeting (which is the basis of this Project and Project Document – document annexed to the project document); the recipients will act on behalf of the implementing partner on the basis of the Memorandum of Agreement (Annex 5) for the purchase of goods and/or services required to achieve the target phase-out. The responsible parties are directly accountable to the implementing partner in accordance with the terms of their agreement.

The recipient enterprises which will sign an MoA are listed in below table:

Item	Enterprises	MLF Funding (US\$)	Co-Financing from enterprises (US\$)	Total Amount
1	Mezher Steel Structures	511,600.00	560,900.00	1,072,500.00
2	Kilzi Industries	282,000.00	195,400.00	477,400.00
3	Awkal Saidah Steel	365,350.00	531,150.00	896,500.00
4	ProFoam S.A.L.	388,680.00	220,720.00	609,400.00
5	Iceberg S.A.R.L.	349,850.00		349,850.00
6	Frigo Liban S.A.L.	298,730.00		298,730.00
7	Industrial and Commercial Refrigeration Company	74,500.00		74,500.00

8	CGI	95,770		95,770.00
9	UNIC (United for Industry and Contracting)	129,570.00		129,570.00
10	Spec	45,320.00		45,320.00
11	Promotel	38,360.00		38,360.00
	Total	2,579,730.00	1,508,170.00	4,087,900.00

The full list of targeted enterprises are found in annex II.

IX. LEGAL CONTEXT AND RISK MANAGEMENT

LEGAL CONTEXT STANDARD CLAUSES

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Lebanon and UNDP, signed on 10 February 1986. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

RISK MANAGEMENT STANDARD CLAUSES

1. Consistent with the Article III of the SBAA, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
 - a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - b) assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.
2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document.
3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document.
4. Consistent with UNDP’s Programme and Operations Policies and Procedures, social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
5. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental

Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

X. ANNEXES

1. **Social and Environmental Screening report.**
2. **Baseline data and cost of conversion for the Air Conditioning manufacturing enterprises and the Discontinuous Sandwich Panels manufacturing enterprises.**
3. **Risk Analysis – Risk log.**
4. **Agreement between the Executive Committee of the Multilateral Fund and Government of Lebanon for HPMP Stage-II.**
5. **Memorandum of Agreement (Template)**
6. **Letter of Agreement**
7. **DOA Approval of funding tranche for Lebanon HCFC Phase-out Management Plan, Stage II**

ANNEX I. SOCIAL AND ENVIRONMENTAL SCREENING REPORT

Project Information

Table I.1: Project information

Project Information	
1. Project Title	HCFC Phase-out Management Plan (HPMP) Stage-II for compliance with the post 2015 control targets for Annex C, Group-1 substances, in Lebanon
2. Project Number	00100473 – Award ID 00096549 - MLF No. LEB/PHA/75/INV/85 to 88
3. Location (Global/Region/Country)	LEBANON

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

Table I.2: Integrating Overarching Principles to Strengthen Social and Environmental Sustainability.

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?
Briefly describe in the space below how the Project mainstreams the human-rights based approach
The project was established on human based approach in the perspective that the ultimate goal is to provide cleaner production preserving the ozone layer while this will guarantee equal rights for the world population. The technical and the enough financial assistance provided through this project remain one of the key inputs needed to minimize the burden of transition on consumers and local industries.
Briefly describe in the space below how the Project is likely to improve gender equality and women’s empowerment
Although the project activities consist on converting technologies in targeted industries and thus do not explicitly have a gender dimension, the project team will promote the participation of women in consultation meetings, and will address gender inequalities in terms of access to clean production, finance, and decision-making when applicable. If relevant gender empowerment needs are detected during the implementation of the project, they will be adequately reported and addressed.
Briefly describe in the space below how the Project mainstreams environmental sustainability
Briefly, the project mainstreams environmental sustainability through reducing to completely eliminate the dependence/use of chemicals (HCFCs) that deplete the ozone layer from the manufacturing and servicing sectors. It is done at two levels: 1) providing financial and technical support to the industries to convert their technologies and thus to have a cleaner production respecting the economic sustainability of both industries and consumers; 2) providing institutional support to the country and strengthening the national systems to monitor and regulate the import/export of ozone depleting substances.

Part B. Identifying and Managing Social and Environmental Risks




Table 1.3: Identifying and Managing Social and Environmental Risks.

<p>QUESTION 2: What are the Potential Social and Environmental Risks? Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any “Yes” responses). If no risks have been identified in Attachment 1 then note “No Risks Identified” and skip to Question 4 and Select “Low Risk”. Questions 5 and 6 not required for Low Risk Projects.</p>		<p>QUESTION 3: What is the level of significance of the potential social and environmental risks? Note: Respond to Questions 4 and 5 below before proceeding to Question 6</p>		<p>QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?</p>
Risk Description	Impact and Probability (1-5)	Significance (Low, Moderate, High)	Comments	Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.
No risks were identified	I = P =			N/A, the project has low environmental and social risks.
	I = P =			
	I = P =			
	<p>QUESTION 4: What is the overall Project risk categorization?</p>			
		Low Risk	<input checked="" type="checkbox"/>	
		Moderate Risk	<input type="checkbox"/>	
		High Risk	<input type="checkbox"/>	

QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?		
Check all that apply		Comments
Principle 1: Human Rights	<input type="checkbox"/>	As per attachment 1, no moderate to major risks are identified.
Principle 2: Gender Equality and Women's Empowerment	<input type="checkbox"/>	
1. Biodiversity Conservation and Natural Resource Management	<input type="checkbox"/>	
2. Climate Change Mitigation and Adaptation	<input type="checkbox"/>	
3. Community Health, Safety and Working Conditions	<input type="checkbox"/>	
4. Cultural Heritage	<input type="checkbox"/>	
5. Displacement and Resettlement	<input type="checkbox"/>	
6. Indigenous Peoples	<input type="checkbox"/>	
7. Pollution Prevention and Resource Efficiency	<input type="checkbox"/>	

Final Sign Off

Table I.4: Final Sign Off

Signature	Date	Description
	11.08.2016	Ms. Jihan Seoud, Programme Analyst, Energy and Environment Programme, acting as QA Assessor
	12.08.16	Mr. Edgard Chehab, Assistant Resident Representative-Programme acting as QA Approver
	12.08.16	Mr. Edgard Chehab, Assistant Resident Representative-Programme, acting as PAC Chair

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Table I.5: SESP Attachment 1. Social and Environmental Risk Screening Checklist.

Checklist Potential Social and Environmental Risks		
Principles 1: Human Rights		Answer (Yes/No)
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	NO
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? ³	NO
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	NO
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	NO
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	NO
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	NO
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	NO
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	NO
Principle 2: Gender Equality and Women's Empowerment		
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	NO
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	NO
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project	NO

³ Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

	proposal and in the risk assessment?	
4.	<p>Would the Project potentially limit women’s ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?</p> <p><i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i></p>	NO
<p>Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below</p>		
<p>Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management</p>		
1.1	<p>Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?</p> <p><i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i></p>	NO
1.2	<p>Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?</p>	NO
1.3	<p>Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)</p>	NO
1.4	<p>Would Project activities pose risks to endangered species?</p>	NO
1.5	<p>Would the Project pose a risk of introducing invasive alien species?</p>	NO
1.6	<p>Does the Project involve harvesting of natural forests, plantation development, or reforestation?</p>	NO
1.7	<p>Does the Project involve the production and/or harvesting of fish populations or other aquatic species?</p>	NO
1.8	<p>Does the Project involve significant extraction, diversion or containment of surface or ground water?</p> <p><i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i></p>	NO
1.9	<p>Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)</p>	NO
1.10	<p>Would the Project generate potential adverse transboundary or global environmental</p>	NO

	concerns?	
1.11	<p>Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?</p> <p><i>For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.</i></p>	NO
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant ⁴ greenhouse gas emissions or may exacerbate climate change?	NO
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	NO
2.3	<p>Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?</p> <p><i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i></p>	NO
Standard 3: Community Health, Safety and Working Conditions		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	NO
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	NO
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	NO
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	NO
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	NO
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	NO

⁴ In regards to CO₂, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	NO
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	NO
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	NO
Standard 4: Cultural Heritage		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	NO
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	NO
Standard 5: Displacement and Resettlement		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	NO
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	NO
5.3	Is there a risk that the Project would lead to forced evictions? ⁵	NO
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	NO
Standard 6: Indigenous Peoples		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	NO
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	NO
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether	NO

⁵ Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

	<p>indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?</p> <p><i>If the answer to the screening question 6.3 is “yes” the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.</i></p>	
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	NO
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	NO
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	NO
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	NO
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	NO
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	NO
Standard 7: Pollution Prevention and Resource Efficiency		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	NO
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	NO
7.3	<p>Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?</p> <p><i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol</i></p>	NO
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	NO
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	

ANNEX II. Baseline data and cost of conversion for the Air Conditioning manufacturing enterprises and the Discontinuous Sandwich Panels manufacturing enterprises.

❖ **Summary of the cost of conversion of the enterprises eligible for funding by the MLF and co-financed by the enterprises**

Item	Enterprises	MLF Funding (US\$)	Co-Financing from enterprises (US\$)	Total Amount
1	Mezher Steel Structures	511,600.00	560,900.00	1,072,500.00
2	Kilzi Industries	282,000.00	195,400.00	477,400.00
3	Awkal Saidah Steel	365,350.00	531,150.00	896,500.00
4	ProFoam S.A.L.	388,680.00	220,720.00	609,400.00
5	Iceberg S.A.R.L.	349,850.00		349,850.00
6	Frigo Liban S.A.L.	298,730.00		298,730.00
7	Industrial and Commercial Refrigeration Company	74,500.00		74,500.00
8	CGI	95,770		95,770.00
9	UNIC (United for Industry and Contracting)	129,570.00		129,570.00
10	Spec	45,320.00		45,320.00
11	Promotel	38,360.00		38,360.00
	Total	2,579,730.00	1,508,170.00	4,087,900.00

Baseline data of enterprises by sector are detailed in the tables below

1. Baseline data for 5 Enterprises Manufacturing Air-Conditioning Equipment:

Parameter	Data					
Enterprise Name	UNIC	Industrial & Commercial Refrigerators	CGI (Halawani)	Frigo Liban	Iceberg (Farjallah)	
Location	Roumieh	Dbayeh	Choueifat	Akkawi	Hadath	
Year of Establishment	1997	2002	1989	1973	1975	
No. of Employees	45	13	12	12	60	
National Ownership	100% Lebanese	100% Lebanese	100% Lebanese	100% Lebanese	100% Lebanese	
Exports to non-A5 Countries	Arab Countries	Arab Countries	Arab Countries	Arab Countries	Arab Countries	
Products						
<i>Residential (up to 2.5 HP)</i>	-	-	-	-	-	
<i>Light Commercial (3 to 30 HP)</i>	17	13	-	385	315	
<i>Commercial (>30 HP)</i>	122	140	-	225	128	
<i>Transportation (3 to 70 HP)</i>	-	-	164		75	
<i>Air-cooled Chillers (5 to 400 HP)</i>	33	-	-	13	6	
<i>Water-cooler chillers (5 to 400 HP)</i>	14	-	-	2	3	
HCFC-22 consumption (metric tons)	16	2.8	11.5	16.75	12.6	
Operations with non-ODSs?	No	No	No	No	No	
Any capacity addition after 2007	No	No	No	No	No	
Main baseline equipment related to products manufactured	Refrigerant storage	Cylinders	Cylinders	Cylinders	Cylinders	Cylinders
	Charging equipment	Refrigerant gauge (4)	Refrigerant gauge (3)	China (3)	China (4)	China (2)
	Vacuum pumps	Copeland (4)	Robinair (2)	Robinair (2)	ITE (3)	Robinair
	Leak detectors	China (3)	RTI (1)	RTI (1)	China (2)	RTI (3)
	Heat exchangers mfg	No	No	No	No	No
	Sheet metal processing	Yes	Yes	Yes	Yes	Yes
	Assembly/fabrication	Yes	Yes	Yes	Yes	Yes
	Pressure testing	Yes	Yes	Yes	Yes	Yes
	Load testing/test rig	No	No	No	No	No

1.1 UNIC - Commercial air conditioning conversion to R-32 refrigerant technology

Refrigeration Operation					
Incremental Capital Costs					
No	Item	Unit	Qty	Unit Cost	Total
1	Sheet metal fabrication modifications	Lot	1	25,000	25,000
2	Assembly line modifications				
	Refrigerant charging equipment	Nos	2	12,500	25,000
	Leak detector	Nos	2	5,000	10,000
	Vacuum pumps	Nos	4	2,500	10,000
3	Safety related investments	Lot	1	10,000	10,000
4	Trials and testing	Lot	1	7,500	7,500
5	Process, operation, maintenance and safety training	Lot	1	5,000	5,000
6	Technical assistance from external experts	Lot	1	7,500	7,500
Sub-total					100,000
Contingencies (10%)					10,000
Total (ICC)					110,000
Incremental Operating Costs					
No	Item	Unit	Qty	Unit Cost	Total
1	Compressors	Nos	-	-	-
2	Refrigerant (30% less charge)	Kg	8820	-	-
	IOC calculated at USD 6.3 / kg of HCFC-22 phased-out				19570
Total (IOC)					19,570
Total Costs					
No	Item				Total
1	Incremental Capital Costs				110,000
2	Incremental Operating Costs				19,570
Total Costs					129,570

1.2 Industrial Commercial Refrigerators - Commercial air conditioning conversion to R-32 refrigerant technology

Refrigeration Operation					
Incremental Capital Costs					
No	Item	Unit	Qty	Unit Cost	Total
1	Sheet metal fabrication modifications	Lot	1	20,000	20,000
2	Assembly line modifications				
	Refrigerant charging equipment	Nos	1	12,500	12,500
	Leak detector	Nos	1	2,500	2,500
	Vacuum pumps	Nos	2	2,500	5,000
3	Safety related investments	Lot	1	5,000	5,000
4	Trials and testing	Lot	1	2,500	2,500
5	Process, operation, maintenance and safety training	Lot	1	2,500	2,500
6	Technical assistance from external experts	Lot	1	3,000	3,000
Sub-total					53,000
Contingencies (10%)					5,300
Total (ICC)					58,300
Incremental Operating Costs					
No	Item	Unit	Qty	Unit Cost	Total
1	Compressors	Nos	-	-	-
2	Refrigerant (30% less charge)	Kg	8820	-	-
	IOC calculated at USD 6.3 / kg of HCFC-22 phased-out				16,200
Total (IOC)					16,200
Total Costs					
No	Item				Total
1	Incremental Capital Costs				58,300
2	Incremental Operating Costs				16,200
Total Costs					74,500

1.3 CGI Cold Stores (Halawany) - Commercial air conditioning to R-32 and foam to HFO / Low-GWP

Refrigeration Operation					
<i>Incremental Capital Costs</i>					
No	Item	Unit	Qty	Unit Cost	Total
1	Sheet metal fabrication modifications	Lot	1	5,000	5,000
2	Assembly line modifications				
	Refrigerant charging equipment	Nos	2	2,500	5,000
	Leak detector	Nos	1	2,500	2,500
	Vacuum pumps	Nos	2	1,250	2,500
	Safety related investments	Lot	1	5,000	5,000
3	Trials and testing	Lot	1	3,000	3,000
4	Process, operation, maintenance and safety training	Lot	1	5,000	5,000
5	Technical assistance from external experts	Lot	1	2,000	2,000
Sub-total					30,000
Contingencies (10%)					3,000
Total (ICC)					33,000
<i>Incremental Operating Costs</i>					
No	Item	Unit	Qty	Unit Cost	Total
1	Compressors	Nos	-	-	-
2	Refrigerant (30% less charge)	Kg	8050	-	-
	IOC calculated at USD 6.3 / kg of HCFC-22 phased-out				40,850
Total (IOC)					40,850
<i>Total Costs</i>					
No	Item				Total
1	Incremental Capital Costs				33,000
2	Incremental Operating Costs				40,850
Total Costs (Refrigeration)					73,850

Foam Operation					
<i>Incremental Capital Costs</i>					
No	Item	Unit	Qty	Unit Cost	Total
1	Equipment support for upgrade	Lot	1	12,000	12,000
2	Trials and testing	Lot	1	3,000	3,000
3	Subtotal				15,000
4	Contingency (10%)				1,500
5	Incremental capital cost				16,500
	Incremental operating cost for 2000 kg			8.94	17,880
Sub-total					34,380
Eligible incremental costs at USD 10.96 /kg (72/50)					21,920
Total (ICC)					21,920
<i>Total Costs</i>					
No	Item				Total
1	Incremental Costs				21,920

SUMMARY (Foam+ Refrigeration)		
No	Item	Total
1	Incremental Capital Costs	54,920
2	Incremental Operating Costs	40,850
Grand Total		95,770

1.4 Frigo Liban - Commercial air conditioning to R-32

Refrigeration Operation					
Incremental Capital Costs					
No	Item	Unit	Qty	Unit Cost	Total
1	Sheet metal fabrication modifications	Lot	1	30,000	30,000
2	Assembly line modifications				
	Refrigerant charging equipment	Nos	2	7,500	15,000
	Leak detector	Nos	2	7,500	15,000
	Vacuum pumps	Nos	2	2,500	5,000
3	Safety related investments	Lot	1	15,000	15,000
4	Trials and testing	Lot	1	5,000	5,000
5	Process, operation, maintenance and safety training	Lot	1	5,000	5,000
6	Technical assistance from external experts	Lot	1	5,000	5,000
Sub-total					95,000
Contingencies (10%)					9,500
Total (ICC)					104,500
Incremental Operating Costs					
No	Item	Unit	Qty	Unit Cost	Total
1	Compressors	Nos	527	400	210,800
2	Refrigerant (30% less charge)	Kg	8820		18,820
	IOC calculated at USD 6.3 / kg of HCFC-22 phased-out				194,230
Total (IOC)					194,230
Total Costs					
No	Item				Total
1	Incremental Capital Costs				104,500
2	Incremental Operating Costs				194,230
Total Costs					298,730

1.5 Iceberg (Farjallah) - Commercial air conditioning to R-32 and foam to HFO / Low-GWP

Refrigeration Operation					
Incremental Capital Costs					
No	Item	Unit	Qty	Unit Cost	Total
1	Sheet metal fabrication modifications	Lot	1	30,000	30,000
2	Assembly line modifications				
	Refrigerant charging equipment	Nos	2	7,500	15,000
	Leak detector	Nos	2	7,500	15,000
	Vacuum pumps	Nos	2	2,500	5,000
	Safety related investments	Lot	1	15,000	15,000
3	Trials and testing	Lot	1	5,000	5,000
4	Process, operation, maintenance and safety training	Lot	1	5,000	5,000
5	Technical assistance from external experts	Lot	1	5,000	5,000
Sub-total					95,000
Contingencies (10%)					9,500
Total (ICC)					104,500
Incremental Operating Costs					
No	Item	Unit	Qty	Unit Cost	Total
1	Compressors	Nos	527	400	210,800
2	Refrigerant (30% less charge)	Kg	8820	1	8,820
	IOC calculated at USD 6.3 / kg of HCFC-22 phased-out				175,210
Total (IOC)					175,210
Total Costs					
No	Item				Total
1	Incremental Capital Costs				104,500
2	Incremental Operating Costs				175,210
Total Costs (Refrigeration)					279,710

Foam Operation					
Incremental Capital Costs					
No	Item	Unit	Qty	Unit Cost	Total
1	Equipment support for upgrade	Lot	1	12,000	12,000
2	Trials and testing	Lot	1	3,000	3,000
3	Subtotal				15,000
4	Contingency (10%)				1,500
5	Incremental capital cost				16,500
	Incremental operating cost for 2000 kg			8.94	53,640
Sub-total					70,140
Eligible incremental costs at USD 10.96 /kg (72/50)					70,140
Total (ICC)					70,140
Total Costs					
No	Item				Total
1	Incremental Costs				70,140

SUMMARY (Foam+ Refrigeration)		
No	Item	Total
1	Incremental Capital Costs	174,640
2	Incremental Operating Costs	175,210
Grand Total		349,850

2. Baseline data for Enterprises Manufacturing Discontinuous Sandwich Panels:

Parameter	Enterprise-level data					
	Mezher Industries	Awkal & Saydah	Kilzi Industries	Pro-foam Pack	Prometal	Spec
Name	Mezher Industries	Awkal & Saydah	Kilzi Industries	Pro-foam Pack	Prometal	Spec
Location	Dekwaneh	Choueifat	Nahr El Mot	Roumieh	Nahr El Mot	Taanayel
Date of establishment of enterprise	1960	2002	1964	2001	1993 1994	2005
Date of establishment of HCFC capacity	2005	2004	2000	2005	2005	2005
Number of employees	100	50	50	271	40	45
A5 ownership	100%	100%	100%	100%	100%	100%
Exports to non-A5 countries	0%	0%	0%	0%	0%	0%
Change in ODS-based capacity since	None	None	None	None	None	None
Main baseline equipment						
<i>Foam dispensers</i>	3 LP, 1HP	2 HP, 1 LP	2 LP	2 LP	1 LP	1 LP
<i>Jigs/molds/fixtures</i>	18	12	25	30	8	7
<i>Panel Press</i>	6	3	4	5	2	2
Products	Discontinuous Sandwich Panels					
Production level (sqm, 2014)	225,000	190,000	95,000	80,000	14,000	18,000
HCFC-141b actual consumption (2014) (Metric tons)	91.2	83.50	42	35.50	5.5	7.5
HCFC-141b eligible consumption for support from MLF (Metric tons)*	60	42	32	36.5	3.5	4.5
Alternative technology	Iso-pentane				HFO	

2.1 Cost of re-conversion of the discontinuous sandwich panels enterprises

No	Item	Unit Cost	MEZHER		A&SCO		KILZI		PROFOAM		Totals
			Units	Total	Units	Total	Units	Total	Units	Total	Total
1	Loading Area for Iso-pentane	4,000	2	8000	2	8,000	1	4,000	1	4,000	24,000
2	Iso-pentane storage and pumping system	25,000	2	50,000	2	50,000	1	25,000	1	25,000	150,000
3	Polyol Buffer Tank with pump	15,000	2	30,000	2	30,000	1	15,000	1	15,000	90,000
4	Pre-mixer, and Buffer Tanjk	80,000	1	80,000	1	80,000	1	64,000	1	64,000	288,000
5	New Hi-Pressure unit	120,000	3	360,000	1	120,000	1	120,000	2	240,000	840,000
6	Upgrade of Hi-Pressure Dispenser plus Pre-mixer unit.	80,000	1	80,000	2	160,000	0	0	0	0	240,000
7	Modification of presses	15,000	3	45,000	3	45,000	2	30,000	2	30,000	150,000
8	Gas sensors Alarm Monitoring	18,000	2	36,000	2	36,000	1	18,000	1	18,000	108,000
9	Ventilation system	10,000	3	30,000	3	30,000	2	20,000	2	20,000	100,000
10	Water Conditioning System	25,000	2	50,000	2	50,000	1	25,000	1	25,000	150,000
11	Nitrogen Generator	45,000	2	90,000	2	90,000	1	45,000	1	45,000	270,000
12	Fire protection and monitoring	15,000	2	30,000	2	30,000	1	15,000	1	15,000	90,000
13	Lightning Protection	10,000	2	20,000	2	20,000	1	10,000	1	10,000	60,000
14	Safety Audit, inspection and certification	10,000	1	10,000	1	10,000	1	10,000	1	10,000	40,000

15	Stand-by Generator	10,000	2	20,000	2	20,000	1	10,000	1	10,000	60,000
15	Civil works	5,000	2	10,000	2	10,000	1	5,000	1	5,000	30,000
16	Electrical installation Upgrade	8,000	2	16,000	2	16,000	1	8,000	1	8,000	48,000
17	Technology transfer, training and trials	10,000	1	10,000	1	10,000	1	10,000	1	10,000	40,000
Sub-total				975,000		815,000		434,000		554,000	2,778,000
Contingencies (10%)				97500		81500		43400		55400	277,800
Total (ICC)				1,072,500		896,500		477,400		609,400	\$ 3,055,800

2.2 Cost of Re-Conversion for 4 Discontinuous Sandwich Panels; breakdown of funds eligible from MLF and co-financing from enterprises (pentane technology)

		Mezher	A&Sco	Kilzi	Profoam	Total
<i>Incremental Operating Costs</i>	<i>Cost/ton</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	
HCFC-141b consumption	USD 2,200	60	42	32	36.5	
Pentane consumption	USD 2,000	36	25.2	19.2	21.9	
Chemical systems cost differential						
Total (IOC)		(60,000)	(42,000)	(32,000)	(36,500)	
Total Costs (ICC+IOC)		1,072,500	896,500	477,400	609,400	3,055,800
Deduction for non-A5 ownership		0	0	0	0	0
Net Costs (US\$)*		1,072,500	896,500	477,400	609,400	3,055,800
Cost effectiveness (US\$/Kg-ODS/yr)		16.9	20.3	13.9	15.7	16.9
Eligible Costs (max. US\$ 9.79/kg-ODS)		511,600	365,350	282,000	388,680	1,547,630
Requested funding support from MLF (US \$)		511,600	365,350	282,000	388,680	1,547,630
Co-financing by the company (US \$)		560,900	531,150	195,400	220,720	1,508,170

2.3 Cost of Re-Conversion of 2 small scale Discontinuous Sandwich Panels Enterprises (HFO technology)

Item	Unit	Unit Cost in USD	Prometal	SPEC
Equipment support for upgrade	1	12,000	12,000	12,000
Trials and testing	1	3,000	3,000	3,000
Sub-total			15,000	15,000
Contingency (10%)			1,500	1,500
Incremental capital cost			16,500	16,500
IOC for HFO	8.94		31,290	40,230
Total incremental costs for conversion			47,790	56,730
Eligible incremental costs (@ USD 10.96/kg)			38,360	45,320

3. Baseline Data for Enterprises Manufacturing Solar and Electrical Water Heaters:

Parameter	Enterprise-level data										
Name	Al-Mawared	Nafco	Ezzeddine	Farhat	Kmeid	Enercom	Ghaddar	Saad El Din	Tfaily	Itani	Sun Shining Co.
Location	Koura	Beirut	Deir Kanoon El Nahr	Ghaziyyeh	Jbeil	Araya	Ghaziyyeh	Dinniyyeh	Nabatieh	Choueifat	Bshamoun
Date of establishment of enterprise	1998	1964	1989	2005	1982	2004	1977	1990	2000	1998	1990
Date of establishment of HCFC capacity	2006	2004	2004	2005	2003	2006	2005	2003	2002	2003	2005
Number of employees	33	80	12	14	16	8	27	15	4	22	14
A5 ownership	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Exports to non-A5 countries	No	No	No	No	No	No	No	No	No	No	No
Change in ODS-based capacity since 2007	No	No	No	No	No	No	No	No	No	No	No
<i>Foam dispensers</i>	1 HP	1 HP	1 HP	Hand Mix	Hand Mix	1 HP	1 HP	1 LP	2 HP	1 LP	1 HP
<i>Jigs/molds/fixtures</i>	No	No	No	No	No	No	No	No	No	No	No
<i>Double-bed conveyors</i>	No	No	No	No	No	No	No	No	No	No	No
<i>Metal forming</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Products	NA										
HCFC-141b consumption (2014)	11.2	1.55	2.5	2.8	1.8	2	3.5	3.25	5.1	3.35	0.85

ANNEX III. RISK LOG TEMPLATE

Project Title: HCFCs Phase-out Management Plan, HPMP Stage-II

Award ID: 00096549

Date: August 2016

#	Description	Date Identified	Type	Impact & Probability (1: Low – 5: high)	Countermeasures/Mngt response	Owner	Submitted/updated by	Last Update	Status
1	Technology development slower than expected	Project Initiation	Operational	Delay in the conversion of technologies in the selected industries – Not complying with set targets. P=1 I=4	(a) Close monitoring of technology development by the Project Unit in consultation with technical experts. (b) Periodic consultations with industries on conversion to HCFC free technologies. (c) Updates on regulations that would prohibit adoption of old HCFC based technologies in advance (2-3 years).	UNDP	Project Manager		
2	New technologies are not cost competitive and enterprises lack skills to adopt them (mainly related to SMEs)	Project Initiation	Financial	Lack of cooperation and responsiveness of industries which delays the implementation and meeting the targets. P=2 I= 4	Technical and financial support will be provided to avoid high cost of transition noting that cost effectiveness of these technologies will improve with time. Enforcing adequate policies and regulations will ensure compliance of the industries.	UNDP	Project Manager		

3	Industry not aware and are reluctant to adopt HCFC free technologies	Project Initiation	Operational	<p>Lack of cooperation and responsiveness of industries which delays the implementation and meeting the targets.</p> <p>P= 2 I= 2</p>	<p>(a) Workshops and consultations with industries on HPMP Stage-II and support offered for HCFC phase-out project activities (including funding support). (b) Updates on regulations that would prohibit adoption of old HCFC based technologies in advance (2-3 years). (c) Periodic consultations with industries on conversion to HCFC free technologies highlighting benefits of new technology options.</p>	UNDP	Project Manager		
4	Political instability and security situation in the country	Project Initiation	Political	<p>Political changes and degradation of security situation can slow down or stop the project activities</p> <p>P= 3 I= 4</p>	<p>Close follow up and monitoring of the situation in the country, timely notification of potential threats to the PB, and close coordination with UNDSS especially for fieldwork.</p>	UNDP	Project Manager		

ANNEX IV: Agreement between the Executive Committee of the Multilateral Fund and Government of Lebanon for HPMP Stage-II

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

Purpose

1. This Agreement represents the understanding of the Government of Lebanon (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of 18.39 ODP tonnes by 1 January 2025 in compliance with Montreal Protocol schedule.
2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in rows 4.1.3, 4.2.3. and 4.3.3 (remaining consumption eligible for funding).
3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A (“Funding Approval Schedule”).
4. The Country agrees to implement this Agreement in accordance with the stage II of the HCFC phase-out management plan (HPMP) approved (“the Plan”). In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.

Conditions for funding release

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

- (c) That the Country had submitted a Tranche Implementation Report in the form of Appendix 4-A (“Format of Tranche Implementation Reports and Plans”) covering each previous calendar year; that it had achieved a significant level of implementation of activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent;
- (d) That the Country has submitted a Tranche Implementation Plan in the form of Appendix 4-A covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen, and
- (e) That, for the first tranche that is due on a year after the date of completion of the previous stage of the HPMP (as defined in paragraph 14 of the Agreement associated to the previous stage), all tranches from the previous stage have been completed, remaining funds have been returned to the Multilateral Fund (as established in paragraph 7 of the Agreement associated to the previous stage) and the corresponding project completion reports have been submitted to the Executive Committee.

Monitoring

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A (“Monitoring Institutions and Roles”) will monitor and report on implementation of the activities in the previous Tranche Implementation Plans in accordance with their roles and responsibilities set out in the same appendix.

Flexibility in the reallocation of funds

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

- (a) Reallocations categorized as major changes must be documented in advance either in a Tranche Implementation Plan as foreseen in sub-paragraph 5(d) above, or as a revision to an existing Tranche Implementation Plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
 - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
 - (ii) Changes which would modify any clause of this Agreement;
 - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and
 - (iv) Provision of funding for programmes or activities not included in the current endorsed Tranche Implementation Plan, or removal of an activity in the Tranche Implementation Plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
- (b) Reallocations not categorized as major changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the subsequent Tranche Implementation Report;

- (c) Should the Country decide during implementation of the Agreement to introduce an alternative technology other than that proposed in the Plan, this would require approval by the Executive Committee as part of a Tranche Implementation Plan or the revision of the approved Plan. Any submission of such a request for change in technology would identify the associated incremental costs, the potential impact to the climate, and any differences in ODP tonnes to be phased out if applicable. The Country agrees that potential savings related to the change of technology would decrease the overall funding level under this Agreement accordingly;
- (d) Any enterprise to be converted to non-HCFC technology included in the Plan and that would be found to be ineligible under the policies of the Multilateral Fund (i.e., due to foreign ownership or establishment post the 21 September 2007 cut-off date), would not receive financial assistance. This information would be reported as part of the Tranche Implementation Plan;
- (e) The Country commits to examining the possibility of using pre-blended systems with low-global warming potential blowing agents instead of blending them in-house, for those foam enterprises covered under the Plan, should this be technically viable, economically feasible and acceptable to the enterprises; and
- (f) Any remaining funds held by the bilateral or implementing agencies or the country under the Plan will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

Considerations for the refrigeration servicing sector

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

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation;
- (b) The Country would take into consideration relevant actions that could minimize adverse climate impact when phasing out HCFC in the refrigeration servicing sector; and
- (c) The Country would be encouraged to consider, as needed and feasible, the development of regulations and codes of practice; the adoption of standards for the safe introduction of flammable and/or toxic refrigerants; the implementation of measures to limit the import of HCFC-based equipment and to facilitate the introduction of energy-efficient and climate-friendly alternatives; and implementation of activities in the refrigeration servicing sector on training of technicians and introduction of good service practices such as the safe handling of refrigerants, containment and recovery and recycling and reuse of refrigerants rather than retrofitting.

Bilateral and implementing agencies

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNDP has agreed to be the lead implementing agency (the "Lead IA") in respect of the Country's activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead IA taking part in this Agreement.

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

Non-compliance with the Agreement

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A ("Reductions in Funding for Failure to Comply") in respect of each ODP kilogram of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once decisions are taken, the specific case of not compliance with this Agreement will not be an impediment for the provision of funding for future tranches as per paragraph 5 above.

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

13. The Country will comply with any reasonable request of the Executive Committee and the Lead IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA with access to the information necessary to verify compliance with this Agreement.

Date of completion

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

Validity

15. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	35.95
HCFC-123	C	I	0.05
HCFC-141b	C	I	37.53
Total	C	I	73.50

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2015	2016	2017	2018	2019	2020	2021	2022-2023	2024	2025	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	66.15	66.15	66.15	66.15	66.15	47.78	47.78	47.78	47.78	23.88	n/a
1.2	Maximum allowable total consumption of Annex C, Group I	66.15	66.15	60.64	60.64	48.71	36.78	36.78	36.78	27.58	18.39	n/a
2.1	Lead IA (UNDP) agreed funding	2,410,000	0	0	1,114,000	0	0	420,462	0	259,364	0	4,203,826
2.2	Support costs for Lead IA	168,700	0	0	77,980	0	0	29,432	0	18,155	0	294,268
3.1	Total agreed funding (US \$)	2,410,000	0	0	1,114,000	0	0	420,462	0	259,364	0	4,203,826
3.2	Total support costs (US \$)	168,700	0	0	77,980	0	0	29,432	0	18,155	0	294,268
3.3	Total agreed costs (US \$)	2,578,700	0	0	1,191,980	0	0	449,894	0	277,519	0	4,498,094
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)											14.22
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)											9.41
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)											12.32
4.2.1	Total phase-out of HCFC-123 agreed to be achieved under this Agreement (ODP tonnes)											0.05
4.2.2	Phase-out of HCFC-123 to be achieved in the previous stage (ODP tonnes)											0
4.2.3	Remaining eligible consumption for HCFC-123 (ODP tonnes)											0
4.3.1	Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)											22.43
4.3.2	Phase-out of HCFC-141b to be achieved in the previous stage (ODP tonnes)											15.10
4.3.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)											0

*Date of completion of stage I as per stage I Agreement: 2017

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

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

APPENDIX 4-A: FORMAT OF TRANCHE IMPLEMENTATION REPORTS AND PLANS

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

- (a) A narrative report, with data provided by tranche, describing the progress achieved since the previous report, reflecting the situation of the Country in regard to phase-out of the Substances, how the different activities contribute to it, and how they relate to each other. The report should include the amount of ODS phased out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Tranche Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes;
- (b) An independent verification report of the Plan results and the consumption of the Substances, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
- (c) A written description of the activities to be undertaken during the period covered by the requested tranche, highlighting implementation milestones, the time of completion and the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall Plan that are foreseen. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
- (d) A set of quantitative information for all Tranche Implementation Reports and Plans, submitted through an online database; and
- (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).

2. In the event that in a particular year two stages of the HPMP are being implemented in parallel, the following considerations should be taken in preparing the Tranche Implementation Reports and Plans:

- (a) The Tranche Implementation Reports and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement; and
- (b) If the stages under implementation have different HCFC consumption targets under Appendix 2-A of each Agreement in a particular year, the lower HCFC consumption target will be used as reference for compliance with these Agreements and will be the basis for the independent verification.

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The monitoring process will be managed by the Ministry of Environment through the National Ozone Unit (NOU) with the assistance of the Lead IA.

2. The consumption will be monitored and determined based on official import and export data for the Substances recorded by relevant Government departments.

3. The NOU shall compile and report the following data and information on an annual basis on or before the relevant due dates:

- (a) Annual reports on consumption of the Substances to be submitted to the Ozone Secretariat; and
- (b) Annual reports on progress of implementation of the HPMP to be submitted to the Executive Committee of the Multilateral Fund.

4. The NOU and Lead IA will engage an independent and qualified entity to carry out a qualitative and quantitative performance evaluation of the HPMP implementation.

5. The evaluating entity shall have full access to relevant technical and financial information related to implementation of the HPMP.

6. The evaluating entity shall prepare and submit to the NOU and the Lead IA, a consolidated draft report at the end of each annual implementation plan, comprising of the findings of the evaluation and recommendations for improvements or adjustments, if any. The draft report shall include the status of the Country's compliance with the provisions of this Agreement.

7. Upon incorporating the comments and explanations as may be applicable, from the NOU and Lead IA, the evaluating entity shall finalize the report and submit it to the NOU and Lead IA.

8. The NOU shall endorse the final report and the Lead IA shall submit the same to the relevant meeting of the Executive Committee along with the annual implementation plan and reports.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities, including at least the following:
 - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;
 - (b) Assisting the Country in preparation of the Tranche Implementation Reports and Plans as per Appendix 4-A;
 - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated tranche activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 4-A;
 - (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future Tranche Implementation Plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
 - (e) Fulfilling the reporting requirements for the Tranche Implementation Reports and Plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee;
 - (f) In the event that the last funding tranche is requested one or more years prior to the last year for which a consumption target had been established, annual tranche implementation reports and, where applicable, verification reports on the current stage of the Plan should be submitted until all activities foreseen had been completed and HCFC consumption targets had been met;
 - (g) Ensuring that appropriate independent technical experts carry out the technical reviews;
 - (h) Carrying out required supervision missions;
 - (i) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
 - (j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country the allocation of the reductions to the different budget items and to the funding of the Lead IA;
 - (k) Ensuring that disbursements made to the Country are based on the use of the indicators;
And
 - (l) Providing assistance with policy, management and technical support when required.
2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

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

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$147 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met, on the understanding that the maximum funding reduction would not exceed the funding level of the tranche being requested. Additional measures might be considered in cases where non-compliance extends for two consecutive years.

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

ANNEX V: Memorandum of Agreement (Template)

MEMORANDUM OF AGREEMENT

This Memorandum of Agreement (hereinafter referred to as the “Agreement”) made this [date] day of [month and year], between the **Ministry of Environment** (hereinafter referred to as “MoE”) and **[enterprise name]** (hereinafter referred to as the “Recipient”), for the purposes of implementing the activities to be carried out in relation to the participation of Recipient in the project **HCFC Phase out Management Plan Stage-II for Compliance with post 2015 control targets for Annex-C Group-1 substances in Lebanon** (hereinafter referred to as the “HPMP Stage II”).

WHEREAS the HPMP Stage II for the Government of Lebanon Stage-II was approved by the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, in its 75th meeting;

WHEREAS the Recipient has been identified in the approved HPMP Stage-II proposal for carrying out activities to phase out the use of HCFCs to contribute to the national HCFC consumption and phase-out targets for Lebanon as stipulated in the HPMP Stage-II;

WHEREAS the Executive Committee of the Multilateral Fund for implementation of the Montreal Protocol through the Multilateral Fund Secretariat and in consultation with UNDP and MoE, carried out a thorough review of the eligible costs for all components of the HPMP Stage-II including the component pertaining to the conversion of facilities at the Recipient to non-HCFC technologies as stipulated in the approved HPMP Stage-II;

WHEREAS the Recipient agrees to convert their facilities to enable phase-out of HCFCs in accordance with the HPMP Stage-II as approved by the Executive Committee of the Multilateral Fund and that the Recipient hereby agrees to participate in the HPMP Stage-II on the terms and conditions hereinafter set forth;

NOW, therefore, the Parties hereto agree as follows:

1. Responsibilities of Recipient:

- 1.1 Recipient agrees to carry out the activities as described in the Terms of Reference in Annex A, which form an integral part of this Agreement;
- 1.2 None of the funds provided pursuant to this Agreement may be used any purpose other than those expressly set forth in Annex-A;
- 1.3 Unless specifically mentioned otherwise, all items of work in Annex-A shall be deemed to be inclusive of development, design, engineering, assembly, fabrication, supply, installation, start-up, trial runs, testing, evaluation, regulatory clearances and commissioning, and all materials, labor, consumables, etc. required thereof;
- 1.4 Recipient shall bear any costs that may be required for successful conversion to the selected non-HCFC technology over and above the approved funds as described in 3.1 below;
- 1.5 Recipient shall permanently discontinue the use of HCFCs as of [date] and to dispose all redundant baseline equipment that may have been replaced under the scope of this Agreement and to allow monitoring inspections by MoE, UNDP and/or their designated representatives during project implementation and after project completion, to verify the same;
- 1.6 Recipient undertakes to obtain all regulatory and other approvals that may be required for carrying out all activities in accordance with the prevailing laws;
- 1.7 All activities covered under this Agreement shall be carried out at the following location(s):

[Address of the manufacturing facilities of the Recipient]

2. Duration

- 2.1 This Agreement will come into effect on [date] and shall expire on [date];
- 2.2 The duration of the Agreement may be extended at the discretion of MoE and UNDP.

3. Compensation

- 3.1 As full consideration for the activities carried out by the Recipient, Recipient shall be paid a total amount of US Dollars[amount] (US Dollars [amount in words]) in accordance with the description and costs of activities set forth in Annex-A;
- 3.2 The payment for each activity in Annex-A shall be made by UNDP upon completion of that activity and confirmation of the same and endorsement of the payment by MoE;
- 3.3 MoE and UNDP reserve the right to verify the completion of each activity through external experts as may be necessary;
- 3.4 All payments shall be made in US dollars [or equivalent local currency];
- 3.5 Recipient shall bear full responsibility and costs of activities in respect of products not specifically mentioned in Annex-A required for phasing out HCFCs in the manufacturing of the same before [Date];
- 3.5 The amount of payment is not subject to any adjustment or revision because of price or currency fluctuations or the actual costs incurred by the Recipient in the performance of the Agreement.

4. Records, Information and Reports

- 4.1 Recipient shall maintain clear, accurate and complete records in respect of the funds received under this Agreement, in such a manner that the receipts and expenditures of the funds will be shown separately on such books and records and can be easily checked;
- 4.2 Recipient shall furnish, compile and make available at all times to MoE and UNDP any records or information, oral or written, which MoE or UNDP may reasonably request in respect of the Agreement.

5. General Provisions

- 5.1 This Agreement and the Annexes attached hereto shall form the entire Agreement between Recipient and MoE, superseding the contents of any other negotiations and/or agreements, whether oral or in writing, pertaining to the subject of this Agreement;
- 5.2 The Recipient shall carry out all activities under this Agreement with due diligence and efficiency;
- 5.3 MoE and UNDP undertakes no responsibilities in respect of life, health, accident, travel or any other insurance coverage for any person, which may be necessary or desirable for the purpose of this Agreement or for any personnel performing services under this Agreement. Such responsibilities and related costs and liabilities shall be entirely borne by the Recipient;
- 5.4 The rights and obligations of the Recipient are limited to the terms and conditions of this Agreement. Accordingly, the Recipient and personnel performing services on its behalf shall not be entitled to any benefit, payment, compensation or entitlement except as expressly provided for in this Agreement;

- 5.5 The Recipient shall be solely liable for claims by third parties arising from the Recipient's acts or omissions in the course of performing this Agreement and under no circumstances shall MoE or UNDP be held liable for such claims by third parties;
- 5.6 Equipment or services procured by the Recipient with funds provided under this Agreement shall be used for the purpose indicated in the Agreement throughout the period of this Agreement;
- 5.7 No modification of or change in this Agreement, waiver of any of its provisions or additional contractual provisions shall be valid or enforceable unless previously approved in writing by the parties to this Agreement or their duly authorized representatives in the form of an amendment to this Agreement duly signed by the parties hereto;
- 5.8 Any controversy or claim arising out of, or in accordance with this Agreement or any breach thereof, shall unless it is settled by direct negotiation, be settled in accordance with [name of arbitration body/law as applicable] and rules therein as at present in force. Where, in the course of such direct negotiation referred to above, the parties wish to seek an amicable settlement of such dispute, controversy or claim by conciliation, the conciliation shall take place in accordance with the provisions of the [name of arbitration body/law as applicable] and rules therein as at present in force;
- 5.9 The parties shall be bound by any arbitration award rendered as a result of arbitration stipulated in 5.8 above, as the final adjudication of any such controversy or claim;
- 5.10 Nothing in or relating to this Agreement shall be deemed a waiver of any privileges and immunities of MoE and UNDP.

IN WITNESS WHEREOF, the undersigned, duly appointed representatives of Recipient, MoE and UNDP respectively, have signed the Agreement on the dates indicated below with their respective signatures.

On behalf of Recipient

On behalf of MoE

On behalf of UNDP

[Name]

[Name]

[Name]

[Designation]

[Designation]

[Designation]

[Date]

[Date]

[Date]

Authorized Signatory

Authorized Signatory

Authorized Signatory

Terms of Reference (TOR) (Indicative template)

Project Name: Hydrochloroflouro Carbon Phase-Out Management Plan (HPMP) Stage II

Reference Number: 00100473

Subject: Reconversion of Enterprises to non-Ozone Depleting Substances (ODS) technology in [name of Industry]

1. Background

To maintain the momentum achieved in stage I of the HPMP, the Government of Lebanon, with assistance from UNDP, developed stage II of the HPMP, which proposes to phase out an additional 756.20 mt (57.11 ODP tonnes) of HCFCs by 2025.

In the 75th Meeting of the Executive Committee, the HPMP Stage II project funding was approved for Lebanon to reduce HCFCs consumption by 75% of its baseline to be implemented by UNDP in accordance with the agreement between the government of Lebanon and the Executive Committee of the Multilateral fund to the Montreal Protocol (Decision 75/46) dated November 2015.

Accordingly, the project Lebanon's HCFC Phase-out Management Plan (HPMP Stage-II) comprises of a combination of interventions such as technology transfer investments, policies and regulations, technical assistance, training, awareness and communications and management, coordination and monitoring in the Foams and Air Conditioning/Refrigeration sectors, to be implemented over 10 years from 2015 to 2025.

Upon successful completion, the plan will result in net sustainable reductions of minimum 57.11 ODP tonnes in the national HCFC consumption by 2025, contributing to Lebanon's compliance with the post 2015 control targets for HCFCs. In addition, the project will result in net CO₂-equivalent emission reductions of about 0.365 million tonnes annually from 2020.

The details of the Terms of Reference (TOR) given below presents the scope of work to be implemented by the eligible industry.

2. Scope of Work, Responsibilities and Description of the Proposed Analytical Work

Scope of Work

In order to meet the reduction targets for the years 2015 and beyond, this will involve phasing out of HCFCs use in major manufacturing sectors as well as servicing sector to non-ODS/ low-GWP technologies. The recipient's industries eligible for funding from the MLF of the Montreal Protocol, will convert their facility to enable phase-out of HCFCs, to a non-ODS /low-GWP technologies in accordance with the HPMP Stage-II project document, as approved by the Executive Committee of the Multilateral Fund;

General tasks

Under the direct supervision of the National Ozone Unit (NOU) and in close coordination with the Ministry of Environment and the UNDP Country Office, the recipient industry should undertake the following tasks:

- 1) Prepare a detailed workplan with deliverables and timelines
- 2) Select a proven and reasonably mature technology in line with the criteria set by the executive committee of the Multilateral Fund Secretariat.
- 3) Prepare a re-layout and modification plan for the plant where applicable, and design products with favorable processing characteristics and cost effective conversion.
- 4) Prepare and issue of purchase orders of the equipment needed, as well as the installing work and other activities needed, taking into consideration compliance with the safety regulations pertaining to areas handling flammable substances.
- 5) Prepare products/ equipment prototypes by demonstrating the new alternative technology.
- 6) Conduct trials and commissioning of the production line in line with the above set criteria

Expected Outcomes:

Work plan describing and including the below:

- Plant re-layout and drawings
- Break down of cost for implementation
- Purchase order for equipment and installation (civil, mechanical, electrical work and design)
- Product design, sample design, inspection, test results, trials and commissioning

3. Eligibility of Enterprises

The enterprise wishing to be considered for funding the conversion to a non – ODS alternatives should be based in Lebanon and have the following qualifications:

- **Legal status:** Legal registration of the enterprise
- The recipient should be a manufacturer using ozone depleting substances
- The year of manufacturing should be before September 2007
- The recipient, if necessary, should be willing to co-finance certain activities related to the project implementation
- The recipient undergoing the technology change should comply with the established (Local and International) standards on health, safety and environment.
- The recipient should have the capacity (technical, financial and procurement) to self-implement the project.

Competencies:

- Well-established company
- Good technical background of alternative technologies
- Good communication, coordination and reporting skills
- Organized, has qualified technical and managerial staff, as the enterprise should manage the conversion process of the industry cost effectively and safely.

4. [Industry specific conversion technology and costs detailed table]

5. Duration of contract

The overall duration of the assignment covered by this ToR is in the trench of six to eighteen months from the date of contract signature.

Proposed workplan

No.	Deliverables	Duration from contract signature	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13-M18
1	Detailed workplan with deliverables and timelines	Month	X (R&F)												
2	Plant re-layout and modification plan, product re-design and purchase order of equipment needed for the re-conversion process	Month				X (R)		X (F)							
3	Prototypes, trials and commissioning (completion of phase-out of HCFCs)	Month										X (R)			X (F)

F: Foam Industries

R: Refrigeration and air conditioning sector

6. Milestones:

The deliverables and payments include the following:

	Payment	Deliverables	Potential dates
1	20%	Workplan: Implementation work plan, Plant re-layout and modification, and product re-design	Month 01 after contract signature of MOA
2	50%	Prototype, Trials and Commissioning	R: Month 04 after signature of MOA F: Month 06 after signature of MOA
3	30%	Completion and phase-out of HCFCs	R: Month 10 after signature of MOA F: Month (13-18) after signature of MOA

ANNEX VI: Letter of Agreement

STANDARD LETTER OF AGREEMENT BETWEEN UNDP AND THE GOVERNMENT FOR THE PROVISION OF SUPPORT SERVICES

Excellency,

1. Reference is made to consultations between officials of the Government of *Lebanon* (hereinafter referred to as “the Government”) and officials of UNDP with respect to the provision of support services by the UNDP country office for nationally managed “HCFC Phase out Management Plan (HPMP) Stage-II” ID 0000100473. UNDP and the Government hereby agree that the UNDP country office may provide such support services at the request of the Government through its institution the Ministry of Environment designated in the relevant programme support document or project document, as described below.
2. The UNDP country office may provide support services for assistance with reporting requirements and direct payment. In providing such support services, the UNDP country office shall ensure that the capacity of the Government-designated institution the Ministry of Environment is strengthened to enable it to carry out such activities directly. The costs incurred by the UNDP country office in providing such support services shall be recovered from the administrative budget of the office.
3. The UNDP country office may provide, at the request of the designated institution, the following support services covered by the Direct Project Costs, for the activities of the programme/project:
 - i. Payments, disbursements and other financial transactions
 - ii. Recruitment of staff, project personnel, and consultants
 - iii. Procurement of services and equipment, including disposal
 - iv. Organization of training activities, conferences, and workshops, including fellowships
 - v. Travel including visa requests, ticketing, and travel arrangements
 - vi. Shipment, custom clearance, vehicle registration, and accreditation
 - vii. Security management service and Malicious Acts Insurance Policy
 - viii. External access to ATLAS for project managers and other staff, Payroll management services and Medical Clearance Services for all staff.
4. The UNDP country office will also provide the following general oversight and management services for the activities of the project which include the following:
 - i. General oversight and monitoring, including participation in project reviews
 - ii. Briefing and de-briefing of project staff and consultants
 - iii. Resource management and reporting
 - iv. Thematic and technical backstopping
5. The procurement of goods and services and the recruitment of project and programme personnel by the UNDP country office shall be in accordance with the UNDP regulations, rules, policies and procedures. Support services described in paragraphs 3 & 4 above shall be detailed in an annex to the programme support document or project document, in the form provided in the attachment hereto. If the requirements for support services by the country office change during the life of a programme or project, the annex and related section in the programme support document or project document is revised with the mutual agreement of the UNDP resident representative and the designated institution.

6. The relevant provisions of the Standard Basic Assistance Agreement with the Government (the "SBAA") dated 10 February 1986, including the provisions on liability and privileges and immunities, shall apply to the provision of such support services. The Government shall retain overall responsibility for the nationally managed programme or project through its designated institution the Ministry of Environment. The responsibility of the UNDP country office for the provision of the support services described herein shall be limited to the provision of such support services detailed in the annex to the programme support document or project document.
7. Any claim or dispute arising under or in connection with the provision of support services by the UNDP country office in accordance with this letter shall be handled pursuant to the relevant provisions of the SBAA.
8. The manner and method of cost-recovery by the UNDP country office in providing the support services described in paragraphs 3 & 4 above shall be specified in the annex to the programme support document or project document.
9. The UNDP country office shall submit progress reports on the support services provided and shall report on the costs reimbursed in providing such services, as may be required.
10. Any modification of the present arrangements shall be effected by mutual written agreement of the parties hereto.
11. If you are in agreement with the provisions set forth above, please sign and return to this office two signed copies of this letter. Upon your signature, this letter shall constitute an agreement between your Government and UNDP on the terms and conditions for the provision of support services by the UNDP country office for nationally managed programmes and projects.

Yours sincerely,

Signed on behalf of UNDP
Mr. Edgard Chehab
Assistant Resident Representative

For the Government
H.E. Mr. Mohamad Al Mashnouk
Minister of Environment
Date:

DESCRIPTION OF UNDP COUNTRY OFFICE SUPPORT SERVICES

1. Reference is made to consultations between the Ministry of Environment, the institution designated by the Government of Lebanon and officials of UNDP with respect to the provision of support services by the UNDP country office for the nationally managed project ID 00100473 "HCFC Phase out Management Plan (HPMP) Stage-II", *"the Project"* (Atlas Award ID 00096549).

2. In accordance with the provisions of the letter of agreement signed on August 2016, and the *project document*, the UNDP country office shall provide support services for the *Project* as described below.

3. Support services to be provided:

Support services	Schedule for the provision of the support services	Cost to UNDP of providing such support services	Method of reimbursement of UNDP
1. Financial Services	Project duration	Based on UPL	GLJE
2. Human Resources Services	Project duration	Based on UPL	GLJE
3. Procurement services	Project duration	Based on UPL	GLJE
4. Travel Services	Project duration	Based on UPL	GLJE
5. General Administration Services	Project duration	Based on UPL	GLJE
6. Revenue Management Services	Project duration	Based on UPL	GLJE
TOTAL			

4. Description of functions and responsibilities of the parties involved:

Support services	Description
Financial Services	<ul style="list-style-type: none"> - Payment process - Issue check - Vendor profile
Human Resources Services	<ul style="list-style-type: none"> - Staff selection and recruitment process (advertising, short-listing, interviewing) - Staff HR & Benefits Administration & Management (at issuance of a contract, and again at separation) - Recurrent personnel management services: staff Payroll & Banking Administration & Management (Payroll validation, disbursement, performance evaluation, extension, promotion, entitlements, leave monitoring) - Interns Management
Procurement services	<ul style="list-style-type: none"> - Consultant recruitment (advertising, short-listing and selection, contract issuance) - Procurement process involving local CAP and/or ITB, RFP requirements (Identification & selection, contracting/issue purchase order, follow-up) - Procurement not involving local CAP; low value procurement (Identification & selection, issue purchase order, follow-up) - Disposal of equipment
Travel Services	<ul style="list-style-type: none"> - Travel authorization - F10 settlement
General Administration Services	<ul style="list-style-type: none"> - Issue/Renew IDs (UN LP, UN ID, etc.) - Shipment, customs clearance, vehicle registration - Issuance of visas, telephone lines
Revenue Management Services	<ul style="list-style-type: none"> - AR Management Process (Create/apply receivable pending item, Issue/Apply Deposit)

ANNEX VII: Delegation of Authority

United Nations Development Programme



Empowered lives.
Resilient nations.
10 June 2016

Dear Mr. Renda,

Approval of funding tranche for Lebanon HCFC Phase-out Management Plan, Stage-II

We are pleased to inform you that the following funding was approved for UNDP implementation, as part of the HCFC Phase-out Management Plan (HPMP) Stage-II for Lebanon at the 75th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, held in November 2015.

MLF Reference No.*	Project Title	Funding (US\$)
LEB/PHA/75/INV/85	Stage II HPMP (first tranche) (foam sector)	1,147,649
LEB/PHA/75/INV/86	Stage II HPMP (first tranche) (air conditioning sector)	547,504
LEB/PHA/75/INV/87	Stage II HPMP (first tranche) (refrigeration servicing sector)	495,756
LEB/PHA/75/TAS/88	Stage II HPMP (first tranche) (project management and coordination)	219,091

* Please indicate this reference number in the cover sheet of the project document and in the ATLAS short project title

Background: The overall HCFC phase-out management plan for Stage II is approved in-principle by the MLF Executive Committee, to assist Lebanon in complying with the 2020 and beyond control measures for HCFCs under the Montreal Protocol and is subject to the provisions of the performance-based agreement between the MLF Executive Committee and Lebanon, comprising of annual/biennial HCFC consumption and phase-out targets. Approval of future funding tranches is contingent upon achievement of these targets, failing which Lebanon could be liable for penalty for non-compliance.

Project Document Format: We are attaching herewith the Lebanon HPMP Stage II document as approved by the MLF Executive Committee. It is important to annex this document, without any change, to the project document that will be signed between UNDP and the Government. No outputs, activities or inputs can be added or modified or deleted from those that were approved by the Executive Committee.

Entering the Budget in ATLAS: Consistent with the new agreement for stage II signed between Lebanon and the Executive Committee, your office is requested to enter a **new project/ separate outputs/budgets for each approval** in ATLAS using the Annual Work Plan tables attached. The Multilateral Fund guidelines do not give us flexibility to shift funds between specific budget categories. In line with the UNDP requirement for multi-year project budgeting, please ensure the total approved budget per the work plan table is entered in ATLAS for the current and future years as indicated. Authorized Spending Limits will not be issued where this action has not been taken.

Further Budget Revisions: In case there is a need to shift funds between budget categories, you would have to consult with the MPU/Chemicals' representative in Bangkok, Mr. Balaji Natarajan (balaji.natarajan@undp.org) as in certain cases, the Multilateral Fund will have to be consulted prior to approving of such shifts.

Mr. Luca Renda
Country Director
UNDP Lebanon
Beirut, Lebanon

Montreal Protocol Unit / Chemicals | 304 East 45th Street, 9th Floor, New York, NY 10017, USA
Tel: +1 (212) 906-5112 | Fax: +1 (212) 906-8973 | Email: mpu_registry@undp.org | www.undp.org



Support Costs: The General Management Support Services (GMS) fee received by UNDP in relation to these projects is managed centrally at BPPS-HQ, and should NOT be part of the project budget. In ATLAS, please therefore leave the F/A field % at zero. GMS at the internal distribution rate approved effective January 2016 covering management support rendered by your office will be credited directly to your XB income account based on delivery. Direct Project Costs, formerly Implementation Support Services (ISS) may be charged to the project budget using the Universal Price List. However, this can be applied only for services provided other than project management.

Government Counterpart: Just as a reminder, kindly note that the National Ozone Focal Point in your country is Mr. Mazen Hussein (e-mail: [mkhussein@moe.gov.lb](mailto:mkhusseini@moe.gov.lb)). While he may not be the one to sign the project document on behalf of the Government, kindly make sure that he is copied on all correspondence related to this project.

Over-Expenditures: We wish to remind you that over-expenditures are absolutely not allowed in Montreal Protocol projects. Please therefore ensure that total expenditures never exceed the total budget.

Based on the above, we request you to kindly finalize the project documentation and enter the new project/outputs/budgets in ATLAS. Once the project document is signed, please send an electronic copy to the MPU/Chemicals' representative in Bangkok, Mr. Balaji Natarajan (balaji.natarajan@undp.org) with a request for ASL and send the budgets to KK.

Thank you very much for your partnership in the implementation of this important programme, which falls under the UNDP Strategic Plan 2014-2017 IRRF Indicator 1.1.3 (Number of schemes which expand and diversify the productive base based on the use of sustainable production technologies).

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Jacques Van Engel', written over a light blue horizontal line.

Jacques Van Engel,
Director, Montreal Protocol Unit/Chemicals
Sustainable Development Cluster
Bureau for Policy and Programme Support