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

PROJECT PROPOSAL: LIBYA

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

Phase-out

- HCFC phase-out management plan (stage I, first tranche) UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Libya

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

(II) LATEST ARTICLE 7 DATA (Annex C Group l)	Year: 2014	122.40 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)						Year: 2014			
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumptio
				Manufacturing	Servicing				
HCFC-22				2.15	85.06				87.20
HCFC-141b		32.45		2.75					35.20

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	118.38	Starting point for sustained aggregate reductions:	113.66
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0	Remaining:	113.66

(V) BUSINESS PLAN		2015	2016	2017	2018	Total
UNIDO	ODS phase-out (ODP tonnes)	0	37.30	8.80	3.40	49.50
	Funding (US $)	0	1,361,000	335,000	234,000	1,930,000

(VI) PROJECT DATA			2015	2016	2017	2018	Total
Montreal Protocol consumption limits			106.54	106.54	106.54	106.54	n/a
Maximum allowable consumption (ODP tonnes)*			122.40	118.38	118.38	106.54	n/a
Project costs requested in principle(US$)	UNIDO	Project costs	1,717,950	0	0	190,884	1,908,834
		Support costs	120,257	0	0	13,362	133,619
Total project costs requested in principle (US$)			1,717,950	0	0	190,884	1,908,834
Total support costs requested in principle (US$)			120,257	0	0	13,362	133,619
Total funds requested in principle (US $)			1,838,207	0	0	204,246	2,042,453

* As submitted.

(VII) Request for funding for the first tranche (2015)		
Agency	**Funds requested (US $)**	**Support costs (US $)**
UNIDO	1,717,950	120,257

Funding request:	Approval of funding for the first tranche (2015) as indicated above
Secretariat's recommendation:	Individual consideration

PROJECT DESCRIPTION

1. Stage I of the HPMP for Libya was submitted to the 72nd meeting but subsequently withdrawn as it was not possible to confirm that the licensing system was fully operational due to the security situation prevailing in the country at that time.

2. On behalf of the Government of Libya, UNIDO, as the designated implementing agency, has resubmitted to the 75th meeting stage I of the HCFC phase-out management plan (HPMP) at the amount of US $2,129,377, plus agency support costs of US $149,056, as originally submitted, to achieve 10 per cent reduction in HCFC consumption by 2018.

3. The first tranche for stage I of the HPMP being requested at this meeting amounts to US $1,911,161, plus agency support costs of US $133,781 for UNIDO, as originally submitted.

Background

4. Libya, with a total population of about six million inhabitants, has ratified all the amendments to the Montreal Protocol. In 2013 and 2014, Libya reported consumption of 144 and 122.4 ODP tonnes respectively, which exceeded the HCFC baseline for compliance. This situation was attributed to a lack of approved licensing and quota systems compounded by the difficult political situation in the country, which had prevented the implementation of any phase-out activity.

ODS regulations

5. The Environment General Authority (EGA) is the national authority responsible for implementation of the Montreal Protocol. The National Ozone Unit (NOU) was established under the EGA as a focal point to coordinate activities with all the agencies and stakeholders at the operational level.

6. In June 2015, the Government of Libya issued Decree Law No. 228 to introduce the licensing and quota system for HCFCs, which has met the pre-condition for submission of the HPMP. The legal framework established will support the implementation of regulatory measures including licensing and quota systems for imports of HCFCs and HCFC-based equipment, duty relaxation for alternatives, and banning the establishment of new HCFC-based manufacturing enterprises. The licensing system will be further strengthened during the implementation of stage I of the HPMP.

HCFC consumption and sector distribution

7. All HCFCs in Libya are imported and include HCFC-22 and HCFC-141b. HCFC-22 is used for servicing refrigeration and air-conditioning (RAC) equipment and for charging new installations. HCFC-141b is solely used for manufacturing rigid polyurethane (PU) foam for sandwich panels, insulation foam for commercial refrigeration equipment, and spray foam. The HCFC baseline for compliance has been established at 1,869.1 mt (118.38 ODP tonnes). Table 1 shows the level of HCFC consumption in Libya.

Table 1. HCFC consumption in Libya (2009-2014 Article 7 data)

HCFC	2009	2010	2011	2012	2013	2014	Baseline
Metric tonnes							
HCFC-22	1,272.00	1,900.00	1,802.00	1,200.00	1,658.14	1,585.50	1,586.00
HCFC-141b	250.10	316.04	298.02	710.00	480.00	320.00	283.07
Total (mt)	**1,522.10**	**2,216.04**	**2,100.02**	**1,910.00**	**2,138.14**	**1,905.50**	**1,869.07**
ODP tonnes							
HCFC-22	70.00	104.50	99.11	66.00	91.20	87.20	87.25
HCFC-141b	27.50	34.76	32.78	78.10	52.80	35.20	31.13
Total (ODP tonnes)	**97.50**	**139.26**	**131.89**	**144.10**	**144.00**	**122.40**	**118.38**

8. Alternate technologies available in Libya include hydrocarbon (pentane), HFC-245fa, HFC-36mfc/227ea mixture, HFC-134a/water and CO_2.

9. The Government of Libya reported HCFC sector consumption data under the 2014 CP implementation report which is consistent with the data reported under Article 7. The HCFC consumption in the RAC servicing sector is shown in Table 2.

Table 2: Consumption distribution in the RAC servicing sector (2010)

Product category	Number of units		Average charge (kg)	Total installation (mt)	Leakage rate (%)	Demand of HCFC-22 (mt)	
	Existing	New				Servicing existing	Charge new installation
Window and wall air-conditioning (AC) units	105,000		0.75	79	3	2.36	0.00
Non-ducted or split residential and commercial ACs	4,150,000		1.28	5,312	6	318.72	0.00
Ducted split residential ACs and heat pumps	655,000	58,823	3.40	2,427	6	133.62	200.00
Ducted commercial split and packaged ACs	600,000	57,077	11.50	7,556	6	414.00	656.39
Industrial and commercial refrigeration	500	49	17.00	9	10	0.85	0.83
Other equipment	550	64	15.50	10	10	0.85	0.99
Sub-total	5,511,050	116,013		15,393		870.41	858.21
Total		5,627,063					1,728.61

Foam manufacturing sector

10. The foam manufacturing sector in Libya consists of nine enterprises: six manufacturing continuous and discontinuous panels, and three manufacturing insulation foam for commercial refrigeration equipment and water coolers. There are also some small and medium-sized enterprises (SME) in the spray foam sub-sector, which are currently unidentifiable. The list of enterprises and their consumption are presented in Table 3.

Table 3: Foam enterprises in Libya

Sub-sector	Enterprises	HCFC-141b consumption (mt)						Baseline	
		2009	2010	2011	2012	2013	2014	mt	ODP tonnes
Continuous panels	Alyem Engineering, Tripoli	95.8	95.8	98.9	99.5	100.1	100.7	95.8	10.5
	Al-Najah Company, Tripoli	95.8	114.9	97.1	97.7	98.3	98.9	105.4	11.6
Discontinuous panel	Al-Amal Alkhadar Company, Tripoli	12.2	18.9	18.7	19.0	19.3	19.6	15.6	1.7
	Al-Shorooq, Misurata	10.1	21.0	16.1	16.7	17.2	17.8	15.6	1.7
	Al-Shami, Benghazi	9.0	18.7	14.4	14.9	15.4	15.9	13.9	1.5
	Nagem, Benghazi	8.2	17.0	13.1	13.5	14.0	14.5	12.6	1.4
Sub-total		**231.1**	**286.3**	**258.3**	**261.3**	**264.3**	**267.4**	**258.7**	**28.5**
Insulation foam for refrigeration equipment	Electrical Household Appliance-Tajura	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.3
	Brothers Company, Tripoli	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.2

Sub-sector	Enterprises	HCFC-141b consumption (mt)						Baseline	
		2009	2010	2011	2012	2013	2014	mt	ODP tonnes
	Tasharoukiat Marwa, Tripoli	2.0	1.0	0.0	0.0	0.0	0.0	1.5	0.2
Sub-total		**7.0**	**6.0**	**0.0**	**0.0**	**0.0**	**0.0**	**6.5**	**0.7**
Spray foam	Unidentified SMEs in Spray Foam	11.9	23.8	18.5	19.1	19.8	20.5	17.9	2.0
Total		**250.0**	**316.1**	**276.8**	**280.4**	**284.1**	**287.9**	**283.1**	**31.2**

11. All the foam enterprises were established between 1990 and 2006 with 100 per cent local ownership. Three companies, Electrical Household Appliance in Tajura, Brothers Company and Tasharoukiat Marwa in Tripoli, were converted from CFC-11 to HCFC-141b with financing from the Multilateral Fund. All the remaining enterprises have not received funding from the Fund.

Forecast for future HCFC consumption

12. Libya has gone through political unrest in the last few years and has not been able to effectively initiate actions to phase-out its HCFC consumption. The Government is aware of its obligations under the Montreal Protocol and has taken actions towards returning to compliance, including ratifying the Montreal and Beijing Amendments in April 2014, establishing the licensing system in June 2015 and reducing consumption from 144.0 ODP tonnes in 2013 to 122.4 ODP tonnes in 2014. With the implementation of stage I of the HPMP, it is expected that consumption will be further reduced and that the country would return to compliance with the Montreal Protocol control targets by 2018. Afterwards, HCFC consumption will be controlled in accordance with the maximum allowable consumption under the Protocol.

HCFC phase-out strategy

13. Libya's strategy for phasing out HCFCs has taken into consideration the particular situation in the country. An action plan with time-specific benchmarks has been submitted to the Implementation Committee under the Non-Compliance Procedure of the Montreal Protocol for consideration at the 27th Meeting of the Parties to ensure prompt return of Libya to compliance with the accelerated HCFC phase-out schedule for Article 5 countries (recommendation 54/5). Based on the proposed action plan, Libya has developed an overaching strategy for HCFC phase-out which include reducing HCFC consumption to the baseline level of 118.4 ODP tonnes in 2016, and to 106.5 ODP tonnes in 2018 through conversion of three foam enterprises to cyclopentane; and following the Montreal Protocol phase-out schedule from 2018 onwards.

14. Stage I of the HPMP includes only activities to reduce HCFC by 10 per cent of the baseline by 2018, an investment project to convert three foam enterprises to cyclopentane resulting in a phase-out of 2,163.6 mt (23.8 ODP tonnes) of HCFC-141b; and policy formulation, awareness raising, training of customs officers and technicians.

Conversion of three foam enterprises

15. The conversion to cyclopentane technology includes Alyem Engineering and the Al-Najah Company, which produce continuous panels and Al-Amal Alkhadar Company, which produces discontinuous panels, all of them for building installation. The baseline information for the three companies is contained in Table 4.

Table 4: Baseline information for foam enterprises to be converted in stage I of the HPMP

Enterprises	Application	Year of establishment	Second stage conversion	HCFC-141b phase-out	
				mt	ODP tonnes
Alyem Engineering	Continuous panels	2006	No	95.8	10.5
Al-Najah Company		2006	No	105.4	11.6
Al-Amal Alkhadar Company	Discontinuous panels	2003	No	15.6	1.7
Total				**216.7**	**23.8**

16. The baseline equipment includes storage tanks and day tanks for polyols and isocyanate, foaming machine and press. The production process is, to a large extent, automatic. The selection of cyclopentane as alternative technology is based on an overall assessment of alternatives, taking into consideration insulation properties, cost, process versatility and environmental aspects.

17. The pentane-based production system uses higher pressure than the HCFC-141b-based system. Therefore relevant pieces of equipment, including storage tank, mixing tank and foaming machine, need to be changed or modified. In addition, safety measures are required due to the flammability of cyclopentane. The total incremental costs for the conversion of three enterprises amount to US $1,911,161, as originally submitted as shown in Table 5.

Table 5: Cost of conversion of foam enterprises (as originally submitted)

Name of Industry	HCFC-141b to be phased out (MT)	Estimated cost (US$)		
		ICC	IOC	Total
Alyem Engineering, Tripoli	95.83	765,559	-2,657	762,902
Al-Najah Company, Tripoli	105.37	765,559	-2,922	762,638
Al-Amal Alkhadar Company, Tripoli	15.53	386,051	-430	385,621
Total	**216.73**	**1,917,170**	**-6,009**	**1,911,161**

Activities in the servicing sector

18. The following activities are proposed to be implemented in the servicing sector at a total cost pf US $218,216:

(a) Conducting training and awareness-raising programs for 30 customs officers and other law enforcement personnel on ODS legislation, monitoring imports and preventing illegal trade;

(b) Developing national standards and codes of good practice, training 100 technicians and implementing a technician-certification programme;

(c) Developing national guidelines to promote the establishment of a refrigerant reclamation centre; and

(d) Establishing national reclamation centres for refrigerant recovery, recycling and reuse.

Monitoring and coordination

19. Project monitoring and coordination of activities are planned to take place throughout the implementation period. The NOU will be responsible for coordinating and monitoring the progress of HPMP implementation. Reporting on the progress made during implementation will also be carried out by the NOU with support from UNIDO.

Overall cost of stage I of the HPMP

20. The total cost of the HPMP for Libya has been estimated at US $2,129,377 to achieve 10 per cent reduction in HCFC consumption by 2018. This will result in a phase-out of 262.16 mt (26.34 ODP tonnes) of HCFCs with an overall cost effectiveness of US $8.12/kg. The detailed cost breakdown for activities is listed in Table 6 below.

Table 6: Overall cost of stage I of the HPMP for Libya (as originally submitted)

Activities	Cost	Substance	HCFC-phase-out	
Description	**(US $)**		**mt**	**ODP tonnes**
Conversion of foam enterprises	1,911,161	HCFC-141b	216.73*	23.84
Alyem Engineering, Tripoli	762,902		95.83	10.54
Al-Najah Company, Tripoli	762,638		105.37	11.59
Al-Amal Alkhadar Company, Tripoli	385,621		15.53	1.71
Non-investment components				
Training 30 customs officers and law enforcement personnel	10,000			
Training of 100 technicians in good servicing practices, refrigerant recovery and reuse, implementing certification programme	15,000	HCFC-22	45.46	2.50
Developing National Guidelines for refrigerant reclamation	15,000			
Procurement of equipment for reclamation center	174,216			
Contingency	4,000			
Sub-total servicing	218,216			
Total	**2,129,377**		**262.16**	**26.34**

***** Calculated using the average of consumption in 2009 and 2010.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

21. The Secretariat reviewed the HPMP for Libya in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding stage I HCFC phase-out in consumption sector agreed at the 60th meeting (decision 60/44); subsequent decisions on HPMPs; and the 2015-2017 business plan of the Multilateral Fund.

Operational licensing and quota system

22. Libya has established its licensing and quota system for the import of ozone-depleting substances (ODS) in 1998. The licensing system for HCFC imports and exports is supported by a Government Decree issued in June 2015. In line with decision 63/17, the Government has sent a letter indicating that an enforceable national system of licensing and quota for HCFC imports and exports is in place and the system is capable of ensuring the country's compliance with the HCFC phase-out schedule.

Starting point for aggregate reduction in HCFC consumption

23. Upon a request for clarification on the significant growth in HCFC consumption from 2009 to 2010; UNIDO explained that it was mainly due to consumption for new AC installations in shopping malls, recreation centres, hotels, schools and hospitals.

24. From 2009 to 2011, there was significant development in Libya to compete with countries in the Arab Gulf region, which created the demand for new AC equipment. In addition, there may have been stockpiling by some importers in view of the control measures on imports of HCFCs in 2013.

25. With regard to the consumption profile in the RAC servicing sector, UNIDO reported that the evaluation conducted during the preparation of the HPMP, indicated that stockpiling only occurred in the servicing sector and is estimated at 171.4 mt of HCFC-22 in 2010. This amount has been deducted from the calculation of the starting point, as shown in Table 7.

Table 7: Starting point for aggregate reduction

Substance	2009 consumption (mt)	2010 consumption (mt)			Baseline		Starting point	
		Import	Stockpile	Use	mt	ODP tonnes	mt	ODP tonnes
HCFC-22	1,272.0	1,900	171.4	1,728.6	1,586.0	87.2	1,500.3	82.52
HCFC-141b	250.1	316.1	0	316.1	283.1	31.1	283.1	31.14
Total	**1,522.1**	**2,216.1**	**171.4**	**2,044.7**	**1,869.1**	**118.4**	**1,783.4**	**113.66**

26. The Government of Libya agreed to establish 113.66 ODP tonnes as its starting point for sustained aggregate reduction in HCFC consumption. The business plan indicated a baseline of 1,585 mt (118.4 ODP tonnes).

Non-compliance with the Montreal Protocol phase-out schedule

27. The Secretariat had extensive discussion with UNIDO on the reduction schedule proposed in the HPMP, which puts Libya in non-compliance in 2016 and 2017. Several options were proposed by the Secretariat in attempting to help the country return to compliance in 2016, as summarized below.

28. Regarding controlling HCFC consumption through the quota system at the level allowable under the Montreal Protocol control targets to enable compliance, UNIDO explained that, even though the licensing and quota system might be implemented, the Government cannot enforce a quota significantly below the current demand, as this would create a shortage of supply, encourages illegal trades and could harm the economic development of the country. The HCFC consumption between 2009 and 2014 has been fluctuating between 97.5 to 144.04 ODP tonnes with an average consumption of 129.86 ODP tonnes, indicating the level of demand of HCFCs in the country. To reduce the average consumption to 90 per cent of the baseline would mean a reduction of 23.46 ODP tonnes. Given the current situation in the country, it would be impossible to achieve such a major reduction on consumption within short period of time. Given that Libya has not been able to implement any activities related to HCFC phase-out, the licensing and quota system needs to be further strengthened and the capacity of the customs officers further developed during the implementation of the HPMP.

29. The Secretariat also inquired whether pre-blended HFOs or HFC-245fa could be used temporarily in the three foam enterprises until the conversion to cyclopentane takes place. UNIDO advised that Libya has never imported pre-blended polyols, and it is uncertain whether the infrastructure for such imports (importers, storage and distribution) could be easily ready for such action. In addition, some adjustments and adaptations would be required to switch from the current onsite blending system to pre-blended polyols. Given the political instability in the country, implementation of the changeover to temporary measures would take some time. A preliminary estimate by UNIDO for temporary use of HFC-245fa suggested incremental costs in the order of US $4.7 to US $4.8 million. The incremental cost would be even higher if HFO-1233zd were used as a temporary measure. Given the significant cost implications and, more importantly, the difficulties in implementing temporary measures, UNIDO suggested that the resources be devoted to the direct conversion to cyclopentane to quicken the process, rather than change over twice.

30. The Secretariat further enquired whether some recycled HCFC-22 could be imported, thus reducing imports of virgin HCFC-22 and reducing consumption. UNIDO responded that while recycled HCFC-22 would not be counted as consumption, it was uncertain whether a stable source of reliable-quality recycled HCFC-22 imports could be found, as many countries are facing strict HCFC-22 import controls, and recycled HCFC-22 would be valuable to supplement domestic shortages. Libya would not be able to develop its phase-out strategy based on this uncertain supply.

31. Other measures to reduce the HCFC consumption, including refrigerant recovery and reclamation were also suggested. UNIDO explained that recovery and reclamation activities have been proposed in stage I of the HPMP for immediate implementation that will reduce the demand for virgin HCFC-22 and hence consumption of HCFCs.

Technical and cost issues

Conversion of three foam enterprises

32. The issue of whether to include the foam enterprise Al-Amal in stage I was discussed, given its low consumption (19.6 mt of HCFC-141b in 2014) and the cost of converting to cyclopentane technology exceeds the cost-effectiveness threshold of US $9.79/kg. UNIDO reported that this company should be converted in stage I as it has been identified as one of the major foam producers together with the other two companies in Tripoli. After consultation, the enterprise has agreed to provide co-funding estimated at US $172,200 through a commitment letter, reducing the cost-effectiveness for the conversion of Al-Amal to US $9.78/kg.

33. The costs of equipment for conversion were discussed and the cost structure was further rationalized. Technical assistance and training will be conducted together for three enterprises (rather than for each individual one) with a total cost of US $120,000. The total cost for the conversion of three foam enterprises was decreased from US $1,911,161 to US $1,690,627, with an overall cost-effectiveness of US $8.37/kg.

Activities in the servicing sector

34. The Secretariat noted that US $4.80/kg was used to calculate the phase-out in the servicing sector. This was revised according to stage I funding criteria set in decision 60/44, where the cost-effectiveness is US $4.50/kg. The Secretariat further discussed the issue of establishing the reclamation centre and queried whether it would be more meaningful to provide equipment and tools and training on good practice to technicians rather than trying to facilitate reclamation, as instability might restrict the movement of recovered refrigerants to the reclamation centre. UNIDO explained that providing training and servicing tools might not be adequate to reduce the demand for HCFC-22, as the servicing sector consumes 74 per cent of HCFCs in Libya. The Government believes that activities related to the recovery, reclamation and reuse of HCFC-22 are important to reduce imports of virgin refrigerant.

35. The overall cost of stage I of the HPMP has been agreed to US $1,908,843 to phase out 265.19 mt (26.51 ODP tonnes) with an overall cost-effectiveness of US $7.19/kg (Table 8).

Table 8: Revised cost for stage I HPMP for Libya (As agreed)

Description	Cost (US $)		HCFC	HCFC phase-out	
	Agreed	Co-funding		mt	ODP tonnes
Conversion of foam enterprises					
Alyem Engineering, Tripoli	715,137		HCFC-141b	95.83	10.54
Al-Najah Company, Tripoli	714,967			105.37	11.59
Al-Amal Alkhadar Company, Tripoli	140,523	172,200		15.53	1.71
Technical assistance for three enterprises	120,000				
Subtotal foam sector	1,690,627	172,200		216.73	23.84

Description	Cost (US $)		HCFC	HCFC phase-out	
	Agreed	Co-funding		mt	ODP tonnes
Non-investment components			HCFC-22	48.49	2.67
Training 30 customs officers and law enforcement personnel	10,000				
Training of 100 technicians on good servicing practice, refrigerant recovery and reuse, certification programme	15,000				
Development of guidelines for refrigerants reclamation	15,000				
Procurement of equipment for reclamation center	174,216				
Project management unit	4,000				
Sub-total servicing	218,216				
Total	**1,908,843**	**172,200**		**265.22**	**26.51**

Implementation modality

36. With regard to the implementation modality, funds transfer and the impact that the security situation could have on the implementation of stage I of the HPMP, UNIDO advised that the implementation of the investment project would mainly be carried out by UNIDO, equipment will be purchased and delivered to Libya by UNIDO and transferred to the three foam enterprises. A national consultant has been identified to assist in the conversion of the foam enterprises. The fully functional NOU will implement the activities in the servicing sector. Individual contracts for training programmes will be initiated from UNIDO Headquarters.

Impact on the climate

37. The climate impact of the conversion of the three foam enterprises is calculated as 157,129 tonnes of CO_2 equivalent based on the phase-out of HCFC-141b as shown in Table 9 below.

Table 9: Climate impact of the conversion of three foam enterprises

Enterprise	HCFC-141b to be phased out (mt)	GWP (tCO2eq)		Difference
		HCFC-141b	Cyclopentane	
Alyem Engineering, Tripoli	95.83	725	0	69,477
Al-Najah Company, Tripoli	105.37	725	0	76,393
Al-Amal Alkhadar Company, Tripoli	15.53	725	0	11,259
Total	**216.73**			**157,129**

38. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogramme of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO_2-equivalent tonnes. It is difficult to provide reliable data on climate impact since HCFC alternatives that will be used are not clearly identified at this stage. At this time, the Secretariat is not in a position to quantitatively estimate the impact of the HPMP on the climate. The impact might be established through an assessment of implementation reports by, *inter alia,* comparing the levels of refrigerants used annually from the beginning of HPMP implementation, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-based equipment being retrofitted.

Co-financing

39. In response to decision 54/39(h)[1], UNIDO informed that one enterprise, Al-Amal, will contribute US $172,200 for conversion to low-global warming potential cyclopentane. Other co-financing options will be further explored during the implementation of stage I of the HPMP.

2015-2017 business plan of the Multilateral Fund

40. UNIDO is requesting US $1,908,834 plus agency support costs for implementation of stage I of the HPMP. The total value requested for the period of US $1,838,207 including support costs is above the total amount of US$1,696,000 in the business plan.

Draft Agreement

41. The Executive Committee may wish to note that it had not approved funding for any Article 5 country that was in non-compliance with the control measures under the Montreal Protocol at the time of the submission of the request.

42. Based on the consumption of 144 ODP tonnes (2013) and 122.4 ODP tonnes (2014) reported by the Government of Libya under Article 7, which exceeded the HCFC baseline for compliance, it appears that the country is in non-compliance with its obligations under the Montreal Protocol. In light of this situation, the Secretariat and UNIDO considered several options so that Libya would be in compliance by 2016 (e.g., stringent import quotas, import of non-HCFC-141b pre-blended polyols, import of recycled HCFC-22, and recovery and reuse of HCFC-22). However, under the circumstances prevailing in the country, implementation of those options was not feasible within the time available.

43. At their 27th \Meeting (Dubai, 1- 5 November 2015), the Parties to the Montreal Protocol will consider the action plan for phasing out HCFCs submitted by the Government of Libya with time-specific benchmarks to return to compliance in 2018.

44. The draft Agreement between the Government of Libya and the Executive Committee for the phase-out of HCFCs in stage I of the HPMP is pending the outcome of discussion of the Parties to the Montreal Protocol with regard to the status of compliance of Libya, and will be presented prior to the 75th meeting.

RECOMMENDATION

45. Pending.

[1] Potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth Meeting of the Parties.