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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-eighth Meeting
Montreal, 3-7 December 2012

PROJECT PROPOSAL: SYRIAN ARAB REPUBLIC

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

Phase-out

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

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

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Syrian Arab Republic

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

(II) LATEST ARTICLE 7 DATA (Annex C Group l)	Year: 2011	176.6 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2010
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124									
HCFC-141b		25.9		38.5					64.4
HCFC-141b in imported pre-blended polyols		9.9							9.9
HCFC-142b					7.9				7.9
HCFC-22				34.1	16.5				50.6

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	135	Starting point for sustained aggregate reductions:	138.28
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.0	Remaining:	100.81

(V) BUSINESS PLAN		2012	2013	2014	2015	Total
UNEP	ODS phase-out (ODP tonnes)			27.6		27.6
	Funding (US $)	75,661	8,730	34,921	5,541	124,853
UNIDO	ODS phase-out (ODP tonnes)	2.7	1.8	2.0	1.4	7.8
	Funding (US $)	160,805	99,244	111,757	111,042	482,847

(VI) PROJECT DATA			2012	2013	2014	2015	2016	2017	2018	Total
Montreal Protocol consumption limits			n/a	135.0	135.0	121.5	121.5	121.5	121.5	n/a
Maximum allowable consumption (ODP tonnes)			n/a	135.0	135.0	121.5	121.5	121.5	101.3	n/a
Project costs requested in principle(US $)	UNIDO	Project costs	0	210,960	79,500	403,040	0	0	36,500	730,000
		Support costs	0	14,767	5,565	28,213	0	0	2,555	51,100
	UNEP	Project costs	0	105,050	54,520	220,430	0	0	20,000	400,000
		Support costs	0	13,657	7,088	28,656	0	0	2,600	52,001
Total project costs requested in principle (US $)			0	316,010	134,020	623,470	0	0	56,500	1,130,000
Total support costs requested in principle (US $)			0	28,424	12,653	56,869	0	0	5,155	103,101
Total funds requested in principle (US $)			0	344,434	146,673	680,339	0	0	61,655	1,233,101

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS
Syrian Arab Republic - continuation

(VII) Request for funding for the first tranche (2012)		
Agency	**Funds requested (US $)**	**Support costs (US $)**
UNIDO	0	0
UNEP	0	0

Funding request:	None
Secretariat's recommendation:	For individual consideration

PROJECT DESCRIPTION

1. On behalf of the Government of the Syrian Arab Republic UNIDO, as the lead implementing agency, has submitted to the 68th meeting of the Executive Committee stage I of the HCFC phase-out management plan (HPMP) at a total cost of US $1,235,000 plus agency support costs of US $116,450, as originally submitted, to implement activities that will enable the country to comply with the Montreal Protocol's 10 per cent reduction in HCFC consumption by 2015. The first tranche for stage I being requested at this meeting, as originally submitted, amounts to US $635,000 plus agency support costs of US $44,450 for UNIDO and US $315,000 plus agency support costs of US $40,950 for UNEP as co-implementing agency. Subsequently, the request for the first tranche was withdrawn.

Background

2. The Syrian Arab Republic, with a total population of about 22 million inhabitants acceded to the Montreal Protocol in 1989, and has ratified all amendments to the Montreal Protocol including, in May 2012, the Beijing Amendment. Since March 2011, demonstrations and unrest took place in nearly every city in the country, but the size and intensity of protests have fluctuated over time.

ODS policy and regulatory framework

3. A National Ozone Unit was established in 2004 within the Ministry of State for Environmental Affairs by a ministerial decree to manage and co-ordinate all activities related to ozone layer protection and implementation of the Montreal Protocol. Since 1996, the Government of the Syrian Arab Republic has enacted several laws and regulations to control the import/export and use of ODS, including the establishment of an ODS licensing system. Import of ODS-based products and equipment is prohibited since 1996, the import of halons since 1998. A licensing system for import of ODS has been in operation since 1999. Since 2000, it is prohibited to establish production capacity for CFC-based products.

HCFC consumption and sector distribution

4. All of the HCFCs used in the Syrian Arab Republic are imported. The country has no HCFC production, and exports are small and occasional. Between 2006 and 2011, HCFC consumption increased by, on average, 30.9 per cent per year. The growth occurred mainly in the consumption of HCFC-141b, with a 10-fold increase between 2006 and 2011. Between 2006 and 2010, the HCFC-22 consumption increased moderately with, on average, 4.4 per cent per year; however, between 2010 and 2011 the consumption of HCFC-22 has doubled. In addition to the reported consumption under Article 7, enterprises in the Syrian Arab Republic used HCFC-141b contained in imported pre-blended polyols.

5. The HCFC baseline for compliance is 135.0 ODP tonnes calculated based on the 2009 consumption of 147.2 ODP tonnes and the 2010 consumption of 122.8 ODP tonnes. The HCFC consumption between 2006 and 2011 as well as data on the use of HCFC-141b contained in imported pre-blended polyols by eligible enterprises is shown in Table 1.

Table 1: HCFC consumption reported under Article 7 of the Montreal Protocol and use of HCFC-141b contained in imported pre-blended polyols

Year	2006	2007	2008	2009	2010	2011	Baseline
Metric tonnes							
HCFC-22	774.3	702.7	977.8	1,279.9	920.0	1,835.0	1,100.0
HCFC-123	1.2	2.1	1.2	0.0	0.0	1.5	0.0
HCFC-141b	55.6	59.0	371.3	646.1	585.0	594.0	615.6
HCFC-142b	1.5	1.8	33.6	88.6	121.2	158.0	104.9
Total	832.7	765.6	1,383.8	2,014.6	1,626.2	2,588.5	1,820.4
HCFC-141b contained in imported pre-blended polyols*	unknown	unknown	unknown	88.6	90.0	unknown	29.5
ODP tonnes							
HCFC-22	42.59	38.65	53.78	70.39	50.60	100.93	60.50
HCFC-123	0.02	0.04	0.02	0.00	0.00	0.03	0.00
HCFC-141b	6.12	6.49	40.84	71.07	64.35	65.34	67.71
HCFC-142b	0.10	0.12	2.18	5.76	7.87	10.27	6.82
Total	48.83	45.30	96.82	147.22	122.82	176.57	135.02
HCFC-141b contained in imported pre-blended polyols*	unknown	unknown	unknown	9.75	9.90	unknown	3.25

* Not reported under Article 7; Baseline calculated as average of the years 2007 to 2009

6. HCFC-22 and HCFC-141b represent about 95 per cent of total HCFC consumption in the country; the remaining is the use of HCFC-142b in refrigerant blends for the servicing sector. Almost 80 per cent of the total HCFC consumption is used in the manufacturing sector. HCFC-22 used in manufacturing of refrigeration and air-conditioning (AC) equipment accounts for 27 per cent of total HCFC consumption and HCFC-141b used in manufacturing polyurethane (PU) foams represents 50 per cent. HCFC-142b in refrigerant blends is not only used to service existing refrigeration equipment previously using CFC-12, but also in manufacturing new equipment. The refrigeration and air-conditioning servicing sector accounts for 23 per cent of total HCFC consumption. The sectoral distribution of HCFCs used between 2009 and 2010 is presented in Table 2.

Table 2: Sectoral distribution by type of HCFC used

Sector	Substance	2009	2010	Baseline	Share
metric tonnes					
Foam sector	HCFC-141b	646.1	585.0	615.6	33.8%
Refrigeration and AC manufacturing sector	HCFC-22	779.9	556.0	668.0	36.7%
	HCFC-142b	44.3	60.6	52.5	2.9%
Refrigeration service sector	HCFC-22	500.0	364.0	432.0	23.7%
	HCFC-142b	44.3	60.6	52.5	2.9%
Total		2,014.6	1,626.2	1,820.4	100.0%
ODP tonnes					
Foam sector	HCFC-141b	71.07	64.35	67.71	50.1%
Refrigeration and AC manufacturing sector	HCFC-22	42.89	30.58	36.74	27.2%
	HCFC-142b	2.88	3.94	3.41	2.5%
Refrigeration service sector	HCFC-22	27.50	20.02	23.76	17.6%
	HCFC-142b	2.88	3.94	3.41	2.5%
Total		147.22	122.83	135.03	100.0%

Foam sector

7. The PU foam sector in the Syrian Arab Republic is the manufacturing sector with the highest HCFC use, measured in ODP tonnes. The country imports and exports HCFC-141b contained in pre-blended polyols, which were not reported under Article 7. Table 3 provides for the year 2010 as the last year where detailed data is available an overview of the amounts of HCFC-141b imported and exported, as well as of the manufacturing of pre-blended polyols within the country.

Table 3: Overview of imported and exported HCFC-141b and its use in pre-blended polyols for the year 2010

HCFC-141b (mt) in 2010	Import	Pre-blended in country	Used	Export
Bulk	585.0	508.0	77.0	0.0
Contained in pre-blended polyols	90.0		442.0	156.0
Total	675.0	n/a	519.0	156.0

8. The foam sector comprises of 39 medium and large enterprises as well as multiple small manufacturers; of the medium and large manufacturers, four produce sandwich panels, nine produce insulated boxes for trucks, 19 are domestic and commercial refrigerator / refrigeration equipment manufacturers, and seven belong to none of the above categories. The four largest domestic refrigerator manufacturers already replaced the use of HCFC-141b as a foam-blowing agent by converting to cyclopentane; so did the largest manufacturer of sandwich panels. One more enterprise with two separate facilities is currently converting from HCFC-141b to cyclopentane as part of a stand-alone project funded by the Multilateral Fund (Al Hafez). Further information can be found in Table 4, showing the HCFC-141b baseline use as well as the latest year for which complete data is available, 2010.

Table 4: Distribution of HCFC-141b use in the foam manufacturing sector

Type	No. of enterprises	Baseline use (mt)*	2010 use (mt)
Enterprises fully eligible, no previous conversion	15	196.6	208.3
Large/medium facilities previously funded, using locally blended polyols	4	173.0	175.0
Small facilities using locally blended polyols	3	residual consumption only / full assessment currently impossible	
Small facilities previously funded, using locally blended polyols	8		
Enterprises using only imported pre-blended polyols (2007/2009 ave.)	1	0.5	2.0
Enterprises previously funded using only imported pre-blended polyols (2007/2009 ave.)	1	10.0	28.1
Facilities currently being converted	2	76.9	82.0
Facilities using technology other than HCFC-141b	5	n/a	
Total	39	457.0	495.4

*Baseline use is defined as 2009/2010 for enterprises using nationally pre-blended polyols, and 2007-2009 for the remainder

9. Foam manufacturers almost exclusively use HCFC-141b in pre-blended polyols, and purchase those mixtures predominantly from the two systems houses in the country. One of them, Munir Al Hakim System House Co. (Al Hakim), is exclusively operating as a systems house, and sells pre-blended polyols

exclusively within the country. The other system house, Balbaaki, is also manufacturing rigid foam, and this manufacturing has been previously converted from CFC-11 to HCFC-141b. Balbaaki is distributing about half of the pre-blended polyols manufactured in its facilities and not used in its own operations in the country; the other half is being exported.

Refrigeration and air-conditioning manufacturing

10. HCFC-22 consumption in the refrigeration and air-conditioning manufacturing sector has a baseline of 720.4 mt (40.15 ODP tonnes), representing 29.7 per cent of the overall baseline, the second largest contributor to the HCFC consumption of the Syrian Arab Republic in 2010. The Executive Committee had approved at its 62nd meeting the project for the air-conditioning manufacturer Al Hafez, phasing out already 90 mt (5.0 ODP tonnes) of HCFC-22 use in this sector. The HPMP included a description of the manufacturing sector, indicating four manufacturers producing medium-size air conditioning units and two residential air conditioners. Because several of those belong to the Al Hafez Group, only two enterprises producing medium-sized air conditioners with a combined consumption of 35 mt of HCFC-22 and one enterprise producing residential air-conditioning units with a consumption of 100 mt have not yet received Multilateral Fund assistance. In the commercial refrigeration sector, six enterprises manufacture equipment to produce ice blocks, another eight are specialised in ice banks, six are producing humidifiers and five equipment for food processing. For stage I of the HPMP, no funding is being requested for the refrigeration and air conditioning manufacturing sector.

Refrigeration and air-conditioning servicing sector

11. The servicing sector consumes 20.1 per cent of the baseline consumption. Consumption in the sector is divided between use of HCFC-22 as a pure substance (361.6 mt, 19.89 ODP tonnes) as well as HCFC-22 with HCFC-142b in the mixture R-406A (128.0 mt, 7.29 ODP tonnes). The pure HCFC-22 is mostly used for the servicing of different air-conditioning equipment and chillers, while R-406A is related to the servicing of CFC-12 equipment, equipment containing HFC-134a and equipment built for the use of R-406A.

12. Servicing is provided by an estimated 7,000 technicians. The current maintenance practice for air-conditioning and commercial refrigeration equipment leads to a substantially increased refrigerant use for each repair of 200 to 300 per cent of the nominal charge, since in addition to charging the refrigerant is also used for cleaning, flushing, functional tests, and is also over-charged. Many repair shops have no leak detectors. There is limited recovery of refrigerant. The skill level for the use of non-flammable HFC alternatives is also not consistent, and no skills exist for the handling of flammable substances.

Forecast of future HCFC consumption

13. The Government of the Syrian Arab Republic did not provide a business-as-usual scenario for the future use of HCFCs in the country since under the current circumstances a meaningful forecast is not possible.

HCFC phase-out strategy

14. Stage I of the HPMP as submitted will reduce HCFC consumption by 50.8 ODP tonnes, equivalent to 37.6 per cent of the baseline, composed of 12.9 ODP tonnes in consumption in previously funded phase-out of both HCFC-22 and HCFC-141b at the Al Hafez Group, a further 37.9 ODP tonnes through conversion of a system house and its associated customers. The Secretariat noted that this should be amended by a further 4.9 ODP tonnes calculated on the basis of the funding requested for the servicing sector and associated activities. Conversion of enterprises using HCFC-141b contained in imported pre-blended polyols did not appear to be included in the plan, as submitted. HPMP stage I addresses the HCFC-141b use of one system house, Al Hakim, and of its customers, and undertakes some activities in the servicing sector.

15. Stage I of the HPMP includes the following components:

(a) Investment project for the system house Munir Al Hakim System House Co., located in Aleppo, will be converted during stage I to methyl formate (MF);

(b) Technical assistance activities to support the conversion to alternative technologies for an undefined number of very small consuming enterprises being customers of the systems house, with an aggregated consumption of 300 mt of HCFC-141b;

(c) In the refrigeration and air-conditioning servicing sector, a training programme for 300 technicians and a pilot scheme for certification of technicians; and

(d) Policy, regulatory and other non-investment activities will be carried out, such as a review and update of the national ODS legislation and the development of a legislation banning the establishment of new, HCFC-based manufacturing facilities in the country, supply of refrigerant identification sets to Customs authorities, training 200 Customs officers, the development and implementation of an e-licensing system and a review of national standards relating to HCFC and introduction and/or promotion of standards for equipment and installations operating with hydrocarbons and ammonia.

Investment project foam sector

16. The Al Hakim system house caters to smaller users of HCFC-141b, leading to a strategy focussing first on small users before addressing large users. The project will address 300 mt of HCFC-141b, constituting 24.4 per cent of the baseline.

Selection of technology

17. The technical and economic aspects of all of the available technologies for the replacement of HCFC-141b as a foam-blowing agent were discussed with the systems house and enterprises. The selection of technology was based on the assumed technical ability of the clients to absorb different technologies and on the operating cost, being critical to achieve sustainability when implementing at small enterprises with a very cost sensitive economic environment. Based on these considerations, MF technology will be introduced by Al Hakim.

Incremental costs for conversion in the foam sector

18. Incremental capital costs (ICC) of, in total, US $485,000 are requested for the conversion of the systems house to MF technology. These costs relate to a bulk storage and handling system (US $80,000), two blenders in a closed-system premixing station (US $180,000), pumps (US $5,000), product piping (US $50,000), a nitrogen dispenser (US $20,000), safety equipment (US $85,000), pycnometer, refractometer, k-factor tester and other required equipment (US $30,000) plus 10 per cent for contingency. Incremental operating costs (IOC) are not requested.

Technical assistance component

19. As mentioned above, a technical assistance programme requested at a cost of US $100,000 is included in stage I to support small, non-specified enterprises with a consumption of 300 mt in their efforts to adapt their operations to MF technology.

20. The work of the Project Management Unit (PMU) will include assisting in the implementation and monitoring of the technical assistance programme, which will include activities such as undertaking awareness activities to outreach HCFC-consuming enterprises and consumers to inform them on the need to protect the ozone layer and climate and advise on the potential impact of the Montreal Protocol

phase-out schedule for HCFCs on future supply of HCFCs. The total costs associated with activities under the PMU were requested at a level of US $210,000. Costs for the verification of the consumption for 2013 and 2014 were provided separately at a level of US $40,000.

Overall cost of stage I of the HPMP

21. The total cost of stage I of the HPMP to meet the Montreal Protocol's HCFC compliance targets up to and including the 10 per cent reduction by 2015 has been estimated at US $1,235,000. The overall cost of stage I of the HPMP for the Syrian Arab Republic is presented in below.

Table 5: Cost of stage I of the HPMP

Activities /project	Agency	Substance	Phase-out		Costs (US $)
			mt	ODP t	
Policy and legislation support					
Review and update the national ODS legislation	UNEP	HCFC-22	4.4	0.24	20,000
9 refrigerant identifiers	UNEP	HCFC-22	4.4	0.24	20,000
Training programme for Customs et al. to enforce the ODS legislation and prevent illegal trade for 200 officers	UNEP	HCFC-22	13.3	0.73	60,000
Development and implementation of e-licensing system	UNEP	HCFC-22	13.3	0.73	60,000
Review of national standards and codes	UNEP	HCFC-22	6.7	0.37	30,000
Sub-total	n/a	HCFC-22	42.1	2.31	190,000
Awareness					
Specialized technical awareness programme					
Promotion activity for decision makers in refrigeration and air-conditioning system selection to promote low GWP refrigerants	UNEP	HCFC-22	13.3	0.73	60,000
Workshops for decision makers in refrigeration and air conditioning system selection to promote low GWP refrigerants	UNEP	HCFC-22	11.1	0.61	50,000
Sub-total	n/a	HCFC-22	24.4	1.34	110,000
Foam sector					
System house conversion (Munir Al Hakim System House Co.)	UNIDO	HCFC-141b	300.0	33.00	485,000
Technical assistance programme for foam enterprises	UNIDO	HCFC-141b			100,000
Sub-total	UNIDO	HCFC-141b	300.0	33.00	585,000
Servicing sector					
Training of 300 technicians and related preparatory and follow up activities	UNEP	HCFC-22	22.2	1.22	100,000
Project management					
Project Management Unit	UNIDO	n/a	n/a	n/a	150,000
	UNEP	n/a	n/a	n/a	60,000
Verification cost	UNEP	n/a	n/a	n/a	40,000
Sub-total	UNIDO/UNEP	n/a	n/a	n/a	250,000
Total funding			388.7	37.87	1,235,000
Funding to UNIDO			300.0	33.00	735,000
Funding to UNEP			88.7	4.87	500,000

Future stages of the HPMP

22. Stage II, to commence in 2015, will consist of a refrigeration and air conditioning manufacturing sector plan, activities to complete the phase-out in the foam sector, and more activities in the refrigeration servicing sector. The submission did not contain an estimate of the costs for stage II.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

23. The Secretariat reviewed the HPMP for the Syrian Arab Republic in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding HCFC phase-out in the consumption sector agreed at the 60th meeting (decision 60/44), subsequent decisions on HPMPs and the 2012-2014 business plan of the Multilateral Fund. The Secretariat noted that UNIDO had received previously funding for the preparation of activities for phase-out in the refrigeration and air-conditioning manufacturing sectors, but that the information included in the HPMP regarding those sectors was insufficient.

Implementation of the NPP

24. The Secretariat requested a detailed overview over the achievements of the national CFC phase-out plan (NPP) for the Syrian Arab Republic, originally not contained in the submission. The NPP was approved in December 2006 at the 49th meeting of Executive Committee aiming to phase out the remaining CFC consumption in the manufacturing and servicing sectors, through the provision of a combination of technical assistance, training and capacity building, awareness raising, as well as investment components to enhance the recovery and recycling (R&R) scheme, and to ensure the sustainability of the CFC phase-out programme through integration into national policies and strengthening of the regulatory and institutional framework. All three tranches with a total value of US $754,050 plus agency support costs have been approved, the final one at the 58th meeting in 2009. The NPP achieved phase-out of residual CFC consumption in the solvent sector. Two train-the-trainers courses for the refrigeration servicing sector were organized for teachers in vocational schools, and training equipment was provided for participating schools. Two hundred ninety recovery sets and 20 R&R machines for the servicing sector as well as 12 refrigerant identifiers for Customs were provided. The disbursement for the third tranche stands at the time of writing of this document at US $23,606, with US $130,444 of funding remaining; the other tranches have been completely disbursed.

Licensing and quota system

25. The Executive Committee, in its decision 63/17, requested that for all submissions of tranches of multi-year agreements from the 68th meeting onward, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and, where applicable, production exports if in place and that the system is capable of ensuring the country's compliance with the Montreal Protocol HCFC phase-out schedule for the duration of this agreement. The submission was not accompanied by such a confirmation, and none was received before the documentation was finalised. The Secretariat consulted a previous verification report that indicated that for CFCs a functioning licensing and quota system had been in place. Since non-commercial imports for special uses such as military were not mentioned in the verification, and to ensure that the situation for an HCFC licence and quota system is similar to that for CFCs, the Secretariat requested further information. UNEP advised that according to its experience and confirmation from the country, the current licensing and quota system is in line with the requirements described in decision 63/17, with regard to its full coverage of all ODSs including HCFCs as well as blends and to its application to all kinds of trade and traders, including imports by end users and military. No imports can take place without permission from the National Ozone Unit (NOU). However, the system requires additional strengthening to ensure

reduced time lag in communications between the NOU and Customs as well as other stakeholders to minimize possibilities for illegal trade.

Policy activities during implementation of stage I

26. Based on information contained in the HPMP, future policy activities of the Government of the Syrian Arab Republic were discussed further. The country confirms that it will prepare the legal basis to ban imports of HCFC-141b contained in pre-blended polyols, which it commits to undertake within three years after funding is provided for the phase-out of the remaining eligible use of HCFC-141b contained in imported pre-blended polyols. Currently new manufacturing capacity can be installed for products using or containing HCFCs, while the same has been banned previously for CFCs. Such a ban can be introduced into the regulatory framework within one year after the implementation of the HPMP commences, and be enacted within another 12 months. The preparation of regulations to ban the import and the national manufacturing of refrigeration and air-conditioning products using HCFCs are planned to be completed within three years after the implementation commences, however, their enactment is also depending on receiving support for conversion of refrigeration and air-conditioning manufacturers during stage II of the HPMP.

Starting point for aggregate reduction in HCFC consumption

27. The Government of the Syrian Arab Republic had agreed prior to the 62nd meeting to establish as its starting point for sustained aggregate reduction in HCFC consumption its baseline of 135.0 ODP tonnes, calculated using actual consumption of 147.2 ODP tonnes and 122.8 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol. In addition, eligible enterprises in the country used 88.6 mt of HCFC-141b contained in imported pre-blended polyols in 2009, while the use for 2007 and 2008 could not be established. On this basis, the starting point is amended by the 2007- 2009 average use of HCFC-141b in imported pre-blended polyols of 29.5 mt (3.25 ODP tonnes).

Implementation modality

28. At the time of writing this document, project implementation in the country is almost not possible, in particular where it is necessary to verify baseline and consumption information, come to agreements with enterprises that have not been visited before, or other cases where travel to and in the country is needed. Critical supervisory functions of the implementing agency is necessary at certain milestones of project implementation, such as attesting project completion etc., or visits by external technical experts that currently cannot be carried out. However, activities are progressing in the project "Phase-out of HCFC-22 and HCFC-141b from the manufacture of unitary air-conditioning equipment and rigid PU insulation panels at Al Hafez Group", albeit under large difficulties. The fact that implementation could continue is related to the nature of the civil unrest in the country, which displays a changing geographical focus and the apparent general tendency of all the stakeholders to let some economic activity continue with limited disturbance. It was for example possible during the year 2012 to arrange meetings between UNIDO and important stakeholders in Beirut, and to use different ports for import of equipment into the country, in combination with the expertise of the beneficiary enterprises to ensure safe passage of the goods to the intended location. Similarly, travel within the country, e.g. for preparation of the HPMP, had been possible for nationals if the areas of acute insecurity could be avoided. While arrangements had to be flexible in terms of timing of visits, etc., visits as such were by no means impossible. UNIDO has recently had experience with start-up of implementation in countries shortly after civil unrest, such as, e.g. Libya. It appears therefore sensible to establish eligibility and an approach, and to approve the associated funding in principle at this time. The actual tranches, including the first tranche, could be agreed on only at a later date when implementation appears feasible, the quota system is enacted, and when the continued need for support by the beneficiary enterprises has been established. UNIDO advised that the Government of the Syrian Arab Republic agreed with this approach.

29. UNIDO advised that during the past 18 months, it had been unable to travel to the country to meet and discuss with stakeholders due to the unfavourable security conditions. As an alternative to missions to the country, UNIDO has organized meetings in Beirut, based on the following factors:

(a) Strong commercial links existing between both countries: many Syrian enterprises (such as the Al Hafez Group or Al Hakim) have commercial offices and staff in Beirut;

(b) Proximity: Beirut is two hours driving from Damascus; and

(c) Beirut is also a preferable location for trying to arrange meetings with the National Ozone Unit of the Syrian Arab Republic, although this was not possible in previous UNIDO missions to Beirut due to other limitations.

30. UNIDO further advised that the implementing agencies have managed to utilize to the maximum all available means and tools to communicate with the country to obtain data and information, exchange views and agree on the proposed policies, strategies and activities. The agencies' previous working experience in the country helped a lot in understanding the regulatory and institutional set up as well as in identifying the country's needs and challenges. It also helped in advancing the project preparation through the contact persons that the implementing agencies have within the Government and industry. The agencies intend to use a similar approach for initiating some necessary activities until they are able to visit the country.

31. For delivery of equipment, two options have been discussed with Syrian enterprises:

(a) Delivery to the ports of Latakia or Tartous, since operations of enterprises in these ports have not been disrupted; and

(b) Delivery to Beirut, with transport to facilities in the Syrian Arab Republic arranged via UN or through a local transport provider.

32. UNIDO has raised the question of delivery to enterprises in the country with Al Hafez (project approved in advance of the HPMP) and Al Hakim (systems house in stage I of the HPMP proposal) in relation to the concern that potential suppliers could be forced not to present an offer due to their home country's embargo. The two enterprises have replied that they continue to work with their existing providers and have yet to experience a change.

33. UNIDO pointed further out that both UNEP and UNIDO have positive experience in implementing similar complex activities in Iraq. When the NPP was approved for Iraq, the two agencies faced the situation that the country had no previous experience with Montreal Protocol implementation. The implementation in Iraq is progressing well although in the opinion of the agencies the security conditions did not show any significant improvement between the approval of the HPMP and to date, and despite staff members of both agencies continuing to be unable to travel to Baghdad. It is believed that for the Syrian Arab Republic, implementation will be easier as the country has a long working experience with the Montreal Protocol.

Structure and eligibility of the foam manufacturing sector

34. The Executive Committee, in decision 61/19, had requested UNIDO to include in a proposal for a project on behalf of the Syrian Arab Republic at the Al Hafez Group detailed information on the HCFC-141b foam sector, to allow assessment whether the conditions in decision 54/39(d) for HCFC phase-out investment project in advance of the HPMP had been met. UNIDO had already submitted what was seen as comprehensive information with their request for funding of this project before the 62nd meeting. UNIDO had originally submitted the HPMP to the 65th meeting, but withdrew it based on significant concerns of the Secretariat related to new foam sector data inconsistencies. Since then,

UNIDO has constantly and with great efforts worked with its consultants in the country, Government, industry, UNEP and the Secretariat to improve the quality of information despite the continuously deteriorating security situation in the country. As a result, the submission to the 68th meeting contained sufficient information to carry out a detailed assessment of the foam sector. The information proved to be a consistent and credible qualitative and quantitative description of the foam sector in the country in sufficient detail, and thus enabled the review of the HPMP in line with the guidelines of the Executive Committee. The analysis of UNIDO's information indicated that data on imports of HCFC-141b, HCFC-141b in imported pre-blended polyols, export of HCFC-141b contained in pre-blended polyols and use of HCFC-141b on an enterprise-by-enterprise basis are closely matching, with very minor discrepancies of less than 5 per cent between bottom-up (user) and top-down (import/export) data.

35. The Secretariat requested a sufficiently transparent analysis of the foam sector in particular because the consumption of HCFC-141b had been increasing substantially between 2007 (59.0 mt) and 2009 (646.1 mt). A closer look at Article 7 data reveals a general upward trend, but high yearly fluctuations. Table 6 shows that in 2005, the consumption of HCFC-141b had been already 236.9 mt, only to decline in 2006 to less than one quarter of the previous year's figure.

Table 6: Consumption of HCFC-141b and increase between 2005 and 2011 (Article 7)

Year	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Mt	236.9	55.6	59.0	371.3	646.1	585.0	594.0
ODP t	26.1	6.1	6.5	40.8	71.1	64.4	65.3
Annual change	n/a	-77%	6%	529%	74%	-9%	2%
Mean annual increase	n/a	16.51%					

36. The Secretariat was concerned regarding the eligibility of enterprises for support, since an obvious assumption would be that the increased consumption of HCFC-141b would be linked to increases in capacity. UNIDO informed that the substantial increase in HCFC-141b consumption is related to the change of the market from the import of HCFC-141b contained in pre-blended polyols to the growth of system houses blending in the country. The foam manufacturers simply switched over time from HCFC-141b contained in imported pre-blended polyols to nationally-blended polyols containing HCFC-141b, without visibly increasing their capacity in the process, but increasing accordingly the consumption. The two system houses have been active in the Syrian Arab Republic for decades, providing polyurethane products (coatings, etc.), selling imported pre-blended polyols and, in one case, manufacturing their own. The steps to blend HCFC-141b and polyols themselves instead of importing were relatively minor. Al Hakim, which is included for support, submitted detailed capacity installation data, demonstrating that only eligible capacity would be converted with Multilateral Fund assistance. The Secretariat also looked at the alternative possibility to implement without support from a system house; using common cost templates, an enterprise-by-enterprise approach would have increased cost by more than 50 per cent for only addressing the small foam manufacturers and without having a solution for very small consuming (micro) manufacturers.

37. In analysing the foam sector data, the principle eligibility for support is shown in Table 7 below, with eligibility both for bulk imports and imported pre-blended polyols.

Table 7: Structure of eligible HCFC-141b use in the foam sector

Baseline use of HCFC-141b					
HCFC-141b (mt)	Import	Pre-blended in country	Used	Export	Eligible
Bulk	615.6	519.0	96.6	0.0	432.6
Contained in pre-blended polyols	29.5*		365.5	183.0	29.5
Total	645.1	n/a	462.1	183.0	462.1
Previously funded conversion of Al Hafez**					-76.9
Remaining eligibility bulk					355.7
Remaining eligibility contained in imported pre-blended polyols					29.5

*Average 2007-2009
**Average 2009/2010 higher than phase-out due to growth 2009 to 2010 of 14%

38. It should be noted that the use of HCFC-141b contained in imported pre-blended polyols had been substantially larger than the baseline data suggests; however, due to use which could not be verified, and the inability to obtain data for 2007 and 2008, the average of the 2007-2009 use is not representative for the actual imports and use of HCFC-141b contained in pre-blended polyols.

39. In Table 8, the sector characteristics are presented. In this context, enterprises with less than 2 mt annual use as well as those where use fluctuated significantly with a lower limit below 2 mt are considered "Micro enterprises", from 2 mt to 20 mt small enterprises, from above 20 mt to 40 mt medium enterprises, and from 50 mt onwards large enterprises. Enterprises are classified as using imported pre-blended polyols when they have imported such polyols directly, or are known to purchase from dealers that are exclusively selling imported pre-blended polyols. However, a significant number of the small foam manufacturers purchase their polyols from local traders that often purchase their supplies from system houses, but in some cases also from foreign sources. These foam manufacturers are classified in the following table as using locally-blended polyols.

Table 8: Structure of the foam manufacturing sector in the last year for which complete data was available (2010)

Type	No. of enterprises*	2010 use
Small and medium users, fully eligible, no previous funding	15	208.3
Large and medium scale users previously funded, using locally-blended polyols	4	175.0
Small users using locally-blended polyols	3	residual consumption only / full assessment currently impossible
Small and micro enterprises previously funded, using locally-blended polyols	8	0.0
Small enterprises using only imported pre-blended polyols (2007/2009 ave.)	1	2.0
Enterprises previously funded using exclusively imported pre-blended polyols	1	28.1
Facilities currently being converted	2	82.0
Enterprises using technology other than HCFC-141b	5	n/a
Other micro enterprises	Unknown	48.0
Total	39	543.4

* No. of small/medium/large enterprises; micro enterprises not included

Foam sector activities and costs

40. The Secretariat queried the decision of UNIDO to address the low consumption end of the sector first. UNIDO advised that this strategy was related to the fact that one of the two system houses, being both a major consumer of HCFC-141b for foaming and at the same time a supplier to the larger foam manufacturers, was not willing to participate at this point in time in a phase-out of HCFC-141b. In addition, the foam manufacturing operation of the Al Hakim system house as well as a number of its larger clients had received funding for the conversion of CFC-11 to HCFC-141b. All of the enterprises, which had previously received funding have been identified, but are not part of stage I; the country will decide, before submitting stage II, whether any and which of these enterprises will be included in stage II. The co-operation with Al Hakim, focussing on small scale users, allowed a coherent phase-out strategy. Finally, the support foreseen could probably be implemented even under today's security situation, and is structured in a way which makes implementation possible even under unfavourable conditions.

41. The funding for the Al Hakim system house is adjusted to take into account capacity increases in the year 2011, which are not eligible. Al Tabrid Al Asri as the only medium-sized manufacturer participating in the project, consuming 24 mt of HCFC-141b, will receive US $25,000 for adapting the equipment for the use of MF, for trial and testing and technical support. The technical assistance for the small and micro users of HCFC-141b will focus mainly on technology and information transfer and technical support. The country agreed that there would be no more eligibility for the conversion of foam manufacturers using less than 20 mt of HCFC-141b, including refrigeration/air-conditioning enterprises producing also foam product or insulating with foam. It was also agreed that the eligibility for foam enterprises using above 20 mt of HCFC-141b would be limited to those identified in a list provided by UNIDO. Table 9 provides an overview of the funding.

Table 9: Funding for the foam sector

Enterprise/Activity	Cost (US $)	Phase-out	
		mt	ODP t
Munir Al Hakim System House Co.		n/a	n/a
Methyl formate bulk storage and handling system	80,000		
Closed-system premixing station (two blenders)	160,000		
Pumps	5,000		
Product piping	50,000		
Nitrogen dispenser	20,000		
Other safety adaptations	95,000		
Pycnometer, refractometer, k-factor tester and other required equipment	30,000		
10 % contingency	45,000		
Sub-total	485,000		
Technical assistance for small and micro enterprises	100,000	165.0	18.15
Al Tabrid al Asri	25,000	24.0	2.64
Total	610,000	189.0	20.79

42. The small enterprises include the company Hasan Younes & Sons Co., known to use exclusively HCFC-141b contained in imported pre-blended polyols, and which is eligible to receive funding; the other remaining use is in 11 small enterprises and multiple micro enterprises, all using nationally blended polyols. Information about 25 small and micro enterprises has been provided by UNIDO and more supplied through distributors, are known to exist. The related consumption of 2.0 mt in 2010 is part of the 165 mt phase-out, and is being deducted from the remaining eligible consumption for HCFC-141b contained in imported pre-blended polyols.

Servicing sector activities

43. The Secretariat questioned whether implementation of non-investment activities in the country is meaningful at this time. UNIDO and UNEP replied that, aside from the fact that implementation will only commence once the conditions for it are favourable, they will focus first on the activities related to the development and updating of the regulatory and policy frameworks that can be developed, if needed, from outside the country in close consultation with concerned stakeholders and through the services of national experts. UNEP also informed that the e-licensing system has shown to actually work well in similar situations, since the communications between the NOU and the ports are simplified, and travel minimised, in particular for importers. Through a train the trainers approach, a technician training scheme can be implemented even under difficult circumstances. The awareness activity would be implemented only after the situation in the country is stable again, would involve foreign experts, and is meant to facilitate the move in the refrigeration and air conditioning manufacturing and service sectors to refrigerants with a lower climate impact but a higher hazard potential; another activity with the same objective is the change in standards to allow the use of low-GWP refrigerants.

44. The Secretariat and the agencies discussed the activities remaining from the funding provided under the NPP of US $130,444. It was agreed to incorporate them into the HPMP budget; an associated decision is part of the recommendation. The funding will be used to provide equipment to service technicians to improve best practices and reduce refrigerant consumption.

Second-stage conversions

45. The foam sector activities for stage I are not addressing enterprises that have already received funding from the Multilateral Fund.

Project Management Unit

46. A PMU will be established either within the Ministry of Environment, or within the chamber of industry in Damascus, to assist the NOU in implementing HPMP activities and co-ordinating the project implementation including tracking the promulgation, and enforcement of policy and legislation. The PMU will manage teams of national experts, develop and implement training, carry out awareness and capacity-building activities, and verifying the completion of activities.

Overall cost of the HPMP

47. The level of funding agreed between the Secretariat, UNIDO and UNEP for the implementation of stage I of the HPMP for the Syrian Arab Republic is US $1,130,000 with an overall cost effectiveness of US $4.38/kg, as shown in Table 10.

Table 10: Overall agreed cost of the HPMP

Activities /project	Agency	Substance	Phase-out		Cost (US $)	CE (US $)
			mt	ODP t		
Air conditioning sector						
Al Hafez Group (approved at 62nd meeting)*	UNIDO	HCFC-141b	71.8	7.90	1,465,361	9.02
	UNIDO	HCFC-22	90.6	5.00		
Foam sector						
Al Hakim systems house	UNIDO	HCFC-141b	-	-	485,000	
TA for small and micro enterprises	UNIDO	HCFC-141b	163.0	17.93	100,000	3.23
	UNIDO	HCFC-141b contained in pre-blended polyols	2.0	0.22		
Al Tabrid al Asri	UNIDO	HCFC-141b	24.0	2.64	25,000	
Sub-total	UNIDO	HCFC-141b	189.0	20.79	610,000	
Service sector						
Provision of tool sets including recovery machines and equipment to improve service quality*	UNIDO	HCFC-22	-	-	130,444	-
Training of 300 technicians and related preparatory and follow up activities	UNEP	HCFC-22	22.2	1.22	100,000	4.50
Awareness						
Specialized technical awareness programme						4.50
Promotion activity for decision makers in refrigeration and air conditioning system selection to promote low GWP refrigerants	UNEP	HCFC-22	6.7	0.37	30,000	
Workshops for decision makers in refrigeration and air conditioning system selection to promote low GWP refrigerants	UNEP	HCFC-22	5.6	0.31	25,000	
Sub-total	n/a	HCFC-22	12.3	0.68	55,000	
Policy and legislation support						
Review and update the national ODS legislation	UNEP	HCFC-22	3.3	0.18	15,000	4.50
9 refrigerant identifiers	UNEP	HCFC-22	4.4	0.24	20,000	
Training programme for customs et al. to enforce the ODS legislation and prevent illegal trade for 120 officers	UNEP	HCFC-22	8.9	0.49	40,000	
Development and implementation of e-licensing system	UNEP	HCFC-22	13.3	0.73	60,000	
Review of national standards and codes	UNEP	HCFC-22	4.4	0.24	20,000	
Sub-total	n/a	HCFC-22	34.3	1.88	155,000	
Project management						
Project Management Unit	UNIDO	n/a	n/a	n/a	120,000	-
	UNEP	n/a	n/a	n/a	50,000	
Verification cost	UNEP	n/a	n/a	n/a	40,000	
Sub-total	UNIDO/UNEP	n/a	n/a	n/a	210,000	
Total funding requested for stage I			257.8	24.57	1,130,000	4.38
Funding to UNIDO			189.0	20.79	730,000	
Funding to UNEP			68.8	3.78	400,000	

* Activity is neither included in budget nor taken into account when calculating phase-out

48. The phase-out for activities newly requested under the HPMP represents 18 per cent of the baseline consumption. With the inclusion of the previous project at Al Hafez, this increases to 28 per cent of the baseline consumption. By undertaking the agreed strategy, the Government of the Syrian Arab Republic commits to reducing 25 per cent of the baseline by 2018, on the understanding that it could submit stage II of the HPMP by 2015 or later.

Impact on the climate estimated by the country in its HPMP

49. Implementation of the foam project would avoid atmospheric emission of some 133,245 tonnes of CO_2-equivalent associated with the conversion of the HCFC 141b-based enterprises to MF technology (based only on the GWP values of the different blowing agents), as shown in Table 11.

Table 11: Impact on the climate associated with the conversion in the foam sector

Substance	GWP	mt/year	CO_2-eq (tonnes/year)
Before conversion			
HCFC-141b	725	189.00	137,025
After conversion			
Methyl formate	20	189.00	3,780
Net impact			-133,245

50. The proposed assistance activities in the servicing sector, which include training of technicians in good practice, better containment of refrigerants and leakage control, and the enforcement of HCFC import quotas, 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 savings of approximately 1.8 CO_2-equivalent tonnes. Although a calculation of the impact on the climate was not included in the HPMP, the activities planned by the Syrian Arab Republic, in particular its efforts to improve servicing practices; refrigerant recovery and reuse indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere therefore resulting in benefits on climate. However, at this time, a more accurate quantitatively assessment on the impact on climate cannot be conducted. The impact might be established through an assessment of implementation reports by, *inter alia*, comparing the levels of refrigerants used annually from the commencement of the implementation of the HPMP, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22 based equipment being retrofitted.

Co-financing

51. In response to decision 54/39(h) on potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth Meeting of the Parties, UNIDO explained that in stage I of the HPMP, a significant but not quantifiable amount of co-funding will be provided by the foam manufacturers participating in the activities.

2012-2014 business plan of the Multilateral Fund

52. UNIDO and UNEP are requesting US $1,130,000 plus support costs for the implementation of stage I of the HPMP. The total value requested for the period 2012-2014 of US $491,107 including support cost is the result of an agreed downward adjustment of the funding request for the first two tranches of the HPMP to the level of the business plan.

Draft Agreement

53. A draft Agreement between the Government of the Syrian Arab Republic and the Executive Committee for HCFC phase-out is contained in Annex I to the present document. It contains in paragraph 14 and Appendix 3-A specific conditions relating to the tranche scheduling and a clause to void the Agreement should implementation not be able to commence until mid-2014. No funds are to be approved until UNIDO can assure the Executive Committee that the circumstances in the country allow implementation to commence. The Agreement precludes a request to combine the first and second tranches because of possibly delayed commencement of implementation, in order to ensure the Executive Committee's oversight and full reporting. The draft agreement foresees a 25 per cent reduction of consumption from the baseline by 2018.

RECOMMENDATION

54. The situation under which this HPMP is proposed is unique in the sense that implementation is currently not possible in the country due to civil unrest. The Secretariat notes that the country was able to provide all information necessary to establish eligibility, incremental cost and propose a meaningful implementation plan. The agencies were able to provide assurance that implementation could progress rapidly once peace is restored. The alternative would have been to prepare a HPMP submission only after the country emerges from civil unrest; this would have led to a renewed, time consuming process of data collection throughout the country, so creating potential compliance delays. Further, it seems that in similar cases where countries emerge from civil unrest, construction activity is increasing rapidly, with an associated increase in HCFC consumption. Based on these considerations the Executive Committee might wish to consider approving the HPMP in order to be in the position to commence implementation as soon as possible.

55. The Executive Committee may wish to consider:

(a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for the Syrian Arab Republic for the period 2012 to 2018 to reduce HCFC consumption by 25 per cent of the baseline, at the amount of US $1,233,101, consisting of US $730,000, plus agency support costs of US $51,100 for UNIDO, and US $400,000 plus agency support costs of US $52,001 for UNEP, and noting that the project to phase-out 12.9 ODP tonnes of HCFCs, used at Al Hafez group at the amount of US $1,465,361 plus agency support costs of US $109,902 for UNIDO had already been approved at the 62nd meeting and had subsequently been included in stage I of the HPMP;

(b) Noting that with the amounts referred to in paragraph (a) above, the total funding for stage I of the HPMP for the Syrian Arab Republic amounts to US $2,595,361 plus agency support costs of US $213,003;

(c) Recalling that the Executive Committee noted in decision 62/39 the agreement of the Government of the Syrian Arab Republic to establish as its starting point for sustained aggregate reduction in HCFC consumption its baseline, and noting the starting point of 135.0 ODP tonnes, calculated using actual consumption of 147.2 ODP tonnes and 122.8 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol; plus 3.25 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems, resulting in 138.25 ODP tonnes;

(d) Noting the commitment of the Government of the Syrian Arab Republic to ban imports of HCFC-141b contained in pre-blended polyols three years after funding is provided for the phase-out of the remaining eligible use of HCFC-141b contained in imported pre-blended polyols;

(e) Noting the deduction of 12.9 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption approved at the 62nd meeting, and deducting a further 24.57 ODP tonnes of HCFCs for the implementation of stage I of the HPMP;

(f) Noting that approval of stage I of the HPMP did not preclude the Syrian Arab Republic from submitting, not earlier than 2015, a proposal to achieve phase-out of HCFCs beyond that addressed in stage I of the HPMP;

(g) Approving the draft Agreement between the Government of the Syrian Arab Republic and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;

(h) Requesting UNIDO to complete, once implementation commences, the information in the HPMP stage I submission by submitting a detailed description of the HCFC-22 and HCFC-142b consuming enterprises in the refrigeration and air-conditioning manufacturing sectors in the Syrian Arab Republic, including all aspects relevant to determine eligibility and incremental cost, as a pre-condition for the submission of the second tranche, currently foreseen for 2014;

(i) Noting that UNIDO will submit the request for the first tranche once the conditions in the country allow for implementation of the agreed activities to commence. The submission can only be considered complete if it is accompanied by:

(i) An endorsement letter by the country;

(ii) An annual implementation plan for the year of submission and the following calendar year;

(iii) An assurance by UNIDO that the situation in the country allows for the implementation of the activities foreseen for stage I to commence upon approval; and

(iv) A confirmation from the Government of the Syrian Arab Republic that an enforceable national system of licensing and quotas for HCFC imports is in place and that the system is capable of ensuring its compliance with the Montreal Protocol HCFC phase-out schedule for the duration of the Agreement;

(j) Noting that the submission of a second tranche needs to be accompanied by assurance that the enterprises in the foam sector foreseen to receive support under stage I of the HPMP continue to manufacture polyurethane (PU) foam or polyol systems, and for those manufacturers where this is not the case, either:

(i) The necessary information for an alternate enterprise regarding eligibility and incremental cost and an assessment on how the replacement would affect the implementation; or

(ii) Information to allow determining the reduction in implementing cost, on the understanding that the overall cost of implementation would be reduced accordingly and the funds would be returned upon completion of stage I; and

(k) Approving the reallocation of funding remaining from the national phase-out management plan of US $130,444, plus agency support costs for UNIDO, as agreed by the Government of the Syrian Arab Republic, in line with the implementation plan provided.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF THE SYRIAN ARAB REPUBLIC AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

1. This Agreement represents the understanding of the Government of the Syrian Arab Republic (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 101.3 ODP tonnes by 1 January 2018 in compliance with Montreal Protocol schedules.

2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A ("The Targets, and Funding") in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in rows 4.1.3, 4.2.3, 4.3.3 and 4.4.3 (remaining eligible consumption).

3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A ("Funding Approval Schedule").

4. The Country agrees to implement this Agreement in accordance with the HCFC phase-out sector plans submitted. In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.

5. The Executive Committee will not provide the Funding in accordance with the Funding Approval Schedule unless the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:

(a) That the Country had met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. Years for which no obligation for reporting of country programme data exists at the date of the Executive Committee meeting at which the funding request is being presented are exempted;

(b) That the meeting of these Targets has been independently verified, unless the Executive Committee decided that such verification would not be required;

(c) That the Country had submitted annual implementation reports in the form of Appendix 4-A ("Format of Implementation Reports and Plans") covering each previous calendar year; that it had achieved a significant level of implementation of activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and

(d) That the Country has submitted an annual implementation plan in the form of Appendix 4-A covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A ("Monitoring Institutions and Roles") will monitor and report on implementation of the activities in the previous annual implementation plans in accordance with their roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in paragraph 4 above.

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

(a) Reallocations categorized as major changes must be documented in advance either in an annual implementation plan submitted as foreseen in sub-paragraph 5(d) above, or as a revision to an existing annual implementation plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:

(i) Issues potentially concerning the rules and policies of the Multilateral Fund;

(ii) Changes which would modify any clause of this Agreement;

(iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and

(iv) Provision of funding for programmes or activities not included in the current endorsed annual implementation plan, or removal of an activity in the annual implementation plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;

(b) Reallocations not categorized as major changes may be incorporated in the approved annual implementation plan, under implementation at the time, and reported to the Executive Committee in the subsequent annual implementation report; and

(c) Should the Country decide during implementation of the agreement to introduce an alternative technology other than that proposed in the approved HPMP, this would require approval by the Executive Committee as part of an Annual 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 in incremental costs 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 approved HPMP and that would be found to be ineligible under the guidelines of the Multilateral Fund (i.e., due to foreign ownership or establishment post the 21 September 2007 cut-off date), will not receive assistance. This information would be reported to the Executive Committee as part of the Annual Implementation Plan; and

(e) Any remaining funds will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

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

(a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and

(b) The Country and the bilateral and implementing agencies involved will take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the plan.

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

10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). This responsibility includes the necessity to co-ordinate with the Cooperating IA to ensure appropriate timing and sequence of activities in the implementation. The Cooperating IA will support the Lead IA by implementing the activities listed in Appendix 6-B under the overall co-ordination of the Lead IA. The Lead IA and Cooperating IA have reached consensus on the arrangements regarding inter-agency planning, reporting and responsibilities under this Agreement to facilitate a co-ordinated implementation of the Plan, including regular co-ordination meetings. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.

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

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

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

14. The completion of stage I of the HPMP and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in Appendix 2-A. Should there at that time still be activities that are outstanding, and which were foreseen in the Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion unless otherwise specified by the Executive Committee. Should the Lead IA not have submitted to the Executive Committee by 1 August 2014 a request for the first tranche including the assurance that implementation will commence immediately, as defined in Appendix 3-A, the Agreement will be automatically void by that date, except the Executive Committee agrees prior to that date to a specific request of the Country to prolong the Agreement.

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	60.50
HCFC-141b	C	I	67.71
HCFC-142b	C	I	6.82
Sub-total			135.03
HCFC-141b contained in imported pre-blended polyols	C	I	3.25
Total			138.25

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2012	2013	2014	2015	2016	2017	2018	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	135.0	135.0	121.5	121.5	121.5	121.5	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	135.0	135.0	121.5	121.5	121.5	101.3	n/a
2.1	Lead IA (UNIDO) agreed funding (US $)	0	210,960	79,500	403,040	0	0	36,500	730,000
2.2	Support costs for Lead IA (US $)	0	14,767	5,565	28,213	0	0	2,555	51,100
2.3	Cooperating IA (UNEP) agreed funding (US $)	0	105,050	54,520	220,430	0	0	20,000	400,000
2.4	Support costs for Cooperating IA (US $)	0	13,657	7,088	28,656	0	0	2,600	52,001
3.1	Total agreed funding (US $)	0	316,010	134,020	623,470	0	0	56,500	1,130,000
3.2	Total support costs (US $)	0	28,424	12,653	56,869	0	0	5,155	103,101
3.3	Total agreed costs (US $)	0	344,434	146,673	680,339	0	0	61,655	1,233,101
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)								3.78
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)								5.00
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)								51.72
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)								20.57
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)								7.90
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)								39.24
4.3.1	Total phase-out of HCFC-142b agreed to be achieved under this Agreement (ODP tonnes)								0
4.3.2	Phase-out of HCFC-142b to be achieved in previously approved projects (ODP tonnes)								0
4.3.3	Remaining eligible consumption for HCFC-142b (ODP tonnes)								6.82
4.4.1	Total phase-out of HCFC-141b contained in imported pre-blended polyols agreed to be achieved under this Agreement (ODP tonnes)								0.22
4.4.2	Phase-out of HCFC-141b contained in imported pre-blended polyols to be achieved in previously approved projects (ODP tonnes)								0
4.4.3	Remaining eligible consumption for HCFC-141b contained in imported pre-blended polyols (ODP tonnes)								3.03

*The Agreement also covers the project "Phase-out of HCFC-22 and HCFC-141b from the manufacture of unitary air-conditioning equipment and rigid polyurethane insulation panels at Al Hafez Group", approved at the 62nd meeting of the Executive Committee for implementation by UNIDO, with an associated phase-out of 5.0 ODP tonnes of HCFC-22 and 7.9 ODP tonnes of HCFC-141b at a funding level of US $1,465,361 plus agency support costs, and subjects this project to the same monitoring and reporting obligations as valid for all other activities under stage I of the HPMP.

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the first tranche will be considered for approval upon submission of a tranche request, accompanied by an annual implementation plan, latest eight weeks before a meeting of the Executive Committee, on the understanding that no tranche request would be submitted prior to the implementing agencies being in the position to assure the Executive Committee they will commence implementation upon receipt of the first tranche.

2. Funding for the second tranche will be considered not earlier than 10 months after the approval of the first tranche.

3. Funding for the last tranche will be considered not earlier than the last meeting of the year 2015.

APPENDIX 4-A: FORMAT OF IMPLEMENTATION REPORTS AND PLANS

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

(a) A narrative report, with data provided by calendar year, regarding the progress since the year prior to the previous report, reflecting the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it, and how they relate to each other. The report should include ODS phase-out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Annual Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes. The narrative report will cover all relevant years specified in sub-paragraph 5(a) of the Agreement and can in addition also include information on activities in the current year;

(b) A verification report of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;

(c) A written description of the activities to be undertaken until and including the year of the planned submission of the next tranche request, highlighting the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall plan and progress achieved, as well as any possible changes to the overall plan that are foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;

(d) A set of quantitative information for all annual implementation reports and annual implementation plans, submitted through an online database. This quantitative information, to be submitted by calendar year with each tranche request, will be amending the narratives and description for the report (see sub-paragraph 1(a) above) and the plan (see sub-paragraph 1(c) above), the annual implementation plan and any changes to the overall plan, and will cover the same time periods and activities; and

(e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The National Ozone Unit (NOU) will monitor the effectiveness of implementing the different components under the HPMP, including monitoring compliance with phase-out levels and the impact of all activities against the set objectives and goals.

2. The Project Management Unit (PMU) in close cooperation and co-ordination with the NOU and the support of the two IAs will play a key role in monitoring the HPMP implementation through establishing and managing a comprehensive monitoring database for the implementation of all activities under the HPMP. The PMU will undertake monitoring, reporting and record keeping on:

(a) ODS import/export, including data collection from local importers;

(b) ODS use of different sectors; including data collection from manufacturers and surveys conducted by PMU;

(c) Amount of recovered, recycled, unwanted quantities of ODS;

(d) Regular update on projects' deliverables as per targeted milestones;

(e) Plans, progress reports and completion reports of components and projects; and

(f) Information on ODS based equipment, banks and status of its operation and retirement.

3. The Cooperating IA, in cooperation with the Lead IA and the NOU, will prepare a detailed terms of reference (TOR) for the monitoring database and will contract accordingly the technical institution that can develop this database. The operation and management of the database will be carried out through a dedicated consultant that will act as the database administrator and monitoring co-ordinator for the HPMP of the Syrian Arab Republic.

4. The verification will, in addition to other tasks, also cover the reports generated regarding achievements under the HPMP implementation, and the performance of the PMU.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities, including at least the following:

(a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;

(b) Assisting the Country in preparation of the Implementation Plans and subsequent reports as per Appendix 4-A;

(c) Providing independent verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the Implementation Plan consistent with Appendix 4-A;

(d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future annual implementation plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;

(e) Fulfilling the reporting requirements for the annual implementation reports, annual implementation plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee. The reporting requirements include the reporting about activities undertaken by the Cooperating IA;

(f) Ensuring that appropriate independent technical experts carry out the technical reviews;

(g) Carrying out required supervision missions;

(h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Implementation Plan and accurate data reporting;

(i) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;

(j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;

(k) Ensuring that disbursements made to the Country are based on the use of the indicators; and

(l) Providing assistance with policy, management and technical support when required.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCY

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

(a) Providing assistance for policy development when required;

(b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities; and

(c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A.

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

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US $96 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.