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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: IRAN (Islamic Republic of)

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

Phase-out

- HCFC phase-out management plan (stage I, second tranche) UNDP/Germany/UNEP/UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Iran (Islamic Republic of)

(I) PROJECT TITLE	AGENCY
HCFC phase out plan (Stage I)	UNDP (lead), Germany, UNEP, UNIDO

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2011	376.88 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2011		
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124									
HCFC-141b		115.86		94.73					210.59
HCFC-142b									
HCFC-22		1.46		79.15	85.82				166.43

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	380.5	Starting point for sustained aggregate reductions:	380.5
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	107.1	Remaining:	273.4

(V) BUSINESS PLAN		2012	2013	2014	Total
UNDP	ODS phase-out (ODP tonnes)	1,472,750	513,562		1,986,402
	Funding (US \$)	14.1	4.9		19.0
UNEP	ODS phase-out (ODP tonnes)	0			
	Funding (US \$)	0			
UNIDO	ODS phase-out (ODP tonnes)	892,250	295,625		1,187,875
	Funding (US \$)	8.6	2.8		11.4
Germany	ODS phase-out (ODP tonnes)	565,108			565,108
	Funding (US \$)	5.2			5.2

(VI) PROJECT DATA			2011	2012	2013	2014	2015	Total	
Montreal Protocol consumption limits			n/a	n/a	380.5	380.5	342.45	n/a	
Maximum allowable consumption (ODP tonnes)			n/a	n/a	380.5	380.5	342.45	n/a	
Agreed Funding (US\$)	UNDP	Project costs	2,242,000	1,370,000	477,816	0	475,930	4,565,746	
		Support costs	168,150	102,750	35,836		35,695	342,431	
	UNEP	Project costs	262,000	0	0	0	0	262,000	
		Support costs	34,060	0	0	0	0	34,060	
	UNIDO	Project costs	1,300,000	830,000	101,450	0	274,827	2,506,277	
		Support costs	97,500	62,250	7,609	0	20,612	187,971	
	Germany	Project costs	2,063,000	534,233	0	0	288,582	2,885,815	
		Support costs	234,079	60,617	0	0	32,744	327,440	
	Funds approved by ExCom (US\$)		Project Costs	5,867,000					5,867,000
			Support Costs	533,789					533,789
Total funds requested for approval at this meeting (US \$)		Project Costs		2,734,233					
		Support Costs		225,617					

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

1. On behalf of the Government of the Islamic Republic of Iran UNDP, as the lead implementing agency, has submitted to the 68th meeting of the Executive Committee a request for funding for the second tranche of stage I of the HCFC phase-out management plan (HPMP) at a total cost of US \$2,959,850, consisting of US \$1,370,000 plus agency support costs of US \$102,750 for UNDP, US \$534,233 plus agency support costs of US \$60,617 for the Government of Germany, and US \$830,000 plus agency support costs of US \$62,250 for UNIDO. The submission includes a progress report on the implementation of the first tranche of the HPMP and an implementation plan for the second tranche.

Background

2. Stage I of the HPMP for the Islamic Republic of Iran was approved in principle by the Executive Committee at its 63rd meeting, to reduce HCFC consumption by 10 per cent of the baseline by the end of 2014, at a total funding level of US \$10,393,388 plus agency support costs of US \$904,918. The Executive Committee also approved the first tranche of stage I of the HPMP at the amount of US \$6,400,789, consisting of US \$2,242,000, plus agency support costs of US \$168,150 for UNDP; US \$2,063,000, plus agency support costs of US \$234,079 for the Government of Germany, US \$262,000, plus agency support costs of US \$34,060 for UNEP and US \$1,300,000, plus agency support costs of US \$97,500 for UNIDO.

Progress report on the implementation of the first tranche of the HPMP

3. The main activities to be implemented during stage I of the HPMP are: the foam sector plan to eliminate the consumption of 65.7 ODP tonnes of HCFC-141b, the conversion of one air-conditioning manufacturing enterprise to phase out 29.3 ODP tonnes of HCFC-22, and the sector plan for the refrigeration and air-conditioning servicing sector, which is expected to reduce 12.1 ODP tonnes of HCFC-22. The results achieved so far are described below.

Regulatory actions by the Government of the Islamic Republic of Iran

4. The Government of the Islamic Republic of Iran has established an HCFC licensing and quota system. The quota system became operational in 2012. The total HCFC import quota is determined annually by the National Ozone Committee,¹ and the National Ozone Unit (NOU) is responsible for quota distribution among substances according to the Agreement with the Executive Committee and the implementation of the foam sector plan. Importers must also report on import statistics and strict control is ensured through coordination between the NOU and the relevant authorities. Other measures in place include the ban on establishment of new HCFC-consuming industrial capacity from July 2010, the exemption from import duties on capital equipment for enterprises that convert to non-ODS technology and the reduction on the commercial benefits tax on import of non-ODS compressors. The bans on manufacturing HCFC-based air-conditioning equipment and on usage of HCFC-141b or HCFC-141b-based polyols in manufacturing foam products will be aligned to the date of completion of the conversion projects in these sectors.

Activities in the foam manufacturing sector

5. Stage I of the HPMP includes the conversion of one systems house (UNDP), 15 enterprises in the rigid polyurethane (PU) foam and integral skin subsectors (UNIDO) and 8 enterprises in the continuous panels sector (Germany). Activities in the servicing sector (Germany and UNEP) and a technical

¹ The National Ozone Committee is composed by representatives from the Ministry of Industry, Mine and Trade, the Custom Department and relevant unions of importers and users.

assistance project for the foam manufacturing sector are also being implemented (Germany). The status of implementation of these activities is as follows:

- (a) *Conversion of USC systems house (US \$225,500)*: UNDP drafted a Memorandum of Agreement (MoA) for the implementation of the project. The agreement is expected to be signed by November 2012. USC is exploring low global-warming potential (GWP) technology options which would be technically and commercially feasible for its customer enterprises;
- (b) *Conversion of 15 enterprises in the rigid PU foam and integral skin subsectors to phase out 38.3 ODP tonnes of HCFC-141b (US \$1,300,000)*: UNIDO completed the survey for the 15 beneficiary enterprises and carried out an assessment of equipment and raw material suppliers. Hydrocarbon (HC) based technologies are proposed for these enterprises. Bidding for procurement of equipment for seven enterprises with consumption in 2011 of 252.4 mt (baseline consumption for these enterprises was 134.2 mt) is currently being conducted. Installation of equipment is planned by the third quarter of 2013 and the full conversion with complete phase-out of HCFCs by December 2013. A second round of bidding for procurement of equipment for an additional five enterprises consuming 131.1 mt in 2011 (baseline consumption 109.4 mt) will be implemented with funds from the second tranche. Of the remaining three enterprises, the enterprise Yakhchavan Co. (42 mt) was found to be not eligible, and the other two will be addressed during a future tranche.
- (c) *Conversion of 8 enterprises in the continuous panels sector to phase out 24.4 ODP tonnes of HCFC-141b (US \$1,962,400)*: The Government of Germany signed the project agreement with the NOU, and individual agreements were signed in June 2012 with five enterprises. The technology selected for conversion is HC, and the procurement process is in its final stages. Equipment delivery is expected for December 2012. Installation of equipment and full conversion with complete phase-out of HCFCs are on schedule, expected by the second half of 2013. The remaining three enterprises will start implementation in 2013 with completion expected by the second half of 2014; and
- (d) The Government of Germany has also talked to local suppliers to ensure supply of pentane as blowing agent for conversions. Technical options for SMEs are being evaluated; and discussions with USC systems house, UNDP and UNIDO are taking place for possible use of pre-blended hydrocarbon systems for SMEs. A standard for foam manufacturing to promote the use of low-GWP technologies is being prepared and its first draft is expected by the end of 2012. Monitoring mechanisms will ensure that converted enterprises do not revert to the use of HCFC-141b pure or contained in imported pre-blended polyols.

Activities in the air-conditioning manufacturing sector

6. Regarding the conversion of one enterprise in the residential air-conditioning manufacturing sector to phase out 29.3 ODP tonnes of HCFC-22 (US \$1,938,500), UNDP signed the project document with the Government of the Islamic Republic of Iran in January 2012. A Memorandum of Agreement for implementation of the project is expected to be signed with the enterprise in November 2012. The enterprise is considering HFC-410A as the alternative technology for the conversion. Equipment procurement is expected by the first quarter 2013, equipment installation between second and third quarter 2013, and commercial production without HCFCs by December 2014.

Activities in the refrigeration and air-conditioning servicing sector

7. The following activities have been implemented in the refrigeration and air-conditioning servicing sector with the assistance of UNEP (US \$262,000) and the Government of Germany (US \$100,600):

- (a) Demonstration of reductions in HCFC leakage rates in supermarkets by applying appropriate technology: Agreements with beneficiaries have been finalized and specifications for the demonstration projects have been developed. A first stakeholder workshop to present the initial results of the study was organized in October 2012. The demonstration activities will start in 2013;
- (b) An electronic set of tools and guidelines for potential beneficiaries of HCFC-free technologies in supermarkets and large refrigeration systems is being prepared;
- (c) Guidelines and standards for leakage reduction during manufacturing and servicing of refrigeration equipment are expected to be available by the end of 2012 followed by a review period in 2013;
- (d) The first draft guidelines for servicing, based on information on leak control, best practices and recycling, were developed in August 2012 and their final review is expected by January 2013;
- (e) A detailed work plan for the training of technicians and enforcement officials was developed. Trainer focal point to assist the NOU in training activities was designated.

Project implementation and monitoring unit (PMU)

8. The PMU is now functional and provides support to the NOU on the implementation of the licensing and quota systems, interaction with beneficiary enterprises on project implementation, information outreach targeted at SMEs in the air-conditioning sector and day-to-day management of HPMP project activities including administration and coordination with cooperating agencies.

Level of funding disbursement

9. By the end of October 2012, of the US \$5,867,000 approved for the first tranche, US \$2,056,830 will have been disbursed and the balance of US \$3,810,170 will have been committed as shown in Table 1.

Table 1: Financial report of the first tranche of the HPMP for the Islamic Republic of Iran

Description	Agency	Funds approved Tranche I (US \$)	Funds disbursed Tranche I (*)		Balance as of end of October
			US \$	%	
Foam (conversions continuous panels and technical assistance)	Germany	1,962,400	936,830	47	1,126,170
Technical assistance (servicing sector)		100,600			
Foam (conversions rigid PU and integral skin)	UNIDO	1,300,000	1,100,000	85	200,000
Servicing sector	UNEP	262,000	-	0	262,000
Conversion USC systems house	UNDP (**)	225,500	20,000	1	2,222,000
Conversion residential air-conditioning manufacturing		1,938,500			
Project Management Unit		78,000			
Total		5,867,000	2,056,830	35	3,810,170

(*)Provisional financial figure: expected funds to be disbursed by end of October 2012

(**) Additional disbursement for US \$760,000 is expected in November 2012 when UNDP MoAs are signed with USC (systems house) and Mehr Asl (air-conditioning manufacturing enterprise).

10. With regard to UNEP's component, due to procedural difficulties relating to transfer of funds to the NOU, funds could not be disbursed in advance for project activities. In consultation with UNDP's country office, UNEP will use the Request for Direct Payment (RDP) modality which will enable the UNDP local office to do direct payments to contractors and service providers. UNEP's agreement with the Government or the Islamic Republic of Iran was adjusted according to the new payment modality. It will be sent to the country for their approval.

Implementation plan for the second tranche of the HPMP

11. During the second funding tranche of the HPMP the following will be achieved:

- (a) The Government of the Islamic Republic of Iran will continue to enforce the licensing system and quota system;
- (b) USC systems house will continue developing non-HCFC-141b pre-blended polyols and retrofitting its facilities by explosion-proofing the blending tanks and installing the additional equipment required. It is expected that non-HCFC-141b pre-blended polyols will be supplied by December 2013;
- (c) Conversion of 15 enterprises in the PU rigid foam sector: the five discontinuous panel, the seven domestic refrigeration and the three integral skin enterprises will complete their equipment procurement, installation and initiation of commercial production with hydrocarbons by the end of 2013;
- (d) Conversion of 8 enterprises in the continuous panels sector: All enterprises will complete their equipment procurement, installation and initiation of commercial production with hydrocarbons by December 2014;
- (e) The residential air conditioner manufacturer will continue implementation of the HCFC-phase-out project. Equipment procurement and installation will be completed by the end of 2013 and commercial production will start by mid-2014;

- (f) Implementation of the incentive scheme for the servicing sector with priority on supermarkets will continue until December 2014; the development of certification standards for the refrigeration and air-conditioning equipment servicing and installation will be completed during the first quarter of 2013; and the consultations for the development of monitoring tools for the servicing sector will continue in 2013 for completion in 2014; and
- (g) The PMU will continue implementing operational activities, including conducting one workshop for SMEs on HPMP implementation, monitoring HCFC quotas for 2013, and holding consultations with the customs department and the Ministry of Industry and Trade on the licensing system, including the implementation of harmonized system codes for individual HCFCs.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Operational license system

12. In line with decision 63/17, the Government of the Islamic Republic of Iran confirmed that an enforceable system of licensing and quotas 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.

HCFC consumption

13. The HCFC baseline for compliance has been established at 380.5 ODP tonnes, based on the actual consumption reported under Article 7 of the Montreal Protocol for 2009 and 2010 as shown in Table 2. The established baseline is 24.8 ODP tonnes higher than that of 355.7 ODP tonnes estimated at the time the Islamic Republic of Iran's HPMP was approved since at the time of approval the request for a correction of 2009 data sent to the Ozone Secretariat based on the HPMP survey results had not yet been recorded.

Table.2 HCFC consumption in the Islamic Republic of Iran (Article 7)

HCFC	2006	2007	2008	2009	2010	Baseline
Metric tonnes						
HCFC-22	1,239.8	1,630.8	1,328.2	2,841.8	3,107.3	2,974.6
HCFC-141b	894.1	924.8	1,725.8	1,870.9	2,071.5	1,971.2
Total (mt)	2,133.9	2,555.6	3,054.0	4,712.7	5,178.8	4,945.8
ODP tonnes						
HCFC-22	68.2	89.7	73.1	156.3	170.9	163.6
HCFC-141b	98.3	101.7	189.8	205.8	227.9	216.9
Total (ODP tonnes)	166.5	191.4	262.9	362.1	398.8	380.5

Other issues discussed

14. Several issues related to the activities being implemented in stage I of the HPMP were discussed and satisfactorily addressed by the bilateral and implementing agencies together with the Government of the Islamic Republic of Iran, specifically:

- (a) With regard to the low level of progress and disbursement of the USC systems house project and the potential impact that a delay in this project could have on the phase-out of HCFC-141b in SMEs, UNDP indicated that USC is still exploring feasible technical options for conversion (e.g., FEA-1100, AFA-L1, HBA-2, HFO-1234ze). UNDP and the NOU are working with the systems house to sign the MoA as soon as possible. Nevertheless, UNDP does not foresee that a delay in the USC project would have an impact on the conversion of the foam enterprises covered under stage I of the HPMP;
- (b) With regard to the conversion of enterprises in several PU rigid foam applications being undertaken by the Government of Germany (8 enterprises) and UNIDO (15 enterprises), the procurement processes for ten enterprises (five for each Germany and UNIDO) are on track and conversion will be completed by December 2013. The remaining 13 enterprises (three with Germany and ten with UNIDO) will be fully converted by December 2014;
- (c) Based on the survey of the enterprises covered under stage I of the HPMP conducted after the HPMP was approved, UNIDO found out that Yakhchavan, with a baseline consumption of 42.0 mt of HCFC-141b, was converted from CFC-11 to hydrocarbons and, therefore, was ineligible. In further discussions with UNIDO, it was agreed that the funds associated with the enterprise will be returned to the Multilateral Fund at the 69th meeting;
- (d) On the possibility of introducing a lower GWP alternative in the air-conditioning manufacturing project, UNDP explained that HFC-410A continues to be the chosen technology in the country given the availability of the refrigerant and other systems components, business feasibility in local market conditions, and the adoption of HFC-410A-based products in the domestic and international markets. HFC-32 may also be considered in the future if found commercially sustainable and attractive as a business proposition for the enterprise; and
- (e) Upon a query from the Secretariat on the need to ensure the long-term sustainability of the conversion of the foam enterprises and avoid a shift from the use of controlled HCFC-141b to non-controlled HCFC-141b, UNDP confirmed that although pre-blended polyols are not currently imported, the quota management system will also cover the import of pre-blended polyols in line with the country's HCFC-141b phase-out plan.

15. In summary, the Secretariat notes that the import licensing and quota systems are operational and will enable the Government to reduce its consumption by 10 per cent of its baseline by 2015. Conversion of the foam manufacturing enterprises is progressing on track and will be completed during 2013 and 2014. By the end of 2013, non-HCFC-141b pre-blended polyols will be supplied by the local systems house which will contribute to additional reductions of HCFC-141b in SMEs; and the conversion of the air-conditioning manufacturing enterprise, if expedited, will ensure additional reductions of HCFC-22. Several technical assistance activities in the refrigeration servicing sector have started and will continue in 2013, further reducing the amounts of HCFC-22 used in servicing practices.

Revision to the Agreement of the HPMP

16. The HPMP for the Islamic Republic of Iran was approved prior to the establishment of the HCFC baseline for compliance. Accordingly, in approving the HPMP the Executive Committee requested the Secretariat to, *inter alia*, update Appendix 2-A ("The targets, and funding") to the Agreement with the figures for the maximum allowable consumption, and to notify the Committee of the resulting levels accordingly (decision 63/56(f)). Based on the data reported by the Government of the Islamic Republic of Iran under Article 7 and its revised phase-out schedule, the relevant paragraphs of the Agreement have been updated, and a new paragraph has been added to indicate that the updated Agreement supersedes

that reached at the 63rd meeting, as shown in Annex I to this document. The full revised Agreement will be appended to the final report of the 68th meeting.

RECOMMENDATION

17. The Executive Committee may wish to consider:

- (a) Noting the progress report on the implementation of the first tranche of stage I of the HCFC phase-out management plan (HPMP) in the Islamic Republic of Iran;
- (b) Noting that the Fund Secretariat had updated paragraph 1, Appendices 1-A and 2-A of the Agreement between the Government of the Islamic Republic of Iran and the Executive Committee, based on the established HCFC baseline for compliance, and the deduction of US \$173,550, plus agency support cost of US \$13,016 for UNIDO, associated with the conversion of the foam enterprise Yakhchavan that was identified as non-eligible for funding under the Multilateral Fund after the HPMP for the Islamic Republic of Iran was approved, and that a new paragraph 16 had been added to indicate that the updated Agreement superseded the Agreement that reached at the 63rd meeting, as contained in Annex I to the present document;
- (c) Noting that the revised starting point for sustained aggregate reduction in HCFC consumption was 380.5 ODP tonnes, calculated using actual consumption of 362.1 ODP tonnes and 398.8 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol;
- (d) Approving the second tranche of stage I of the HPMP for the Islamic Republic of Iran, and the corresponding annual implementation plans, at the amount of US \$2,959,850, consisting of US \$1,370,000 plus agency support costs of US \$102,750 for UNDP, US \$534,233 plus agency support costs of US \$60,617 for the Government of Germany, and US \$830,000 plus agency support costs of US \$62,250 for UNIDO; and
- (e) Requesting UNIDO to return US \$173,550 plus agency support cost of US \$13,016 associated with the conversion of the foam enterprise Yakhchavan at the 69th meeting of the Executive Committee.

Annex I

TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF IRAN AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

(Relevant changes are in bold font for ease of reference)

1. This Agreement represents the understanding of the Government of the Islamic Republic of Iran (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”) prior to 1 January 2015 in compliance with Montreal Protocol schedules to a sustained level of **342.45** ODP tonnes representing the maximum consumption allowed for 2015 under the Montreal Protocol reduction schedule.

16. This updated Agreement supersedes the Agreement reached between the Government of the Islamic Republic of Iran and the Executive Committee at the 63rd meeting of the Executive Committee.

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	163.6
HCFC-141b	C	I	216.9
Total			380.5

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2011	2012	2013	2014	2015	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes) *	n/a	n/a	380.5	380.5	342.45	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	n/a	380.5	380.5	342.45	n/a
2.1	Lead IA UNDP agreed funding(US \$)	2,242,000	1,370,000	477,816	0	475,930	4,565,746
2.2	Support costs for Lead IA(US \$)	168,150	102,750	35,836	0	35,695	342,431
2.3	Cooperating IA UNEP agreed funding (US \$)	262,000	0	0	0	0	262,000
2.4	Support costs for Cooperating IA (US \$)	34,060	0	0	0	0	34,060
2.5	Cooperating IA UNIDO agreed funding (US \$)	1,300,000	830,000	101,450	0	274,827	2,506,277
2.6	Support costs for Cooperating IA (US \$)	97,500	62,250	7,609	0	20,612	187,971
2.7	Cooperating agency Germany agreed funding (US \$)	2,063,000	534,233	0	0	288,582	2,885,815
2.8	Support costs for Cooperating agency (US \$)	234,079	60,617	0	0	32,744	327,440
3.1	Total agreed funding (US \$)	5,867,000	2,734,233	579,266	0	1,039,339	10,219,838
3.2	Total support cost (US \$)	533,789	225,617	43,445	0	89,051	891,902
3.3	Total agreed costs (US \$)	6,400,789	2,959,850	622,711		1,128,390	11,111,740
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes)						38.6
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)						-
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)						125.0
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)						62.7
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)						-
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)						154.2

Note: US \$173,550 and agency support costs of US \$13,016 for UNIDO were deducted from its third tranche as enterprise Yakhchavan is not eligible for funding under the Multilateral Fund and will convert with its own resources.