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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
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REPORT ON IMPLEMENTATION OF APPROVED PROJECTS WITH SPECIFIC REPORTING REQUIREMENTS

Introduction

1. UNDP and the World Bank have submitted progress reports on the implementation of the projects in Lebanon and Venezuela, where specific reporting requirements are contained in the agreements, and UNIDO has submitted a request to review the methyl bromide (MB) phase-out targets stipulated in the revised agreed conditions in Morocco, for consideration by the Executive Committee at its 58th Meeting as follows:

(a) Lebanon: National CFC phase-out plan: progress report, verification report and 2009-2010 work programme (UNDP);

(b) Morocco: Phase-out of methyl bromide (MB): Review the phase-out targets stipulated in the revised agreed conditions (UNIDO);

(c) Venezuela: CFC production phase-out programme: verification report (World Bank).

2. The Secretariat reviewed the progress reports in light of the original project proposals, ODS data reported by the Governments concerned under Article 7 of the Montreal Protocol, and relevant decisions taken by the Executive Committee and the Meeting of the Parties.

Lebanon: National CFC phase-out plan (UNDP)

3. On behalf of the Government of Lebanon, UNDP submitted to the 58th Meeting of the Executive Committee a progress report on the implementation of the fifth tranche (2008) of the national CFC phase-out plan (NPP), the performance verification report of the annual implementation programme for 2008, and the implementation programme for 2009-2010.

Background

4. The NPP for Lebanon was approved at the 44th Meeting of the Executive Committee at a total cost of US $2,091,420, plus agency support costs of US $156,857 for UNDP. The Government of Lebanon committed to completely phase out its CFC consumption by the end of 2008. The NPP included conversion of CFC-based aerosol, foam and refrigeration manufacturing plants to alternative technologies, and phase-out activities in the refrigeration servicing sector. Total funding for the NPP has been approved by the Executive Committee in five tranches.

Progress report and verification

5. Through the implementation of the NPP, the remaining CFC-based manufacturing plants in the aerosol (one plant), foam (14 plants) and commercial refrigeration (35 plants) sectors have been converted to non-CFC alternative technologies. These enterprises are listed below:

Enterprise name	Products	Conversion technology	CFC (ODP tonnes)
Aerosol sector			
Ste. A. R. Chamsine	Cosmetics	HAP	17.0
Rigid foam sub-sector			
Dalal Steel Industries	Rigid panels	HCFC-141b	24.4
Mezher Industrial Co.	Rigid panels	HCFC-141b	3.9
Zaidan house Sicome	Rigid panels	HCFC-141b	2.0
Al-Mawared Construction	Spray/Insitu	HCFC-141b	8.5
Chame's Modern Factory	Spray/Insitu	HCFC-141b	0.5
Electromechanic	Spray/Insitu	HCFC-141b	0.5
Ghaddar Trade & Industry	Spray/Insitu	HCFC-141b	10.0

Enterprise name	Products	Conversion technology	CFC (ODP tonnes)
Solarnet	Spray/Insitu	HCFC-141b	0.1
Tfayli Solar Energy	Spray/Insitu	HCFC-141b	4.5
Thermos Sarl	Spray/Insitu	HCFC-141b	0.3
Flexible foam subsector			
Al-Brazil	Mattresses	Methylene chloride	3.0
STE Khalil	Mattresses	Methylene chloride	2.7
Extruded polystyrene sub-sector			
Finepack	Packaging	HFC-134a	5.0
Building Chemicals Co	Pipe insulation	HFC-134a	0.5
Total			**82.8**

Commercial refrigeration	Conversion technology	CFC (ODP tonnes)		
		CFC-11	CFC-12	Total
Frigo Addada	HCFC-141b/HFC-134a	0.8	1.2	2.0
GNT Co.	HCFC-141b/HFC-134a	1.5	2.3	3.8
Najwal	HCFC-141b/HFC-134a	1.0	1.5	2.5
Rabico	HCFC-141b/HFC-134a	1.1	1.1	2.2
Tomado	HCFC-141b/HFC-134a	1.4	2.1	3.5
Abdel Menhim Al Naghi	HFC-134a		1.2	1.2
Al Mutahideh Ind.& Trad.	HFC-134a		0.9	0.9
Al Rawad Ind.	HFC-134a		1.1	1.1
Al Tayeb	HFC-134a		0.5	0.5
Al Tayeb Refrigeration	HFC-134a		0.6	0.6
Albert Abou Jaoude Est.	HFC-134a		0.6	0.6
Alex Zeidan	HFC-134a		1.1	1.1
Avarest	HFC-134a		0.1	0.1
Demian Refrigeration	HFC-134a		1.6	1.6
Dirani Est.	HFC-134a		0.5	0.5
Ets. Antoine Audi	HFC-134a		0.4	0.4
Frigo Joe	HFC-134a		0.5	0.5
Ghannoum Est.	HFC-134a		1.6	1.6
Ghazar Azadian	HFC-134a		1.1	1.1
Hammoud Sahary	HFC-134a		0.9	0.9
Hassan Sharaf Eldine	HFC-134a		0.4	0.4
Hayek Antoine	HFC-134a		0.5	0.5
Hijazi Est.	HFC-134a		0.6	0.6
Jamal El Din Ind. Est.	HFC-134a		1.3	1.3
Kassarji Naiim	HFC-134a		0.3	0.3
Kassouf Pierre	HFC-134a		0.8	0.8
Kassouf Sami	HFC-134a		0.4	0.4
Lteif Assaad	HFC-134a		6.2	6.2
Mazeh Est.	HFC-134a		0.9	0.9
Mecanix SAL	HFC-134a		0.6	0.7
Mohammad Al Rafhi	HFC-134a		0.9	0.9
Ouweidat Modern Ind.	HFC-134a		1.0	1.1
Vasko	HFC-134a		0.4	0.4
Walid Addada Est.	HFC-134a		1.1	1.1
Zein Eddine Ind.	HFC-134a		0.4	0.4
Total		**5.8**	**36.4**	**42.4**

6. In the refrigeration servicing sector, several training programmes have been completed and 12 training centres have been established. Training workshops for refrigeration technicians will be provided during the second half of 2009. Small-sized reclamation units for the training centres and 60 recovery/recycling machines for MAC workshops have been procured and will be delivered by March 2009. ODS identification kits for customs officers have been distributed to the 12 training centres. Agreements with 50 end-user establishments for conversion to non-CFC refrigerants have been finalized.

7. The Ozone Unit has been entrusted with the responsibility of managing, coordinating and monitoring NPP implementation. Of the total funding of US $2,091,420 approved, total expenditures as of December 2008 amounted to US $1,666,677. The balance of US $424,743 will be utilized for activities proposed in the 2009-2010 work programme.

2009-2010 work programme

8. The Government is committed to phasing out an additional 35.0 ODP tonnes of CFCs, through the implementation of a number of activities. These include delivery of the technician training programme to introduce best servicing practices; distribution of 110 sets of recovery and recycling equipment; preparation of a technician licensing programme, regulations and codes of practice in the refrigeration sector, and quality and performance standards for non-CFC refrigeration systems; and technical assistance for 50 end-users. It is also proposed to continue monitoring NPP activities; implement workshops for enterprises and major institutional and Government stakeholders; implement enforcement of existing ODS controls; and conduct an awareness outreach programme.

Secretariat's comments

9. The 2007 CFC consumption of 74.5 ODP tonnes reported in the performance verification report of the annual implementation programme for 2007 was already 0.5 ODP tonnes below the allowable level of 75 ODP tonnes for that year. The 2008 CFC consumption of 33.2 ODP tonnes was also 1.8 ODP tonnes below the maximum allowable level of 35.0 ODP tonnes in the agreement between the Government of Lebanon and the Executive Committee. This consumption has been verified through an independent performance verification carried out in early 2009.

10. Technical issues were raised in regard to: the usefulness of providing 50 additional MAC recovery/recycling units, given the old age of the MAC systems still in operation (e.g., 15 years or older, considering that HFC-134-MAC systems were introduced in 1993-1995); the retrofit programme for 50 CFC-based refrigeration systems, including alternative refrigerants and their costs; and whether, through the activities proposed in the 2009-2010 work programme, the Government would be able to achieve the complete phase-out of CFCs by end of 2009 and sustain that level of consumption. UNDP pointed out that the average age of MAC systems in vehicles in Lebanon is below 15 years. Due to the historically higher price of HFC-134a compared to CFC-12, repairs of HFC-based MAC systems often involved recharging with CFC-12. The recovery/recycling equipment provided will make it possible to reduce demand for virgin CFCs, and also motivate the workshops to promote retrofits, thus further reducing dependence on CFCs. With increasing prices of CFCs, recovery/recycling and retrofitting has become commercially more viable, therefore introduction of such equipment will contribute to environmental objectives as well as to sustainability. UNDP also reported that through the implementation of the activities proposed in the NPP, the Government of Lebanon will achieve the complete phase-out of CFCs as per the Protocol's compliance targets.

11. Noting that funding for the preparation of the HPMP was approved by the Executive Committee at its 55th and 57th Meetings the Secretariat also suggested that, during the implementation of the final tranche of the NPP, UNDP consider advising the Government on undertaking some actions to facilitate the phase-out of HCFCs in due time.

Secretariat's recommendations

12. The Fund Secretariat recommends that the Executive Committee:

(a) Takes note of the progress report on the implementation of the fifth tranche of the national CFC phase-out plan in Lebanon;

(b) Takes note of the verification report of the 2008 CFC consumption; and

(c) Approves the 2009-2010 annual implementation programme.

Morocco: Adjustment to the total level of MB consumption phase-out in the Agreement (UNIDO)

13. On behalf of the Government of Morocco, UNIDO has submitted a request to review the methyl bromide (MB) phase-out targets stipulated in the revised agreed conditions for phase-out of MB in Morocco owing to an arithmetical error in the calculations of the remaining levels of consumption from 2009.

Background

14. So far, the Executive Committee has approved projects to phase out MB use in cut flower and banana production, and in the strawberry, green beans and cucurbits sectors in Morocco, which amounted to funding of US $8,546,924. This includes a terminal project for the phase-out of MB used as a soil fumigant in the production of green beans and cucurbits that was approved by the Executive Committee at its 56th Meeting, at which time the Committee also approved a revised draft agreement between the Government of Morocco and the Executive Committee for the phase-out of controlled uses of MB, with the following phase-out schedule.

Table: Agreed level of MB phase-out in Morocco

Year	ODP tonnes					
	Strawberry	Banana and cut flowers	Tomato	Green beans and melon	Total phased out	Total consumption
2001	23.4	-	-		23.4	744.0
2002	15.6	40.0	-		55.6	688.4
2003	20.4	21.0	34.1		75.5	612.9
2004	42.2	-	-		42.2	570.7
2005	50.0	-	39.0		89.0	481.7
2006	-	-	56.4		56.4	425.3
2007	-	-	78.0		78.0	347.3
2008	-	-	86.4		86.4	260.9
2009	-	-	96.0	20.0	116.0	86.2
2010	-	-	-	30.0	30.0	56.2
2011				28.2	28.2	28.0
2012				28.0	28.0	
2013				0		
Total	**151.60**	**61.00**	**389.90**	**106.2**	**708.7**	

15. UNIDO pointed out that the allowable level of MB consumption for 2009 should be 144.9 ODP tonnes (i.e., 260.9 ODP tonnes in 2008 less 116.0 ODP tonnes to be phased out in 2009). Subsequent MB consumption levels would be 114.9 ODP tonnes in 2010, 86.7 ODP tonnes in 2011 and 58.7 ODP tonnes in 2011 and up till 2015. Accordingly, UNIDO is proposing the following phase-out schedule, which will include the phase-out of 58.7 ODP tonnes of MB without any additional funding requirements from the Fund.

Table: Revised agreed level of MB phase-out in Morocco

Year	ODP tonnes						
	Strawberry	Banana and cut flowers	Tomato	Green beans and melon	Other(*)	Total phased out	Total consumption
2000							767.4
2001	23.4					23.4	744.0
2002	15.6	40.0				55.6	688.4
2003	20.4	21.0	34.1			75.5	612.9
2004	42.2					42.2	570.7
2005	50.0		39.0			89.0	481.7
2006			56.4			56.4	425.3
2007			78.0			78.0	347.3
2008			86.4			86.4	260.9
2009			96.0	20.0		116.0	144.9
2010				30.0	20.0	50.0	94.9
2011				28.2	20.0	48.2	46.7
2012				28.0	18.7	46.7	-
2013				-		-	
Total	151.6	61.0	389.9	106.2	58.7	767.4	

(*) Consumption to be phased out by the Government of Morocco without funding from the Multilateral Fund

Secretariat's comments

16. In 2008, the project was implemented according to the work plan, and the activities resulted in a phase-out of 86.4 ODP tonnes. The 2009 plan of action was agreed leading to the complete phase-out of MB in the tomato sector (96 ODP tonnes). The 2009-2010 action plan for the phase-out of MB in green beans and cucurbits was agreed in early 2009. The national institution responsible for the project's implementation has been selected and the contract is being finalized. The following main activities will be implemented in 2009: development of a composting and biofumigation plant; development of grafting technology for melon and other cucurbits at the existing grafting centres; and provision of technical assistance and training for farmers.

Secretariat's recommendation

17. Noting that the total MB phase-out in Morocco will be achieved in 2012 and that no additional funding is being requested for the phase-out of 58.7 ODP tonnes, the Secretariat recommends that the Executive Committee adjusts the schedule for the phase-out of methyl bromide in Morocco as shown in the table for the revised agreed level of methyl bromide consumption in Morocco.

Venezuela: CFC production phase-out programme (World Bank)

18. The Government of Venezuela, through the World Bank, has submitted a verification report on the cessation of CFC production at PRODUVEN, Productos Halogenados de Venezuela, C.A. in Venezuela for the year 2008.

Background

19. In 2004 at its 44th Meeting the Executive Committee approved, in principle, a total of US $16.5 million for the implementation of the Agreement for the Venezuela CFC production sector, under which the Government of Venezuela committed to a condition of a maximum levels of total CFC production for the period 2004-2006, with a total phase-out by 2007 (decision 44/59). By the end of 2006, PRODUVEN, the sole producer of CFC in Venezuela terminated its CFC production and refitted its facility for the production of HCFC-22. The World Bank submitted the verification report of the 2007

levels of CFC production in 2008 to the 54th Meeting of the Executive Committee and received the final funding tranche of US $1.05 million, plus the associated support cost.

20. As a condition of approval of the final funding tranche, the Executive Committee requested the World Bank to continue the verification of the PRODUVEN facility in 2009 to ensure the permanent closure of the plant's CFC production capacity (decision 54/15(a)). In suggesting the continued verification of the facility, the Secretariat had noted that the only assurance that the swing plant would not revert to CFC production was to deny the plant access to CTC, the key feedstock for CFC production. In this respect, it was important for the Government to continue to implement the existing licensing control over the import of CTC.

21. Accordingly, the World Bank carried out a verification report of the PRODUVEN plant to ensure that there had been no CFC production in 2008 and that the plant had been permanently refitted for the production of HCFC-22.

Verification report on the cessation CFC production at PRODUVEN in Venezuela in 2008

22. The verification was carried out between 19 and 23 January 2009 by Juan Carols Reinhart, the same technical consultant who had conducted the verification report that had been submitted to the 54th Meeting.

23. The technical consultant used the recommendations from the 2006-2007 verification, which had been conducted by Mr. Vogelsberg, to ensure that the recommended actions to permanently close down the CFC production had been implemented. Specifically, the auditor checked the access of the plant to CTC, the dismantling of the CFC production-related equipment, the consumption of HF (the common raw material for the production of CFC and HCFC-22) and the balance of the remaining inventory of CFCs and CTC from levels recorded at the end of 2007.

24. The 2008 report confirmed that the findings of previous audits and reports are still valid.

25. The verification confirmed that there had been no importation of CTC in 2008 (by checking the inventory and the certification from the Government that there had been no request from the plant to import CTC in 2008; that there was no CTC production locally; and CTC imports required a license from the Government). There had been a request from the plant to export the remaining inventory of 127 metric tonnes of CTC but, as in 2007, the plant had not identified an importer. There was a remaining inventory at the plant of 127 metric tonnes of CTC. Although the seals on the CTC tanks had not been broken, the technical consultant found that they were highly deteriorated by sunlight and only some of their numbers could be verified. FONDOIN and PRODUVEN agreed to add new seals to the CTC tanks without removing the old ones.

26. To confirm that the HF consumption was directed only to the production of HCFC-22, the technical consultant examined the records of the production of HCFC-22 and the ratio of HCFC-22 production to HF consumption. He found that the ratio was within industry norms. The technical consultant also looked at the consumption of chloroform and the ratio of chloroform consumption to HCFC-22 production to reconfirm the level of HCFC-22 production. He also examined the financial and operational records and found that there had been no production of CFCs in 2008.

27. The technical consultant certified that some of the equipment, such as a decanter, pumps and some piping, had been dismantled although most of the equipment in the plant had been retained and refitted for the production of HCFC-22, since the plant had been designed as a swing operation to produce both CFCs and HCFC-22. The activated carbon column C-304, which was used to remove traces of phosgene from CFC-11, had been destroyed in February 2008.

28. There are several annexes to the verification report, including: Annex I containing the details and rationale for the steps taken in closing down the CFC plant; Annex II, which is the presentation of the plant closure data in the format approved by the Executive Committee; Annex III, which contains the photos showing the pieces of equipment that had been dismantled or refitted; and Annex IV, which includes data, by month, on the consumption of HF and chloroform, the production of HCFC-22 and the HF/HCFC-22 and chloroform/HCFC-22 ratios. Annex V includes PRODUVEN's comments on the World Bank's remarks regarding CFC-12 losses.

29. The results of the verification showed that PRODUVEN only produced no CFCs in 2008. The verification confirmed the CFC production, inventory and sales data submitted by the plant for the period January to December 2008 as shown in the Table 1 below. The plant now only produces HCFC-22.

Table 1

CFC-11 AND CFC-12 PRODUCTION AUDIT SUMMARY

	Item	**Data**	**Remarks**
A	Total opening stock as of 1st January 2008 (metric tonnes)	697.115	CFC-11 and CFC-12
B	Imports	Nil	
C	Gross production (metric tonnes)	Nil	
D	Operative losses (metric tonnes)	28.261	
E	Domestic Sales (metric tonnes)	314.970	
F	Export sales (metric tonnes)	Nil	
G	Closing stock 31 December 2008 (metric tonnes)	353.884	CFC-12 only (A-B-C-D-E-F)

30. There has been no purchase and receipt of CTC since the cessation of CFC production, and CTC stock verification levels in 2008 were the same as in 2007. In 2008 there was no CTC production in the country.

Table 2

	31 December 2007	**31 December 2008**
Closing Stock of raw material CTC	127.740 metric tonnes	127.740 metric tonnes
Closing Inventory of CFC-11	1.400 metric tonnes	Zero
Closing Inventory of CFC-12	695.715 metric tonnes	353.884 metric tonnes

Secretariat's comments

31. The Executive Committee requested the World Bank to conduct this additional verification following the release of the last annual tranche of funding.

32. The audit on the cessation of CFC production was carried out by the World Bank in accordance with decision 54/15(a) of the Executive Committee and was implemented in compliance with the guidelines for verifying ODS production phase-out approved by the Executive Committee. The results confirmed that there had been no CFC production by the PRODUVEN Plant after the closure in December 2006, and that the plant had switched to the production of HCFC-22. The results also reconfirmed the actions that had been taken by the Government of Venezuela to ensure the permanence of the CFC production closure, by not issuing an import licenses to the company to purchase CTC, one of the key feedstock for the production of CFC.

33. The audit also concluded that the recommendation on the use of storage tanks for CFC-12 for other purposes had not been fully completed, because the tanks were being used to store the remaining CFC-12 that had been produced before the end of 2006. The number of tanks required to store CFC-12, however, had been reduced from 10 in 2007 to four in 2008 and the other tanks had been used for other uses, as recommended. Once the stock of CFC-12 is depleted, the recommendation will be fully implemented.

34. The Secretariat noted that an annual plan had not accompanied the audit report. The annual plan would not request additional funding, but would instead indicate which activities were to be undertaken during 2009 and which activities had been done in 2008. The Bank advised that it was working with Venezuela to provide the annual plan, but that the plan could not be available for the 58th Meeting.

35. The World Bank inquired about the occurrence of reported losses of finished product amounting to 28.261 metric tonnes, as it had considered a 4 per cent loss of CFC-12 excessively high when such a reduction had been determined by CFC-12 gas decanting and filling operations performed from a tank to the clients' cisterns. PRODUVEN indicated that the inventory shrinkage had been due mainly to a mistaken initial estimation (caused by the use of inadequate measuring equipment) in addition to losses inherent in decanting, quantity of vessels and leakage for an almost two-year storage period. Moreover, PRODUVEN indicated that more differences were likely to appear in future, insofar as product would continue to be withdrawn from the original tanks where it had initially been stored in 2006. In terms of a remedy, PRODUVEN suggested that in order to minimize losses, a thorough assessment of leaks was needed and an effort could be made to produce the best possible vacuum in emptying vessels and hoses.

36. Finally, in order to ensure a sustained phase-out in the absence of a ban on CTC, the Secretariat suggested that the World Bank should submit a verification report for the year 2009 to the Executive Committee in 2010. The World Bank indicated that the Government of Venezuela and the Bank would submit the 2009 CFC production verification report as the last verification report for the project in 2010, and that the verification report would be submitted to the second meeting of 2010.

Secretariat's recommendations

37. The Secretariat recommends that the Executive Committee:

(a) Commends the Government of Venezuela and the World Bank for the good efforts made to comply with decision 54/15(a) and in successfully implementing the audit for 2008 to confirm the sustained cessation of CFC production at the PRODUVEN plant in Venezuela;

(b) Requests:

(i) The Government of Venezuela and the World Bank to submit the annual plan for 2009 to the Fund Secretariat for inclusion in the report on approved projects with special reporting requirements to be submitted to the 59th Meeting;

(ii) The World Bank to urge PRODUVEN to implement the measures it suggested to minimize losses, including a thorough assessment of leaks and an effort to produce the best possible vacuum in emptying vessels and hoses; and

(iii) The World Bank to continue the verification of the PRODUVEN facility for a report on 2009 activities to be submitted in time for consideration at the second meeting of 2010 to ensure the permanent closure of the CFC production capacity at the plant.