



United Nations Environment Programme

Distr. GENERAL

UNEP/OzL.Pro/ExCom/72/35 15 April 2014

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Seventy-second Meeting Montreal, 12-16 May 2014

PROJECT PROPOSAL: THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

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

Phase-out

• HCFC phase-out management plan (phase I, fifth tranche)

UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS The former Yugoslav Republic of Macedonia

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2013	0.72 (ODP tonnes)

(III) LATI	EST COU	Year: 201							
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing Servicing					
HCFC					0.7				0.7

(IV) CONSUMPTION DATA (ODP tonnes)									
2009 - 2010 baseline:	1.8	Starting point for sustained aggregate reductions:	3.35						
	CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)								
Already approved:	2.18	Remaining:	1.17						

(V) BUS	2014	2015	2016	2017	2018	2019	2020	Total	
UNIDO	ODS phase-out (ODP tonnes)	0.2	0.2	0.2	0.2	0.1	0.1	0.1	1.4
	Funding (US \$)	88,150	88,150	88,150	140,825	80,625	80,625	80,625	806,250

(VI) PRO	DJECT DA	TA	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	n/a	2.70	2.70	2.43	2.43	2.43	2.43	2.43	1.76	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	n/a	1.80	1.80	1.62	1.53	1.44	1.35	1.26	1.17	n/a
Agreed funding	UNIDO	Project costs	15,000	107,000	294,955	148,000	82,000	82,000	82,000	131,000	75,000	75,000	75,000	1,166,955
(US \$)		Support costs	1,125	8,025	22,122	11,100	6,150	6,150	6,150	9,825	5,625	5,625	5,625	87,522
Funds app ExCom (proved by US \$)	Project costs	15,000	107,000	294,955	148,000	0	0	0	0	0	0	0	564,955
		Support costs	1,125	8,025	22,122	11,100	0	0	0	0	0	0	0	42,372
Total funds requested for		Project costs	0	0	0	0	82,000	0	0	0	0	0	0	82,000
approval meeting (Support costs	0	0	0	0	6,150	0	0	0	0	0	0	6,150

Secretariat's recommendation:	For blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of the former Yugoslav Republic of Macedonia, UNIDO as the designated implementing agency, has submitted to the 72nd meeting of the Executive Committee a request for funding for the fifth tranche of stage I of the HCFC phase-out management plan (HPMP)¹ at the amount of US \$82,000, plus agency support costs of US \$6,150. The submission includes a progress report on the implementation of the fourth year of the HPMP, a monitoring and audit report for 2013, and an annual implementation plan for 2014.

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

- 2. Since the approval of the fourth tranche, the following activities had been implemented: equipment for refrigeration training was provided to three vocational schools, and 25 additional refrigeration technicians were trained. Six training courses for 96 customs officers were organized in six customs checkpoints. Eighteen sets of recovery and recycling (R&R) equipment were provided to 18 enterprises, selected from 25 applicants. A new low-pressure foaming machine has been delivered to KOPER, the largest manufacturer of foam in the country (using imported HCFC-141b pre-blended polyols). The activities in the other foam enterprises focus on retrofit of the baseline equipment, technology transfer, training and trials. The conversion will be completed by the mid of 2015.
- 3. Activities under IS included, *inter alia*, the introduction of amendments to the environmental law, to establish a mandatory certification system for refrigeration and air-conditioning technicians. Public awareness was raised, *inter alia*, through the annual meeting of the regional ozone network for Europe and Central Asia, celebrating the tenth year anniversary of that network, as well as through a workshop on national legislation for ODS management with 48 participants.
- 4. Of the US \$148,000 approved for the fourth tranche, US \$63,200 (42.7 per cent) was disbursed. Of the aggregated funding of US \$564,955, US \$369,263 (65.4 per cent) has been disbursed.

Annual implementation plan

5. The fifth tranche consists of funding largely for IS (US \$75,000) and a small operational budget of US \$7,000. The operational budget will be merged with the funding available from previous tranches to carry out the following activities: purchase of additional R&R equipment, and delivery to end-users; additional training courses for servicing technicians; and continued implementation of the activities in the foam sector. The activities related to IS include: control and reporting of the import and export of refrigerants and equipment containing ODS; implementation of mandatory log books for larger refrigeration equipment; regular visits to refrigeration servicing shops; monitoring of the R&R scheme; and public awareness for the HPMP; data reporting to the Fund and Ozone Secretariats.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Licensing and quota system

6. The licensing and quota system is fully functional. The verification report demonstrates an effective import control according to a strict quota system. Substantial customs training support the enforcement capabilities.

¹ The HPMP for the former Yugoslav Republic of Macedonia was approved by the Executive Committee at its 60th meeting to reduce HCFC consumption by 35 per cent of the baseline by 1 January 2020, including institutional strengthening (IS) components. At the 67th meeting the Executive Committee approved an additional component to phase out the use of pre-blended polyols containing HCFC-141b in four enterprises.

Consumption

The consumption in 2013 was related exclusively to HCFC-22 at a level of 0.72 ODP tonnes 7. (13.056 mt). The maximum allowable consumption for 2013 specified in the Agreement was at the baseline level, i.e. 1.8 ODP tonnes. The Government has already reported its Article 7 data for 2013. An overview of the consumption for 2013 and earlier years is provided in Table 1.

Table 1. Consumption data from 2009 to 2013

Year		2009	2010	2011	2012	2013	Baseline
HCFC-22	mt	41.63	23.94	16.32	13.46	13.06	32.78
	ODP tonnes	2.3	1.3	0.9	0.74	0.72	1.8
Change to previous year		n/a	-42.5%	-31.8%	-17.5%	-3.0%	
Change to b	aseline			-50.2%	-58.9%	-60.2%	

Approach to the servicing sector

- 8. The Government's approach to the servicing sector is holistic. The mandatory licensing system for technicians ensures a sufficient level of skills of technicians as well as the availability of adequate tools. ODS disposable cylinders have been banned. The training programme for technicians has been substantially expanded to cover 280 technicians as compared to the original estimates of 200 technicians due to high demand. In addition, vocational schools are being provided with basic refrigeration/airconditioning equipment for training purposes and the teachers are trained to educate new technicians adequately in non-ODS technologies. An import ban of HCFC-dependent refrigeration equipment has been introduced to reduce future HCFC servicing demand. All these activities ensure sustainability of the HPMP.
- 9. The country operates an efficient network for R&R, mainly based on equipment purchased during CFC phase-out. According to the information provided in the submission, 2.81 metric tonnes (mt) (0.15 ODP tonnes) of HCFC-22 were recycled, representing 21.5 per cent of the HCFC-22 consumption in the country. Other refrigerants recycled were CFC-12 (575 kg), HFC-134a, HFC-404A, HFC-407C, HFC-410A, R-403b and CFC-502, leading to a total recovery of 14.04 mt of refrigerant, and to an accumulation of 482 kg (3.4 per cent) of refrigerant waste.
- 10. The Secretariat pointed out that a number of the alternatives to HCFC-22 as refrigerant are flammable, in particular those with a low global warming potential, and asked whether the technician-training courses undertaken are also focussing on the handling of flammable refrigerants. UNIDO advised that currently that is not the case, but will be considered for the future.

Conclusion

- The implementation of the fourth tranche progressed according to plan. The conversion activities in the foam sector are progressing well. The main activity, the conversion at KOPER, has progressed to the point where a low-pressure foaming machine was delivered in March 2014. Some minor delays were experienced in publishing a number of rule books², and their publishing date has been postponed to this year.
- 12. The country is in compliance with the Montreal Protocol control targets as well as with the targets specified in its HPMP Agreement. The R&R contributed substantially to the low consumption in the country; of the total use of approximately 15.87 mt, 17.7 per cent are covered by recycled material. The activities show a holistic approach towards establishing and firming up good servicing practices, and reducing future dependence on HCFCs by discontinuing import of refrigeration and air-conditioning

² These rule books are effectively government regulations and, in this case, relate to R&R, to annual ODS import/export reporting and to prohibiting trade of refrigerants in non-refillable containers.

equipment dependent on HCFCs. The licensing system for HCFCs seems to work well, and the import of new HCFC-based equipment has been banned. The HPMP implementation in general as well as the plan of activities for the next year appear to address the challenges in the country to meet the 2015 and 2020 compliance targets as well as the more ambitious targets in the Agreement.

RECOMMENDATION

13. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the fourth tranche of stage I of the HCFC phase out management plan of (HPMP) in the former Yugoslav Republic of Macedonia, and further recommends blanket approval of the fifth tranche of stage I of the HPMP for the former Yugoslav Republic of Macedonia, and the corresponding 2014 annual implementation plan, with associated support costs at the funding level shown in the table below:

	Project title	Project funding (US \$)	Support cost (US \$)	Implementing agency
(a	HCFC phase-out management plan (phase I, fifth tranche)	82,000	6,150	UNIDO

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