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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Seventy-ninth Meeting
Bangkok, 3-7 July 2017

PROJECT PROPOSAL: THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

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

Phase-out

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

UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

The former Yugoslav Republic of Macedonia

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNIDO (lead)	60th	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2016	0.27 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2016	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					0.27				0.27

(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) BUSINESS PLAN		2017	2018	2019	2020	Total
UNIDO	ODS phase-out (ODP tonnes)	0.39	0.00	0.28	0.14	0.81
	Funding (US \$)	228,975	0.00	161,250	80,625	470,850

(VI) PROJECT DATA		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits*		n/a	n/a	n/a	1.80	1.80	1.62	1.62	1.62	1.62	1.62	1.17	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 (US \$)	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
	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 approved by ExCom (US \$)	Project costs	15,000	107,000	294,955	148,000	82,000	82,000	0	0	0	0	0	728,955
	Support costs	1,125	8,025	22,122	11,100	6,150	6,150	0	0	0	0	0	54,672
Total funds requested for approval at this meeting (US \$)	Project costs	0	0	0	0	0	0		82,000**	0	0	0	82,000
	Support costs	0	0	0	0	0	0		6,150**	0	0	0	6,150

*A corrigendum was issued for the 67th meeting report to reflect the country's actual consumption

**The seventh tranche should have been submitted in 2016

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 79th meeting a request for funding for the seventh tranche of stage I of the HCFC phase-out management plan (HPMP), at the amount of US \$82,000, plus agency support costs of US \$6,150.¹ The submission includes a progress report on the implementation of the sixth tranche, the verification report on HCFC consumption in 2015 and 2016, and the tranche implementation plan for 2017 to 2018. Institutional strengthening (IS) is a component of stage I of the HPMP.

Report on HCFC consumption

HCFC consumption

2. The Government of the former Yugoslav Republic of Macedonia reported a consumption of 0.27 ODP tonnes of HCFC in 2016. The 2012-2016 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in the former Yugoslav Republic of Macedonia (2012-2016 Article 7 data)

HCFC	2012	2013	2014	2015	2016	Baseline
Metric tonnes						
HCFC-22	13.46	13.06	10.44	3.36	4.92	32.78
HCFC-141b in imported pre-blended polyols	14.60	0	0	0	0	14.1*
Total (metric tonnes)	28.06	13.06	10.44	3.36	4.92	46.88
ODP tonnes						
HCFC-22	0.74	0.72	0.57	0.18	0.27	1.8
HCFC-141b in imported pre-blended polyols	1.61	0	0	0	0	1.55*
Total (ODP tonnes)	2.35	0.72	0.57	0.18	0.27	3.35

*Average consumption between 2007 and 2009

3. The HCFC consumption in 2016 (0.27 ODP tonnes) was 85 and 82 per cent lower than the baseline for compliance (1.8 ODP tonnes) and the maximum allowable consumption in the Agreement with the Executive Committee in 2016 (1.53 ODP tonnes), respectively. The decrease in consumption is due to a combination of the environmental tax (US \$1.13/kg)² on the import of HCFCs, the regulatory measures that have been put in place, including those related to recovery and recycling (R&R) and rules to prevent and minimize refrigerant emissions during servicing, and the implementation of activities in the refrigeration servicing sector. A slight increase in 2016 is attributed to a higher demand for HCFC-22.

Verification report

4. The verification report confirmed that the Government is implementing a licensing and quota system for HCFC imports and exports and that the total consumption of HCFCs was 0.18 ODP tonnes and 0.27 ODP tonnes in 2015 and 2016, respectively. The verification concluded that the former Yugoslav Republic of Macedonia has all necessary legislation in place, the training programme for service technicians is well organised and the R&R scheme is functioning well.

¹ As per the letter of 5 May 2017 from the Ministry of Environment and Physical Planning of the former Yugoslav Republic of Macedonia to UNIDO.

² The charge is 62 Macedonian Denar per kilogramme (kg), converted to U.S. dollars on 25 May 2017.

Country programme (CP) implementation report

5. The Government of the former Yugoslav Republic of Macedonia reported HCFC sector consumption data under the 2016 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

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

Legal framework

6. The following regulatory measures have been implemented: environmental tax for import of HCFC-22 was established in 2011; the import and export of HCFC-based equipment was banned in 2012; the order prohibiting trade of refrigerants in non-refillable containers entered into force on 1 January 2015; and the amendment to the Law on Environment establishing licensing for entities handling refrigeration and air-conditioning (RAC) equipment per category entered into force on 1 January 2017.

7. In addition, rulebooks were developed on: reporting import and export of ODS; the manner of ODSs R&R; reporting on types and quantities of the R&R refrigerants; format and content of training programme for handling, servicing, R&R of refrigerants and/or equipment containing refrigerants; and on the format of the certificate for completion of training for management of refrigerants and RAC equipment, which is one of the conditions to obtain a license for refrigerants management.

Manufacturing sector

8. Two foam enterprises (Koper-Negotino and Zlatna Raka) converted to methyl formate (MF) phasing out 1.35 ODP tonnes of HCFC-141b contained in imported pre-blended polyols prior to the implementation of the sixth tranche. Two other enterprises (Sileks AD Co. and Frigoteknika) are in the process of completing their conversion to MF by 31 December 2018 phasing out an additional 0.39 ODP tonnes of HCFC-141b contained in imported pre-blended polyols.

Refrigeration servicing sector

9. The following activities were implemented: workshops were organized for 172 service technicians and 120 equipment owners and environmental inspectors covering, *inter alia*, log-booking and equipment management and labelling; six identifiers and ten leak-detectors were delivered to environmental inspectors; 136 additional refrigeration technicians were trained on *inter alia* ODS legislation, R&R, management of the equipment containing three and more kg of refrigerant and alternative refrigerants with the total number trained under stage I reaching 469. The amount of R&R refrigerants reached 35,464.8 kg in 2016 (compared to 26,038.8 kg in 2015), with the most common refrigerants (HCFC-22, HFC-134A, R-404A, R-407C, and R-410A) accounting for almost all of this quantity (small amounts of CFC-12, R-403B, R-502 and R-507 were also recovered).

Project implementation and monitoring unit (PMU) and IS

10. The mandatory log-booking under IS was implemented: the electronic database for equipment containing three and more kg of refrigerant was upgraded to include information on subsectors of usage of equipment, geographic location of equipment and status of recording or labelling; 402 units of commercial, industrial and residential RAC equipment were recorded in the database; the national ozone unit (NOU) visited 33 equipment, owners in order to assist with equipment recording and labelling; and online help desk was established for log-books and equipment labelling. The NOU also implemented a public awareness programme and participated in a number of meetings and workshops abroad.

Level of fund disbursement

11. As of May 2017, of the US \$728,955 so far approved, US \$613,891 had been disbursed (Table 2). The balance of US \$115,064 will be disbursed during the seventh tranche.

Table 2. Financial report of stage I of the HPMP for the former Yugoslav Republic of Macedonia (US \$)

Agency	First-fifth tranche		Sixth tranche		Total	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNIDO	646,955	592,576	82,000	21,315	728,955	613,891
Disbursement rate (%)	91.6		26.0		84.2	

Implementation plan for the seventh tranche of the HPMP

12. During the seventh funding tranche, the following activities will be undertaken:
- (a) Completion of foam enterprises conversion (funding from the previous tranches);
 - (b) Technicians training on good service practice, including safety aspects related to alternatives (US \$10,000);
 - (c) Activities related to IS: legislation amendments (adoption of additional rulebooks, including one on types of categories of licenses for management of refrigerants and/or products containing refrigerants, and another on the manner of refrigerants R&R, harmonized with European Union regulations), further strengthening of licensing system for technicians (including establishment of the register of licences and commissions for exam preparation and performance), equipment recording and labelling control and log-books management, monitoring of the R&R scheme, and public awareness (US \$65,000); and
 - (d) Monitoring and verification (US \$7,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Verification report

13. In reviewing the verification report, the Secretariat noted that the two importers stored 4.1 metric tonnes of HCFC-22 from 2015 and 2016 import and enquired the reasons for such storage, and whether the importers already applied for HCFC-22 import permits in 2017. UNIDO indicated that at the moment there was no application for import of HCFC-22 in 2017, and the likely reason for the storage is for future sales.

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

Legal framework

14. The HCFC import quota for 2017 has been established at 1.35 ODP tonnes.³

Manufacturing sector

15. UNIDO clarified that the conversion at Sileks AD Co., was not completed in 2016 as planned due to a change in ownership; however it will be completed by December 2018. In the case of Frigoteknika, the enterprise is relocating to a newly-built facility; the equipment required for the conversion of the foam production line will be installed immediately after completion of the construction, with the conversion expected to be completed by December 2018. The ban on the use of HCFC-141b contained in imported pre-blended polyols will be introduced immediately after completion of the conversions (expected by December 2018).

Refrigeration servicing sector

16. The Secretariat noted the continued effective implementation of the R&R scheme, and that the rulebook on the manner of ODSs R&R contains requirements related to special premises for temporary storage of ODS waste. UNIDO informed that enterprises are required to report on generated waste on an annual basis (e.g., the waste quantity generated in 2016 was 964.4 kg) but an estimate on the ODS waste collected in the country has not yet been conducted. UNIDO further indicated that the country had no experience in disposal of ODS waste, but the experience gained through activities for persistent organic pollutant waste disposal could be used as a starting point to develop future action on ODS waste management, including developing an ODSs waste national inventory.

IS

17. The Secretariat noted the progress in implementing the mandatory logbooks, including the recording in the database of 402 pieces of equipment containing three and more kg of refrigerant. The Secretariat enquired whether the database could easily be updated as new refrigerants enter the market. UNIDO informed that the database is upgraded with HFCs and other alternatives to HCFC-22. The recent upgrade to the database included fields for sectors and sub-sectors, geographic location and status of equipment in terms of recording or labelling. This data will support the NOU in planning activities, in particular distribution of refrigeration equipment throughout the country.

Conclusion

18. The implementation of the sixth tranche despite a slight delay in the manufacturing sector progressed well. The country's 2015 and 2016 consumption is well below the Montreal Protocol control targets and the maximum allowable consumption under its Agreement with the Executive Committee. The licensing and quota system is functioning. The amount of R&R refrigerants increased by 36 per cent between 2015 and 2016, and technicians training is successfully implemented. The log-booking has been further strengthened with 402 pieces of RAC equipment recorded. The conversion at the two remaining foam enterprises, planned in 2016, is expected to be completed during the seventh tranche. The level of disbursement is at 84.2 per cent. The activities so far implemented and those planned under the seventh tranche will continue to help the country meet its compliance obligations under the Protocol.

³ In line with decision 63/17, a confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and exports is in place and that the system is capable of ensuring compliance with the Montreal Protocol.

RECOMMENDATION

19. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the sixth tranche of stage I of the HCFC phase-out management plan of (HPMP) for the former Yugoslav Republic of Macedonia; and further recommends blanket approval of the seventh tranche of stage I of the HPMP for the former Yugoslav Republic of Macedonia, and the corresponding 2017-2018 tranche implementation plan, 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 (stage I, seventh tranche)	82,000	6,150	UNIDO