



**United Nations  
Environment  
Programme**

Distr.  
GENERAL

UNEP/OzL.Pro/ExCom/84/56  
11 November 2019

ORIGINAL: ENGLISH



---

EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Eighty-fourth Meeting  
Montreal, 16–20 December 2019

**PROJECT PROPOSAL: NORTH 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, ninth tranche)

UNIDO

## PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

## North Macedonia

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2018	0.26 (ODP tonnes)
--	------------	-------------------

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2018	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					0.14				0.14

(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		2019	2020	2021	Total
UNIDO	ODS phase-out (ODP tonnes)	0.14	0.14	0.14	0.42
	Funding (US \$)	80,625	80,625	80,625	241,875

(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	82,000	101,000*	0	0	911,955
		Support costs	1,125	8,025	22,122	11,100	6,150	6,150	0	6,150	7,575*	0	0	68,397
Total funds requested for approval at this meeting (US \$)		Project costs										75,000**		75,000
		Support costs										5,625		5,625

\*Figures were updated to reflect the return of US \$30,000, plus agency support costs of US \$2,250 due to Sileks withdrawing from the project (decision 83/26)

\*\*The ninth tranche should have been submitted in 2018

<b>Secretariat's recommendation:</b>	For blanket approval
--------------------------------------	----------------------

## PROJECT DESCRIPTION

1. On behalf of the Government of North Macedonia, UNIDO as the designated implementing agency, has submitted a request for funding for the ninth tranche of stage I of the HCFC phase-out management plan (HPMP), at the amount of US \$75,000, plus agency support costs of US \$5,625.<sup>1</sup> The submission includes a progress report on the implementation of the eighth tranche, the verification report on HCFC consumption for 2018 and the tranche implementation plan for 2019 to 2020. Institutional strengthening (IS) is a component of stage I of the HPMP.

### Report on HCFC consumption

2. The Government of North Macedonia reported a consumption of 0.26 ODP tonnes of HCFC in 2018, which is 85.56 per cent below the HCFC baseline for compliance. The 2014-2018 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in North Macedonia (2014-2018 Article 7 data)**

HCFC	2014	2015	2016	2017	2018	Baseline
<b>Metric tonnes</b>						
HCFC-22	10.44	3.36	4.92	0.00	4.76	32.78
HCFC-141b in imported pre-blended polyols*	0.00	0.00	0.00	0.00	0.00	14.10*
<b>ODP tonnes</b>						
HCFC-22	0.57	0.18	0.27	0.00	0.26	1.80
HCFC-141b in imported pre-blended polyols*	0.00	0.00	0.00	0.00	0.00	1.55*

\*Average consumption between 2007 and 2009.

3. The activities for the servicing sector implemented under the HPMP including regulations to minimize refrigerant emissions during servicing, training of technicians, recovery and recycling (R&R) of refrigerants had led to the decrease in HCFC imports. The annual reduction of 5 per cent on the import quota coupled with the environmental tax (€1/kg) on the import of HCFCs had further supported this reduction. Furthermore, the introduction of refrigeration and air-conditioning (RAC) equipment based on HFCs/HFC blends and natural refrigerants has also contributed to the decreased demand for HCFCs in the country.

4. Of the 184.31 mt of refrigerants imported into the country in 2018, HCFCs accounted for 2.58 per cent (4.76 mt), while the rest was for HFC/HFC blends. Import of HFC-23 was also reported for that year (i.e. 0.5 mt) for the use in the process of oxygen and nitrogen production in one production facility.

### *Country programme (CP) implementation report*

5. The Government of North Macedonia reported HCFC sector consumption data under the 2018 CP implementation report which is consistent with the data reported under Article 7 of the Montreal Protocol. It was however noted that the actual use in the country for the servicing sector in 2018 was only 0.14 ODP tonnes (2.54 mt) and the remaining amount was for stockpile. The CP report was amended to reflect the actual use in the country.

<sup>1</sup> As per the letter of 20 September 2019 from the Ministry of Environment and Physical Planning of North Macedonia to UNIDO.

### *Verification report*

6. The verification concluded that the Government of North Macedonia is implementing a licensing and quota system for HCFC imports and exports and that the annual consumption of HCFC-22 in 2018 was 0.26 ODP tonnes. Only one enterprise which was issued a license to import HCFC-22 in 2017 brought in the substances in 2018 (i.e., 4.76 mt), which was the basis for the 2018 consumption.

### Progress report on the implementation of the eighth tranche of the HPMP

#### *Legal framework*

7. In 2019, the amendment to the Law on Environment to include specific provisions on types and categories of licenses for management of refrigerants and/or products containing refrigerants, procedures applied for R&R, equipment installation and servicing was implemented. In addition, a new amendment to this law related to strengthening the certification system and practical testing of technicians had been drafted, and is expected to be approved in 2020. This proposed amendment would introduce an on-site practical part of the certification testing in line with European Union (EU) and international training centres' requirements. Meetings and consultations were held to explore the ways by which current EU regulation on fluorinated greenhouse gases can be transposed into national regulations. Import of Annex F substances (HFCs) are controlled as part of the licensing system in North Macedonia.

#### *Manufacturing sector*

8. The three polyurethane (PU) foam beneficiary enterprises (Frigoteknika, Koper-Negotino, Zlatna Raka) have completed their conversion which has resulted in the phase-out of 1.73 ODP tonnes of HCFC-141b contained in imported pre-blended polyols. Since 2013, zero imports of HCFC-141b has been reported. At the 83<sup>rd</sup> meeting, the foam enterprise Sileks had decided to withdraw from stage I of the HPMP and that US \$30,000, plus agency support costs of US \$2,250 for UNIDO associated with the conversion of the enterprise had been returned to the Multilateral Fund in line with decision 83/26.

#### *Refrigeration servicing sector*

9. The Government gave high priority to activities that controlled, recorded and labelled equipment that contained high refrigerant charge (i.e., 3 kg or more), and the State Environment Directorate was actively mobilized for the inspection and leak-check activities. Other activities implemented included training of 22 representatives from three main stakeholders (i.e., equipment owners, service technicians and environmental inspectors) to present all the aspects of the procedure for checking/inspecting/recording the RAC equipment, and enable better communication, cooperation and coordination among them, and a training workshop for 15 service technicians on good servicing practice (bringing to a total of 537 technicians trained in the country).

10. Monitoring of the R&R programme continued, and the Ministry of Environment and Physical Planning prepared annual reports on the quantities of refrigerants that have been recovered and recycled. Of the total 31.65 mt of refrigerants recovered, recycled and re-used, the share of HCFC-22 was only 16.34 per cent the rest was associated with HFCs/HFC blends, the highest of which was R-410A (33.60 per cent). A very small amount (0.14 per cent) was attributed to CFC-12. Reporting of recovered and recycled quantities of refrigerant was facilitated through a helpdesk which ensured a more efficient implementation of the R&R scheme.

*Activities implemented by the IS*

11. The national ozone unit (NOU) is involved in issuing permits for import/export of ODS, ODS alternative refrigerants and equipment containing refrigerants; it coordinates the work to harmonize its national legislation with EU regulations. The NOU also implemented a public awareness programme; conducted training for service technicians, environmental inspectors and equipment owners; developed training and other information materials; and participated in regional and international workshops. It is also responsible for reporting CP and Article 7 data to the Multilateral Fund and the Ozone Secretariats, respectively.

Level of fund disbursement

12. As of October 2019, of the US \$911,955 approved so far, US \$818,995 had been disbursed as shown in Table 2. The balance of US \$92,960 will be disbursed in 2020.

**Table 2. Financial report of stage I of the HPMP for North Macedonia (US \$)**

Agency	First-seventh tranche		Eighth tranche		Total	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNIDO	810,955	789,942	101,000*	29,053	911,955	818,995
<b>Disbursement rate (%)</b>	97.40		28.77		89.80	

\*\*Figures were updated to reflect the return of US \$30,000, plus agency support costs of US \$2,250 due to Sileks withdrawing from the project (decision 83/26)

Implementation plan for the ninth tranche of the HPMP

13. The following activities will be implemented between January and December 2020:
- (a) Drafting legislation to enable the consistent application of Montreal Protocol provisions with EU F-gas regulations to support complete phase-out of ODS (US \$10,000);
  - (b) Continued monitoring and control of import/export of ODS and ODS-containing equipment through the licensing system (US \$5,000);
  - (c) Training for 30 customs administration officers on control at the border points, and updating the manual for good practices in refrigerants control at the border points (US \$10,000);
  - (d) Visits to 20 enterprises with RAC equipment to monitor, label and record the operation of the equipment including leak-check (US \$15,000);
  - (e) Monitoring of R&R scheme (US \$10,000); and
  - (f) Activities related to IS: CP and Article 7 data reporting, monitoring of HPMP implementation, awareness raising activities (US \$25,000).

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

#### Progress report on the implementation of the eighth tranche of the HPMP

##### *Legal framework*

14. The Government of North Macedonia has already issued HCFC import quotas for 2019 at 1.17 ODP tonnes, which is lower than the Montreal Protocol control targets and the allowable consumption under the Agreement with the Executive Committee. UNIDO clarified that as the annual quota issued for the country is strictly linked with the national legislation on HCFC import/export (Order limiting import of HCFCs), there is currently no legal mechanism in the country to adjust these quotas to be close to the actual imports recorded for the last five years, which are much lower than the annual quotas. It was reiterated that the Government of North Macedonia is committed to ensuring compliance with the Agreement despite this limitation.

##### *Manufacturing sector and sustainability of HCFC phase-out*

15. With the return of the funds from the PU foam enterprise (Sileks) to the 83<sup>rd</sup> meeting, the Secretariat noted with appreciation that the Government of North Macedonia has completed the phase-out of the enterprises in the foam sector using low-global warming potential technologies and has phased out the use of 15.7 mt (1.73 ODP tonnes) of HCFC-141b contained in imported pre-blended polyols. Regarding the sustainability of the HCFC phase-out, UNIDO indicated that there has been no imports of HCFC-141b since 2013, and the Government of North Macedonia will formalize the issuance of a ban on imports of HCFC-141b pure and contained in pre-blended polyols in 2020. UNIDO further indicated that the Government will report on the progress of the issuance of the ban as part of its progress report to support the request for the next tranche in 2020. Random visits to importers to assess compliance with ODS regulations are undertaken by environmental inspectors on a regular basis. Converted enterprises are also monitored and visited after conversion. To date no irregularities have been identified.

##### Conclusion

16. North Macedonia continues to be in compliance with the Montreal Protocol and the HCFC consumption targets defined in its Agreement with the Executive Committee; in 2018, consumption of all HCFCs was 80 per cent lower than the maximum allowable consumption in the Agreement, and there has been zero reported consumption of HCFC-141b since 2013. The licensing and quota system is functioning. The R&R scheme is also functioning successfully and has reported that all of the recycled material has been reused in the market, and this is expected to continue in the future. The conversion of the three foam enterprises has resulted in the phase out of 15.7 mt (1.73 ODP tonnes) of HCFC-141b contained in imported pre-blended polyols, and while no imports of these substances have been recorded, the Government will formally initiate a ban on these imports in future. The level of disbursement of the eighth tranche is 28.77 per cent and the overall disbursement rate has reached 89.80 per cent. The activities so far implemented and those planned under the eighth tranche will continue to support the country meet its compliance obligations under the Protocol.

**RECOMMENDATION**

17. The Fund Secretariat further recommends blanket approval of the ninth tranche of stage I of the HPMP for North Macedonia, and the corresponding 2019-2020 tranche implementation plan, at the funding level shown in the table below:

	<b>Project title</b>	<b>Project funding (US \$)</b>	<b>Support cost (US \$)</b>	<b>Implementing agency</b>
(a)	HCFC phase-out management plan (stage I, ninth tranche)	75,000	5,625	UNIDO