UNITED NATIONS EP



United Nations Environment Programme Distr. GENERAL



UNEP/OzL.Pro/ExCom/83/19 2 May 2019

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Eighty-third Meeting Montreal, 27–31 May 2019

**UNIDO's WORK PROGRAMME FOR 2019** 

#### COMMENTS AND RECOMMENDATION OF THE FUND SECRETARIAT

1. UNIDO is requesting approval from the Executive Committee of US \$192,500, plus agency support costs of US \$13,475 for its 2019 work programme listed in Table 1. The submission is attached to the present document.

Table 1: UNIDO's work programme for 2019

Country	Activity/Project	Amount Requested (US \$)	Amount Recommended (US \$)
SECTION A: ACTIV	VITIES RECOMMENDED FOR BLANKET APPROVA	L	
A1: Project preparat	ion for HCFC phase-out management plans		
Botswana*	Preparation of an HCFC phase-out management plan (HPMP) (stage II)	15,000	15,000
Myanmar*	Preparation of an HCFC phase-out management plan (HPMP) (stage II)	10,000	10,000
Nicaragua*	Preparation of an HCFC phase-out management plan (HPMP) (stage II)	10,000	10,000
Nigeria**	Preparation of an HCFC phase-out management plan (HPMP) (stage III)	72,500	72,500
Suriname*	Preparation of an HCFC phase-out management plan (HPMP) (stage II)	10,000	10,000
Togo*	Preparation of an HCFC phase-out management plan (HPMP) (stage II)	20,000	20,000
Zambia*	Preparation of an HCFC phase-out management plan (HPMP) (stage II)	10,000	10,000
	Subtotal for A1	147,500	147,500
	Agency support costs (7 per cent for project preparation)	10,325	10,325
	Total for A1	157,825	157,825
A2: Project preparat	cion for control of HFC-23 by-product emissions		
Mexico	Project preparation for the control of HFC-23 by-product emissions in the HCFC production sector	45,000	45,000
	Subtotal for A2	45,000	45,000
	Agency support costs (7 per cent for project preparation)	3,150	3,150
	Total for A2	48,150	48,150
	Grand total (A1, A2)	205,975	205,975

<sup>\*</sup> UNEP as lead implementing agency

#### SECTION A: ACTIVITIES RECOMMENDED FOR BLANKET APPROVAL

## A1: Project preparation for HCFC phase-out management plans (HPMPs)

### **Project description**

- 2. UNIDO, as cooperating implementing agency, submitted requests for six countries for the preparation of stage II of the HPMPs and a request for the preparation of stage III of the HPMP for Nigeria, as shown in section A1 of Table 1.
- 3. UNEP as lead implementing agency, provided descriptions of the activities to support the requests for project preparation for the six countries listed in section A1 of Table 1. The submissions for each country included: justification for the requested project preparation funding; a progress report on the implementation of stage I of their respective HPMPs; and the list of potential activities and the

<sup>\*\*</sup> UNDP as lead implementing agency

corresponding budgets. UNEP has requested US \$145,000, plus agency support costs in its work programme for 2019.<sup>1</sup>

4. UNDP as lead implementing agency, provided a description of the activities for the project preparation for Nigeria including an update on the implementation of stage II of its HPMP. UNDP has requested US \$22,500, plus agency support costs in its work programme for 2019.<sup>2</sup>

#### **Secretariat's comments**

- 5. In reviewing the seven requests, the Secretariat took into account the guidelines for funding the preparation of stage II of the HPMPs for Article 5 countries contained in decision 71/42, stage I and stage II (in the case of Nigeria) of the HPMPs as approved, the status of implementation of the tranches as at the preparation of the present document, and decision 82/45(c)(ii). The Secretariat noted that the funding requested for each country is in line with decision 71/42.
- 6. With regard to the request for Nigeria, the Secretariat noted that at the 82<sup>nd</sup> meeting, the Executive Committee agreed to include project preparation for stage III of HPMPs in the 2019–2021 consolidated business plan for those countries for which stage II of the HPMP went beyond 2020, with the understanding that requests for project preparation would not be submitted more than two years before the end date of stage II of the HPMP.<sup>3</sup> Although the request for Nigeria was submitted more than two years before the end date of stage II,<sup>4</sup> it was noted that stage II was approved on the understanding that its approval did not preclude Nigeria from submitting, not earlier than 2020, stage III of the HPMP.<sup>5</sup> Accordingly, the request for project preparation has been submitted to the 83<sup>rd</sup> meeting.

#### Secretariat's recommendation

7. The Secretariat recommends blanket approval of UNIDO's requests for project preparation for stage II of the HCFC phase-out management plans (HPMP) for Botswana, Myanmar, Nicaragua, Suriname, Togo and Zambia, and for project preparation for stage III of the HPMP for Nigeria, at the level of funding shown in section A1 of Table 1.

# A2: Project preparation for the control of HFC-23 by-product emissions

## **Project description**

8. UNIDO submitted a funding request to prepare a project for the control of HFC-23 by-product emissions in the HCFC production sector in Mexico, listed in section A2 of Table 1 above. Details of the project preparation request is contained in Section 2 of UNIDO's submission attached to the present document.

### **Secretariat's comments**

9. The Secretariat noted that the funding requested (US \$50,000) was higher than funding approved in the past for similar project preparation requests (i.e., US \$30,000 per enterprise), and requested UNIDO to provide supporting information. UNIDO clarified that preparation for this project require experts with experience and technical knowledge related to HFC-23 emissions, monitoring, control and destruction, which are not required for preparation of HCFC investment projects in the consumption sector.

<sup>&</sup>lt;sup>1</sup> UNEP/OzL.Pro/ExCom/83/18

<sup>&</sup>lt;sup>2</sup> UNEP/OzL.Pro/ExCom/83/17

<sup>&</sup>lt;sup>3</sup> Decision 82/45(c)(ii)

<sup>&</sup>lt;sup>4</sup> 31 December 2024

<sup>&</sup>lt;sup>5</sup> Decision 81/40(c)

10. Following the discussion, it was agreed to adjust the funding to US \$45,000.

## Secretariat's recommendation

11. The Secretariat recommends blanket approval of the request for project preparation for the control of HFC-23 by-product emissions in the HCFC production sector in Mexico, listed in section A2 of Table 1 above.



# **UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

 $83^{rd}$  Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

**UNIDO Work Programme** 

83<sup>rd</sup> Meeting of the Executive Committee

### **Introduction**

The UNIDO Work Programme for the consideration of the 83<sup>rd</sup> Meeting of the Executive Committee (ExCom) of the Multilateral Fund (MLF) has been prepared following the Government requests as well as based on ongoing and planned activities. The Work Programme will support the implementation of UNIDO's three year Rolling Business Plan 2019-2021.

The 83<sup>rd</sup> UNIDO WP is addressing preparatory assistance requests and requests for extension of the duration of the Enabling activities for HFC phase-down.

Preparatory Assistance is submitted for the 83<sup>rd</sup> Executive Committee Meeting consideration for Mexico for the country compliance with paragraphs 6 and 7 of Article 2J of the Montreal Protocol. Furthermore, preparatory assistance is submitted for Botswana, Myanmar, Nicaragua, Suriname, Togo and Zambia to enable the countries to overview and update data necessary for the launch and implementation of HPMP Stage II. Also, preparatory assistance is submitted for the 83<sup>rd</sup> Executive Committee Meeting consideration for Nigeria to enable the country to overview and update data necessary for the launch and implementation of HPMP Stage III.

As per decision 81/31(a), Enabling activities for HFC phase-down were approved with a duration of 18 months, however if needed, that period can be extended for additional 12 months, when an official request is submitted. UNIDO has received official letters from Armenia, Bosnia and Herzegovina, Burkina Faso, Cameroon, Chile, the Congo, the Gambia, Macedonia, Mexico, Serbia, Somalia, Sudan, Tunisia, Turkey and Uruguay, requesting the duration of the implementation period to be extended for additional 12 months. The reasons for the extensions are provided in Section 3.

The UNIDO Work Programme Amendment for the consideration of the 83<sup>rd</sup> ExCom Meeting comprises the following sections:

- Section 1: Consolidated list of activities foreseen for the above requests by project types and country;
- Section 2: Project concepts indicating details and funding requirements;
- Section 3: Requests for extension of the duration of the Enabling activities for HFC phase down.

### Funding is requested as follows:

- Preparatory Assistance for compliance with paragraphs 6 and 7 of Article 2J of the Montreal Protocol for Mexico amounting to US\$ 48,150 (including US\$ 3,150 representing 7.0% A.S.C.);
- Preparatory assistance funding for HPMP Stage II in Botswana, Myanmar, Nicaragua, Suriname, Togo and Zambia and for HPMP Stage III for Nigeria<sup>6</sup> amounting to US\$ 157,825 (including US\$ 10,325 representing 7.0 % A.S.C);

Total: US\$ 205,975 (including US\$ 13,475 agency support cost).

<sup>&</sup>lt;sup>6</sup> The Project Concepts for Botswana, Myanmar, Nicaragua, Suriname, Togo and Zambia are included in the Lead Agency (UN Environment) Work Programme. The Project Concept for Nigeria is included in the Lead Agency (UNDP) Work Programme.

# **SECTION 1**

Country	MLF HCFC Status	Туре	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C.	P.D.	Remarks
			Preparato	ory Assistance for	compliance with paragraphs 6 and 7	of Article 2J	of the Mont	real Protoc	ol		
Mexico	Non- LVC	PRP	HFC-23	Production	Project preparation for the control of HFC-23 by-product emissions in the HCFC production sector	45,000	3,150	48,150	7%	12	
			SU	BTOTAL		45,000	3,150	48,150			
					Preparatory Assistance for HP	MP					
Botswana	Non- LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	15,000	1,050	16,050	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Myanmar	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Nicaragua	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Nigeria	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage III HPMP	72,500	5,075	77,575	7%	24	In cooperation with UNDP. Concept is submitted by UNDP.
Suriname	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Togo	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	20,000	1,400	21,400	7%	24	In cooperation with UN Environment.

# UNEP/OzL.Pro/ExCom/83/19

Country	MLF HCFC Status	Туре	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
											Concept is submitted by UN Environment.
Zambia	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
	SUBTOTAL				147,500	10,325	157,825				
GRAND TOTAL				192,500	13,475	205,975					

#### **SECTION 2**

### **Project Concept**

**Country:** Mexico

**Title:** Project preparation for the control of HFC-23 by-product emissions in the HCFC

production sector

**Project Duration:** 12 months

**Project Budget:** US\$ 45,000 (excl. 7% Agency Support Costs)

**Implementing Agency: UNIDO** 

Coordinating Agency: National Ozone Unit, Environmental and Natural Resources Secretariat

(SEMARNAT)

# **Project Summary**

At the 28<sup>th</sup> Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, held in Kigali in October 2016, the Parties agreed to phase down HFCs. The Kigali Amendment entered into force on 1 January 2019, since more than twenty instruments of ratification, acceptance or approval of the Amendment have been deposited before that date by States or regional economic integration organizations that are Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer. The Government of Mexico ratified the Kigali Amendment on 25 September 2018 through Approval.

The Government of Mexico is currently implementing its Stage II HCFC Phase-out Management Plan (HPMP) in the consumption sector that help the Government of Mexico to reach compliance with her targets agreed with the Multilateral Fund, which are stricter than the MP phase-out schedule. Mexico agreed to 35% reduction by 2018, 50% reduction by 2020 and 67.5% reduction in 2022. Stage II HPMP focuses on the complete phase-out of HCFC-141b consumption in all sectors as well as on the further reduction of HCFC-22 consumption in the service and aerosol/solvent sectors.

Mexico is one of the few countries with an established ODS production facility. The only producer of HCFC-22 in Mexico is CYDSA, Quimobasicos. The company has two production lines, which in the past produced CFC-11 and CFC-12 as well as HCFC-22.

As per the approved HPMPs for Mexico, "production of HCFCs will be strictly monitored and regulated through temporary measures and the import/export quota system. The yearly monitoring will be carried out through the licensing and quota system and verification site visits to be undertaken by independent international experts", to verify that the annual HCFC production levels were in line with the Montreal Protocol control targets.

However, except for annual monitoring, Mexico did not receive financial support from the Multilateral Fund for the reduction of HCFC-22 in the production sector.

The Office of the National Ozone Unit (NOU) in Mexico is under the direct supervision of the General Direction of Air Quality Management and by the Vice Minister for Environmental Protection of SEMARNAT (Ministry of Environment); this enables the central authority for environment to direct the policies, strategies and priorities for the ODSs phase-out as an integrated component of the environmental

policies of México. The NOU is the focal point for Montreal Protocol activities and mainly coordinates the whole Montreal Protocol programme in the country and prepares the basis for legislative and regulatory measures to be adopted by the responsible government authorities with an emphasis on the HCFC phase-out and HFC phase-down targets.

The NOU is also responsible for monitoring the ODS import and consumption data and has for this purpose developed the Information and Monitoring System (SISSAO).

#### Past and Current management practices for HFC-23 by-product control in Mexico.

The Company Quimobásicos S.A de C.V. was founded in 1961 in Monterrey city as part of the CYDSA Group in a strategic alliance with Honeywell, with the main objective of manufacturing and commercializing fluorocarbon refrigerant gases under the Genetron® brand for national consumption and exports to Center, South America and the Caribbean.

During its first 28 years produced essentially CFC, while in the period from 1989 to 2005 the company produced CFC (R-12 and R-11) and HCFC R-22 alternately.

Difluorochloromethane (HCFC-22) is produced by reacting chloroform (CHCl3) and anhydrous hydrogen fluoride (HF); such reaction produces predominantly HCFC-22 with small amounts of HFC-23, an undesirable by-product. HFC-23 generation ratio varies between 1.78% and 3.44 on a weight basis. Regarding the specific case of Quimobásicos, the average generation ratio reported has been 2.44%, which means 24.4 kg of HFC-23 are produced by every tonne of HCFC-22. Figure I illustrates the historical production of HCFC-22 and the respective emissions of HFC-23 in CO2e (Figure II).

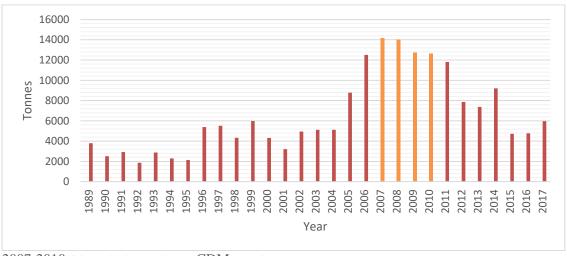
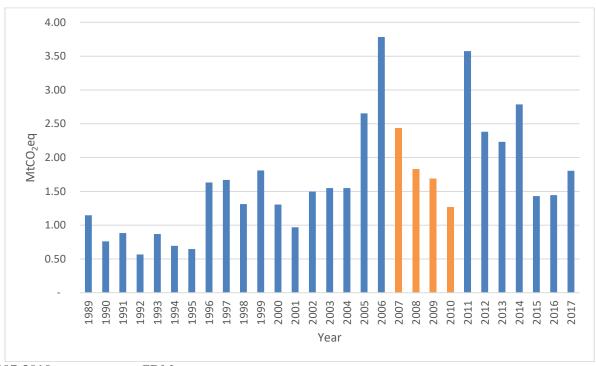


Figure I Historical HCFC-22 production in Mexico (tonnes)

2007-2010 CORRESPOND TO THE CDM PERIOD SOURCE: SISSAO MEXICO, 2018.

As it is shown, the highest levels of production took place in the period from 2005 to 2014, with 2007 and 2008 as the top production years with 14 thousand tons per year, which fell within the CDM project, where the emissions of line 1 were controlled with the plasma equipment.

Figure II Historical HFC-23 emissions in Mexico



2007-2010 REFER TO THE CDM PERIOD ESTIMATE BASED ON HCFC-22 PRODUCTION, 2018

## Project Preparation in order to comply with the Kigali Amendment

As per Paragraph 6 of Article 2 J of the amended Montreal Protocol (after Kigali), "Each Party manufacturing Annex C, Group I, or Annex F substances shall ensure that for the twelve-month period commencing on 1 January 2020, and in each twelve-month period thereafter, its emissions of Annex F, Group II, substances generated in each production facility that manufactures Annex C, Group I, or Annex F substances are destroyed to the extent practicable using technology approved by the Parties in the same twelve-month period. "

In line with Paragraph 7 of Article 2 J of the amended Montreal Protocol (after Kigali): "Each Party shall ensure that any destruction of Annex F, Group II, substances generated by facilities that produce Annex C, Group I, or Annex F substances shall occur only by technologies approved by the Parties."

In order to comply with Paragraphs 6 and 7 of Article 2J of the Montreal Protocol, the Government of Mexico requested UNIDO to submit a project preparation request to the 83<sup>rd</sup> Meeting of the Executive Committee, which would allow the preparation of a project for submission to the 84<sup>th</sup> Meeting of the Executive Committee to control the HFC-23 by-product emissions from 1 January 2020.

Item	Cost US\$
Sub-Contract for the data collection, verification and preparation of HFC-23 control options	25,000
International consultant for project preparation	13,000
Travel Costs	7,000
TOTAL	45,000

# **SECTION 3**

Country	Project Title	Extension Duration (months)	Reason for extending the duration	Official request for extension received?
Armenia	Enabling activities for HFC phase-down (ARM/SEV/80/TAS/01+)	12	Armenia ratified the Kigali Amendment on 27 March 2019, and the main reason for requesting extension is to have sufficient time to implement the follow up activities related to the amendments to the Law and by-laws to cover HFCs, and the various awareness raising activities. A delay also occurred in contracting the company for the upgrade of the E-licensing system to include HFCs. Special focus is paid to the energy-efficiency issues and once the KA ratification enters in to force (when the instrument of ratification is duly deposited), a series of workshops related to the energy efficiency in HVACR sector will be organized for end-users, importers, and RAC technicians. For the next 12 months, Armenia will focus on the following activities:  Legal framework amendments;  Upgrade of the e-licensing system;  Energy-efficiency activities related to the HVACR sector; and	Yes
Bosnia and Herzegovina	Enabling activities for HFC phase-down (BHE/SEV/80/TAS/01+)	12	The country requested extension of the project due to the required follow up for the ratification with the relevant stakeholders.	Yes
Burkina Faso	Enabling activities for HFC phase-down (BKF/SEV/80/TAS/01+)	12	The extension is requested in order to give sufficient time to ensure proper and adequate execution of all activities, without impacting the implementation of the HPMP. Progress made so far and remaining activities are as follows:  • Review of codes and standards: Burkina Faso utilizes a ten digit HS code with the four last digits all showing zeros for the HFCs. The proposal is to use digits 7 and 8 to differentiate the HFCs similar to the CN code in Europe. A proposal to make this change a regional change through the CEDEAO is premature at present.  • Burkina Faso passed a law in 2018 adding HFCs to the controlled substances. Adding to the quota system is in progress.  • The National mechanism used for ODS reporting is at the moment manual and a new electronic system will be introduced in 2020. Customs will be added to the system to facilitate reporting.  • Assessment of the refrigeration and air-conditioning (RAC) servicing sector (formal and informal sector) is in progress.  • Identification of appropriate policies to facilitate the phase-down of HFCs and the introduction of low-GWP non-ODS alternative technologies: Discussions in progress with the ozone office regarding the use of low-GWP alternatives.	Yes
Cameroon	Enabling activities for HFC phase-down (CMR/SEV/80/TAS/01+)	12	The ratification process of the Kigali amendment has been initiated, however it is a long process that needs to be supported in the framework of the Enabling Activities and it won't be completed by the initially planned completion date of	Yes

Country	Project Title	Extension Duration (months)	Reason for extending the duration	Official request for extension received?
			the project. In addition, some activities, such as the updating of the customs code system, have had a late start as the consultant could be on board only recently.	
Chile	Enabling activities for HFC phase-down (CHI/SEV/80/TAS/02+)	12	The extension is requested to advance the actions planned under UNIDO's component, considering that some activities needed the necessary coordination for their development at the national level and to align with the general timetable agreed with the NOU and the implementing agencies involved in the project.	Yes
Congo	Enabling activities for HFC phase-down (PRC/SEV/80/TAS/01+)	12	Extension is required due to delays in selection process and recruiting of national consultants. Subsequent delays in preparation of national legislation and support of relevant legislative activities and respective workshops, information dissemination and awareness could not be accomplished in originally projected time.	Yes
Gambia	Enabling activities for HFC phase-down (GAM/SEV/80/TAS/01+)	12	Activities under the project are progressing very well, however, an extension is requested to ensure complete implementation of all activities. The country is preparing for the ratification of the Kigali Amendment, but the work plan had to be updated because additional coordination and provision of background documents were necessary to engage all relevant ministries and national assembly members that are requested to vote on the ratification.	Yes
Macedonia	Enabling activities for HFC phase-down (MDN/SEV/80/TAS/01+)	12	The extension is required in order to finalize the remaining activities, such as:  Review of the national mechanisms used for ODS reporting to include HFCs consumption, especially considering the servicing sector (the informal sector in particular);  In coordination with the Customs Administration finalization of the customs codes related to the Annex F substances and their blends harmonization;  Enhancement of the import and export license system to include HFCs and other alternatives;  Improving a national database to include HFCs and other ODS alternatives;  Reviewing operating codes and standards for the correct and efficient use of HFCs and ODS alternatives in the entire value chain  Adoption of the Law on Ratification of the Kigali Amendment by the Parliament.  So far, the initial activities have been undertaken, the analysis of the legal framework is completed, consultations with legal experts on the legislation harmonization, review of the customs codes for HFCs and their blends and preparation of harmonized tariff codes.	Yes
Mexico	Enabling activities for HFC phase-down (MEX/SEV/80/TAS/02+)	12	Although the enabling activities progressed very well, the extension is requested to finalize the work planned for the period May - July and the proper development of the awareness and dissemination activities at the national level (workshop) included in the project. Additional time was necessary during the	Yes

Country	Project Title	Extension Duration (months)	Reason for extending the duration	Official request for extension received?
			project implementation to ensure the clear understanding and approval from the new governmental authorities in Mexico.	
Serbia	Enabling activities for HFC phase-down (YUG/SEV/80/TAS/01+)	12	The country is preparing for the ratification of the Kigali Amendment, following also EU directives, which requires more time to ensure the system is developed in line with the EU requirements.	Yes
Somalia	Enabling activities for HFC phase-down (SOM/SEV/80/TAS/01+)	12	Extension is requested due to the slower pace of activities implementation in the country. The security situation imposes some technical difficulties related to the organization of the activities, which are ongoing, but will need additional time to ensure their proper implementation.	Yes
Sudan	Enabling activities for HFC phase-down (SUD/SEV/80/TAS/01+)	12	Extension is requested due to the delayed organization of respective co- implementing joint work (incl. workshops). Also, there were delays in preparation of the national strategies to implement established action plans in the prioritized areas for the country.	Yes
Tunisia	Enabling activities for HFC phase-down (TUN/SEV/80/TAS/02+ and TUN/SEV/80/TAS/01+)	12	Funding for the Enabling Activities Project for Tunisia has been confirmed by MLF as well as bilateral partner. Initial coordination and grant agreement procedures requested more time. Since then, the activities under the project are advancing as planned and will be finalized with an extension of max 12 months.	Yes
Turkey	Enabling activities for HFC phase-down (TUR/SEV/80/TAS/01+)	12	The extension is required due to the fact that HFCs are present in all the sectors and targeted workshops are taking place in different regions. The workshops are planned for the whole duration of 2019. The activities are coordinated with the EU f-gas project on field to ensure complementarity and avoid overlaps.	Yes
Uruguay	Enabling activities for HFC phase-down (URU/SEV/80/TAS/01+)	12	Extension is requested to conclude two minor planned actions in the UNIDO's component between June and August. Some activities demanded coordination for their development at the national level and aligned with the general timetable agreed with the NOU and UNDP (as lead agency of the project).	Yes