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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-sixth Meeting
Montreal, 2-6 November 2020
Postponed to 8-12 March 2021¹

PROJECT PROPOSAL: PARAGUAY

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, third tranche) UNDP and UNEP

¹ Due to coronavirus disease (COVID-19)

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Paraguay

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNDP, UNEP (lead)	63 rd	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2019	14.59 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2019	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123			0.13						0.13
HCFC-141b in imported pre-blended polyol		3.66							3.66
HCFC-22					14.46				14.46

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	18.0	Starting point for sustained aggregate reductions:	19.31
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	6.28	Remaining:	13.03

(V) BUSINESS PLAN		2020
UNDP	ODS phase-out (ODP tonnes)	0.0
	Funding (US \$)	0
UNEP	ODS phase-out (ODP tonnes)	0.63
	Funding (US \$)	71,190

(VI) PROJECT DATA			2011	2012	2013	2014	2015-2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	18.0	18.0	16.1	11.7	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	17.95	17.95	16.16	11.67	n/a
Agreed funding (US\$)	UNDP	Project costs	168,500	0	0	0	131,500	0	300,000
		Support costs	12,638	0	0	0	9,862	0	22,500
	UNEP	Project costs	146,500	0	0	0	120,500	63,000	330,000
		Support costs	19,045	0	0	0	15,665	8,190	42,900
Funds approved by ExCom (US\$)		Project costs	315,000	0	0	0	252,000	0	567,000
		Support costs	31,683	0	0	0	25,527	0	57,210
Total funds requested for approval at this meeting (US\$)		Project costs	0	0	0	0	63,000	63,000	
		Support costs	0	0	0	0	8,190	8,190	

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Paraguay, UNEP as the lead implementing agency, has submitted a request for funding for the third and final tranche of stage I of the HCFC phase-out management plan (HPMP), at the amount of US \$63,000, plus agency support costs of US \$8,190 for UNEP only.² The submission includes a progress report on the implementation of the second tranche and the tranche implementation plan for 2020 to 2021.

Report on HCFC consumption

2. The Government of Paraguay reported a consumption of 14.59 ODP tonnes of HCFC in 2019, which is 18.9 per cent below the HCFC baseline for compliance. The 2015-2019 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Paraguay (2015-2019 Article 7 data)

HCFC	2015	2016	2017	2018	2019	Baseline
Metric tonnes (mt)						
HCFC-22	287.72	220.73	230.07	234.31	262.84	296.0
HCFC-123	2.86	0.68	4.18	6.41	6.45	15.9
HCFC-124	0.00	0.95	0.00	0.00	0.00	7.0
HCFC-141b	1.00	6.75	0.00	0.00	0.00	0.5
HCFC-142b	0.00	0.57	0.00	0.00	0.00	20.4
Sub-total (mt)	291.58	229.68	234.25	240.72	269.29	339.8
HCFC-141b in imported pre-blended polyols*	28.75	32.83	12.22	18.00	33.26	12.7**
ODP tonnes						
HCFC-22	15.82	12.14	12.65	12.89	14.46	16.3
HCFC-123	0.06	0.01	0.08	0.13	0.13	0.2
HCFC-124	0.00	0.02	0.00	0.00	0.00	0.1
HCFC-141b	0.11	0.74	0.00	0.00	0.00	0.1
HCFC-142b	0.00	0.04	0.00	0.00	0.00	1.3
Sub-total (ODP tonnes)	15.99	12.95	12.73	13.02	14.59	18.0
HCFC-141b in imported pre-blended polyols*	3.16	3.61	1.34	1.98	3.66	1.40**

* Country programme (CP) data.

** Average consumption between 2007 and 2009.

3. Overall, the consumption of HCFCs in the country decreased from 2015 to 2019, mainly on account of implementation of the HPMP activities including controls on import of HCFCs, better servicing practices followed by technicians as a result of training, and adoption of alternatives-based refrigeration and air-conditioning (RAC) equipment.

4. The main reason for the increase in HCFC-22 consumption in 2019 is due to temporary stockpiling prior to 2020 when the import quotas for HCFCs would be reduced from 16.1 to 11.7 ODP tonnes, in line with the HPMP targets. Similarly, the increase in stock of HCFC-123 in the last two years is to meet the future demand in servicing of fire-fighting equipment.

5. Alternative RAC equipment based on HCFC-22 used in the country are mainly based on ammonia, HFC-134a, R-404A and R-410A refrigerants. R-290 refrigerant is used in very small quantities in self-contained commercial refrigeration equipment. HCFCs contained in blends, mainly R-401A, R-406A, R-409A and R-414A, were used as drop-ins for servicing old domestic refrigeration, self-contained commercial systems and mobile air-conditioners that used CFCs (currently, there is no more use of HCFC blends). The slight increase in the import of pre-blended polyols containing HCFC-141b in 2019 was due

² As per the letter of 18 June 2020 from the Ministerio del Ambiente y Desarrollo Sostenible of Paraguay to UNEP.

to demand from enterprises that manufacture thermal insulation foam; this consumption will be addressed in stage II of the HPMP.

CP implementation report

6. The Government of Paraguay reported HCFC sector consumption data under the 2019 CP implementation report which is consistent with the data reported under Article 7 of the Montreal Protocol.

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

Legal framework

7. The HCFC import and export licensing system, in operation since 2008, was adjusted to comply with the maximum allowable consumption as per the Agreement between the Government of Paraguay and the Executive Committee; the Secretariat of the Environment (SEAM) of Paraguay, which is now upgraded to Ministry of Environment and Sustainable Development (MADES), regulated the procedures for issuing HCFC licenses and established an electronic licensing system; and the Government is in the process of updating the regulations to include quota system for HFCs. A ban on imports of HCFC-based air-conditioners has been in place since 2015; regulations for standards for HCFC-22 and HCFC-123 containers were also enforced. The Government is in the process of updating safety standards for the safe adoption of RAC equipment based on flammable refrigerants, which is expected to be completed by the end of 2022.

Refrigeration servicing sector

8. The following activities were implemented:

- (a) Twenty-four workshops for training 587 customs and enforcement officers, including 130 women, were conducted on implementing regulations for controlling and monitoring import of HCFCs, illegal trade prevention and legal and administrative procedures relating to enforcement;
- (b) Two train-the-trainers workshops for 57 trainers and 25 workshops for 506 servicing technicians were conducted on good servicing practices and safe use of flammable and toxic refrigerants; and 129 servicing technicians were certified. Training of technicians for certification is undertaken by training institutions and certification is carried out by the “Instituto Nacional de Tecnología, Normalización y Metrología” (INTN) through theoretical and practical evaluation of servicing technicians;
- (c) Activities were initiated for setting up two recovery and recycling centres in “Asociación de Técnicos en Refrigeración del Alto Paraná” (ASOTRAP) and “Técnicos de Refrigeración Asociados del Paraguay” (TRAP); one centre was established in 2019 and the second centre will be established in 2020. Refrigerant recovery machines, recovery cylinders, digital balance and pressure valves that were procured will be delivered to the centres;
- (d) Equipment and tools (e.g., digital vacuum gauges, protective equipment for servicing, refrigerant cylinders, leak detectors, air-conditioners for training technicians) were provided to eight technical training centres and to 506 technicians for ongoing training and adoption of good servicing practices for HCFC-based equipment; and
- (e) Awareness and outreach activities were implemented for publicising activities relating to HCFC phase-out, encouraging users to adopt RAC equipment based on HCFC-free

low-global-warming potential (GWP) refrigerants and providing recognition to nine organisations that are actively promoting adoption of low-GWP alternatives to HCFCs and implemented good servicing practices.

Project implementation and monitoring

9. The Head of the Ozone Department serves as project coordinator of the Montreal Protocol and is *inter alia* responsible for the implementation of HPMP activities. In addition, one legal advisor and one full-time technical advisor provide support for managing activities relating to HPMP. As of August 2020, of the US \$126,000 approved for this component, US \$90,350 had been disbursed for staff and consultants (US \$75,850), workshops/meetings (US \$4,550) and travel and other operations (US \$9,950).

Level of fund disbursement

10. As of August 2020, of the US \$567,000 approved so far, US \$523,025 had been disbursed (US \$223,025 for UNEP and US \$300,000 for UNDP) as shown in Table 2. The balance of US \$43,975 will be disbursed in 2020 and 2021.

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

Agency	First tranche		Second tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNEP	146,500	136,675	120,500	86,350	267,000	223,025
UNDP	168,500	168,500	131,500	131,500	300,000	300,000
Total	315,000	305,175	252,000	217,850	567,000	523,025
Disbursement rate (%)	96.9		86.4		92.2	

Implementation plan for the third and final tranche of the HPMP

11. The following activities will be implemented between December 2020 and December 2021:

- Strengthening national regulations for the implementation of HCFC phase-out and potential HFC phase-down activities; capacity building of customs and enforcement officials through two workshops to train 50 environmental evaluators of SEAM and customs officers in HCFC control including pre-blended polyols containing HCFC; consultative meetings and coordination with relevant ministries/departments on preventing illegal trade of HCFCs; and monitoring and inspections of implementation of the licensing and quota system (UNEP) (US \$40,000);
- Follow-up on training activities and updating curriculum for training on the latest developments relating to low-GWP HCFC-free alternative technologies (UNEP) (funds from previous tranche);
- Awareness and information outreach promoting the adoption of low-GWP alternatives in two identified supermarkets through direct promotion measures; development and dissemination of information to different stakeholders on HCFC phase-out and availability and adoption of alternatives; workshops and meetings with end-users (e.g., industries using large RAC equipment, hotels, shopping centres) on adoption of HCFC-free low-GWP alternatives (UNEP) (US \$23,000); and
- PMU: Continued monitoring and reporting of implementation of HPMP activities (UNEP) (funds from previous tranche).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

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

Legal framework

12. The Government of Paraguay has already issued HCFC import quotas for 2020 at 11.07 ODP tonnes to 20 importers, in accordance with the Montreal Protocol control targets.

Refrigeration servicing sector

13. With regard to the technician certification scheme, UNEP clarified that while certification of technicians is voluntary, to create incentives, the national ozone unit continues working on the registering, mandatory contracting and use of enterprises with certified technicians by Government institutions for servicing of RAC equipment.

14. In the submission of the second tranche at the 74th meeting,³ UNEP reported that three HCFC-based refrigeration units had been retrofitted to flammable refrigerants as a pilot demonstration and were under assessment to measure their performance; based on the results, conversion of RAC equipment at SEAM facilities would be carried out in future. Upon a request for an update on the status of the pilot demonstration, UNEP clarified that the retrofit of these units was undertaken in the early stage of the HPMP in 2015; training on safe servicing practices was provided to refrigeration technicians of the Natural History Museum of Paraguay (under the administration of the MADES) where these units are located. As the Government is fully aware of the decisions on retrofit (decisions 72/17 and 73/34), no new retrofit of HCFC-based equipment to flammable refrigerants has been proposed or undertaken after the pilot conversions. Since 2015, refrigeration technicians have been trained on safe use of flammable and toxic refrigerants in new equipment during which retrofit of equipment using flammable refrigerants is strongly discouraged. Furthermore, the safety standards of flammable refrigerants are under preparation and will be ready by 2022.

15. UNEP further explained that while the Government is committed to promoting low-GWP and energy-efficient alternatives, currently only RAC equipment based on high-GWP non-HCFC-based refrigerants is available at competitive price. To support preparedness of the servicing sector on handling flammable refrigerants, the Government has provided training and certification of technicians and implemented awareness activities in training institutions on handling such refrigerants; promoted adoption of ozone friendly low-GWP technologies/products among retailers, dealers and end-users; and given recognition to enterprises that promoted the use of low-GWP technologies. The Government will continue these and other initiatives during the last tranche of stage I and all tranches of stage II of the HPMP. On this basis, the funds originally proposed for the incentive scheme have been reprogrammed for training and capacity building activities to support adoption of low-GWP technologies.

Completion of stage I of the HPMP

16. UNEP has confirmed that stage I of the HPMP will be completed on 31 December 2021 as established in paragraph 14 of the Agreement between the Government and the Executive Committee.

³ Paragraph 26 of UNEP/OzL.Pro/ExCom/74/44

Gender policy implementation⁴

17. UNEP informed that the Government of Paraguay, UNEP and UNDP are committed to implementing the gender policy and that activities for gender-sensitive project implementation would be undertaken on an ongoing basis, *inter alia* greater gender balance among experts/trainers recruited for HPMP activities and participants in different programmes, presentation of data on gender distribution in training and outreach materials, and collection and reporting of gender disaggregated data on project activities. In the implementation report for the second tranche, information on women in training of customs and enforcement officers is already included.

Sustainability of the HCFC phase-out

18. The sustainability of the HCFC phase-out would be ensured by: ongoing support provided to the vocational training centres; certification of technicians by INTN together with efforts undertaken by the Government and the servicing sector associations (ASOTRAP and TRAP) to promote hiring of certified technicians for servicing RAC equipment; effective enforcement of HCFC licensing and quota system coupled with active participation of Paraguayan Customs Training Institute and other organisations of different departments dealing with training of enforcement officials and measures to prevent illegal trade; and awareness and outreach activities to promote the adoption of low-GWP HCFC-free technologies.

Conclusion

19. Paraguay continues to be in compliance with the Montreal Protocol control targets through effective implementation of a licensing and quota system. The Government achieved additional progress in the HPMP activities including capacity building of customs and servicing technicians, equipment support to training institutions and certification of servicing sector, operation of the recovery and recycling centres and promoting adoption of HCFC-free low-GWP alternatives, which contribute to a sustainable reduction of HCFC consumption in the country. The use of imported pre-blended polyols containing HCFC-141b will be addressed in stage II of the HPMP, which is expected to be submitted in 2021. Over 92 per cent of the approved funds was disbursed. During the last tranche, the Government will continue implementing enforcement activities including training of customs officers to ensure that HCFC consumption is below the Montreal Protocol and the Agreement targets, supporting the servicing sector through training and certification of technicians and carrying out awareness and outreach activities to maximise adoption of HCFC-free low-GWP alternatives in the servicing sector.

RECOMMENDATION

20. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan (HPMP) for Paraguay; and further recommends blanket approval of the third and final tranche of stage I of the HPMP for Paraguay, and the corresponding 2020-2021 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, third tranche)	63,000	8,190	UNEP

⁴ Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.