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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL

Eighty-fifth Meeting

Montreal, 25-29 May 2020

Postponed to 19-22 July 2020*

PROJECT PROPOSAL: PANAMA

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

Phase-out

- HCFC phase-out management plan (stage II, third tranche) UNDP

* 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

Panama

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase-out plan (Stage II)	UNDP	76 th	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2018	16.34 (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-22	0.00	0.00	0.00	0.00	14.36	0.00	0.00	0.00	14.36
HCFC-123	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HCFC-124	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HCFC-141b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HCFC-141b in imported pre-blended polyols	0.00	7.78	0.00	0.00	0.00	0.00	0.00	0.00	7.78
HCFC-142b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(IV) CONSUMPTION DATA (ODP tonnes)			
2009-2010 baseline:	24.80	Starting point for sustained aggregate reductions:	27.28
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	13.89	Remaining:	13.39

(V) BUSINESS PLAN		2020	Total
UNDP	ODS phase-out (ODP tonnes)	0.92	0.92
	Funding (US \$)	77,847	77,847

(VI) PROJECT DATA			2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			22.30	22.30	22.30	22.30	16.11	n/a
Maximum allowable consumption (ODP tonnes)			22.30	22.30	22.30	22.30	16.11	n/a
Agreed funding (US \$)	UNDP	Project costs	265,100	0	385,800	0	72,754	723,654
		Support costs	18,557	0	27,006	0	5,093	50,656
Funds approved by ExCom (US \$)	UNDP	Project costs	265,100		385,800			650,900
		Support costs	18,557		27,006			45,563
Total funds requested for approval at this meeting (US \$)	UNDP	Project costs					72,754	72,754
		Support costs					5,093	5,093

Secretariat's recommendation	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Panama, UNDP as the designated implementing agency has submitted a request for funding for the third and final tranche of stage II of the HCFC phase-out management plan (HPMP), at the amount of US \$72,754, plus agency support costs of US \$5,093.¹ The submission includes a progress report on the implementation of the second tranche, the verification report on HCFC consumption for 2018 and 2019 and the tranche implementation plan for 2020-2021.

Report on HCFC consumption

2. The Government of Panama reported under the country programme (CP) implementation report a consumption of 14.36 ODP tonnes of HCFC in 2019, which is 42 per cent below the HCFC baseline for compliance. The 2015-2019 HCFC consumption is shown in Table 1.

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

HCFC	2015	2016	2017	2018	2019*	Baseline
Metric tonnes (mt)						
HCFC-22	318.13	332.04	300.27	297.10	261.16	404.32
HCFC-123	1.46	4.5	0.53	0.00	0.00	2.37
HCFC-124	0.071	0.00	0.00	0.00	0.00	0.45
HCFC-141b	0.00	0.00	0.00	0.00	0.00	20.87
HCFC-142b	0.043	0.00	0.00	0.00	0.00	2.72
Total (mt)	319.70	336.54	300.80	297.10	261.16	430.66
HCFC-141b in imported pre-blended polyols*	79.38	41.35	60.62	52.81	70.73	22.72**
ODP tonnes						
HCFC-22	17.50	18.26	16.51	16.34	14.36	22.24
HCFC-123	0.03	0.09	0.01	0.00	0.00	0.05
HCFC-124	0.00	0.00	0.00	0.00	0.00	0.01
HCFC-141b	0.00	0.00	0.00	0.00	0.00	2.30
HCFC-142b	0.00	0.00	0.00	0.00	0.00	0.18
Total (ODP tonnes)	17.53	18.35	16.53	16.34	14.36	24.77
HCFC-141b in imported pre-blended polyols*	8.73	4.55	6.67	5.81	7.78	2.50**

* Country programme data.

**Average consumption between 2007 and 2009.

3. Since 2016, HCFC consumption has continued to decrease steadily due to the control measures imposed on ODS imports, including the quota system, the ban on imports of HCFC-141b in pure form as of 1 January 2014, the ban on new HCFC-22-based air-conditioning installations as of 1 January 2016, and the ban on the use of HCFC-22 for flushing refrigeration systems as of 1 January 2019. In addition, the implementation of the phase-out activities conducted under the HPMP, including the technical assistance and training provided to the refrigeration serving sector, have contributed to the sustained reductions in HCFC consumption. Additional phase-out of HCFCs is due to the introduction of non-HCFC-based equipment in the local market.

4. The decrease in imports of HCFC-141b contained in pre-blended polyols in 2016 was due to the use of stocks that were available at the largest non-eligible consumer enterprise, Huurre Panama,² and the

¹ As per the letter of 12 March 2020 from the Ministry of Health of Panama to UNDP.

² The enterprise is expected to convert to cyclopentane with its own resources before 2020, when the ban on imports of HCFC-141b contained in pre-blended polyols enters into force.

increase in 2019 was due to imports for stockpiling by enterprises before the ban on formulated polyols containing HCFC-141b entered into force on 1 January 2020.

CP implementation report

5. The Government of Panama reported HCFC sector consumption data under the 2018 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

Verification report

6. The verification report confirmed that Panama has an effective system to allocate licenses and quotas to importing enterprises, and keeps an accurate record of actual ODS imports into the country. The quota system has been effective in meeting the national ODS consumption targets. The total levels of HCFC consumption for 2018 and 2019 were below the import quota issued and the HCFC consumption target of 22.30 ODP tonnes for the same years, as established in the Agreement between the Government and the Executive Committee for stage II of the HPMP.

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

Legal framework

7. The Government completed the following set of regulations:

- (a) A ban on the use of HCFC-22 as a cleaning agent in refrigeration and air-conditioning (RAC) systems and in the production of extruded polystyrene (XPS) foam, both in existing and new facilities as of 1 January 2019; and
- (b) A ban on imports of formulated polyols containing HCFC-141b as of 1 January 2020.

8. Following recommendations in verification reports, as of 4 February 2020, pre-declarations for imports of controlled substances under the Protocol are being approved through the digital platform established at the National Customs Authority (ANA). In addition, enterprises importing fully formulated polyol systems are required to register for import authorization; to date, six rigid foam enterprises have been registered.

9. Other activities implemented with the ANA include: training of 65 customs officers on HCFC identification and control; training of 28 customs officers (including 15 women) on the operation of the refrigerant identifier; training of 28 customs officers (including 13 women) on trade control measures and the prevention of illicit trade within the framework of the Montreal Protocol; and training of 24 customs officers (including 11 women) on the implementation of the Montreal Protocol.

10. Progress has been achieved in adapting ISO standard 5149:2014 on safety and environmental aspects applicable to refrigeration systems and heat pumps: part I (definitions, classification and selection criteria) and part III (installation place) of the standard have already been approved.

11. Panama ratified the Kigali Amendment on 28 September 2018.

Free Trade Zone (FTZ)

12. The Government of Panama continued its efforts to strengthen the ODS control mechanisms of the FTZ. In February 2020, the Government sent an official communication to the FTZ authorities requesting information on HCFC imports and exports. A meeting was also held with representatives of a non-Article-5-owned systems house operating in the FTZ (Synthesia) to discuss matters related to

HCFC-141b imports and exports, and the ban on imports of pre-blended polyols formulated with HCFC-141b that went into effect on 1 January 2020, which includes imports from the FTZ. The Government has confirmed that as of 1 January 2020, imports of HCFC-141b contained in pre-blended polyols by the FTZ is zero.

Polyurethane (PU) foam manufacturing sector

13. During the second tranche, the NOU presented the new regulatory framework for the control of ODS in the foam sector to importers, and provided technical assistance to PU foam enterprises for the development of tests with new formulations with zero-ODP and low-global-warming-potential (GWP) blowing agents.

14. Out of the five PU foam sector enterprises included in stage II to phase out 1.19 ODP tonnes of HCFC-141b, three (Fibropinturas, Cangas Trucks and Refrigeracion Internacional S.A.) signed contracts for the phase-out of 0.70 ODP tonnes. One of them has already tested the technology and is waiting for certification to adopt it, while the other two will undertake tests in the first half of 2020 and will complete their conversions by the end of 2020, although the current situation of COVID-19 may delay completion. Enterprises in the sector are still using remaining inventories of polyols formulated with HCFC-141b after the 1 January 2020 ban on imports.

15. The remaining two enterprises (Disur and Refratermic), with a consumption of 0.48 ODP tonnes, decided to withdraw from stage II of the HPMP. Disur is using cyclopentane polyols, while Refratermic is no longer producing PU foam.

Refrigeration servicing sector

16. The following activities were implemented:

- (a) Expansion of the national training center's (National Institute for Professional Training for Human Development (INADEH)) programme for mechanics in domestic refrigeration to 925 hours, including a mandatory module on good practices in refrigerant management (40 hours); the updated curriculum will be adopted by 10 teaching centres as of 2020;
- (b) Train-the-trainer workshop on the safe use of R-600a and R-290 for 24 instructors from INADEH, the Technological University of Panama (UTP) and the Ministry of Education (MEDUCA); and participation of two instructors in a course on the installation and maintenance of air-conditioners with R-290 at the Costa Rica learning institute;
- (c) Training of 199 technicians in six centres on good servicing practices using the updated programme for mechanics in domestic refrigeration; training of an additional 20 technicians in a five-day course on good practices in refrigerant management, including the safe use of flammable refrigerants; and a one-day workshop for 31 technicians on the safe handling of R-290 and R-600a refrigerants;
- (d) Procurement of 15 basic toolkits³ for courses in good practices in the handling of refrigerants, six of which have been delivered to training institutes and nine are scheduled for delivery in the first quarter of 2020. A total of 70 additional sets of equipment (i.e., R-290-based split AC units and R-600a-based refrigerators for demonstration) and

³ Including recovery units and cylinders, manifolds, capillary tube cutters, silver welding, containers, lock rings, digital vacuum, digital thermometers, R-290 and R-600a flaring kits, and cooling ratchets.

tools will be procured and distributed during the second half of 2020;

- (e) Progress on the establishment of a certification scheme for RAC technicians through coordination meetings and two induction workshops for all involved institutions⁴ on the certification process being prepared based on labor competencies;
- (f) Updates by INADEH to the database of technicians and the instruction manual for good service practices in the management of refrigerants for domestic refrigeration mechanics; and
- (g) Promotion of the use of CO₂ and other low-GWP refrigerants as alternatives to HCFCs through nine meetings for enterprises in the relevant sectors (e.g., supermarkets and hotels), three seminar-workshops with 75 participants including technicians and decision makers from relevant sectors, and production of technical brochures on alternative refrigerants.

Project implementation and monitoring

17. HPMP project coordination and management is supervised by the NOU. Activities include project monitoring and operational implementation of the stage II activities in both the refrigeration and PU foam sectors. So far, a total of US \$31,361 has been spent (i.e., US \$17,047 on staff and consultants, US \$2,814 on workshops and meetings and US \$11,500 on reports and verifications).

Level of fund disbursement

18. As of March 2020, of the US \$650,900 approved so far, US \$239,716 had been disbursed, as shown in Table 2. The balance of US \$411,184 will be disbursed in 2020 and 2021.

Table 2. Financial report of stage II of the HPMP for Panama (US \$)

Tranche	Approved	Disbursed	Disbursement rate (%)
First	265,100	159,300	60
Second	385,800	80,416	21
Total	650,900	239,716	37

Implementation plan for the third and final tranche of the HPMP

19. The following activities will be implemented between July 2020 and December 2021:
- (a) Strengthening national capacities for the control of HCFCs through the training of 50 additional customs officers on HCFC-related regulations; development of educational material to be distributed among the participants of the training for customs officers; and continuation of the process of consultation with relevant institutions on the regulation to manage natural refrigerants (US \$27,500);
 - (b) Completion of the conversion of three PU foam manufacturing enterprises (funds from previous tranches);
 - (c) State-approved programme for reducing the use of HCFCs in the RAC servicing sector, including five training sessions for 125 technicians and a campaign to publicize the national

⁴ Secretariat of the Certification System for Labor Competencies of INADEH, the Technical Board of Engineering and Architecture, the Panamanian Society of Engineers and Architects, the College of Electrical, Mechanical and Industrial Engineers, Ministry of Education, Ministry of Environment, Ministry of Health, Ministry of Labor, trainers from INADEH and other education institutes, unions and technicians.

technician certification system (US \$30,254); and

- (d) Project implementation and monitoring (US \$15,000), including staff and consultants (US \$12,000), workshops and meetings (US \$3,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

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

20. In approving the second tranche of stage II of the HPMP of Panama at the 82nd meeting (by blanket approval), the Executive Committee requested UNEP to return at the 83rd meeting any remaining balances approved under stage I of the HPMP. In this regard, UNEP informed the Secretariat through UNDP that the project has not been financially closed. This issue is being addressed in the Report on balances and availability of resources.⁵

Legal framework

21. The Government of Panama has already issued HCFC import quotas for 2020 at 14.22 ODP tonnes (258.55 mt), which is 11.7 per cent below the compliance level of 16.11 ODP tonnes under the Montreal Protocol control targets.

Issues related to the FTZ

22. In approving the second tranche of stage II of the HPMP, the Executive Committee requested the Government of Panama and UNDP to continue reporting, at the time of submission of the remaining tranche requests, on the status of the Government's efforts to obtain data from the systems house in the FTZ and information on HCFCs imported to and exported from the FTZ. The Secretariat notes with appreciation the efforts made by the Government in this regard, including the appointment of two focal points at the FTZ to address the issue, the several meetings held by the Government and UNDP with the systems house and the FTZ focal points, and the official communication sent in February 2020 requesting data on imports and exports of HCFC in 2019.

23. In providing additional details on these efforts, UNDP also informed that although a meeting with the systems house planned for March 2020 could not take place because of issues related to COVID-19, the Government will continue its efforts to obtain data from the FTZ. UNDP also clarified that the bans on imports of HCFC-141b pure and contained in pre-blended polyols have been extended to the FTZ. Therefore, since 1 January 2020 the systems house in the FTZ cannot import HCFC-141b for export in pre-blended polyols to Panama or other countries. Furthermore, the systems house in the FTZ has cooperated with UNDP to facilitate the import of low-GWP blowing agents (i.e., HFOs) in Panama and other countries in the region.

24. UNDP also informed the Secretariat that measures to prevent imports of PU foam products using HCFC-141b will be introduced once the PU foam enterprises being converted under stage II complete their projects. The Secretariat considers the extension of the bans on imports of HCFC-141b pure and in pre-blended polyols to the FTZ will ensure the sustainability of the phase out of HCFC-141b in the PU foam sector in Panama, and in the Latin America and Caribbean region as many pre-blended polyols containing HCFC-141b were imported by several of these countries from the FTZ.

⁵ UNEP/OzL.Pro/ExCom/85/4.

PU foam manufacturing sector

25. The PU foam enterprises Disur (0.34 ODP tonnes) and Refratermic (0.14 ODP tonnes) decided to withdraw from stage II of the HPMP. UNDP informed the Secretariat that a portion of the cost related to visits by the international expert to all of the enterprises and participation in workshops had been incurred; therefore, the total funding to be returned amounts to US \$43,153 (i.e., US \$29,360 from Disur and US \$13,793 from Refratermic), plus agency support costs of US \$3,021 for UNDP of the US \$47,753 approved. Further to a discussion, it was agreed that UNDP would return the balance from the PU foam enterprises at the 86th meeting.

Gender policy implementation⁶

26. UNDP reported that, in initiating actions on gender mainstreaming, the NOU would monitor, report, and raise awareness by:

- (a) Collecting data to produce gender-disaggregated indicators;
- (b) Showing the disaggregated figures; introducing gender considerations in training sessions and training materials; collecting data to establish an ex-post baseline of women technicians in the RAC sector and comparing it with the number of women involved in NOU activities for the sector; and
- (c) Introducing gender-sensitive language into communications; incorporating gender aspects in the recruitment of new staff to the NOU; considering adding a gender-related element in each job description; and ensuring that monitoring and evaluation consultants and project personnel have the required competences to incorporate gender considerations at all stages of their work.

Sustainability of the HCFC phase-out

27. The Government is ensuring sustainability of the phase-out of HCFC through a comprehensive set of regulations including a ban on the use of HCFC-22 as a cleaning agent in RAC systems and in the production of XPS foam, both in existing and new facilities as of 1 January 2019; and a ban on imports of formulated polyols containing HCFC-141b as of 1 January 2020. The bans on imports of HCFC-141b pure and contained in pre-blended polyols have been extended to the FTZ, and the systems house in the FTZ is now facilitating the import of low-GWP blowing agents (i.e., HFOs) in Panama and other countries in the region. In the refrigeration servicing sector INADEH has included good servicing practices in its RAC courses and the Government is developing a labour competency certification scheme for technicians operated by local institutions that will help promote the training of technicians in the country.

28. As per the Agreement, the duration of stage II is up to December 2021. UNDP has confirmed that so far activities are progressing as planned and completion is expected by the scheduled date.

Conclusion

29. Panama continues to be in compliance with the Montreal Protocol and the HCFC consumption targets defined in its Agreement with the Executive Committee. Verified HCFC consumption in 2019 was 42 per cent below the HCFC consumption baseline and 35.6 per cent below the limit established in the Agreement. Under the second tranche, three PU foam enterprises signed contracts to convert to HFO technology and one of them started testing the technology; training was provided to customs officers and

⁶ Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

refrigeration technicians; progress was made in the establishment of a certification scheme for RAC technicians; and the Government adopted bans on the use of HCFC-22 as a cleaning agent in RAC systems (1 January 2019), on the production of XPS foam, both in existing and new facilities (1 January 2019), and on imports of formulated polyols containing HCFC-141b (1 January 2020). The Government has also continued contact with the authorities of the FTZ and the enterprise Synthesia to strengthen ODS control mechanisms in the FTZ. The level of disbursement from the previous tranche is above 20 per cent. The funds associated with two PU foam enterprises that have withdrawn from the HPMP are being returned to the Multilateral Fund at the 86th meeting.

RECOMMENDATION

30. The Fund Secretariat recommends to the Executive Committee:

- (a) To note:
 - (i) The progress report on the implementation of the second tranche of stage II of the HCFC phase-out management plan of (HPMP) for Panama;
 - (ii) That the two polyurethane foam enterprises Disur and Refratermic, with a consumption of 0.48 ODP tonnes (4.36 metric tonnes) of HCFC-141b, and associated funding of US \$47,753, have withdrawn from stage II, noting that the consumption associated with those enterprises had been phased out;
- (b) To request UNDP and the Government of Panama to include in the submission of the first tranche request of stage III of the HPMP an update on the status of the Government's efforts to obtain data from the systems house in the Free Trade Zone and information on HCFCs imported to and exported from the Free Trade Zone; and
- (c) To further request UNDP to return to the 86th meeting US \$43,153, plus agency support cost of US \$3,021, from the project PAN/PHA/76/INV/44, corresponding to the unused balance of funds associated with the enterprises in paragraph (a)(ii);

31. The Fund Secretariat further recommends blanket approval of the third and final tranche of stage II of the HPMP for Panama, 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 II, third tranche)	72,754	5,093	UNDP