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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-second Meeting
Montreal, 29 May to 2 June 2023
Item 9(c) of the provisional agenda¹

PROJECT PROPOSAL: DOMINICAN REPUBLIC

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

Phase-out

- HCFC phase-out management plan (stage III, second tranche) UNDP and UNEP

¹ UNEP/OzL.Pro/ExCom/92/1

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Dominican Republic

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase-out plan (stage III)	UNDP (lead), UNEP	86 th	100% phase-out by 2030

(II) LATEST ARTICLE-7 DATA (Annex C Group I)	Year: 2022	27.13 ODP tonnes
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2022	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					28.13				28.13
HCFC-123									0.00
HCFC-141b									0.00

(IV) CONSUMPTION DATA (ODP tonnes)			
2009-2010 baseline:	51.20	Starting point for sustained aggregate reductions:	70.71
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	70.71	Remaining:	0.00

(V) ENDORSED BUSINESS PLAN		2023	2024	2025	Total
UNDP	ODS phase-out (ODP tonnes)	10.1	0.00	0.00	10.1
	Funding (US \$)	1,032,000	0	0	1,032,000
UNEP	ODS phase-out (ODP tonnes)	1.2	0.00	0.00	1.2
	Funding (US \$)	126,000	0	0	126,000

(VI) PROJECT DATA			2020	2021-2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Montreal Protocol consumption limits (ODP tonnes)			33.28	33.28	33.28	33.28	16.64	16.64	16.64	16.64	16.64	0	n/a
Maximum allowable consumption (ODP tonnes)			30.72	30.72	30.72	30.72	16.64	16.64	16.64	1.28	1.28	0	n/a
Funding agreed in principle (US \$)	UNDP	Project costs	603,005	0	964,808	0	0	603,005	0	0	241,202	0	2,412,020
		Support costs	42,210	0	67,537	0	0	42,210	0	0	16,884	0	168,841
	UNEP	Project costs	69,475	0	111,160	0	0	69,475	0	0	27,790	0	277,900
		Support costs	9,032	0	14,451	0	0	9,032	0	0	3,613	0	36,127
Funds approved by ExCom (US \$)	Project costs	672,480	0	0	0	0	0	0	0	0	0	0	672,480
	Support costs	51,242	0	0	0	0	0	0	0	0	0	0	51,242
Total funds recommended for approval at this meeting (US \$)	Project costs	0	0	1,075,968	0	0	0	0	0	0	0	0	1,075,968
	Support costs	0	0	81,987	0	0	0	0	0	0	0	0	81,987

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of the Dominican Republic, UNDP as the lead agency has submitted a request for funding for the second tranche of stage III of the HCFC phase-out management plan (HPMP), at a total cost of US \$1,157,955, consisting of US \$964,808, plus agency support costs of US \$67,537 for UNDP, and US \$111,160, plus agency support costs of US \$14,451 for UNEP.² The submission includes a progress report on the implementation of the first tranche, and the tranche implementation plan for 2023 to 2026.

Report on HCFC consumption

2. The Government of the Dominican Republic reported a consumption of 27.13 ODP tonnes of HCFC in 2022, which is 47 per cent below the HCFC baseline for compliance. The 2018-2022 HCFC consumption is shown in table 1.

Table 1. HCFC consumption in Dominican Republic (2018-2022 Article 7 data)

HCFC	2018	2019	2020	2021	2022	Baseline
Metric tonnes (mt)						
HCFC-22	601.85	691.93	527.47	219.12	493.29	916.53
HCFC-123	0.00	0.00	0.23	0.23	0.18	9.68
HCFC-141b	0.00	0.00	0.00	0.00	0.00	5.43
(Subtotal / Total) (mt)	601.85	691.93	527.7***	219.35	493.47	931.64
HCFC-141b in imported pre-blended polyols*	0.00	0.00	0.00	0.00	0.00	177.36**
ODP tonnes						
HCFC-22	33.10	38.06	29.01	12.06	27.13	50.41
HCFC-123	0.00	0.00	0.00	0.00	0.00	0.19
HCFC-141b	0.00	0.00	0.00	0.00	0.00	0.60
(Subtotal / Total) (ODP tonnes)	33.10	38.06	29.01***	12.06	27.13	51.20
HCFC-141b in imported pre-blended polyols*	0.00	0.00	0.00	0.00	0.00	19.51**

* Country programme data.

** Average consumption between 2007 and 2009.

*** In 2020, -0.02 ODP tonnes of HCFC-124 and -0.04 ODP tonnes of HCFC-142b were also reported bringing the total ODP tonnes of HCFCs to 28.95 as reported on the Ozone Secretariat website.

3. While there is an overall decreasing trend in the consumption of HCFCs in the country since 2018, in some years consumption increased steeply as compared to the previous year. The increase in consumption in 2019 had been due to stockpiling in anticipation of the 2020 reduction in import quotas while in 2022 it was due to economic recovery after the pandemic-related recession especially in the tourism sector, where the demand for refrigerants to maintain equipment had stopped during the pandemic. The control measures on the import of HCFC-22-based refrigeration and air-conditioning (RAC) equipment and the activities implemented in the servicing sector under the HPMP, have resulted in the overall decrease of HCFC consumption. Bans on the import of HCFC-141b in bulk and in pre-blended polyols have been in place since 1 January 2017 after the completion of the conversion of foam enterprises and have also contributed to the overall reduction in consumption.

Country programme implementation report

4. The Government of the Dominican Republic reported HCFC sector consumption data under the 2022 CP implementation report that is slightly different than the data reported under Article 7 of the Montreal Protocol since Article 7 data is based on imports and exports of controlled substances while the

² As per the letter of 10 March 2023 from the Ministry of Environment of Dominican Republic to UNDP.

CP report is based on the use of HCFCs in servicing; some amounts used were from the previous year's imports.

Verification report

5. UNDP reported that the verification of the country's HCFC consumption for 2020 to 2022 is still under preparation; the consultant required time to gather data for the 2022 consumption as final data would be ready only by March 2023. UNDP expects that the verification report will be submitted by mid-June 2023, and at the latest, no later than 12 weeks before the 93rd meeting.

Status of implementation of stage II of the HCFC phase-out management plan

6. UNDP confirmed at the 90th meeting³ that stage II of the HPMP was operationally completed in December 2021; however, the tools and equipment for technicians had been delayed due to the COVID-19 pandemic and constraints in the supply chain and would be delivered in June 2022 and that once the tools and equipment had been received by CONALTRA, UNDP could initiate financial completion of the project. In line with decision 90/12⁴ UNDP has informed that the remaining 405 kits of equipment have been received by CONALTRA and that 331 kits have been delivered and that the remaining 74 would be delivered by the end of May 2023. UNDP indicated that any remaining funds from this would be returned to the Fund in accordance with established practice. The project completion report was submitted on 6 April 2023.

Progress report on the implementation of the first tranche of stage III of the HCFC phase-out management plan

Legal framework

7. Since January 2017, the Dominican Republic had imposed a ban on the import and production of HCFC-based equipment (for both new and used), and on the import of HCFC-141b in bulk and/or contained in pre-blended polyols. The Government also levied administrative fees on HCFC imports from 1 January 2019 to support the phase-out of HCFCs, effectively controlling their imports. The Dominican Republic ratified the Kigali Amendment on 14 April 2021. The regulation that established the licensing system to monitor imports of ODS now also includes the monitoring of HFCs, to support the Kigali Amendment; new tariff codes for HFCs and HFC-blends were introduced to improve the control of import and export of these substances. A decree was passed to establish the certification of RAC technicians in the country and another decree was issued to instruct the Ministry of Environment to establish government procurement procedures that will ensure the purchase of ozone- and climate-friendly RAC equipment.

8. The Commission for License Issuance to Technicians in the Refrigeration and Air-conditioning Sector (CONALTRAA) has continued its work to strengthen the RAC certification system by defining procedures and criteria for the evaluation of labor competences and best practices in safe and efficient use of refrigerants for each RAC subsector. Work is also underway to establish the standard on safety requirements for the use of hydrocarbons (HC) in RAC systems and several coordination meetings were held virtually.

9. Two new customs offices were established in the ports of Haina Oriental and Multimodal Caucedo where refrigerant gas imports are monitored on-site to prevent smuggling of unregulated gases and mixtures of low-quality refrigerant gases. The customs capacity building programme continued and a total of 60 customs officials participated in two training sessions. Monthly meetings were held to coordinate training

³ Document UNEP/OzL.Pro/ExCom/90/9

⁴ To request UNDP to report on the final delivery and distribution of the tools and equipment for refrigeration technicians when requesting the subsequent tranche for stage III of the HPMP.

sessions on the legal framework, the licensing and quota system and HCFC control at border points and ports.

Refrigeration servicing sector

10. Twenty-five courses were held at the National Institute of Professional Education Training (INFOTEP) on good refrigeration practices and the safe handling of HCs for 522 participants, of which nine were women; four of INFOTEP's regional laboratories were upgraded with additional tools⁵ to strengthen their capacity to work with HC refrigerants; 45 new RAC instructors and teachers in vocational schools received training on a new RAC training programme which includes handling of new refrigerant gases for AC, refrigerated transport and a mobile air-conditioning component; and 600 training manuals on best practices in refrigeration were distributed.

11. During 2022, 496 RAC technicians completed certification training and are ready to receive their license; in total 608 licenses have been issued to RAC technicians (including two women) that obtained certification in previous years; 804 sets of refrigeration toolkits were procured out of which 558 were distributed among certified technicians as incentive for the certification process. Cooperation agreements to support the certification programme were also signed with technical education institutions.

12. To support the refrigerant recovery and recycling (R&R) centres, 298 recovery machines and 30-lb storage cylinders, 30 scales, 30 vacuum pumps and 50 sets of flares were purchased and partially distributed to polytechnical and vocational schools and R&R centres; a new R&R centre was established at the Association of Refrigeration Technicians of Santiago (ATEPREASA).

13. A workshop on HCFC alternatives was held for 120 end-users with the objective of providing information to technicians, hotel chains and companies in the eastern zone of the country on alternatives for the replacement of HCFC-based equipment. Two supermarkets are being considered as beneficiaries for technical assistance (Almacenes Unido and Centro Cuesta Nacional).

14. The project has continued with the programme to raise awareness about the phase-out of HCFCs through the distribution of outreach material, such as manuals on good refrigeration practices and manuals on the safe use of HCFC alternatives, and 34 technical meetings were held to promote the use of alternatives to HCFCs.

Project implementation and monitoring

15. Of the US \$61,135 approved for project monitoring US \$52,471 was disbursed: on local consultants (US \$28,795); on stakeholder meetings and workshops (US \$6,605); and to support operational costs and travel (US \$17,071).

Level of fund disbursement

16. As of March 2023, of the US \$672,480 approved so far (US \$603,005 for UNDP and US \$69,475 for UNEP), US \$465,099 (69 per cent) had been disbursed (US \$396,099 for UNDP and US \$69,000 for UNEP). The balance of US \$207,381 will be disbursed in 2023.

Implementation plan for the second tranche of stage III of the HCFC phase-out management plan

17. The following activities will be implemented between June 2023 and June 2026:

- (a) *Certification system for technicians in the RAC sector*: continue to strengthen the

⁵ Such as welding equipment, pressure gauges, gas detector, recovery machine, vacuum pumps, pressure gauges and digital scales.

certification system for RAC technicians by supporting the CONALTRAA strategic plan; carry out nine workshops in various sectors on the certification system; conduct an awareness campaign targeting technicians who need to obtain their license; certification of 500 technicians under the system (UNEP) (US \$83,160, plus funds from the previous tranche);

- (b) *Safety standards/guidelines for flammable refrigerants*: the reproduction of information leaflets and 10 sectoral workshops to raise awareness on the standard (UNEP) (US \$28,000);
- (c) *Training for application of good refrigeration practices and safety in handling flammable refrigerants*: conduct 40 workshops for a total of 700 RAC technicians on good practices including the safe handling of HC refrigerants and procurement of 250 toolkits⁶ for distribution to technicians (UNDP) (US \$203,016);
- (d) *Strengthening of formal education facilities and technical institutes for training in good refrigeration practices*: provision of all training materials; procurement of 15 sets of RAC equipment for five technical institutes, five vocational schools and five for INFOTEP regional centres; hosting workshops for instructors including two on new RAC technologies, 10 workshops for instructors focused on the use of R-290-based equipment and updating the workshop on good refrigeration practices (UNDP) (US \$144,133);
- (e) *Management of natural gases as refrigerants in industrial, commercial, and domestic sectors*: provision of all technical material and manuals; procurement process and installation of all tools and equipment⁷ to work with natural refrigerants; provision of tools⁸ to stakeholders and updating of one workshop on natural refrigerants and training of 20 trainers (UNDP) (US \$192,000);
- (f) *Strengthening the refrigerant R&R network*: procure equipment⁹ and establish four new R&R centres and complete the distribution of equipment procured among R&R centres; encourage technicians' participation in refrigerant recovery through financial incentives; publication of 300 guides on the use and management of R&R centres (UNDP) (US \$104,762, plus funds from the previous tranche);
- (g) *Technical assistance for end-users*: implementation of a demonstration project in two supermarket chains selected in the previous tranche to promote the use of CO₂ as an alternative to HCFCs; hiring of an international expert to provide technical assistance to end-users; study tour abroad to visit a comparable demonstration of the use of alternative technologies (UNDP) (US \$163,405);
- (h) *Awareness-building campaigns*: public awareness campaigns and 20 workshops to targeted groups on the Montreal Protocol and the phase-out of HCFCs, control measures

⁶ Kits will include one leak detector, one vacuum pump, and one manometer with hoses and adapters. The number of kits was increased from 150 under the original plan as the project is acquiring and distributing a simpler kit (without recovery machines and cylinders) to focus on good installation of the RAC system to avoid leaks. If a technician needs a recovery machine, the R&R centres in each region can lend these specialized tools.

⁷ Teaching laboratory equipment for cold rooms using ammonia-based refrigeration system, ammonia/CO₂ cooling system, compression ammonia (NH₃) cooling system, pressure gauges, thermometers, data-loggers, leak detectors, didactic equipment and components.

⁸ The tools and equipment for the stakeholders include vacuum pumps, pressure gauges for HC, modules for AC and RC, leak detectors, welding equipment, scales.

⁹ For the R&R centres the equipment and tools are gas detector, vacuum pumps, pressure gauges, digital scales, refrigerant recovery machine, transfer pumps, adapters, cylinders (30-lb, 50-lb and 100-lb) and refrigerant identifiers.

and alternative technologies and refrigerants; continue distribution of outreach materials and manuals on the safe use of HCFCs; hold six technical meetings to promote alternatives to HCFCs (UNDP) (US \$59,676, plus funds from the previous tranche); and

- (i) *Project monitoring:* (UNDP) (US \$97,816, plus funds from the previous tranche) including consultants and the preparation of progress and verification reports (US \$61,600), two follow-up meetings with stakeholders (US \$10,000) and other operational costs (US \$26,216) to support project implementation and monitoring.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption and verification report

18. The second tranche of stage III of the HPMP requires the submission of a verification report of HCFC consumption for 2020-2022. As this tranche request is being submitted to the first meeting of the Executive Committee and noting that the 2022 consumption reported under Article 7 is 47 per cent below the baseline and 12 per cent below the country's maximum eligible consumption under its Agreement with the Executive Committee, the Secretariat is recommending approval of this funding tranche request in line with decision 72/19(b)¹⁰ and without setting a precedent, on the understanding that:

- (a) The Treasurer would be requested to transfer the approved funds to UNDP and UNEP only after receipt by the Secretariat of the verification report confirming that the country was in compliance;
- (b) UNDP has committed to submit the verification report at the earliest by June 2023, and no later than 12 weeks prior to the 93rd meeting;
- (c) The recommendations included in the verification report would be addressed during the implementation of the second tranche and that the actions implemented towards that end would be included in the progress report of the second tranche of stage III of the HPMP to be submitted with the country's third tranche request; and
- (d) In the unlikely event of non-compliance by the Government of the Dominican Republic with its Agreement with the Executive Committee, relevant actions would be taken by the Executive Committee.

Progress report on the implementation of the first tranche of stage III of the HCFC phase-out management plan

Legal framework

19. The Government of Dominican Republic has already issued HCFC import quotas for 2023 at 30.7 ODP tonnes, which is lower than the Montreal Protocol control targets, and in accordance with the Agreement with the Executive Committee.

¹⁰ Decision 72/19(b) states that, should the verification reports not be ready in time for the first meeting of the year, transfer of approved funds to the agencies would occur only after receipt by the Secretariat of the verification report confirming that the country was in compliance.

Refrigeration servicing sector

20. In explaining why some equipment delivered to INFOTEP since December 2022 has not yet been distributed to the technicians and other stakeholders, UNDP clarified that changes in the personnel of INFOTEP and the administrative procedures required for the distribution of the equipment to some stakeholders led to delays in the distribution; these have been resolved and all equipment is expected to be distributed early in the second quarter of 2023.

21. The Secretariat requested further information on the specific activities that will be undertaken for the proposed pilot projects for trans-critical CO₂ in two supermarkets, the timeline for completion, how the proposal met the conditions of decision 84/84, in particular how the introduction and scaling up of the new technology would be supported in the country's national policies; the number of enterprises in the country that could be interested in the transition as a result of the programme being undertaken and the scalability of the technology in the local market; how results will be communicated to stakeholders; what enabling conditions could be leveraged to benefit the project outcomes; and information on the estimated co-financing from the beneficiaries.

22. UNDP has identified two supermarkets which can be part of the pilot project. However, the supermarkets have not yet expressed interest in participating in the project. Once they do, technical assistance will be provided to help with the procurement, design, installation, and start-up of the new system. This support will help train technicians and installers in the new technology and increase local capability. The project is expected to be completed during the implementation of the second tranche, and the country has already published a decree to promote energy efficiency. Three major supermarket chains in the country with a total of 83 stores¹¹ are interested in the technology, and each beneficiary would share the results of the pilot project through their communication offices. UNDP also mentioned that the project will benefit because of high energy costs in the country as the new technology is expected to be more energy efficient and from the constraints on the consumption of HCFC-22 and its price increase. The estimated cost for implementing the new system in a supermarket is between US \$500,000 and US \$1,000,000; the current proposal would only provide technical assistance, any investments in the technology will be borne by the supermarket owners. The country has committed to providing a report of the results of the demonstration project once completed.

23. On the activity related to the adoption and implementation of safety standards and guidelines for flammable refrigerants, UNDP clarified that they are yet to be finalized. The National Ozone Program (PRONAOZ) prepared the standards and guidelines for flammable refrigerants, which were approved by the Ministry of Environment and Natural Resources and transmitted to the National Institute for Quality (INDOCAL), the national entity responsible for these standards. This draft is currently undergoing consultation with stakeholders, and it is expected to be in place by the end of 2023.

Gender policy implementation¹²

24. In line with decisions 84/92(d) and 90/48(c), gender-disaggregated data was collected for monitoring and reporting; a baseline of women in the RAC sector was established; awareness-raising activities on gender-sensitive communications were conducted; gender aspects were included in the recruitment practices of the NOU and gender-related elements were included in job descriptions and terms of references for HPMP components such as the training sessions.

¹¹ These stores operate commercial and industrial refrigeration equipment using HCFC-22, R-404A and R-507.

¹² In line with decision 84/92(d), decision 90/48(c) encouraged bilateral and implementing agencies to continue ensuring that the operational gender mainstreaming policy was applied to all projects, taking into consideration the specific activities presented in table 2 of document UNEP/OzL.Pro/ExCom/90/37.

Sustainability of the HCFC phase-out and assessment of risks

25. The Government of the Dominican Republic is committed to achieving the long-term sustainability of HCFC phase-out by ensuring the strict enforcement of the bans on the import and production of new and used HCFC-based equipment and on the import of HCFC-141b in bulk and/or contained in pre-blended polyols. This is further supported by administrative fees levied on HCFC imports from 1 January 2019 to support the phase-out of HCFCs, effectively controlling their imports. The Government is also putting in place a mandatory technician certification system by 2025 highlighting the importance of training in good servicing practices; the pilot project supporting the uptake of low-GWP alternatives in supermarkets will facilitate the reduction of HCFC demand in servicing.

Conclusion

26. The 2022 consumption of 27.13 ODP tonnes is 18 per cent below the Montreal Protocol consumption limits (33.28 ODP tonnes) and 12 per cent below the maximum allowable consumption of the country (30.72 ODP tonnes) under its Agreement with the Executive Committee. A number of activities have been completed during the first tranche of stage III including a large number of technicians trained and equipment distributed; the framework to establish a mandatory technician certification system by 2025 has been initiated to support the HCFC phase-out in the servicing sector; and awareness activities were implemented. The disbursement rate of the first tranche is 69 per cent. Activities planned for the second tranche will continue the training and provision of equipment to service technicians to support the technician certification system and will continue focus on the implementation of the pilot project in two supermarkets. UNDP has committed to submit the verification report for 2020 to 2022 at the earliest by June 2023 and the Secretariat recommends *inter alia* that the Treasurer would be requested to transfer approved funds to UNDP and UNEP only after receipt by the Secretariat of the verification report confirming that the country was in compliance for that period.

RECOMMENDATION

27. The Fund Secretariat recommends that the Executive Committee note the progress report on the implementation of the first tranche of stage III of the HCFC phase-out management plan (HPMP) for Dominican Republic, and further recommends blanket approval of the second tranche of stage III of the HPMP and the corresponding 2023-2026 tranche implementation plan for Dominican Republic at the funding levels shown in the table below on the understanding that:

- (a) The Treasurer would be requested to transfer the approved funds to UNDP and UNEP only after receipt by the Secretariat of the verification report confirming that the country was in compliance;
- (b) UNDP has committed to submit the verification report at the earliest by June 2023, and no later than 12 weeks prior to the 93rd meeting;
- (c) The recommendations included in the verification report would be addressed during the implementation of the second tranche and that the actions implemented towards that end would be included in the progress report of the second tranche of stage III of the HPMP to be submitted with the country's third tranche request; and
- (d) In the unlikely event of non-compliance by the Government of the Dominican Republic with its Agreement with the Executive Committee, relevant actions would be taken by the Executive Committee.

	Project title	Project funding (US \$)	Support costs (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage III, second tranche)	964,808	67,537	UNDP
(b)	HCFC phase-out management plan (stage III, second tranche)	111,160	14,451	UNEP
