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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 PROPOSALS: DOMINICAN REPUBLIC

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

Phase-out

- | | | |
|---|---|---------------|
| • | HCFC phase-out management plan (stage II, third tranche) | UNDP and UNEP |
| • | HCFC phase-out management plan (stage III, first 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

Dominican Republic (the)

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage II)	UNDP (lead), UNEP	77 th	40% by 2020

(II) LATEST ARTICLE 7 DATA (ANNEX C GROUP L)	Year: 2019	38.06 (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					38.06				38.06

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	51.20	Starting point for sustained aggregate reductions:	70.71
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	42.50	Remaining:	28.21

(V) BUSINESS PLAN		2018	2019	2020	Total
UNDP	ODS phase-out (ODP tonnes)	6.0	0	1.5	7.5
	Funding (US \$)	614,394	0	156,817	771,211
UNEP	ODS phase-out (ODP tonnes)	1.0	0	0	1.0
	Funding (US \$)	113,000	0	0	113,000

(VI) PROJECT DATA			2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			46.08	46.08	46.08	46.08	33.28	n/a
Maximum allowable consumption (ODP tonnes)			46.08	46.08	46.08	46.08	30.72	n/a
Agreed funding (US \$)	UNDP	Project costs	558,800	0	574,200	0	146,558	1,279,558
		Support costs	39,116	0	40,194	0	10,259	89,569
	UNEP	Project costs	95,000	0	100,000	0	0	195,000
		Support costs	12,350	0	13,000	0	0	25,350
Funds approved by ExCom (US \$)		Project costs	653,800	0	674,200	0	0	1,328,000
		Support costs	51,466	0	53,194	0	0	104,660
Total funds requested for approval at this meeting (US \$)		Project costs	0	0	0	0	146,558	146,558
		Support costs	0	0	0	0	10,259	10,259

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 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 \$146,558, plus agency support costs of US \$10,259 for UNDP only.² The submission includes a progress report on the implementation of the second tranche, the verification report on HCFC consumption for 2018 to 2019, and the tranche implementation plan for 2020 to 2021.

Report on HCFC consumption

2. The Government of the Dominican Republic reported a consumption of 38.06 ODP tonnes of HCFC in 2019, which is 26 per cent below the HCFC baseline for compliance. The 2015-2019 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in the Dominican Republic (2015-2019 Article 7 data)

HCFC	2015	2016	2017	2018	2019	Baseline
Metric tonnes (mt)						
HCFC-22	720.09	759.72	806.55	601.85	691.93	916.53
HCFC-123	0.42	15.00	2.61	0.00	0.00	9.68
HCFC-141b	34.36	1.36	0.00	0.00	0.00	5.43
Total HCFCs (mt)	754.87	776.08	809.16	601.85	691.93	931.64
HCFC-141b in imported pre-blended polyols*	100.00	40.00	0.00	0.00	0.00	177.36**
ODP tonnes						
HCFC-22	39.6	41.78	44.36	33.10	38.06	50.41
HCFC-123	0.01	0.30	0.05	0.00	0.00	0.19
HCFC-141b	3.78	0.15	0.00	0.00	0.00	0.60
Total HCFCs (ODP tonnes)	43.39	42.23	44.41	33.10	38.06	51.20
HCFC-141b in imported pre-blended polyols*	11.00	4.40	0.00	0.00	0.00	19.51**

* Country programme (CP) data.

** Average consumption between 2007 and 2009.

3. While there is an overall decrease trend in the consumption of HCFCs in the country, in some year consumption increased as compared to the previous year. The increase in HCFC-22 consumption in 2016 and 2017 was due to importers shoring up their inventories in anticipation of a 2017 ban on the import of HCFC-based refrigeration and air-conditioning (RAC) equipment and the implementation of additional import fees for HCFCs in 2019, and the increase in consumption in 2019 was due to stockpiling in anticipation of the 2020 reduction in import quotas. The control measures in import of RAC equipment based on HCFC-22, and the activities implemented in the servicing sector under the HPMP, have resulted in the overall decrease of HCFC consumption. The ban on the import of HCFC-141b in bulk and on pre-blended polyols in place since 1 January 2017 after the completion of the conversion of foam enterprises, has also contributed to the overall reduction in consumption.

CP implementation report

4. The Government of the Dominican Republic 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.

Verification report

² As per the letter of 30 June 2020 from the Ministry of Environment and Natural Resources of the Dominican Republic to UNDP.

5. The verification report confirmed that the Government is implementing a licensing and quota system for HCFC imports and exports and that the total consumption of HCFCs reported under Article 7 of the Montreal Protocol for 2018 and 2019 was correct (as shown in Table 1 above). The verification concluded that the Dominican Republic has a regulation to control the imports of HCFCs and other ODS, which includes the import procedure (including issuance of permits) and enforcement of the law.

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

Legal framework

6. The Dominican Republic had issued a ban on import and production of HCFC-based RAC equipment (new or used) and a ban on the import of HCFC-141b, in bulk and/or contained in pre-blended polyols, both bans have been in place since 1 January 2017. Since 1 January 2019, the Government imposed administrative fees on HCFC imports to support the phase-out of HCFCs. The regulation for the monitoring of ODS imports also includes the management of HFCs, to support the Kigali Amendment; tariff codes for HCFCs and HFC-blends are being reviewed to improve the control of import and export of these substances.

7. During the implementation of the second tranche, a total of 400 customs agents received training on control procedures related to HCFCs, alternative refrigerants and HCFC-based technologies. A draft standard on the use of hydrocarbons (HCs) as refrigerant was prepared and submitted to the Dominican Institute for Quality (INDOCAL) for review and consultation with interested stakeholders. This is included in the work plan of the country's Standardization Directorate, and is aimed to be finalized by the time stage II of the HPMP is completed.

Refrigeration servicing sector

8. In the second tranche the following activities were implemented:

- (a) Training of 500 RAC technicians on good refrigeration practices and 56 teachers of technical schools on good refrigeration practices and the use of safety standards/guidelines for flammable refrigerants; five regional training laboratories were equipped with 14 sets of refrigeration equipment and tools to work with flammable gases (each set contained: a recovery unit, a vacuum pump, three cylinders of different capacities and general tools); 620 technicians participated in workshops on the safe use of HCs as a refrigerant; 80 technicians were trained in the use of CO₂, ammonia and flammable refrigerants; one international workshop was held to promote the use of low-global warming potential (GWP) alternatives to HCFCs in the RAC sector with participation from more than 200 students of technical schools, RAC technicians and other stakeholders;
- (b) Thirteen regional vocational schools and one laboratory centre were equipped with one set each of RAC servicing equipment (e.g., recovery machines, recovery cylinders, charging units, vacuum pumps, manifold gauge sets, weighing tanks) for training purposes;
- (c) A certification system for RAC technicians was established through the certification commission and supported by SENA,³ with 47 technicians passing the initial requirements; the development of national labour standards for RAC technician certification is ongoing; an awareness campaign was launched to highlight the need to obtain a RAC labor certification; the National Institute of Professional and Technical Education Training (INFOTEP) signed an agreement to ensure nationwide access to training for the certification process;

³ Servicio Nacional de Aprendizaje (National Apprenticeship Service).

- (d) More than 270 kg of refrigerants were recovered through the refrigerant recovery and recycling (R&R) centres; additional storage cylinders were purchased and distributed to regional centres; national monitoring of the programme was carried out and identified the need for eight additional centres, which were established around the country; discussions were held with a cement company to consider alternatives and requirements for the disposal of unwanted ODS;
- (e) Implementation of one pilot project in a supermarket to promote the adoption of a trans-critical CO₂ system; the selected company is currently reviewing technical options and costs for replacing HCFC-based systems; an international expert on CO₂-based RAC systems visited the company and provided technical assistance on the equipment specifications for installation in the supermarket; an HC-based air-conditioning unit is currently being procured to promote HC-based RAC equipment within public institutions; and
- (f) An awareness programme on the phase-out of HCFCs was continued through the development and distribution of outreach material such as: 1,500 manuals on good refrigeration practices and 500 manuals on the safe use of HCs as a refrigerant; other awareness raising materials were designed, produced and distributed among RAC technicians; technical lectures were carried out to promote the use of alternatives to HCFC at a tourism trades fair.

Project implementation and monitoring

9. A PMU has been established and serves as coordinating office for the implementation and monitoring of HPMP activities. The PMU supported the preparation of the verification report, all monitoring activities, and the preparation of annual progress reports. As of June 2020, the funding disbursed of US \$52,800 was used for consultants (US \$41,281), verification reports (US \$5,000), and meetings and miscellaneous operational costs (US \$2,031) the balance of US \$4,488 will be used in 2020.

Level of fund disbursement

10. As of June 2020, of the US \$1,328,000 approved so far, US \$985,258 had been disbursed (US \$898,967 for UNDP and US \$86,291 for UNEP) as shown in Table 2. The balance of US \$342,742 will be disbursed in 2020 and 2021.

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

Agency	First tranche		Second tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNDP	558,800	558,800	574,200	340,167	1,133,000	898,967
UNEP	95,000	70,016	100,000	16,275	195,000	86,291
Total	653,800	628,816	674,200	356,442	1,328,000	985,258
Disbursement rate (%)	96		53		74	

Implementation plan for the third and final tranche of the HPMP

11. The following activities will be implemented between December 2020 and December 2021:
- (a) Support the adoption of the safety standards/guidelines for flammable refrigerants including coordination of meetings and consultations (UNEP) (funds from previous tranches);
 - (b) Design and implementation of an online diploma course for importers of refrigerants and custom officers on HCFC import authorization forms and procedures for customs brokers

and importers, and digital documentation and records management related to HCFC imports and exports (UNEP) (funds from previous tranches);

- (c) Support for the operation of the certification system, development and implementation of procedures to obtain a labour certification in refrigeration for all technicians including informal refrigeration technicians, and continue to coordinate with institutions and universities to promote distance learning of technicians (UNEP) (funds from previous tranches);
- (d) Conduct two specialized training courses for technicians on NH₃ and HC in commercial refrigeration; distribution of basic tools procured from the previous tranche to technicians; and conduct two specialized workshops for teachers of technical and vocational schools to integrate good refrigeration practices in the vocational curriculum (UNDP) (US \$46,200);
- (e) Continue implementation of the pilot project for the adoption of non-ODP, low-GWP technologies and RAC equipment conversion, and completing two specialized awareness workshops to disseminate results of the pilot projects (UNDP) (funds from previous tranche);
- (f) Application of good refrigeration practices and procedures in the use of HC refrigerants through the implementation of a pilot project designed to demonstrate the use of R-290 AC units in public institutions, and 31 training workshops for 450 RAC equipment importers, engineers and technicians on the safe use of flammable refrigerants (UNDP) (US \$40,000);
- (g) Monitoring of the refrigerant R&R centres, identifying and providing equipment to two new R&R centres; distribution of tools (cylinders and recovery machines) purchased from the previous tranche to the existing R&R centres (UNDP) (US \$15,000);
- (h) Design, printing and distribution of awareness materials; annual visit to customs offices in main border provinces (UNDP) (US \$14,157), and
- (i) PMU (UNDP) (US \$31,201): consultants for project implementation and monitoring (US \$30,000) and conduct two follow up meetings with stakeholders and miscellaneous expenses (US \$1,201)

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

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

Legal framework

12. The Government of the Dominican Republic has already issued HCFC import quotas for 2020 at 27.83 ODP tonnes, which is lower than the Montreal Protocol control targets.

Refrigeration servicing sector

13. In noting the amount of HCFCs that have been recovered (i.e., 270 kg) and how these are being re-used, UNDP explained that these amounts underscore the importance for upgrading technicians' knowledge and providing them with equipment to systematically recover refrigerants during servicing and maintenance operations. While the amount recovered has not yet made an impact on the demand for virgin HCFCs, this supports the need to reinforce the capacity of the R&R centres and to institutionalize a framework for the overall scheme to work more efficiently, noting that the ODS regulations in the

Dominican Republic prohibit the venting of refrigerants into the atmosphere. This scheme will be further strengthened by the mandatory certification of technicians, where R&R would be required. These activities will carry on to stage III of the HPMP.

14. With regard to reaching an agreement with a cement kiln company for ODS disposal, UNDP reiterated that no funding is being provided for this activity from the HPMP.

15. UNDP also clarified that the proposed technician certification system will become mandatory upon completion of stage III. The certification of technicians will be put in place through the national certification body, Commission for Licence Emission to Technicians in the Refrigeration and Air-Conditioning Sector (CONALTRAA) who will be in charge of the certification process; the certification will have a cost for the technician, with funds from the Multilateral Fund supporting the scheme's initial set-up and operation. It is expected that 320 technicians will be certified during stage II.

16. In line with decision 84/84(d), UNDP will submit detailed reports on the results of the pilot projects for the adoption of non-ODP, low-GWP technologies and RAC equipment conversion of end-users once they have been completed, to allow the Secretariat to develop fact sheets to inform future projects.

Completion of stage II

17. UNDP has confirmed that stage II for the Dominican Republic will be completed on 31 December 2021 as established in paragraph 14 of the Agreement.

Gender policy implementation⁴

18. During third tranche implementation of the HPMP the Government has committed to gender mainstreaming; it will collect and report data on the participation of women in activities under the HPMP, establish a baseline of women working in the RAC sector, consider gender-sensitive language in communications and recruitment, and consider implementing gender training as a part of a standard human resources policy.

Sustainability of the HCFC phase-out

19. The Government of the Dominican Republic will achieve the long-term sustainability of HCFC phase-out by putting in place a mandatory certification of technicians by 2025 highlighting the importance of training in good servicing practices; the pilot project supporting the uptake of low-GWP alternatives in supermarkets and the domestic air-conditioning sector will facilitate the reduction of HCFC demand in servicing. Further, the current review of the tariff codes of HCFC and HFC-blends will improve the control of import and export of these substances, and consider the imports of these substances in an integrated manner and reduce the imports of HCFC consumption sustainably.

Conclusion

20. The 2019 consumption of 38.06 ODP tonnes is 26 per cent below the HCFC baseline for compliance and 17 per cent below the maximum allowable consumption of the country (46.08 ODP tones) under the Agreement with the Executive Committee. The Government has put in place strict policies banning the import of HCFC-based equipment and the import HCFC-141b in bulk and/or contained in pre-blended polyols since 1 January 2017, in addition to establishing import fees for HCFC imports (9 per cent per year since 2019); the verification report indicated that the country's ODS regulations and a licensing system operate efficiently. A number of activities have been completed during the first two tranches: a large numbers of technicians were trained; the framework to establish a mandatory technician

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

certification system by 2025 has been initiated to support phase out in the servicing sector; and awareness activities were implemented. The disbursement rate of the second tranche is 53 per cent, with an overall disbursement rate for tranches approved of 74 per cent. The Government will implement the third tranche to focus on the training of service technicians to support the technician certification system, and will continue to provide equipment to technicians and R&R centres. Stage III of the HPMP is being submitted for consideration at the 86th meeting.

RECOMMENDATION

21. The Fund Secretariat recommends that the Executive Committee:

- (a) Takes note of the progress report on the implementation of the second tranche of stage II of the HCFC phase-out management plan (HPMP) for the Dominican Republic;
- (b) Requests the Government of the Dominican Republic, UNDP and UNEP to submit a progress report on the implementation of the work programme associated with the final tranche to the first meeting of the Executive Committee in 2022;
- (c) Requests UNDP to submit detailed reports on the results of the pilot project for the adoption of non-ODP, low-GWP technologies and RAC equipment conversion once they have been completed, to allow the Secretariat to develop fact sheets to inform future projects, in line with decision 84/84(d).

22. The Fund Secretariat further recommends blanket approval of the third and final tranche of stage I of the HPMP for the Dominican Republic, 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)	146,558	10,259	UNDP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Dominican Republic

(I) PROJECT TITLE	AGENCY
HCFC phase-out plan (stage III)	UNDP (lead), UNEP

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2019	38.03 (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	38.06				38.06

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:		51.20	Starting point for sustained aggregate reductions: 70.71
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:		42.50	Remaining: 28.21

(V) BUSINESS PLAN		2020	2021	2022	Total
UNDP	ODS phase-out (ODP tonnes)	6.66	0	0	6.66
	Funding (US \$)	581,000	0	0	581,000
UNEP	ODS phase-out (ODP tonnes)	0.52	0	0	0.52
	Funding (US \$)	51,282	0	0	51,282

(VI) PROJECT DATA			2020	2021-2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Montreal Protocol consumption limits			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
Projects costs requested 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
Total project costs requested in principle (US \$)			672,480	0	1,075,968	0	0	672,480	0	0	268,992	0	2,689,920
Total support costs requested in principle (US \$)			51,242	0	81,987	0	0	51,242	0	0	20,497	0	204,968
Total funds requested in principle (US \$)			723,722	0	1,157,955	0	0	723,722	0	0	289,489	0	2,894,888

(VII) Request for approval of funding for the first tranche (2020)		
Agency	Funds requested (US \$)	Support costs (US \$)
UNDP	603,005	42,210
UNEP	69,475	9,032
Total	672,480	51,242

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

Background

23. On behalf of the Government of the Dominican Republic, UNDP as the lead implementing agency, has submitted a request for stage III of the HCFC phase-out management plan (HPMP), at a total cost of US \$2,894,888, consisting of US \$2,412,020, plus agency support costs of US \$168,841 for UNDP, and US \$277,900, plus agency support costs of US \$36,127 for UNEP, as originally submitted.⁵ The implementation of stage III of the HPMP will phase out the remaining consumption of HCFCs by 2030.

24. The first tranche of stage III of the HPMP being requested at this meeting amounts to US \$868,467, consisting of US \$723,606, plus agency support costs of US \$50,653 for UNDP, and US \$83,370, plus agency support costs of US \$10,838 for UNEP, as originally submitted.

Status of implementation of stage II of the HPMP

25. Stage I of the HPMP was approved at the 65th meeting⁶ to meet the 10 per cent reduction from the baseline by 2015, at a total cost of US \$1,696,225, plus agency support costs, to phase out 27.14 ODP tonnes used in the polyurethane (PU) foam manufacturing and refrigeration and air-conditioning (RAC) servicing sector. Stage I of the HPMP was originally approved for completion by December 2016, but was extended until December 2017 (decision 76/10(a)); the project was reported as completed in December 2019.

26. Stage II of the HPMP was approved at the 77th meeting⁷ to meet the 40 per cent reduction from the baseline by 2020, at a total cost of US \$1,474,558, plus agency support costs, to phase out 15.36 ODP tonnes of HCFCs used in the refrigeration and air-conditioning (RAC) servicing sector. An overview of the implementation of stage II, including an analysis of the HCFC consumption; the progress and financial report on the implementation, the verification report for HCFC consumption for 2018 and 2019, and the request for the third and final tranche submitted to the current meeting, is available in paragraphs 2 to 20 of the present document.

Stage III of the HPMP

Remaining consumption eligible for funding

27. After deducting 27.14 ODP tonnes (i.e., 7.03 ODP tonnes of HCFC-22, 0.60 ODP tonnes of HCFC-141b, and 19.51 ODP tonnes of HCFC-141b in imported pre-blended polyols) associated with stage I of the HPMP and 15.36 ODP tonnes of HCFC-22 associated with stage II of the HPMP, the remaining consumption eligible for funding amounts to 28.02 ODP tonnes of HCFC-22.⁸

Sector distribution of HCFCs

28. There are approximately 7,000 to 8,000 RAC technicians and 4,665 workshops consuming HCFC-22 to service domestic air-conditioning, commercial refrigeration, refrigerated trucks and containers and industrial refrigerators. The estimated consumption of HCFC by application in the Dominican Republic is shown in Table 3.

⁵ As per the letter of 30 June 2020 from the Ministry of the Environment and Natural Resources of Dominican Republic to UNDP.

⁶ [UNEP/OzL.Pro/ExCom/65/30 and Annex XXIII of document UNEP/OzL.Pro/ExCom/65/60.](#)

⁷ [UNEP/OzL.Pro/ExCom/77/41 and Annex XVIII of document UNEP/OzL.Pro/ExCom/77/76.](#)

⁸ The country had remaining eligible consumption of 0.19 ODP tonnes of HCFC-123 which had been phased out since 2016, therefore not included in the calculation of eligible funding for stage III.

Table 3. Estimated consumption of HCFCs by sector in the Dominican Republic

Application	Consumption		% of total (in ODP tonnes)
	mt	ODP tonnes	
HCFC-22			
Commercial refrigeration	498.19	27.40	72.0
Industrial refrigeration	6.92	0.38	1.0
Residential AC	138.39	7.61	20.0
Refrigerated transport	27.68	1.52	4.0
Refrigerated containers/reefers	20.76	1.14	3.0
Total HCFC-22	691.93	38.06	100.0

Phase-out strategy in stage III of the HPMP

29. Stage III of the HPMP aims to achieve a 97.5 per cent reduction from its HCFC baseline consumption by 2028 and 100 per cent reduction by 2030. It has been designed based on the experience gained during the implementation of previous stages and will further strengthen the institutional and legal framework for HCFC phase-out in the country, continue to provide a strong supporting mechanism to service technicians and the overall servicing sector including implementing a certification system and reinforcing the R&R approach.

Proposed activities in stage III of the HPMP

30. The activities to be implemented in stage III of the HPMP, as originally submitted, are summarized in Table 4.

Table 4. Activities to be implemented in stage III of the HPMP

Project component	Planned activities	Agency	Cost (US \$)
<i>Strengthening of the legal and institutional framework to phase out HCFCs</i>			
Strengthening the certification system for RAC technicians	- Strengthening CONALTRAA through the provision of equipment for training (e.g., vacuum pumps, brazing units, small recovery units), providing technical support for the management of the certification process, provision of supplies and implement the certification system and certify 4,000 technicians - Improve the database of RAC technicians in coordination with the Dominican Association of Refrigeration and Air-Conditioning Technicians (ADOMTRA) to ensure inclusion of all technicians - Implement 12 awareness campaigns on the certification requirements for RAC technician across the country	UNEP	207,900
Initiatives to support the adoption of safety standards/guidelines for flammable refrigerants	- Five country-wide public awareness workshops on the safety of equipment using flammable refrigerants, and ten sectoral workshops for RAC technicians, importers and end-users on the safe handling of HC refrigerants - Production of videos, online content and reproduction of 5,000 leaflets/factsheets on safety standards and guidelines for HC refrigerants	UNEP	70,000
<i>Programme for the elimination of HCFCs consumption in the refrigeration and air conditioning sectors</i>			
Training for application of good refrigeration practices	- Implementation of 72 training courses for 1,440 RAC technicians on good practices in refrigeration and proper handling of HC refrigerants, delivered in cooperation with the National Institute for Professional and Technical Education (INFOTEP) and the ADOMTRA - Procurement and distribution of 150 tool kits for HC-based	UNDP	500,000

	equipment ⁹ to service shops and technicians through existing associations		
Strengthening of formal education facilities and technical institutes for training in good refrigeration practices	• Build capacity of 15 technical institutes, 15 vocational schools, and eight INFOTEP regional centres by providing updated training material and manuals on good refrigeration practices • Provision of tools and equipment¹⁰ for selected training institutes • Implementation of four training workshops for all instructors on new technologies and refrigerant substances focused on low-GWP refrigerants	UNDP	350,000
Project for the management of natural gases as refrigerants in industrial, commercial and domestic sectors	• Equipment of one superior education institution with natural refrigerants equipment and tools¹¹ • Conduct two train-the-trainer workshops and the provision of training materials • Training of 100 RAC technicians on the management of natural gases as refrigerants in industrial, commercial and domestic RAC equipment	UNDP	509,732
Strengthening the refrigerant R&R network	• Procurement of eight sets of equipment¹², training materials on the elimination of the HCFC and others ODS, and alternative gases to selected R&R centres • Support trading procedure between technicians and commercial shops operating as R&R centres to encourage recovery of refrigerants • Establish financial incentives to encourage more technicians to recover and trade recovered material	UNDP	250,000
Technical assistance for end-users and implementation of pilot projects to adopt non-ODP, low-GWP technologies in RAC equipment	• Implementation of one pilot project on the use of CO₂ for commercial refrigeration in a shopping mall in the city of La Romana • Implementation of one pilot project on the use of NH₃ for industrial refrigeration in a food processing enterprise in Santo Domingo • Conduct four workshops for end-users to encourage the adoption of ODS free and environmentally safe technologies when designing and building new installations such as supermarkets, and a national seminar on energy savings and greenhouse gas reduction when phasing out HCFCs • Design and implement a technical assistance programme to end-users (i.e., provision of fact sheets and technical information) for the adoption non-ODS, low-GWP, energy-efficient technologies, including end of life disposal of replaced HCFC-based equipment	UNDP	500,000
<i>Public awareness of the importance of HCFC phase-out</i>			
Awareness-building campaigns for end-users, technicians and the general public	• Development and distribution of materials and media campaigns on the protection of the ozone layer, the alternatives to HCFC in RAC equipment and the gradual phase-out of HCFCs • Conduct ten workshops to target groups on specific subjects	UNDP	57,750

⁹ Charging station and vacuum, welding kit, hoses kit with ball valves for HC, 22 ft³ nitrogen air tank with regulator from 0-400 PSI, leak detectors for HC, manometer, and precision balance for HC cartridge.

¹⁰ Vacuum pump, refrigerant identifier, digital infrared thermometer, 2-way brass manifold set and gauges, hoses and fittings, electronic scale, welding kits, oxygen and acetylene, leak detector, manometer, recovery tank.

¹¹ 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.

¹² Recovery-recycling machine, small recovery machines, vacuum pumps, gas identifier, tanks and cylinders of different sizes.

	related to the Montreal Protocol and HCFC phase-out		
<i>Project implementation and monitoring</i>			
Project monitoring and implementation	• Follow up meetings and workshops with stakeholders (US \$32,500) • Consultants and personnel (US \$132,500) • Verification reports (US\$28,000) • Operational costs (US \$51,538)	UNDP	244,538
Total			2,689,920

Project implementation and monitoring unit (PMU)

31. The monitoring mechanism established under stage II of the HPMP will continue into stage III, where the PMU under the supervision of the NOU monitors activities, reports progress, and works with stakeholders to phase out HCFCs with the assistance of UNDP (US \$244,538).

Gender policy implementation

32. Following the approach implemented during stage II, and in line with decision 84/92(d),¹³ stage III will continue promoting gender in hiring practices for consultants, supervisors, trainers and project planners. Female participation will be encouraged in training and other HPMP activities. The NOU will continue collecting gender specific indicators and will establish a baseline of women technicians in the RAC sector.

Total cost of stage III of the HPMP

33. The total cost of stage III of the HPMP has been estimated at US \$2,689,920 (plus agency support costs), as originally submitted for achieving 97.5 per cent reduction from its HCFC baseline consumption by 2028 and 100 per cent reduction in 2030.

Activities planned for the first tranche of stage III

34. The first funding tranche of stage III of the HPMP, at the amount of US \$806,976, will be implemented between January 2021 and December 2024 and will include the following activities:

- (a) *Certification system for technicians in the RAC sector*: strengthening of the certification system for RAC technicians by supporting the CONALTRAA strategic plan (UNEP) (US \$62,370);
- (b) *Safety standards/guidelines for flammable refrigerants*: reproduction of 5,000 leaflets/factsheets on safety standards and guidelines for flammable refrigerants; conduct sectoral workshops on safety standards; production of other materials to raise awareness and encourage the adoption of these standards (UNEP) (US \$21,000);
- (c) *Training for application of good refrigeration practices and safety in handling flammable refrigerants*: procurement and distribution of RAC training equipment (e.g., vacuum pump, 2-way brass manifold set and gauges, hoses and fittings, electronic scale, welding kits, oxygen and acetylene, leak detectors); recruitment of trainers and hold workshops for 360 RAC technicians on good refrigeration practices and the use of HC refrigerant (UNDP) (US \$150,000);

¹³ Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

- (d) *Strengthening of formal education facilities and technical institutes for training in good refrigeration practices*: update training programmes; provide training materials and tool kits (e.g., 15 sets) to vocational schools and formal accredited technical education institutes for RAC training (UNDP) (US \$105,000);
- (e) *Management of natural gases as refrigerants in industrial, commercial and domestic sectors*: providing technical material, literature and equipment (e.g., ammonia/CO₂ cooling system training units, pressure gauges, thermometers, data-loggers, leak detectors, other learning equipment) to training institutes; revise training materials to include aspects related to the management of natural gas refrigerants in industrial, commercial and domestic RAC sectors (UNDP) (US \$152,920);
- (f) *Strengthening the refrigerant R&R network*: procurement and distribution of equipment (e.g., small recovery machines, gas identifiers and storage tanks and cylinders) to selected R&R centres; support recovery and re-use trading procedures; and monitor the refrigerant R&R network (UNDP) (US \$75,000);
- (g) *Technical assistance for end-users*: design materials for end-users for technical assistance and awareness raising campaign to support the adoption of non-ODP, low-GWP technologies in RAC equipment; conduct one workshop for 30 end-users; contracting a technical expert for the selection of beneficiaries for the pilot projects, and initiate equipment procurement process for the pilot project (UNDP) (US \$150,000);
- (h) *Awareness-building campaigns*: Develop and conduct three awareness raising campaigns on matters related to the Montreal Protocol and the HCFC phase-out; and conduct two workshops on low-GWP alternatives for specific target groups (UNDP) (US \$17,325); and
- (i) *PMU*: hiring of one local consultant; verification report preparation; conduct one stakeholder consultation workshop; and operating costs (UNDP) (US \$73,361).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

35. The Secretariat reviewed stage III of the HPMP in light of stage II, the policies and guidelines of the Multilateral Fund, including the criteria for funding HCFC phase-out in the consumption sector for stage II of HPMPs (decision 74/50), and the 2020-2022 business plan of the Multilateral Fund.

Overarching strategy for stage II

36. The Government of the Dominican Republic proposed to meet 100 per cent reduction of its HCFC baseline consumption by 2030, with an interim reduction step of 97.5 per cent in 2028, and consumption of 2.5 per cent of the baseline in 2029, on the understanding that the country's consumption between 2030 and 2040 (i.e., the servicing tail) may exceed zero in any year so long as the sum of its calculated levels of consumption over the ten-year period from 1 January 2030 to 1 January 2040 divided by 10, does not exceed 2.5 per cent of the Dominican Republic's baseline, and provided that such consumption is restricted to the servicing of RAC equipment existing on 1 January 2030, as provided by the Montreal Protocol.¹⁴ The Government further commits to ensure that where consumption for the servicing tail may be required, it

¹⁴ Article 5, paragraph 8 ter (e)(i) of the Montreal Protocol. Other applications where HCFCs can be used include the servicing of fire-suppression and fire-protection equipment existing on 1 January 2030; solvent applications in rocket-engine manufacturing; and topical medical aerosol applications for the specialized treatment of burns.

will do its utmost to establish strict criteria within its existing licensing system to limit and monitor the amounts used to those allowed by the Protocol.

37. In explaining the reasons for which the Government's overarching strategy for stage III of the HPMP proposed the total phase-out of HCFCs in 2030 rather than the 67.5 per cent reduction in 2025, UNDP explained that, following extensive consultations with stakeholders during project preparation, the Government decided that a comprehensive plan for a total phase out would be the most efficient way to support the remaining consumption in the country, and encourage the uptake of low-GWP refrigerants. While the Dominican Republic is a non-low-volume-consuming (LVC) country, its consumption in the servicing sector resembles most of the LVC countries; therefore, a consolidated long-term plan is necessary to achieve the full phase out. The strategy involves strengthening the capacity of technicians to ensure that a framework for the servicing sector is in place when the country implements HFC phase-down activities in future. In addition, the country had implemented a ban on the import of HCFC-based equipment from 1 January 2017, which assumes that by the interim reduction step in 2028, this equipment would have reached the end of life. The Government also considered the need to send a signal to RAC stakeholders on the importance of moving to low-GWP technologies and sustain HCFC phase out.

Technical and cost-related issues

38. In explaining why stage III included a very limited support for training of customs officers, UNDP clarified that the country wanted to embark on a broader training programme after it ratified the Kigali Amendment, so that the scope of the future training will include new regulations related to HFCs. Although the current licensing and quota system for HCFCs is strong enough to continue implementation at this time, during implementation of stage III capacity building will be provided to customs officers as workshops and meetings rather than as full training programmes.

39. UNDP also responded to the Secretariat's observation on the share of funding allocated to RAC technician training; building the capacity of training centres; and assistance to end-users by justifying that despite the training activities already completed in the country, the technical level of technicians still remains low and, therefore, the need to build capacity is vital. These activities will further strengthen the framework for the servicing sector that will ensure that technicians will have the skills to handle flammable, toxic and high-pressure refrigerants which will encourage the safe introduction of low GWP refrigerants, and support the future phase down of HFCs. Presently, the potential for increased uptake of HC-based equipment, especially in the commercial refrigeration sector, is high because the largest manufacturer in the Dominican Republic (FARCO) had converted to HC-based technology through a demonstration project funded by the Multilateral Fund¹⁵.

40. In explaining the costs associated with CONALTRAA (the main institute responsible for implementing the certification of technicians), it was clarified that the institution will design an approach to reach most provinces and regions in the country, including the establishment of the labour competencies to support the certification system. To ensure the success of the certification scheme, CONALTRAA requires technical assistance to expand its network and build its certification capacity, and therefore the need for supplies, materials and equipment for the launch of the certification system.

41. UNDP also clarified that for strengthening the R&R network, is important to support implementation of the regulation to prevent venting of refrigerants; furthermore, prior to implementation, business models will be developed to assess options to ensure that the R&R network would be cost-effective and sustainable.

¹⁵ Conversion of a commercial refrigerator manufacturing line at Fábrica de Refrigeradores Comerciales, SRL (FARCO) from HFC-134a and R-404A to propane (R-290) as refrigerant approved at the 81st Meeting

42. In clarifying how the proposed pilot projects met the conditions in decision 84/84(a) and (b), UNDP mentioned that it built upon similar projects implemented in other Article 5 countries to support the introduction of low-GWP alternatives in supermarkets. The objective is to demonstrate, through two installations supported by the Fund, the risks and benefits of using the low-GWP technology to encourage market penetration. UNDP explained that the proposed pilot would focus on new installations to promote the use of low-GWP alternatives that are currently unavailable, rather than retrofitting existing ones which was done in stage II. The pilot projects will be implemented as part of the second tranche; during the first tranche, the NOU will work closely with the refrigeration association to identify the beneficiaries and put in place the supporting framework to ensure the sustainability of these projects. UNDP was also advised that detailed information would need to be provided on the planned pilot projects and their compliance with the requirements of decision 84/84 when submitting the request for the second tranche, in order to be considered for funding.

43. The Secretariat discussed with UNDP the proposed tranche distribution for stage III noting the importance of ensuring a balanced distribution according to the needs of the country to sustain activities and the potential challenges posed by a prolonged pandemic. The revised Agreement between the Government and the Executive Committee shows that the last tranche of stage III will be in 2029 instead of 2030.¹⁶ Given that the reduction of 97.5 percent of HCFC consumption will be met from 2028, 2029 would be the last year the country would have official controlled consumption of 2.5 per cent of the baseline, and activities would need to be implemented to completely phase out HCFCs in 2030. On this basis, the last tranche was agreed to be provided one year before the last year of the plan. Subsequently, a revised tranche distribution was agreed as shown in Table 5.

Table 5. Original and revised tranche distribution for stage II of the HPMP for the Dominican Republic

Funding (US \$)	2020	2021-2022	2023	2024	2025	2026	2027	2028	2029	2030
As submitted										
Lead IA (UNDP)	723,066	0	723,606	0	723,606	0	0	241,202	0	0
Cooperating IA (UNEP)	83,370	0	83,370	0	83,370	0	0	27,790	0	0
Total	806,976	0	806,976	0	806,976	0	0	268,992	0	0
Revised										
Lead IA (UNDP)	603,005	0	964,808	0	0	603,005	0	0	241,202	0
Cooperating IA (UNEP)	69,475	0	111,160	0	0	69,475	0	0	27,790	0
Total	672,480	0	1,075,968	0	0	672,480	0	0	268,992	0

Activities planned for the first tranche

44. Following the revision of the tranche distribution, the funding for the first tranche of stage III was adjusted as follows: certification system for technicians in the RAC sector (UNEP) (US \$51,975); safety standards/guidelines for flammable refrigerants (UNEP) (US \$17,500); training for application of good refrigeration practices (UNDP) (US \$126,885); strengthening of formal education facilities and technical institutes for training in good refrigeration practices (UNDP) (US \$90,083); management of natural gases as refrigerants in industrial, commercial and domestic sectors (UNDP) (US \$120,000); strengthening the refrigerant recovery and recycling network (UNDP) (US \$65,476); technical assistance for end-users

¹⁶ Bilateral and implementing agencies, when preparing multi-year HCFC phase-out management plans, were requested to ensure that the last tranche comprised 10 per cent of the total funding for the refrigeration servicing sector in the Agreement and was scheduled for the last year of the plan (decision 62/17).

(UNDP) (US \$102,128); awareness-building campaigns (UNDP) (US \$37,298); and project implementation and monitoring (UNDP) (US \$61,135).

Total project cost

45. The total cost for stage III of the HPMP amounts to US \$2,689,920, plus agency support costs which is comprised of US \$2,445,382 plus support costs for the servicing sector calculated at US \$4.8/metric kilogram using the remaining eligible HCFC consumption of 28.02 ODP tonnes (509.5 mt) of HCFC-22, of which US \$244,538 is for costs associated with the project management and monitoring, for the total phase-out of HCFCs based on decision 74/50(c)(xiii).

Impact of the COVID-19 pandemic on HPMP implementation

46. UNDP and the Government of the Dominican Republic have a contingency plan in place for the remaining implementation of stage II and for stage III of the HPMP. It is clear that activities cannot be implemented the way they were originally planned given that movements are restricted. Many businesses have been under lockdown since March 2020. The HPMP implementation strategy has been updated to use virtual media to the extent possible, but it is clear that both the COVID-19 pandemic and the associated economic crisis will still have an impact on the HPMP implementation. The situation is being monitored continuously by UNDP and the Government of the Dominican Republic.

Impact on the climate

47. The proposed activities in the servicing sector, which include better containment of refrigerants through training and provision of equipment, will reduce the amount of HCFC-22 used for RAC servicing. Each kilogram of HCFC-22 not emitted due to better refrigeration practices results in savings of approximately 1.8 CO₂-equivalent tonnes. Although a full calculation of the impact on the climate was not included in the HPMP, the activities planned by the Dominican Republic, including its proposed activities to promote low-GWP alternatives, as well as refrigerant recovery and re-use indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

Co-financing

48. The Government of the Dominican Republic will provide co-financing through in-kind contribution including provision of personnel, office and storage space, office equipment and transportation. Co-financing from beneficiaries of the pilot project will be provided for non-eligible items (i.e., estimated at US \$300,000 to cover non-eligible components and activities).

2020-2022 draft business plan of the Multilateral Fund

49. UNDP and UNEP are requesting US \$2,689,920, plus agency support costs, for the implementation of stage III of the HPMP for the Dominican Republic. The total requested value of US \$723,722, including agency support costs for the period of 2020–2022, is US \$91,440 above the amount in the business plan.

Draft Agreement

50. A draft Agreement between the Government of Dominican Republic and the Executive Committee for the phase-out of HCFCs in stage III of the HPMP is contained in Annex I to the present document.

RECOMMENDATION

51. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage III of the HCFC phase-out management plan (HPMP) for Dominican Republic for the period from 2020 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$ 2,894,888, consisting of US \$2,412,020 plus agency support costs of US \$168,841 for UNDP, and US \$277,900, plus agency support costs of US \$36,127 for UNEP;
- (b) Noting the commitment of the Government of the Dominican Republic:
 - (i) To reduce HCFC consumption by 97.5 per cent of the country's baseline by 1 January 2028 and completely phase out HCFCs by 1 January 2030, and that HCFCs would not be imported after that date, except for the allowance for a servicing tail between 2030-2040 where required, and consistent with the provisions of the Montreal Protocol; and
 - (ii) To establish a mandatory certification system for service technicians by 2025.
- (c) Deducting 28.02 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (d) Approving the draft Agreement between the Government of Dominican Republic and the Executive Committee for the reduction in consumption of HCFCs, in accordance with stage III of the HPMP, contained in Annex I to the present document; and
- (e) Approving the first tranche of stage III of the HPMP for Dominican Republic, and the corresponding tranche implementation plans, in the amount of US \$723,722, consisting of US \$603,005, plus agency support costs of US \$42,210 for UNDP, and US \$69,475, plus agency support costs of US \$9,032 for UNEP.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF THE DOMINICAN REPUBLIC AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE II OF THE HCFC PHASE-OUT MANAGEMENT PLAN

Purpose

1. This Agreement represents the understanding of the Government of the Dominican Republic (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of zero ODP tonnes by 1 January 2030 in compliance with Montreal Protocol schedule.
2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in rows 4.1.3, 4.2.3, 4.3.3 and 4.4.3 (remaining consumption eligible for funding).
3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A (“Funding Approval Schedule”).
4. The Country agrees to implement this Agreement in accordance with the stage II of the HCFC phase-out management plan (HPMP) approved (“the Plan”). In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.

Conditions for funding release

5. The Executive Committee will only provide the Funding in accordance with the Funding Approval Schedule when the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country has met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. Years for which there are no due country programme implementation reports at the date of the Executive Committee meeting at which the funding request is being presented are exempted;
 - (b) That the meeting of these Targets has been independently verified for all relevant years, unless the Executive Committee decided that such verification would not be required;
 - (c) That the Country had submitted a Tranche Implementation Report in the form of Appendix 4-A (“Format of Tranche Implementation Reports and Plans”) covering each previous calendar year; that it had achieved a significant level of implementation of

activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent; and

- (d) That the Country has submitted a Tranche Implementation Plan in the form of Appendix 4-A covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen.

Monitoring

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A (“Monitoring Institutions and Roles”) will monitor and report on implementation of the activities in the previous Tranche Implementation Plans in accordance with their roles and responsibilities set out in the same appendix.

Flexibility in the reallocation of funds

7. The Executive Committee agrees that the Country may have the flexibility to reallocate part or all of the approved funds, according to the evolving circumstances to achieve the smoothest reduction of consumption and phase-out of the Substances specified in Appendix 1-A:

- (a) Reallocations categorized as major changes must be documented in advance either in a Tranche Implementation Plan as foreseen in sub-paragraph 5(d) above, or as a revision to an existing Tranche Implementation Plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
 - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
 - (ii) Changes which would modify any clause of this Agreement;
 - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches;
 - (iv) Provision of funding for activities not included in the current endorsed Tranche Implementation Plan, or removal of an activity in the Tranche Implementation Plan, with a cost greater than 30 per cent of the total cost of the last approved tranche; and
 - (v) Changes in alternative technologies, on the understanding that any submission for such a request would identify the associated incremental costs, the potential impact to the climate, and any differences in ODP tonnes to be phased out if applicable, as well as confirm that the Country agrees that potential savings related to the change of technology would decrease the overall funding level under this Agreement accordingly;
- (b) Reallocations not categorized as major changes may be incorporated in the approved Tranche Implementation Plan, under implementation at the time, and reported to the Executive Committee in the subsequent Tranche Implementation Report;
- (c) The Country agrees, in cases where HFC technologies have been chosen as an alternative to HCFCs, and taking into account national circumstances related to health and safety: to monitor the availability of substitutes and alternatives that further minimize impacts on the climate; to consider, in the review of regulations standards and incentives adequate

provisions that encourage introduction of such alternatives; and to consider the potential for adoption of cost-effective alternatives that minimize the climate impact in the implementation of the HPMP, as appropriate, and inform the Executive Committee on the progress accordingly in tranche implementation reports; and

- (d) Any remaining funds held by the bilateral or implementing agencies or the Country under the Plan will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

Considerations for the refrigeration servicing sector

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sector included in the Plan, in particular:

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
- (b) The Country and relevant bilateral and/or implementing agencies would take into consideration relevant decisions on the refrigeration servicing sector during the implementation of the Plan.

Bilateral and implementing agencies

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNDP has agreed to be the lead implementing agency (the “Lead IA”) and UNEP has agreed to be the cooperating implementing agency (the “Cooperating IA”) under the lead of the Lead IA in respect of the Country’s activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of the Lead IA and/or Cooperating IA taking part in this Agreement.

10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). The Cooperating IA will support the Lead IA by implementing the Plan under the overall co-ordination of the Lead IA. The roles of the Lead IA and Cooperating IA are contained in Appendix 6-A and Appendix 6-B, respectively. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.

Non-compliance with the Agreement

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A (“Reductions in Funding for Failure to Comply”) in respect of each ODP kg of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once decisions are taken, the specific case of non-compliance with this Agreement will not be an impediment for the provision of funding for future tranches as per paragraph 5 above.

12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decisions that may affect the funding of any other consumption sector projects or any other related activities in the Country.

13. The Country will comply with any reasonable request of the Executive Committee, the Lead IA and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to the information necessary to verify compliance with this Agreement.

Date of completion

14. The completion of the Plan and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in Appendix 2-A. Should at that time there still be activities that are outstanding, and which were foreseen in the last Tranche Implementation Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion of the Plan will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion of the Plan unless otherwise specified by the Executive Committee.

Validity

15. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

16. This Agreement may be modified or terminated only by mutual written agreement of the Country and the Executive Committee of the Multilateral Fund.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	50.41
HCFC-123	C	I	0.19
HCFC-141b	C	I	0.60
Sub-total			51.20
HCFC-141b contained in imported pre-blended polyols	C	I	19.51
Total	C	I	70.71

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	33.28	33.28	33.28	33.28	16.64	16.64	16.64	16.64	16.64	0	n/a
1.2	Maximum allowable total consumption of Annex C, Group I	30.72	30.72	30.72	30.72	16.64	16.64	16.64	1.28	1.28	0	n/a

Row	Particulars	2020	2021-2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
	substances 1(ODP tonnes)											
2.1	Lead IA (UNDP) agreed funding (US \$)	603,005	0	964,808	0	0	603,005	0	0	241,202	0	2,412,020
2.2	Support costs for Lead IA (US \$)	42,210	0	67,537	0	0	42,210	0	0	16,884	0	168,841
2.3	Cooperating IA (UNEP) agreed funding (US \$)	69,475	0	111,160	0	0	69,475	0	0	27,790	0	277,900
2.4	Support costs for Cooperating IA (US \$)	9,032	0	14,451	0	0	9,032	0	0	3,613	0	36,127
3.1	Total agreed funding (US \$)	672,480	0	1,075,968	0	0	672,480	0	0	268,992	0	2,689,920
3.2	Total support costs (US \$)	51,242	0	81,987	0	0	51,242	0	0	20,497	0	204,968
3.3	Total agreed costs (US \$)	723,722	0	1,157,955	0	0	723,722	0	0	289,489	0	2,894,888
4.1.1	Total phase-out of HCFC 22 agreed to be achieved under this Agreement (ODP tonnes)											28.02
4.1.2	Phase-out of HCFC 22 to be achieved in the previous stages (ODP tonnes)											22.39
4.1.3	Remaining eligible consumption for HCFC 22 (ODP tonnes)											0.00
4.2.1	Total phase-out of HCFC 123 agreed to be achieved under this Agreement (ODP tonnes)											0.00
4.2.2	Phase-out of HCFC 123 to be achieved in the previous stages (ODP tonnes)											0.19**
4.2.3	Remaining eligible consumption for HCFC 123 (ODP tonnes)											0.00
4.3.1	Total phase-out of HCFC 141b agreed to be achieved under this Agreement (ODP tonnes)											0.00
4.3.2	Phase-out of HCFC 141b to be achieved in the previous stages (ODP tonnes)											0.60
4.3.3	Remaining eligible consumption for HCFC 141b (ODP tonnes)											0.00
4.4.1	Total phase-out of HCFC-141b contained in imported pre-blended polyols agreed to be achieved under this Agreement (ODP tonnes)											0.00
4.4.2	Phase-out of HCFC-141b contained in imported pre-blended polyols to be achieved in the previous stages (ODP tonnes)											19.51
4.4.3	Remaining eligible consumption for HCFC-141b contained in imported pre-blended polyols (ODP tonnes)											0.00

*Date of completion of stage II as per stage II Agreement: 31 December 2021

**Phase-out without assistance from the Multilateral Fund since 2016

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at the first meeting of the year specified in Appendix 2-A.

APPENDIX 4-A: FORMAT OF TRANCHE IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Tranche Implementation Report and Plans for each tranche request will consist of five parts:

- (a) A narrative report, with data provided by tranche, describing the progress achieved since the previous report, reflecting the situation of the Country in regard to phase-out of the Substances, how the different activities contribute to it, and how they relate to each other. The report should include the amount of ODS phased out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Tranche Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or

other changes;

- (b) An independent verification report of the Plan results and the consumption of the Substances, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
 - (c) A written description of the activities to be undertaken during the period covered by the requested tranche, highlighting implementation milestones, the time of completion and the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall Plan and progress achieved, as well as any possible changes to the overall Plan that are foreseen. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
 - (d) A set of quantitative information for all Tranche Implementation Reports and Plans, submitted through an online database; and
 - (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).
2. In the event that in a particular year two stages of the HPMP are being implemented in parallel, the following considerations should be taken in preparing the Tranche Implementation Reports and Plans:
- (a) The Tranche Implementation Reports and Plans referred to as part of this Agreement, will exclusively refer to activities and funds covered by this Agreement; and
 - (b) If the stages under implementation have different HCFC consumption targets under Appendix 2-A of each Agreement in a particular year, the lower HCFC consumption target will be used as reference for compliance with these Agreements and will be the basis for the independent verification.

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. The National Ozone Programme (PRONAOZ) of the Ministry of Environment and Natural Resources (MARN) shall be responsible for coordinating the actions associated with each programme and projects through collaborating with various areas of the Ministry; as well as with other government agencies such as the General Customs Directorate of the Ministry of Treasury, between others.
2. To support the implementation of projects in different sectors, national and/or international consultants will be hired, if necessary, to implement the various activities and offer support to the PRONAOZ in coordination with key actors, including other Ministries, Agencies and the private sector.
3. PRONAOZ have the full support of the Government. The MARN has ensured the adoption of the laws and the implementation of necessary national regulations to guarantee the country's compliance with the Montreal Protocol agreements.
4. For the adequate implementation of these projects, it is essential to continue to have the active participation of relevant public sector counterparts, such as the General Customs Directorate, which actively

participates in the definition and implementation of import and export control processes of HCFC.

5. The Lead IA shall have the overall responsibility of reporting to the Executive Committee, and of supporting the Country in the implementation of the non-investment components that are not implemented by the Cooperating IA.

6. Before each Executive Committee meeting is held to discuss a tranche to receive funding, PRONAOZ will prepare a report on the status of activities and progress together with the Lead IA and with the help of the Cooperating IA, including the milestones and other key performance indicators as well as any other information of interest for the implementation of the Plan. This report will be reviewed and verified by the Lead IA and will then be sent to the Executive Committee through the Secretariat of the Multilateral Fund.

7. A project coordinator will be hired with funding from the Project Management Unit and will report to the National Ozone Officer. The project coordinator will coordinate the daily activities in the project and will assure that all activities are in line with the approved work plan.

APPENDIX 6-A: ROLE OF THE LEAD-IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities, including at least the following:
 - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;
 - (b) Assisting the Country in preparation of the Tranche Implementation Reports and Plans as per Appendix 4A;
 - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated tranche activities have been completed as indicated in the Tranche Implementation Plan consistent with Appendix 4-A;
 - (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future Tranche Implementation Plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
 - (e) Fulfilling the reporting requirements for the Tranche Implementation Reports and Plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee, and should include the activities implemented by the Cooperating IA;
 - (f) In the event that the last funding tranche is requested one or more years prior to the last year for which a consumption target had been established, annual tranche implementation reports and, where applicable, verification reports on the current stage of the Plan should be submitted until all activities foreseen had been completed and HCFC consumption targets had been met;
 - (g) Ensuring that appropriate independent technical experts carry out the technical reviews;
 - (h) Carrying out required supervision missions;
 - (i) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Tranche Implementation Plan and accurate data reporting;
 - (j) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;

- (k) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of the Lead IA and the Cooperating IA;
- (l) Ensuring that disbursements made to the Country are based on the use of the indicators;
- (m) Providing assistance with policy, management and technical support when required;
- (n) Reaching consensus with the Cooperating IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan; and
- (o) Timely releasing funds to the Country/participating enterprises for completing the activities related to the project.

2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCIES

1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the Plan, including at least the following:

- (a) Providing assistance for policy development when required;
- (b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities;
- (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A; and
- (d) Reaching consensus with the Lead IA on any planning, co-ordination and reporting arrangements required to facilitate the implementation of the Plan.

APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$191 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met, on the understanding that the maximum funding reduction would not exceed the funding level of the tranche being requested. Additional measures might be considered in cases where non-compliance extends for two consecutive years.

2. In the event that the penalty needs to be applied for a year in which there are two Agreements in force (two stages of the HPMP being implemented in parallel) with different penalty levels, the application of the penalty will be determined on a case-by-case basis taking into consideration the specific sectors that lead to the non-compliance. If it is not possible to determine a sector, or both stages are addressing the same sector, the penalty level to be applied would be the largest.