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

PROJECT PROPOSAL: URUGUAY

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, first tranche) UNDP

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

Uruguay

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

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2019	14.08 (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				1.10	12.46				13.56
HCFC-141b				0.00	0.45				0.45
HCFC-142b				0.00	0.02				0.02
HCFC-123			0.02	0.00	0.00				0.02
HCFC-124				0.00	0.03				0.03
HCFC-141b in imported pre-blended polyol		5.66		0.00	0.00				5.66

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:		23.33	Starting point for sustained aggregate reductions:
			28.66
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:		15.23	Remaining:
			13.43

(V) BUSINESS PLAN		2020	2021	2022	Total
UNDP	ODS phase-out (ODP tonnes)	3.03	0.00	0.00	3.03
	Funding (US \$)	265,000	0	0	265,000

(VI) PROJECT DATA			2020	2021-2022	2023	2024	2025	2026-2027	2028	2029	2030	Total
Montreal Protocol consumption limits			15.16	15.16	15.16	15.16	7.58	7.58	7.58	7.58	0	n/a
Maximum allowable consumption (ODP tonnes)			15.16	15.16	15.16	15.16	7.58	7.58	0.58	0.58	0	n/a
Projects costs requested in principle (US \$)	UNDP	Project costs	350,601	0	445,318	0	354,339	0	0	138,912	0	1,289,170
		Support costs	24,542	0	31,172	0	24,804	0	0	9,724	0	90,242
Total funds requested in principle (US \$)			375,143	0	476,490	0	379,143	0	0	138,912	0	1,379,412

(VII) Request for approval of funding for the first tranche (2020)		
Agency		Funds requested (US \$)
UNDP		350,601
		Support costs (US \$)
		24,542

Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

Background

1. On behalf of the Government of Uruguay, UNDP as the designated implementing agency has submitted a request for stage III of the HCFC phase-out management plan (HPMP), at the amount of US \$1,289,170, plus agency support costs of US \$90,242 as originally submitted.² The implementation of stage III of the HPMP will phase out the remaining consumption of HCFCs by 2030.

2. The first tranche of stage III of the HPMP being requested at this meeting amounts to US \$345,800, plus agency support costs of US \$24,206 for UNDP, as originally submitted.

Status of implementation of stage II of the HPMP

3. Stage I of the HPMP was approved at the 65 meeting³ to meet the 10 per cent reduction from the baseline by 2015, at a total cost of US \$380,004, plus agency support costs, to phase out 4.18 ODP tonnes of HCFCs used in the polyurethane (PU) foam manufacturing sector and the refrigeration and air-conditioning (RAC) servicing sector; stage I was completed on 31 December 2016.

4. Stage II of the HPMP was approved at the 77th meeting⁴ to meet the 35 per cent reduction from the baseline by 2020, at a total cost of US \$1,105,157, plus agency support costs to phase out 11.25 ODP tonnes of HCFCs used in the PU foam manufacturing and the RAC servicing sectors. The third and final tranche of stage II was approved under the intersessional approval process for the 85th meeting in May 2020; stage II will be completed by 31 December 2021.

HCFC consumption

5. The Government of Uruguay reported a consumption of 14.08 ODP tonnes of HCFC in 2019, which is 40 per cent below the HCFC baseline for compliance. The 2015-2019 HCFC consumption is shown in Table 1.

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

HCFC	2015	2016	2017	2018	2019	Baseline
Metric tonnes						
HCFC-22	254.23	295.35	273.04	139.06	246.57	383.36
HCFC-123	1.60	2.02	1.30	1.51	1.11	1.86
HCFC-124	3.36	2.42	5.45	0.52	1.31	4.14
HCFC-141b	14.81	0.00	13.42	12.11	4.08	13.58
HCFC-142b	0.98	1.35	0.84	0.31	0.33	9.68
Total (mt)	274.98	301.14	294.05	153.52	253.40	412.61
HCFC-141b in imported pre-blended polyols*	35.69	42.85	49.75	58.89	51.47	48.40**
ODP tonnes						
HCFC-22	13.98	16.24	15.02	7.65	13.56	21.08
HCFC-123	0.03	0.04	0.03	0.03	0.02	0.04
HCFC-124	0.07	0.05	0.12	0.01	0.03	0.09
HCFC-141b	1.63	0.00	1.48	1.33	0.45	1.49
HCFC-142b	0.06	0.09	0.05	0.02	0.02	0.63
Total (ODP tonnes)	15.78	16.42	16.69	9.04	14.08	23.33
HCFC-141b in imported pre-blended polyols*	3.93	4.71	5.47	6.47	5.66	5.33**

*Country programme data

**Starting point established in the Agreement with the Executive Committee.

²As per the letter of 9 July 2020 from the Ministry of Housing, Land planning and Environment of Uruguay to UNDP.

³ UNEP/OzL.Pro/ExCom/60/42 and Annex XXXIII of document UNEP/OzL.Pro/ExCom/65/60

⁴ UNEP/OzL.Pro/ExCom/77/67 and Annex XXIV of document UNEP/OzL.Pro/ExCom/77/76

6. HCFC consumption had been declining due to enforcement of the licensing and quota system and the implementation of the HPMP activities, in particular the training of refrigeration technicians and the technical assistance provided to the RAC servicing sector. The economic downturn experienced in 2018 resulted in a sharp decrease in HCFC consumption; as the economy has been gradually recovering, importers have been able to import the full amount of HCFC under their quotas. The increase in consumption of HCFC-141b contained in imported pre-blended polyols up until 2018 was due to the delay in the conversion of the foam enterprises, as HFO systems were not available in the country. However, in 2019 the consumption started to decrease as the enterprises started their conversions. Small amounts of HCFC-123, HCFC-124, and HCFC-142b are used for servicing some RAC equipment (chillers and heat pumps), while HCFC-141b is used as a cleaning agent.

CP implementation report

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

Status of progress and disbursement

ODS policy and regulatory framework

8. Since 2006, the Government of Uruguay has had a regulatory framework to control ODS consumption, and since 2013 a quota system for imports and exports of HCFCs. The electronic licensing system that is in place allows customs authorities to access information related to HCFCs in real time, facilitates the collection of data and statistical records, and uses updated tariff codes to improve control. A ban on the import of HCFC-22-based split air-conditioning equipment entered into force on 1 January 2017; a policy to provide fiscal incentives (e.g., import tariff reductions or loans with preferential rates) for projects that introduce HCFC-free, low-global-warming potential (GWP), and energy-efficient technologies has been implemented; and a ban on import of HCFC-141b in bulk and a ban on import of HCFC-141b contained in pre-blended polyols will be implemented by 1 January 2021 and 1 January 2022, respectively.

9. A total of 118 customs officers received training on the compliance obligations under the Montreal Protocol, on control measures for imports, on exports and transit of ODS, and on the control of illegal trade, using an updated customs training manual. The NOU also carried out two visits to customs offices around the country and held regular meetings with the customs authority.

10. The Government of Uruguay ratified the Kigali Amendment in September 2018.

Polyurethane (PU) foam manufacturing sector

11. Stage II of the HPMP included a project for the complete phase-out of HCFC-141b contained in imported pre-blended polyols (i.e., 5.33 ODP tonnes) used in 21 small- and medium-sized enterprises (SMEs) manufacturing PU foam applications. So far, one enterprise (James) has converted to cyclopentane and phased out 1.02 ODP tonnes (9.3 mt) of HCFC-141b. Testing and trials of HFO technology had been planned for the first quarter of 2020 at the remaining foam enterprises, however, these activities have been delayed by the COVID-19 pandemic. In the meantime, the NOU and the international foam expert have completed the trial protocols and held meetings with local suppliers of PU systems to schedule the trials and testing once travel restrictions have eased up. UNDP anticipates that the conversion of all the foam enterprises will be completed by June 2021, barring any further delays that may be caused by COVID-19.

Refrigeration servicing sector

12. During the first two tranches of stage II, over 460 RAC technicians and 10 trainers from technical institutes, universities and the Technological Laboratory of Uruguay (LATU) were trained in good refrigeration practices and in the safe handling of flammable refrigerants; technical sheets and good refrigeration practices and procedures were produced and distributed among technicians; and manuals on good refrigeration practices were designed, printed and distributed to service workshops, technicians, and assemblers of cold rooms.

13. A report on the impact of good refrigeration practices for end-users was prepared and a national seminar was organized; meetings were conducted with maintenance teams of supermarket chains to promote low-GWP alternatives, such as CO₂; and technical support was provided to one ice-cream producer to adopt ammonia as a refrigerant in one of its storage and distribution centres.

Awareness and information outreach

14. Public awareness to promote the use of alternatives to HCFCs and other phase-out activities was raised through the website and Facebook page of the Ministry of Housing, Land Planning, and Environment; and four documents with procedures and criteria for the sustainable public purchase of air-conditioning equipment were prepared.

Level of fund disbursement

15. As of June 2020, of the US \$1,105,157 approved so far, US \$493,287 (45 per cent) had been disbursed. The balance of US \$611,870 will be disbursed in 2020 and 2021. UNDP reported that the total funding approved for the third and final tranche (US \$111,268) had been transferred to the country at the end of August 2020. A project completion report will be submitted to the first meeting of the Executive Committee in 2022.

Stage III of the HPMP

Remaining consumption eligible for funding

16. After deducting 4.18 ODP tonnes of HCFCs associated with stage I of the HPMP, and 5.72 ODP tonnes of HCFC-22 plus 5.33 ODP tonnes of HCFC-141b contained in imported pre-blended polyols associated with stage II, the remaining consumption eligible for funding is 13.43 ODP tonnes of HCFC-22.

Sector distribution of HCFCs

17. There are approximately 1,400 technicians servicing residential air-conditioning, commercial, industrial and transport refrigeration, chillers and industrial and mobile air-conditioning, as well as a few assemblers of cold rooms. The estimated consumption of HCFC by application in Uruguay in 2019 is shown in Table 2.

Table 2. Estimate consumption of HCFCs by sector in 2019

Application	Consumption		% of total (ODP tonnes)
	mt	ODP tonnes	
HCFC-22			
Commercial refrigeration	133.93	7.37	52.39
Industrial refrigeration	61.89	3.40	24.21
Residential AC	26.73	1.47	10.46
Other AC	2.65	0.15	1.04
Chillers	1.35	0.07	0.53

Application	Consumption		% of total (ODP tonnes)
	mt	ODP tonnes	
Assembly*	20.00	1.10	7.82
Sub-total HCFC-22	246.55	13.56	96.44
Other HCFCs			
HCFC-141b	4.08	0.45	3.19
HCFC-123**	0.18	0.00	0.03
HCFC-124	1.31	0.03	0.19
HCFC-142b	0.33	0.02	0.15
Sub-total other HCFCs	5.90	0.50	3.56
Total	252.45	14.06	100.00

*Consumption will be phased out as part of the servicing sector, and is part of remaining eligible consumption.

** 0.93 mt (0.02 ODP tonnes) also used in firefighting applications

18. Based on data provided by importers, in 2019 HCFC-22-based equipment represents 58 per cent of the RAC equipment imported into the country, followed by HFC-134a (21.4 per cent), R-410A (8.3 per cent), R-404A (6 per cent), R-507 (5.1 per cent) and the rest equipment based on other refrigerants (e.g., R-407C, R-600a, R-290).

Phase-out strategy in stage III of the HPMP

19. Stage III of the HPMP aims to achieve a 97.5 per cent reduction from the 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 focus on supporting customs authorities to continue to monitor imports of ODS with a focus on illegal trade, and nationwide RAC training activities to build capacity for the introduction of low-GWP energy-efficient technologies. It will also continue promoting transitions to low-GWP technologies in the RAC sector through pilot projects and will develop a roadmap on how these transitions can be broadly implemented.

Proposed activities in stage III of the HPMP

20. The activities to be implemented in stage III of the HPMP as originally submitted, are summarized in Table 3.

Table 3. Activities to be implemented in stage III of the HPMP

Project component	Planned activities	Cost (US \$)
<i>Strengthening of the legal and institutional framework to phase out HCFCs</i>		
Technical assistance to control the illegal trade of ODS and strengthen the capabilities of the Customs National Direction	• Training of 100 customs officers on updated control measures and policies related to HCFC phase-out, and on the country's commitments under the Montreal Protocol; and training of 80 customs brokers on updated HCFC import/export control measures • Updated training courses for importers, brokers and customs officers on harmonized system and data reporting tools • Update of the online module for virtual training	92,400
Development of technical standards on safety requirements for the use of flammable and other alternatives in refrigeration systems	• Develop standards for the use of flammable refrigerants in servicing and assembly for integration into one national standard "Security in refrigeration systems", in accordance with ISO 5149 ("refrigerating systems and heat pumps- safety and environmental requirements"); and consultations with end-users, technicians, refrigeration associations and other stakeholders	41,800
<i>Technical assistance to the RAC servicing sector to phase out the use of HCFCs</i>		
Training of RAC technicians in	• Training of 500 RAC technicians on good refrigeration	455,400

Project component	Planned activities	Cost (US \$)
good practices and promotion of lower-GWP refrigerants	practices through 24 week-long training programmes, and updating of training content to include the handling of low-GWP refrigerants (e.g., flammable, HFO and CO ₂) • Six train-the trainer sessions on good refrigeration practices, training a minimum of 40 trainers and senior engineers from end-user maintenance departments, universities and the LATU • Thirty 2-day technical seminars for 300 technicians and stakeholders to address specific technical topics in the refrigeration servicing sector (e.g., cold milk tanks, cold rooms, cold food chambers) • Six specialized training workshops for 120 installer engineers, heads of end-user maintenance departments and end-user decision-makers to review emerging technologies (e.g., use of ammonia or flammable refrigerants, inverter technology)	
Technical assistance for recovery and recycling (R&R) of HCFC-22	• Seven workshops promoting R&R practices for 80 end-users and technicians • Provision of five sets of R&R equipment⁵ to be managed by the NOU for eventual transfer to the RAC association • Initiate discussions between NOU and RAC association for possible controls prohibiting venting of refrigerants during maintenance and servicing of equipment	99,000
Capacity-building for LATU and expansion of laboratory capacity to support the RAC training programme	• Provision of laboratory equipment⁶ for LATU • Establishment of a second technical laboratory in a technical institution outside Montevideo (capital city) and provision of tools • Five train-the-trainer workshops for 40 trainers of the LATU with support from international experts	303,600
<i>Promotion of low-GWP, high energy-efficient refrigerants as alternatives to HCFC in the RAC sector</i>		
• Pilot projects for HCFC conversions to zero-ODP, low-GWP alternatives and technical assistance for supermarkets	• A pilot conversion/replacement to demonstrate the use trans-critical CO₂ refrigeration system in the supermarket sector in coordination with the Uruguayan Supermarket Association • Training workshops for end-users on the technical and environmental benefits of the trans-critical CO₂ refrigerants • Discussion with stakeholders for preparation of a roadmap to adopt the trans-critical CO₂ refrigeration technology in the sector	148,500
<i>Public awareness of the importance of HCFC phase-out</i>		
Awareness-building campaigns for end-users, technicians and installers of equipment	• Updating awareness materials to support the webpage managed by the NOU focusing on HPMP-related activities • Developing and conducting three awareness-raising campaigns to promote the certification programme for technicians, encourage the use of products with low-GWP refrigerants, and support good servicing practices by end-users	31,350
<i>Project implementation and monitoring</i>		
Project monitoring unit (PMU) supervised by the NOU	• Preparation of progress reports, and follow-up meetings and workshops with stakeholders (US \$9,000); consultants and personnel (US \$90,000); other costs including three verification reports, nine meetings with stakeholders, and operational costs (US \$18,120)	117,120
Total		1,289,170

⁵ Recovery-recycling machines, small recovery machines, vacuum pumps, gas identifier, tanks and cylinders.

⁶ Portable recovery machines, refrigeration training units (simulators), tools to handle flammable refrigerants, and updates of electronics (e.g., vacuum pumps, scales, expander tools, capillary tube cutters, pliers, hoses, recovery cylinders, and tools to handle flammable refrigerants).

Project implementation and monitoring unit (PMU)

21. 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. The cost of those activities amounts to US \$117,120.

Gender policy implementation

22. During the implementation of stage II more than 50 per cent of those involved in the design, implementation and supervision of all the projects of the HPMP have been women. In line with decision 84/92(d),⁷ the activities to be implemented under stage III will consider gender mainstreaming in hiring practices; a particular effort will be made to locate and encourage female trainers and technicians to lead and participate in workshops; and all project activities will have a checklist of actions to increase gender participation and will include gender-disaggregated data collection for reporting.

Total cost of stage III of the HPMP

23. The total cost of stage III of the HPMP for Uruguay has been estimated at US \$1,289,170 (plus agency support costs), as originally submitted, to achieve a 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

24. The first funding tranche of stage III, at the amount of US \$345,800, will be implemented between January 2021 and December 2023 and will include the following activities:

- (a) *ODS customs training*: training 40 customs officers and customs brokers on updated control measures related to the import/export of HCFC and HCFC-based equipment, and on risk assessment for illegal ODS trade; and updating the customs manual on HCFC trade control and national measures (US \$27,720);
- (b) *Technical standards on safety requirements for refrigeration*: holding initial consultations for the development of national safety standards for the use of alternative refrigerants in servicing and assembly; organizing meetings with stakeholders from the RAC sector and the standards body of Uruguay to discuss the technical safety standards for alternative refrigeration systems; and preparing an initial draft of the proposal (US \$41,800);
- (c) *RAC technician training*: training 15 trainers in good refrigeration practice; and training 150 RAC technicians in good refrigeration practices and updating training content to include the handling of low-GWP alternatives, such as flammable refrigerants, HFO, and CO₂ (US \$113,850);
- (d) *Recovery and recycling of HCFC-22*: procuring five R&R equipment and supply kits (e.g., small recovery machines, vacuum pumps, refrigerant identifier, tanks and cylinders) to be made available on loan to end-users; monitoring equipment use and data collection on the amount of HCFC-22 recovered and reused, and on the quality of recovered refrigerant; and designing R&R workshops that will promote R&R practices for end-users and technicians (US \$44,550);

⁷ Decision 84/92(d) requested bilateral and implementing agencies to apply the operational policy on gender mainstreaming throughout the project cycle.

- (e) *Equipment for LATU*: procuring RAC equipment and tools (e.g., portable recovery machines, refrigerant identifiers, vacuum pumps, scales, refrigeration training units,⁸ leak detector for various refrigerants, two-way gauges, manifolds, manometers, thermometer); and installing a proposed second laboratory outside of Montevideo (US \$75,900);
- (f) *Promotion of low-GWP, energy-efficient refrigerants*: in coordination with the Uruguayan Supermarket Association (ASU), selecting a beneficiary supermarket willing to install a trans-critical CO₂ refrigeration system to participate in the pilot project (no funding required for the first tranche);
- (g) *Awareness-building campaigns*: updating awareness materials to highlight HCFC phase-out and HPMP activities accomplished to date and those to be accomplished under stage III; and updating the national awareness campaign to include Kigali Amendment implications and the promotion of non-HCFC and low GWP/non-HFC alternative equipment (US \$10,450); and
- (h) *PMU* (US \$31,530): Project implementation and monitoring including the preparation of progress reports, and follow-up meetings and workshops with stakeholders (US \$3,000); consultants and personnel (US \$22,500); other costs including verification reports and operational costs (US \$6,030).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

25. 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 III

26. The Government of Uruguay proposes to achieve 100 per cent reduction of its HCFC baseline consumption by 2030, with an interim reduction step of 97.5 per cent in 2028 and 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 Uruguay'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.⁹ The Government further commits to ensuring that where consumption for the servicing tail may be required, it will do its utmost to establish strict criteria within its existing licensing system to monitor said consumption and limit it to the amount allowed by the Protocol.

HCFC phase-out covered by stage III

27. The Secretariat asked why the Government of Uruguay decided to prepare stage III of the HPMP for the total phase-out in 2030 (with an interim reduction of 97.5 per cent in 2028) rather than for the 67.5 per cent reduction in 2025 only, noting that its 2019 consumption is already 40 per cent below the HCFC baseline for compliance, and that the imports of HCFC equipment into the country are very low. UNDP explained that, following extensive consultations with stakeholders, the Government decided that a

⁸ Compact equipment consisting of refrigeration and/or air-conditioning circuits with sensors installed to demonstrate basic RAC principles, as well as troubleshooting and servicing techniques.

⁹ 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.

comprehensive strategy would ensure the continuity of existing activities and provide incentives for stakeholders to ensure that the declining HCFC consumption is sustained. The strategy involves, *inter alia*, further strengthening the capacity of service technicians, which will provide a framework that can be used when the country starts implementing HFC phase-down activities in future; and the technician certification programme will require a long time for consultations, for the design of the system and for its full implementation.

28. Further to a discussion with the Secretariat, UNDP indicated that the strategy developed by the Government would also include technical assistance to service companies that work in the assembly of cold rooms, and pilot projects to encourage the uptake of low-GWP and energy-efficient alternatives in the supermarket sector.

Technical and cost-related issues

29. In explaining the differences between the various approaches proposed in the RAC technician training component (e.g., 2-day workshops, specialized week-long training sessions, technical seminars), UNDP explained that the Government intends to broaden the reach of the training to the whole country, leading to the organization of smaller training groups around the country to facilitate the participation of more technicians.

30. With regard to the pilot project to demonstrate low-GWP technology in supermarkets, UNDP provided information on how the proposal complies with decision 84/84(b) and (c). UNDP described the fiscal incentives for “green” investments available in Uruguay, which supports such projects; since a large percentage of remaining HCFC consumption is in the servicing sector, there are opportunities for the scalability of the project once it has been successfully demonstrated (it is proposed to prepare a roadmap on the requirements to adopt the trans-critical CO₂ refrigeration technology in the supermarket sector); the beneficiary of the project will contribute a large part of co-financing. UNDP committed to ensuring that any costs to be paid under the Multilateral Fund would be reviewed and submitted for consideration for eligibility, and would submit detailed reports on the results of the pilot project once it has been completed.

31. The Secretariat discussed with UNDP issues related to the request of the equipment for two laboratories instead of providing tools to technicians, the establishment of technician certification programme and the need to provide technical assistance to the cold-room assembly subsector, in addition to servicing. Based on discussions with the Secretariat and in consultation with the Government of Uruguay, UNDP adjusted some of the project components and associated activities and costs of stage III of the HPMP as shown in Table 4.

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

Project component	Targets	(US \$)
<i>Strengthening of the legal and institutional framework to phase out HCFCs</i>		
Technical assistance to control the illegal trade of ODS and strengthen the capabilities of the Customs National Direction	• Training of 100 customs officers on updated control measures and policies related to HCFC phase-out, and on the country's commitments under the Montreal Protocol; and training of 80 customs brokers on updated HCFC import/export control measures • Updated training courses for importers, brokers and customs officers on harmonized system and data reporting tools • Update of the online module for virtual training	92,400
Establishment of RAC technician certification programme	• Design the technician certification strategy through the NCL, and identify options for implementation • Meetings with stakeholders to establish the working group to design the certification process, including occupational profiles to be included • Consultation meetings to establish the process and	115,000

Project component	Targets	(US \$)
	requirements Finalize document containing the assessment of the certification process for technicians involved in maintenance, repair and installation operations	
Development of technical standards on safety requirements for the use of flammable and other alternatives in refrigeration systems	Develop standards for the use of flammable refrigerants in servicing and assembly for integration into one national standard "Security in refrigeration systems", in accordance with ISO 5149 ("refrigerating systems and heat pumps- safety and environmental requirements"); and consultations with end-users, technicians, refrigeration associations and other stakeholders	50,000
<i>Technical assistance to the RAC servicing sector to phase out the use of HCFCs</i>		
Training of RAC technicians in good practices and promotion of lower-GWP refrigerants	- Training of 500 RAC technicians on good refrigeration practices through 24 week-long training programmes, and updating of training content to include the handling of low-GWP refrigerants (e.g., flammable, HFO and CO₂) - Six train-the trainer sessions on good refrigeration practices, training a minimum of 40 trainers and senior engineers from end-user maintenance departments, universities and the LATU - Thirty 2-day technical seminars for 300 technicians and stakeholders to address specific technical topics in the refrigeration servicing sector (e.g., cold milk tanks, cold rooms, cold food chambers) - Six specialized training workshops for 120 installer engineers, heads of end-user maintenance departments and end-user decision-makers to review emerging technologies (e.g., use of ammonia or flammable refrigerants, inverter technology) - Provision of 100 sets of tool kits and basic equipment for service technicians¹⁰ - Update workshop content to include information and developments of new RAC equipment and components and good practices for cold rooms assembly and maintenance	424,000
Technical assistance for recovery and recycling (R&R) of HCFC-22	- Seven workshops promoting R&R practices for 80 end-users and technicians - Provision of five sets of R&R equipment¹¹ to be managed by the NOU for eventual transfer to the RAC association - Initiate discussions between NOU and stakeholders for possible controls prohibiting venting of refrigerants during maintenance and servicing of equipment	95,000
Capacity-building for LATU and expansion of laboratory capacity to support the RAC training programme	- Provision of laboratory equipment¹² for LATU - Establishment of a second technical laboratory in a technical institution outside Montevideo (capital city) and provision of tools - Formal agreements with the laboratories to act as training institutes for servicing training - Five train-the-trainer workshops for 40 trainers with support from international experts	128,000

¹⁰ Each tool set is budgeted at US \$500 and includes vacuum pump, leak detectors, manifold and safety items.

¹¹ Recovery-recycling machines, small recovery machines, vacuum pumps, gas identifier, tanks and cylinders.

¹² Portable recovery machines, refrigeration training units (simulators), tools to handle flammable refrigerants, and updates of electronics (e.g., vacuum pumps, scales, expander tools, capillary tube cutters, pliers, hoses, recovery cylinders, and tools to handle flammable refrigerants).

Project component	Targets	(US \$)
<i>Promotion of low-GWP, high energy-efficient refrigerants as alternatives to HCFC in the RAC sector</i>		
Pilot projects for HCFC conversions to zero-ODP, low-GWP alternatives and technical assistance for supermarkets	• A pilot conversion/replacement to demonstrate the use trans-critical CO₂ refrigeration system in the supermarket sector in coordination with the Uruguayan Supermarket Association • Training workshops for end-users on the technical and environmental benefits of the trans-critical CO₂ refrigerants • Discussion with stakeholders for preparation of a roadmap to adopt the trans-critical CO₂ refrigeration technology in the sector	145,000
Technical assistance to companies that work in the assembly of cold rooms	• Two workshops for 80 participants on good practices for assembling and maintaining cold rooms and the use of low-GWP refrigerants (flammable, HFO, and CO₂) • Manual on good practices for assembling and maintaining cold rooms • Field visits to cold room installations using low-GWP refrigerants in other countries (e.g., Brazil and Colombia)	50,000
<i>Public awareness of the importance of HCFC phase-out</i>		
Awareness-building campaigns for end-users, technicians and installers of equipment	• Updating awareness materials to support the webpage managed by the NOU focusing on HPMP-related activities • Developing and conducting three awareness-raising campaigns to promote the certification programme for technicians, encourage the use of products with low-GWP refrigerants, and support good servicing practices by end-users • Initiate consultations on technician certification and assistance to the assembly sub-sector	72,673
<i>Project implementation and monitoring</i>		
Project monitoring through the NOU	• Preparation of progress reports, and follow-up meetings and workshops with stakeholders (US \$9,000); consultants and personnel (US \$90,000); other costs including three verification reports, nine meetings with stakeholders, and operational costs (US \$18,120)	117,097
Total		1,289,170

32. 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 and the potential challenges posed by a prolonged pandemic. The revised Agreement shows that the last tranche of stage III will be in 2029 instead of 2030.¹³ 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 III of the HPMP for Uruguay (US \$)

Funding	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Original	345,800	0	0	454,150	0	343,600	0	0	145,620	0	0
Revised	350,601	0	0	445,318	0	0	354,339	0	0	138,912	0

¹³ 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).

33. Following the revision of the tranche distribution, the action plan and funding for the first tranche of stage III was adjusted to the following amounts: ODS customs training: (US \$23,100); establishment of RAC technician certification including hiring of national consultant, workshops with international consultant to establish the requirements and process and meetings with identified stakeholders on programme design (US \$40,000); technical standards on safety requirements for refrigeration (US \$40,000); RAC technician training including 10 technical seminars for 150 RAC technicians, a train-the-trainers workshop for 15 trainers; preparation of equipment list and terms of reference (US \$106,000); R&R of HCFC-22 (US \$34,600); procurement and purchase of RAC equipment and tools for LATU laboratory and selection of the institution for the new RAC laboratory (US \$34,500); promotion of low-GWP energy-efficient refrigerants (US \$0); technical assistance to service companies that work in the assembly of cold rooms including one workshop for 40 participants from cold-room installers; one field visit to a regional installation; development of a manual on good practices for assembling and maintaining cold rooms using low-GWP technology (US \$30,000); awareness-building campaigns including initiating consultations on technician certification and assistance to the assembly sub-sector (US \$10,901); and PMU (US \$31,500).

Total project cost

34. The total cost for stage III of the HPMP amounts to US \$1,289,170, plus agency support costs, which is comprised of US \$1,172,073 plus support costs for the servicing sector calculated at US \$4.8/metric kilogram using the remaining eligible HCFC consumption of 13.43 ODP tonnes (244.18 mt) of HCFC-22 based on decision 74/50(c)(xiii), and US \$117,097 for the PMU, for the total phase-out of HCFCs in Uruguay in 2030.

Impact of the COVID-19 pandemic on HPMP implementation

35. The challenges to implementation created by the COVID-19 pandemic have led the Government of Uruguay to develop a plan to conduct meetings with stakeholders and training virtually, in addition to the small-group meetings currently allowed in the country, which has enabled the NOU to meet with stakeholders in Montevideo. The NOU also maintains contact with HCFC importers, RAC technicians and beneficiary companies through online meetings and phone calls. UNDP is using adaptive management to ensure that activities continue to be implemented during the pandemic. It is also expected that all remaining stage II activities can be completed as per the Agreement between the country and the Executive Committee.

Impact on the climate

36. The proposed activities in the servicing sector, which include better containment of refrigerants through training and the 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 calculation of the impact on the climate was not included in the HPMP, the activities planned by Uruguay, including its efforts to promote low-GWP alternatives, as well as refrigerant recovery and reuse, indicate that the implementation of the HPMP will reduce the emission of refrigerants into the atmosphere, resulting in climate benefits.

Co-financing

37. The Government of Uruguay 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

38. UNDP is requesting US \$1,289,170, plus agency support costs, for the implementation of stage III of the HPMP for Uruguay. The total requested value of US \$375,143, including agency support costs for the period of 2020–2022, is US \$110,143 above the amount in the business plan.

Draft Agreement

39. A draft Agreement between the Government of Uruguay 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

40. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage III of the HCFC phase-out management plan (HPMP) for Uruguay for the period from 2020 to 2030 for the complete phase-out of HCFC consumption, in the amount of US \$1,289,170, plus agency support costs of US \$90,242 for UNDP, on the understanding that no more funding would be provided from the Multilateral Fund for the phase-out of HCFCs;
- (b) Noting the commitment of the Government of Uruguay 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, after which date HCFCs would not be imported, except for the allowance for a servicing tail between 2030-2040 where required, and consistent with the provisions of the Montreal Protocol;
- (c) Deducting 13.43 ODP tonnes of HCFCs from the remaining HCFC consumption eligible for funding;
- (d) Approving the draft Agreement between the Government of Uruguay 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 Uruguay, and the corresponding tranche implementation plan, in the amount of US \$350,601, plus agency support costs of US \$24,542 for UNDP.

Annex I

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

Purpose

1. This Agreement represents the understanding of the Government of Uruguay (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, 4.4.3, 4.5.3 and 4.6.3 (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 III 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; and
- (c) 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. United Nations Development Programme (UNDP) has agreed to be the lead implementing agency (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 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 role of the Lead IA is contained in Appendix 6-A. The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in row 2.2 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, and the Lead IA to facilitate implementation of this Agreement. In particular, it will provide the Lead 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	21.08
HCFC-123	C	I	0.04
HCFC-124	C	I	0.09
HCFC-141b	C	I	1.49
HCFC-142b	C	I	0.63
Sub-total			23.33
HCFC-141b contained in pre-blended polyols	C	I	5.33
Total			28.66

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)	15.16	15.16	15.16	15.16	15.16	7.58	7.58	7.58	7.58	7.58	0	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	15.16	15.16	15.16	15.16	15.16	7.58	7.58	7.58	0.58	0.58	0	n/a
2.1	Lead IA UNDP agreed funding (US \$)	350,601	0	0	445,318	0	0	354,339	0	0	138,912	0	1,289,170
2.2	Support costs for Lead IA(US \$)	24,542	0	0	31,172	0	0	24,804	0	0	9,724	0	90,242

Row	Particulars	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
3.1	Total agreed funding (US \$)	350,601	0	0	445,318	0	0	354,339	0	0	138,912	0	1,289,170
3.2	Total support costs (US \$)	24,542	0	0	31,172	0	0	24,804	0	0	9,724	0	90,242
3.3	Total agreed costs (US \$)	375,143	0	0	476,490	0	0	379,143	0	0	148,636	0	1,379,412
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)												13.43
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stages (ODP tonnes)												7.65
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)												0.04
4.2.3	Remaining eligible consumption for HCFC-123 (ODP tonnes)												0.00
4.3.1	Total phase-out of HCFC-124 agreed to be achieved under this Agreement (ODP tonnes)												0.00
4.3.2	Phase-out of HCFC-124 to be achieved in the previous stages (ODP tonnes)												0.09
4.3.3	Remaining eligible consumption for HCFC-124 (ODP tonnes)												0.00
4.4.1	Total phase-out of HCFC-141b agreed to be achieved under this Agreement (ODP tonnes)												0.00
4.4.2	Phase-out of HCFC-141b to be achieved in the previous stages (ODP tonnes)												1.49
4.4.3	Remaining eligible consumption HCFC-141b (ODP tonnes)												0.00
4.5.1	Total phase-out of HCFC-142b agreed to be achieved under this Agreement (ODP tonnes)												0.00
4.5.2	Phase-out of HCFCs of HCFC-142b to be achieved in the previous stages (ODP tonnes)												0.63
4.5.3	Remaining eligible consumption for HCFC-142b (ODP tonnes)												0.00
4.6.1	Total phase-out of HCFC-141b in imported pre-blended polyols agreed to be achieved under this Agreement (ODP tonnes)												0.00
4.6.2	Phase-out of HCFC-141b in imported pre-blended polyols to be achieved in the previous stages (ODP tonnes)												5.33
4.6.3	Remaining eligible consumption for HCFC-141b in imported pre-blended polyols (ODP tonnes)												0.00

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

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 project coordination and management of the Plan will be under the responsibility of the Project Monitoring Unit within the National Ozone Unit (NOU), a part of the National Environmental Directorate (DINAMA) of the Ministry of Housing, Land planning and Environment (MVOTMA). The NOU is directly responsible for the implementation of Montreal Protocol related activities in the country, and in particular, for the identification, implementation, monitoring and evaluation of all non-investment, investment, and technical assistance activities. The most important strategic partners of the NOU are as follows:

- (a) National Customs Directorate (DNA) with whom the NOU shares the responsibility for the implementation of the HCFC import licensing system and control trade of HCFC;
- (b) Technological Laboratory of Uruguay (LATU) functioning as technical branch for the NOU;
- (c) Technological University of Uruguay (UTU) supporting training activities and assessment of new technologies; and
- (d) Importers of HCFCs and HCFC blends who provide information that allows validation of customs data, tracking of stockpiles, downstream HCFC applications.

2. The Government is fully supportive of the NOU. MVOTMA has ensured—and will assure in the future—passage of all necessary national laws and regulations. The NOU is part of the Climate Change

Division (DCC) which sustains a key role in the Uruguayan environmental agenda, so ozone protection matters will have an important participation on national strategies and environmental policies.

3. The Lead IA, acting through its country office, has the overall financial and substantive oversight over the execution of the Plan. The NOU is required to provide regular expenditure report to the Lead IA.

4. The NOU will prepare for each tranche request a status report on its activities and achievements including milestones and other performance targets as well as any other information of interest to the implementation of the Plan. This report will be reviewed and verified by the Lead IA and then submitted to the Multilateral Fund Secretariat for its review and potential presentation to the Executive Committee of the Multilateral Fund.

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.
- (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) 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, the allocation of the reductions to the different budget items and to the funding of the Lead IA;
- (k) Ensuring that disbursements made to the Country are based on the use of the indicators;
- (l) Providing assistance with policy, management and technical support when required;

- (m) 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 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 \$192 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.