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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-third Meeting
Montreal, 15-19 December 2023
Item 9(c) of the provisional agenda¹

PROJECT PROPOSAL: MAURITIUS

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

Technical assistance

- Additional activities to maintain energy efficiency for the servicing sector under decision 89/6(b) Germany

¹ UNEP/OzL.Pro/ExCom/93/1

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 DESCRIPTION

Background

1. The HCFC phase-out management plan (HPMP) for Mauritius was originally approved at the 63rd meeting² and revised at the 72nd meeting,³ to achieve the complete phase-out of HCFC consumption by 2030, at a total cost of US \$950,000, plus agency support costs, on the understanding that this would be the total funding available from the Multilateral Fund to achieve the complete phase-out of HCFCs. The HPMP is under implementation; as of date, four tranches amounting to US \$782,500 have been approved. The Government of Germany will submit the fifth tranche in 2024.

2. On behalf of the Government of Mauritius, the Government of Germany, as the designated implementing agency, has submitted a request for funding additional activities for the introduction of alternatives to HCFCs with low-or zero-global-warming-potential (GWP) and for maintaining energy efficiency in the refrigeration servicing sector in line with decisions 89/6 and 92/22, at the amount of US \$120,000, plus agency support costs of US \$13,943.⁴ The submission includes a description of specific activities, targets and performance indicators and an implementation plan for 2024-2025.

Report on HCFC consumption

3. The Government of Mauritius reported a consumption of 1.81 ODP tonnes of HCFCs in 2022, which is 77.4 per cent below the HCFC baseline for compliance. The 2018-2022 HCFC consumption is shown in table 1.

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

HCFC	2018	2019	2020	2021	2022	Baseline
Metric tonnes (mt)						
HCFC-22	124.31	86.33	36.82	25.17	32.86	143.09
HCFC-123	0.10	0.00	0.00	0.00	0.00	0.00
HCFC-141b	0.00	0.00	0.00	0.00	0.00	1.18
Total (mt)	124.41	86.33	36.82	25.17	32.86	144.27
ODP tonnes						
HCFC-22	6.84	4.75	2.03	1.38	1.81	7.87
HCFC-123	0.00	0.00	0.00	0.00	0.00	0.00
HCFC-141b	0.00	0.00	0.00	0.00	0.00	0.13
Total (ODP tonnes)	6.84	4.75	2.03	1.38	1.81	8.00

Country programme implementation report

4. The Government of Mauritius reported HCFC sector consumption data under the 2022 country programme implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

² Decision 63/45

³ Decision 72/34

⁴ As per the letter of the Embassy of the Republic of Mauritius in the United States of America to the Government of Germany.

Project description

5. Mauritius has been making efforts to enhance energy efficiency while sustaining the phase-out of HCFCs and preparing for the phase-down of HFCs in refrigeration and air-conditioning (RAC) equipment. The country ratified the Kigali Amendment on 1 October 2019.

6. This project proposal is being submitted specifically for activities listed in subparagraphs (iii) and (iv) of decision 89/6(b). The project is designed to develop and adopt minimum energy performance standards (MEPS) for all air-conditioning appliances in line with existing ISO standards for creating an overall enabling environment for implementation of MEPS and labelling and developing guidelines for the green procurement of RAC equipment.

7. The funding requested for the different components is presented in table 2.

Table 2. Requested funding for activities to maintain energy efficiency in the servicing sector for Mauritius

Activity	Sub-activity description	Budget (US \$)
Development and adoption of and training on MEPS for the air-conditioning sector	Development of MEPS and labelling standards for all air-conditioning equipment by the Energy Efficiency Management Office and the Mauritius Standards Bureau (MSB) with support from technical experts	30,000
	Training of local technical experts on the development of MEPS to suit local conditions and monitoring implementation of MEPS as well as future updates of MEPS	25,000
	Workshops and consultations for finalising and approval of MEPS	25,000
Activity total		80,000
Development and implementation of a monitoring, reporting and verification system	Development of a structured database for monitoring and verification of <i>inter alia</i> capacity, refrigerant type, and energy efficiency levels of RAC equipment	20,000
Activity total		20,000
Development of green procurement guidelines for RAC equipment	Development of a green procurement module for the procurement of RAC equipment and workshop for 30 respondents on green procurement procedures	20,000
Activity total		20,000
Grand total		120,000

Implementation plan

8. The project is expected to be completed in 18 months after approval; the following activities will be implemented between January 2024 and June 2025:

- (a) Review of local market conditions on energy efficiency of air-conditioners and based on the review and market inputs, establish appropriate levels of MEPS; three-day training of local technical experts on the development of MEPS and periodically updating MEPS; at least four workshops for over 100 national stakeholders for obtaining inputs and finalising MEPS (US \$80,000);
- (b) Design and development of a product registry system, in close consultation with the MSB, the Ministry of Environment and the Customs Department, that includes a well-structured data collection and monitoring system for different RAC models and implementation of the system including training of relevant persons managing data collection and maintenance (US \$20,000); and

- (c) Development of a green procurement module for the procurement of RAC equipment including processes to encourage the private sector to adopt green procurement procedures; one workshop for at least 30 respondents on green procurement procedures (US \$20,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

9. The Government of Germany confirmed that there are no other activities being implemented with non-Multilateral Fund-funding sources that could be overlapping with the activities planned under this project.

10. The Secretariat requested clarifications on how the energy efficiency standards developed through the project would be enforced and sustained. The Government of Germany explained that a monitoring and verification system will be established to ensure enforcement and verification of conformance with the energy efficiency standards; in parallel, a Green Public Procurement scheme that is being developed would establish the public sector as frontrunner and this would serve as an example for widespread and sustainable adoption of energy efficiency standards.

11. On the impact of the project, the Government of Germany explained that these activities would result in the reduction in import of energy inefficient obsolete RAC equipment, improve the average energy efficiency levels of RAC equipment over time, create awareness among different stakeholders including more active participation of the private sector in green procurement of RAC equipment and strengthen data availability of energy efficient low-GWP refrigerant-based RAC equipment imported in the country. This would, in the medium to long term, support the adoption of sustainable RAC technologies.

Gender policy implementation

12. In accordance with decisions 84/92(d) and 90/48(c) on the Multilateral Fund operational policy on gender mainstreaming, the Government of Mauritius, with the assistance from the Government of Germany will incorporate gender mainstreaming and the participation of women would be encouraged in all aspects of the planning and implementation of these additional activities. Gender-disaggregated data on activities will be collected during project implementation. To encourage greater participation of women, all invitation letters will urge institutions to nominate women wherever possible. For training activities conducted on MEPS development, the MSB will be encouraged to have gender balance among the trainee participants to the extent feasible.

Updated Agreement

13. In view of the inclusion of funding for additional activities to maintain energy efficiency in the refrigeration servicing sector and the accordingly revised funding schedule, the Agreement between the Government of Mauritius and the Executive Committee has been updated. Specifically, Appendix 2-A has been revised and paragraph 16 has been modified to indicate that the updated Agreement supersedes that reached at the 72nd meeting, as contained in Annex I to the present document. The full updated Agreement will be appended to the final report of the 93rd meeting.

Conclusion

14. The proposed project being submitted in line with decisions 89/6(b) and 92/22 would assist the country in implementing MEPS and labelling programmes. During the process of development of MEPS of the air-conditioning equipment, capacity of technical experts would be undertaken, and this will in turn strengthen the capacity of the national authorities in designing and implementing energy standards and other related measures for RAC equipment and strengthen collaboration with the national ozone unit on

energy efficiency matters in the context of HFC phase-down in the future. Further, through implementation of a product registry system, the Government would be able to monitor import of low-GWP energy efficient equipment and their product characteristics; this would assist the national authorities in periodically reviewing the energy efficiency standards for different categories of equipment and upgrade them. Thus, this project will catalyse the introduction of energy efficient low- or zero-GWP alternatives to HCFCs in RAC applications.

RECOMMENDATION

15. The Fund Secretariat recommends blanket approval of the project for additional activities for the introduction of alternatives to HCFCs with low- or zero-global-warming-potential and for maintaining energy efficiency in the refrigeration servicing sector in Mauritius, and the corresponding 2024–2025 implementation plan, at the funding level shown in the table below, on the understanding that the Fund Secretariat has updated the Agreement between the Government of Mauritius and the Executive Committee for the HCFC phase-out management plan, as contained in Annex I to the present document, specifically: Appendix 2-A, on the basis of the inclusion of funding for additional activities to maintain energy efficiency in the refrigeration servicing sector, and paragraph 16 that has been modified to indicate that the updated Agreement supersedes that reached at the 72nd meeting.

	Project title	Project funding (US \$)	Support costs (US \$)	Implementing agency
(a)	Additional activities for the introduction of alternatives to HCFCs with low- or zero-global-warming-potential and for maintaining energy efficiency in the refrigeration servicing sector	120,000	13,943	Germany

Annex I

**TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN
THE GOVERNMENT OF MAURITIUS AND THE EXECUTIVE COMMITTEE OF THE
MULTILATERAL FUND FOR THE PHASE-OUT OF HYDROCHLOROFLUOROCARBONS**

(Relevant changes are in bold font for ease of reference)

16. This updated Agreement supersedes the Agreement reached between the Government of Mauritius and the Executive Committee at the 72nd meeting of the Executive Committee.

APPENDIX 2-A: THE TARGETS, AND FUNDING

		2011	2013	2014	2015	2017	2020	2023		2025	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)		8.00	8.00	7.20	7.20	5.20	5.20		2.80	0.20	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)		8.00	8.00	7.14	7.14	4.00	1.57		0.16	0	n/a
2.1	Lead IA Germany agreed funding (US \$)	157,050	0	131,400	0	332,750	161,300	67,500	120,000	0	100,000	1,070,000
2.2	Support costs for Lead IA (US \$)	18,846	0	15,851	0	40,140	19,458	7,843	13,943	0	11,619	127,700
3.1	Total agreed funding (US \$)	157,050	0	131,400	0	332,750	161,300	67,500	120,000	0	100,000	1,070,000
3.2	Total support cost (US \$)	18,846	0	15,851	0	40,140	19,458	7,843	13,943	0	11,619	127,700
3.3	Total agreed costs (US \$)	175,896	0	147,251	0	372,890	180,758	75,343	133,943	0	111,619	1,197,700
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes)											7.87
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)											0
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)											0
4.2.1	Total phase-out of HCFC-141b agreed to be achieved under this agreement (ODP tonnes)											0.13
4.2.2	Phase-out of HCFC-141b to be achieved in previously approved projects (ODP tonnes)											0
4.2.3	Remaining eligible consumption for HCFC-141b (ODP tonnes)											0