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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-sixth Meeting
Montreal, 26-30 May 2025
Item 9(c) of the provisional agenda¹

PROJECT PROPOSAL: BARBADOS

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

Energy efficiency

- | | | |
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| • Additional activities to maintain energy efficiency for the servicing sector under decision 89/6(b) | UNDP | Blanket approval |
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¹ UNDP/OzL.Pro/ExCom/96/1

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

1. Stage II of the HCFC phase-out management plan (HPMP) for Barbados was approved at the 91st meeting² to completely phase out HCFC consumption by 2030, at a total cost of US \$520,000, plus agency support costs for UNEP and UNDP. As per the Agreement between the Government of Barbados and the Executive Committee, the second tranche of the HPMP was scheduled to be submitted to the 96th meeting but is postponed to the 98th meeting.

2. On behalf of the Government of Barbados, UNDP as the lead implementing agency, has submitted a request for funding additional activities to enhance energy efficiency in the refrigeration and air-conditioning (RAC) servicing sector and promote the use of energy efficient, low-global-warming-potential (GWP) refrigerants in line with decisions 89/6(b) and 92/22,³ in the amount of US \$100,000, plus agency support costs of US \$5,731.⁴ The submission includes a description of specific activities, targets, and an implementation plan from June 2025 to May 2027.

Report on HCFC consumption

3. The Government of Barbados reported a consumption of 0.47 ODP tonnes of HCFCs in 2023, which is 87.3 per cent below the country's HCFC baseline for compliance. The Article 7 and country programme (CP) data for 2024 have not been reported yet. The 2019-2023 HCFC consumption is shown in table 1.

Table 1. HCFC consumption in Barbados (2019-2023 Article 7 data)

HCFC	2019	2020	2021	2022	2023	Baseline
Metric tonnes (mt)						
HCFC-22	30.97	15.89	8.95	19.87	8.54	64.68
HCFC-142b	0.00	0.00	0.00	0.00	0.00	2.06
Total (mt)	30.97	15.89	8.95	19.87	8.54	66.74
ODP tonnes						
HCFC-22	1.70	0.87	0.49	1.09	0.47	3.56
HCFC-142b	0.00	0.00	0.00	0.00	0.00	0.13
Total (ODP tonnes)	1.70	0.87	0.49	1.09	0.47	3.69

4. HCFC consumption in Barbados is decreasing due to the uptake of alternatives such as R-410A in various RAC applications, leading to an overall decline in demand for HCFCs. This trend is further supported by the continued strong enforcement of the HCFC licensing and quota system.

Country programme implementation report

5. The Government of Barbados reported HCFC sector consumption data under the 2023 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.

² Decision 91/43

³ Decision 92/22 allows for the submission of requests for activities referred to in decision 89/6(b) separately from HPMP tranche requests, including a revised Agreement between the Government of the Article 5 country concerned and the Executive Committee, on the understanding that those activities were integrated into the ongoing tranche implementation plans.

⁴ As per the letter of 12 March 2025 from the Ministry of Environment and National Beautification, Green and Blue Economy of Barbados to UNDP.

Project description

6. The activities proposed to be implemented during the period from June 2025 to May 2027 are presented in table 2.

Table 2. Activities, expected outputs and costs for the project to enhance energy efficiency in the servicing sector in Barbados

Activity	Performance indicators	Cost (US \$)
Technical support for safe and energy-efficient operations of RAC equipment		
- Market assessment of penetration of low-GWP alternatives in the commercial RAC sector through a detailed field survey - Identification of barriers to the adoption of low-GWP alternatives to HCFCs and possible measures to overcome those barriers based on inputs from survey and consultations with relevant stakeholders - Estimates of greenhouse gas (GHG) emission, as well as the reduction, direct and indirect, resulting from adopting those alternatives and energy efficiency of equipment using those alternatives - Review of existing and proposed minimum energy performance standards (MEPS) and recommending updates to MEPS taking into consideration local conditions; this includes developing a plan for periodic updates to MEPS and incorporating low-GWP refrigerant criteria for equipment, such as labelling schemes with MEPS - Identification of available options for testing energy efficiency of RAC equipment - Design of an overall plan and providing technical support for implementation of an energy efficiency demonstration project - Preparation of technical training materials relating to energy efficiency and awareness materials for promoting the adoption of energy-efficient low-GWP technologies in different applications - Coordination and monitoring	- Estimates of GHG emissions (direct and indirect) from the RAC sector - Barriers to the adoption of low-GWP alternatives and possible steps to overcome those barriers, identified - Plan developed for maximizing the adoption of low-GWP alternatives in different RAC applications - Need for MEPS update defined; cost-benefit analysis of adoption of MEPS undertaken, including a roadmap for periodic updates of MEPS - Possible options identified for testing energy efficiency of RAC equipment - Training and awareness materials developed for the adoption of energy-efficient low-GWP technologies - Technical support for coordination and monitoring	46,000
Subtotal		46,000
Demonstration project with energy-efficient low-GWP alternatives to HCFC-22		
- Procurement and commissioning of an energy-efficient low-GWP system in the location of intervention - Acquisition of one or more devices for measuring energy consumption and other selected parameters	- Energy-efficient low-GWP system installed - Benefits of an energy-efficient low-GWP system promoted	45,000
Subtotal		45,000
Awareness-raising activities targeting servicing technicians, end users and consumers on the availability and benefits of energy-efficient low-GWP RAC equipment		
Convening stakeholders' consultations and Standards Committee/Technical Committee meetings	Number of persons (disaggregated by gender) trained and/or sensitized and in attendance at awareness sessions	5,000

Activity	Performance indicators	Cost (US \$)
Convening at least one consultation on results; preparation of training and information materials	Enhanced awareness among stakeholders about the economic and global benefits of the alternative low-carbon technologies and MEPS	2,500
Subtotal		7,500
MEPS and standards development and/or implementation for the RAC sector as appropriate		
Development of a proposal for implementing and publishing MEPS and/or other relevant standards for the RAC sector	MEPS and/or other relevant standards published as appropriate	1,500
Subtotal		1,500
Total		100,000

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

7. The Secretariat has reviewed the project proposal in line with decisions 89/6(b) and 92/22 and sought additional information from UNDP on different activities.

8. Regarding the status of implementation of MEPS, UNDP explained that the current project proposes the development and/or enhancement of MEPS and energy efficiency regulations. The Barbados National Standards Institution has already adopted voluntary energy labelling standards for refrigerators and air conditioners, using government internal funds based on the regional standards of the Caribbean Community (CARICOM). The Ministry of Energy and Business is developing a National Energy Efficiency Policy and Strategic Action Plan, which may include an examination of the existing energy efficiency standards for the RAC sector. Therefore, the successful completion of the project would support the comprehensive integration of the RAC sector's transition to energy-efficient low-GWP technologies into the national policy framework and coordinate with other relevant activities related to energy efficiency in refrigeration, air-conditioning, and heat-pump applications (e.g., implementation of the National Cooling Strategy of Barbados).

9. Regarding the implementation of MEPS for air-conditioning, UNDP indicated that coordination with other government entities responsible for energy efficiency (e.g., Department of Commerce and Consumer Affairs) is essential. The implementation process is anticipated to take at least one year. Furthermore, standards will be reviewed and updated as necessary, and as determined by the national ozone unit (NOU) in consultation with the Barbados National Standards Institution.

10. UNDP clarified that Barbados currently lacks national equipment testing facilities. However, a regional testing facility located in Jamaica may be used for ad hoc equipment testing where feasible. The procedures and feasibility of utilizing the regional testing facility will be evaluated during the project.

11. Regarding similar projects funded with non-Multilateral Fund (MLF) sources, UNDP explained that activities related to the adoption of voluntary energy labelling standards, the development of the Barbados National Cooling Strategy, and the National Energy Efficiency Policy and Strategic Action Plan, which may include the assessment of national energy efficiency standards, were funded through non-MLF sources. The activities under the current project are designed to complement those initiatives to maximize impact. UNDP also informed that the NOU would solicit feedback on project activities and convene meetings with the relevant agencies as appropriate.

12. UNDP indicated that the Government of Barbados plans to submit stage I of the Kigali HFC implementation plan at the 98th meeting. The activities proposed under the current project aim to facilitate

the adoption of low-GWP technologies, potentially resulting in a faster reduction in the country's dependence on HFCs in commercial refrigeration and residential air-conditioning applications.

Gender policy implementation

13. The Government of Barbados is aware of the Multilateral Fund's operational policy on gender mainstreaming. It will undertake various initiatives, including awareness and outreach activities, to ensure women are provided equal opportunity. These initiatives aim to encourage women to apply for different services related to the project and to participate in various activities as appropriate. UNDP's internal gender policies will also be applied to the project.

Updated Agreement

14. In view of the revised schedule of the second tranche of the HPMP referred to in paragraph 1 above, and 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 Barbados and the Executive Committee has been updated. Specifically, Appendix 2-A has been revised, and paragraph 17 has been added to indicate that the updated Agreement supersedes that reached at the 91st meeting by decision 91/43, as contained in annex I to the present document. The updated Agreement will be appended to the final report of the 96th meeting.

Conclusion

15. The project has been submitted in accordance with decisions 89/6(b) and 92/22 and includes activities to promote the use of low-GWP alternatives. It also aims to facilitate the successful development and periodic updates of MEPS for air-conditioning, the implementation of energy labelling requirements, the identification of options for testing the energy efficiency of equipment, and the preparation of technical training materials related to energy efficiency in the RAC service sector. Additionally, a demonstration project for low-GWP refrigerant-based air-conditioning equipment, along with awareness and outreach activities to promote energy efficiency and the adoption of such equipment, will be implemented. The project will contribute to the overall objectives of the HPMP and assist the country in sustaining the achieved reductions of HCFCs while adopting more energy-efficient RAC technologies. Furthermore, it will reduce the country's dependence on HFC-based technologies.

RECOMMENDATION

16. The Fund Secretariat recommends blanket approval of the project for additional activities for the introduction of alternatives to HCFCs with low global-warming potential and for maintaining energy efficiency in the refrigeration servicing sector in Barbados, and the corresponding 2025-2027 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 Barbados and the Executive Committee, as contained in annex I to the present document, specifically Appendix 2-A, to reflect the revised schedule of the second tranche of the HCFC phase-out management plan and the revised funding level owing to the inclusion of funding for additional activities to maintain energy efficiency in the refrigeration servicing sector; and paragraph 17, which has been added to indicate that the updated Agreement supersedes that reached at the 91st meeting (decision 91/43).

	Project title	Project funding (US \$)	Support costs (US \$)	Implementing agency
(a)	Additional activities for the introduction of alternatives to HCFCs with low global warming potential and for maintaining energy efficiency in the refrigeration servicing sector	100,000	5,731	UNDP

Annex I

TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF BARBADOS 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

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

17. This updated Agreement supersedes the Agreement reached between the Government of Barbados and the Executive Committee at the 91st meeting of the Executive Committee.

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2022	2023	2024	2025	2026	2027	2028-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	2.40	2.40	2.40	1.20	1.20	1.20	1.20	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	2.40	2.40	2.40	1.20	1.20	1.20	1.20	0.00	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	36,000	0	0	0	52,500	134,000	0	75,500	298,000
2.2	Support costs for Lead IA (US \$)	4,680	0	0	0	6,825	17,420	0	9,815	38,740
2.3	Cooperating IA (UNDP) agreed funding (US \$)	125,000	0	0	100,000	97,000	0	0	0	322,000
2.4	Support costs for Cooperating IA (US \$)	11,250	0	0	5,731	5,559	0	0	0	22,540
3.1	Total agreed funding (US \$)	161,000	0	0	100,000	149,500	134,000	0	75,500	620,000
3.2	Total support costs (US \$)	15,930	0	0	5,731	12,384	17,420	0	9,815	61,280
3.3	Total agreed costs (US \$)	176,930	0	0	105,731	161,884	151,420	0	85,315	681,280
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)									2.27
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (ODP tonnes)									1.29
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)									0.00
4.2.1	Total phase-out of HCFC-142b agreed to be achieved under this Agreement (ODP tonnes)									0.13
4.2.2	Phase-out of HCFC-142b to be achieved in the previous stage (ODP tonnes)									0.00
4.2.3	Remaining eligible consumption for HCFC-142b (ODP tonnes)									0.00

*Date of completion of stage I as per stage I Agreement: 31 December 2023.