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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 agenda<sup>1</sup>

**PROJECT PROPOSAL: GUYANA**

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)

UNDP

<sup>1</sup> UNEP/OzL.Pro/ExCom/93/1

## PROJECT DESCRIPTION

### Background

1. Stage II of the HCFC phase-out management plan (HPMP) for Guyana was approved at the 75<sup>th</sup> meeting<sup>2</sup> at a total cost of US \$684,000, plus agency support costs. The Government of Guyana has two tranches remaining of stage II of its HPMP. The country is expected to phase out HCFCs by 100 per cent by 1 January 2030.

2. On behalf of the Government of Guyana, UNDP, as the designated implementing agency, has submitted a request for funding additional activities to strengthen energy efficiency in refrigeration and air-conditioning (RAC) servicing and promote the use of energy-efficient, low-global warming potential (GWP) refrigerants in line with decisions 89/6 and 92/22, at the amount of US \$100,000, plus agency support costs of US \$7,000.<sup>3</sup> The submission includes a description of specific activities, targets, and performance indicators and an implementation plan for 2024 to 2026.

### Report on HCFC consumption

3. At the 92<sup>nd</sup> meeting, the Government of Guyana reported a consumption of 0.62 ODP tonnes of HCFC in 2022, which is 65.55 per cent below the HCFC baseline for compliance. The 2018-2022 HCFC consumption is shown in table 1.

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

HCFC	2018	2019	2020	2021	2022	Baseline
<b>Metric tonnes (mt)</b>						
HCFC-22	19.63	17.94	16.34	9.05	9.93	31.02
HCFC-141b	0	0	0	0	0.68	0
<b>(Total) (mt)</b>	<b>19.63</b>	<b>17.94</b>	<b>16.34</b>	<b>9.05</b>	<b>10.65</b>	<b>31.02</b>
<b>ODP tonnes</b>						
HCFC-22	1.08	0.99	0.90	0.50	0.55	1.80
HCFC-141b	0	0	0	0	0.07	0
<b>(Total) (ODP tonnes)</b>	<b>1.08</b>	<b>0.99</b>	<b>0.90</b>	<b>0.50</b>	<b>0.62</b>	<b>1.80</b>

4. The Government of Guyana has met its commitment under its Agreement with the Executive Committee for an accelerated phase-out of HCFCs by 2022 to a sustained level of 0.69 ODP tonnes.

### *Country programme (CP) implementation report*

5. The Government of Guyana reported HCFC sector consumption data under the 2022 CP implementation report that is consistent with the data reported under Article 7 of the Montreal Protocol.<sup>4</sup>

### Project description

6. Guyana is currently implementing the third tranche of stage II of its HPMP, which is being implemented on an accelerated phase-out of HCFCs by promoting the introduction of non ODS-based and low-GWP alternatives.

<sup>2</sup> Annex XX of document UNEP/OzL.Pro/ExCom/75/85.

<sup>3</sup> As per the letter of 1 November 2023 from the Ministry of Agriculture of Guyana to UNDP.

<sup>4</sup> UNEP/OzL.Pro/ExCom/92/27

7. The purpose of the proposed activities is to combine technical support with awareness raising on the potential energy-efficiency gains in small capacity commercial air-conditioning (AC) equipment, preparing a plan for adoption of energy-efficient technologies in the commercial AC sector and provide inputs for the development of energy efficiency regulations and relevant policies in the future. The proposed activities fall within the scope referred to in subparagraphs (b)(i), (b)(ii), (b)(iii) and (b)(v) of decision 89/6. This project will help users in the commercial AC sector and, indirectly, in other sectors to understand the benefits of using energy-efficient equipment and how the existing equipment can be operated in an energy-efficient manner, as well as in the future development of Minimum Energy Performance Standards (MEPS)<sup>5</sup> and other measures for energy efficiency in the commercial AC sector.

8. The proposed project comprises two components that would have mid-term and long-term benefits for the commercial AC sector:

- (a) Technical inputs for safe and energy-efficient operations of commercial AC equipment, both for existing and new equipment. These inputs would be integrated in servicing sector training modules or equivalent for future training programmes; and
- (b) Awareness-raising activities targeting servicing technicians, end-users and consumers on the availability and benefits of energy-efficient low-GWP RAC equipment.

9. Details on the activities to be implemented under each of the above components, their expected outputs and requested funding are provided in table 2 below:

**Table 2. Activities, expected outputs and requested funding for the project proposed to maintain energy efficiency for the servicing sector in Guyana**

<b>Activities and expected outputs</b>	<b>Budget (US \$)</b>
Technical support through national consultants for data collection of different commercial AC equipment, their energy consumption and their end-user usage characteristics, analysis of barriers for the adoption of low-GWP commercial AC equipment, and development of a plan for the adoption of low-GWP technologies and the usage of existing/new equipment in an energy-efficient manner. The data would be collected in the Giftland mall area*.	55,000
Technical support through the services of an international consultant to cover technology choices for low-GWP technologies in the commercial AC sector along with key technical and operational aspects relating to the usage of these technologies and how energy efficient operations can be achieved.	25,000
Stakeholder consultations during the data collection process and awareness raising workshops, targeting importers, end-users, the RAC association and other stakeholders, for dissemination of the results of the above-mentioned activities. Relevant awareness materials relating to energy efficient operations of low-GWP commercial AC equipment will be prepared.	20,000
<b>Total</b>	<b>100,000</b>

\*This area comprises a shopping centre, universities, convention centres and the Caribbean Community (CARICOM) offices.

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

10. The Secretariat sought clarification from UNDP on how the main end-users would benefit from the project, UNDP mentioned that the main end-users will benefit through a better understanding of energy-efficient operations of low-GWP refrigerant-based commercial AC equipment, which would foster an energy-efficiency culture among the end-users. Furthermore, the technical inputs to be made available

<sup>5</sup> Guyana has neither MEPS nor mandatory labelling requirements for RAC equipment.

through the project would help the Government strengthen the regulatory framework as well as training capacity for energy-efficient low-GWP refrigerant-based equipment.

11. UNDP also explained that although there is insufficient data on HCFC/HFC usage distribution throughout the RAC sector in Guyana, data suggested that despite the growth in the usage of HFCs in the country, mainly due to its economic growth, there is still a strong use of HCFC-22 in the commercial RAC sector. In addition to the high cost of low-GWP alternatives when compared with that of HCFC-22, the high investment cost of low-GWP alternatives for the commercial RAC sector acts as a barrier for the adoption of more efficient technologies. There was a need to better understand this sector through the proposed data collection and technical support from experts on technology choices, so as to prepare a plan on energy-efficiency improvements and the transition to low GWP technologies, and provide the necessary inputs for policy adoption and training enhancement.

12. As the project's selected site is the area of the Giftland mall area in Georgetown, the Secretariat asked whether the Government intended to sign a voluntary agreement with the project site (under a framework of corporate social responsibility for instance) to implement the technical options to improve energy efficiency on the site. UNDP's response was that this would be done with UNDP's support, and that the Giftland mall area provides a unique opportunity given that the area has a concentration of commercial buildings, convention centres and universities, and could provide valuable information about potential energy-efficiency gains with a specific plan for improvements rather than more generic recommendations at the national level.

13. The Secretariat enquired whether the absence of MEPS or labelling requirements for RAC equipment would affect the implementation of the energy efficiency promotion measures planned through the above activities. UNDP clarified that the intent of activities such as the collection of data is to discuss options and facilitate future adoption of energy efficiency standards in the country. The data to be collected would also serve to better inform the National Ozone Unit and RAC sector about the type of equipment that is currently entering the market, and this would allow for a further analysis about the actions that could be taken in the future about adoption of energy efficient equipment.

14. The Secretariat sought clarifications on the timetable for the activities, and UNDP confirmed that the project would be implemented in 36 months after approval, i.e., between January 2024 and December 2026.

#### Gender policy implementation<sup>6</sup>

15. At the 92<sup>nd</sup> meeting, a report on the gender mainstreaming policy implementation was provided as part of the request for the third tranche of stage II of Guyana's HPMP. UNDP confirmed that gender mainstreaming actions to be taken during the third tranche will also be applied to the current proposal.

#### Updated Agreement

16. In view of the inclusion of funding for additional activities to maintain energy efficiency in the servicing sector and the accordingly revised funding schedule, the Agreement between the Government of Guyana and the Executive Committee has been updated. Specifically, Appendix 2-A has been revised and paragraph 16 has been added to indicate that the updated Agreement supersedes that reached at the 75<sup>th</sup> meeting, as contained in annex I to the present document. The full updated Agreement will be appended to the final report of the 93<sup>rd</sup> meeting.

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<sup>6</sup> In line with decisions 84/92(d), decision 90/48(c) encouraged bilateral and implementing agencies to continue ensuring that the operational gender mainstreaming policy was applied to all projects, taking into consideration the specific activities presented in table 2 of document UNEP/OzL.Pro/ExCom/90/37.

## Conclusion

17. The project being submitted in line with decisions 89/6(b) and 92/22, includes activities to support a better understanding of consumer needs in adopting energy-efficient low-GWP refrigerant-based equipment in the commercial RAC sector in Guyana, and to strengthen coordination with energy-efficiency authorities and other key national stakeholders in the country to enable the selection of energy-efficient, low-GWP products available in the market. Preliminary data collected for the existing RAC sector in Guyana shows an HCFC consumption distribution of 40 per cent in the commercial AC sector; thus, the proposed project would help the end-users in this sector in transitioning from HCFCs to low-GWP energy-efficient alternatives. The energy-efficiency gains in the sector will have a large potential benefit for the adoption of low-GWP alternatives. The project will help strengthen technical capacity of different stakeholders, including in the adoption of energy efficient technologies by users in the commercial AC sector; and provide inputs on future policies and regulations relating to energy efficiency. The project will also build the framework for considering energy-efficiency-related actions in the Kigali HFC implementation plan currently under preparation and will support activities relating to the uptake of energy-efficient, low-GWP RAC and heat pump equipment.

## RECOMMENDATION

18. 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 Guyana, and the corresponding 2024-2026 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 Guyana 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 added to indicate that the updated Agreement supersedes that reached at the 75<sup>th</sup> meeting.

	<b>Project title</b>	<b>Project funding (US \$)</b>	<b>Support costs (US \$)</b>	<b>Implementing agency</b>
(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	100,000	7,000	UNDP



## Annex I

**TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF THE REPUBLIC OF GUYANA 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)

**16. This updated Agreement supersedes the Agreement reached between the Government of the Republic of Guyana and the Executive Committee at the 75<sup>th</sup> meeting of the Executive Committee.**

**APPENDIX 2-A: THE TARGETS, AND FUNDING**

Row	Particulars	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	1.62	1.62	1.62	1.62	1.62	1.17	1.17	1.17	1.17	1.17	0.59	0.59	0.59	0.05	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	1.62	1.52	1.42	1.32	1.22	1.12	0.91	0.69	0.48	0.26	0.05	0.05	0.05	0	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	55,500	0	0	65,500	0	0	45,500	0	45,500	<b>0</b>	0	30,500	0	0	242,500
2.2	Support costs for Lead IA (US \$)	7,215	0	0	8,515	0	0	5,915	0	5,915	<b>0</b>	0	3,965	0	0	31,525
2.3	Cooperating IA (UNDP) agreed funding (US \$)	159,750	0	0	66,750	0	0	125,000	0	35,000	<b>100,000</b>	0	55,000	0	0	<b>541,500</b>
2.4	Support costs for Cooperating IA (US \$)	11,183	0	0	4,673	0	0	8,750	0	2,450	<b>7,000</b>	0	3,850	0	0	<b>37,906</b>
3.1	Total agreed funding (US \$)	215,250	0	0	132,250	0	0	170,500	0	80,500	<b>100,000</b>	0	85,500	0	0	<b>784,000</b>
3.2	Total support costs (US \$)	18,398	0	0	13,188	0	0	14,665	0	8,365	<b>7,000</b>	0	7,815	0	0	<b>69,431</b>
3.3	Total agreed costs (US \$)	233,648	0	0	145,438	0	0	185,165	0	88,865	<b>107,000</b>	0	93,315	0	0	<b>853,431</b>
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (ODP tonnes)															1.62
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes)															0.18
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)															0