## UNITED NATIONS



# United Nations Environment Programme

Distr. GENERAL

UNEP/OzL.Pro/ExCom/93/34 7 December 2023

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Ninety-third Meeting Montreal, 15-19 December 2023 Item 9(d) of the provisional agenda<sup>1</sup>

## PROJECTS RECOMMENDED FOR INDIVIDUAL CONSIDERATION

1. This document provides summary information on projects and activities submitted to the 93<sup>rd</sup> meeting that are recommended for individual consideration. Table 1 presents a list of these requests.

Projects and activities	No. of countries	No. of funding requests	Amount recommended (US \$)	Amount in principle (US \$)
Stage II/III of HPMPs	6	14	7,300,366	17,907,720
Tranches of approved HPMPs	1	5	21,479,467	
Stage I of KIPs	23	54	20,372,787	51,905,576
HFC-related investment projects	1	3	1,250,593	
Preparation for KIPs and/or investment-related activities	2	2	267,500	
Additional activities to maintain energy efficiency in the servicing sector (decision 89/6)	1*	1	135,265.00	
Preparation for a pilot project on energy efficiency	1 and a global	2	117,700	
Pilot project on energy efficiency	11	13	7,169,581	
Compliance Assistance Programme (2024 budget)		1	11,265,696	
Core unit costs (2024)		3	5,969,740	
Total		98	75,328,695	

Table 1: Rec	quests recommended for in	ndividual consideration
Table I. Ku	Jucous recommended for m	nuiviuuai consiuci auon

\* Activities for the country (Mozambique) have been submitted as part of a new stage of its HPMP to this meeting. Note: Funding amounts include agency support costs.

2. Tables 2-5 provide more information on the above-listed projects and activities recommended for individual consideration, including non-investment preparatory activities presented in the work programmes of implementing agencies and in the bilateral cooperation document; and tranche requests

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.

<sup>&</sup>lt;sup>1</sup> UNEP/OzL.Pro/ExCom/93/1

under stage II of the HCFC phase-out management plan (HPMP), requests for new stages II and III of HPMPs, requests for stage I of Kigali HFC implementation plans (KIPs) including HFC investment projects submitted as part of the KIPs, and pilot projects related to energy efficiency submitted in line with decision 91/65, as presented in the respective country project proposals.

Country /Region	Project title	IAs	Doc. #	Issue
Global	Preparation of a pilot project to demonstrate the use of digital monitoring and management tools to enhance energy efficiency and reduce emission of greenhouse gases in the space cooling and cold chain sectors in Colombia, Lebanon, Panama, Sri Lanka, and Trinidad and Tobago	UNDP	93/35	Guidance sought from the Executive Committee as the proposal represents a new prospective approach for considering energy efficiency in the context of the Montreal Protocol
India	Preparation of a demonstration project for the manufacture of compressors in the mobile air-conditioning manufacturing sector	UNDP	93/35	Guidance sought from the Executive Committee on demonstration projects submitted as part of KIPs other than end-user projects submitted in line with decision 92/36
Thailand	Preparation of a KIP (stage I)	World Bank	93/38	The country has not ratified the Kigali Amendment
Viet Nam	Preparation of a pilot project to maintain and/or enhance energy efficiency in the air-conditioning (AC) sector	World Bank	93/38	Guidance sought from the Executive Committee as the project is not submitted in the context of HFC phase-down

Table 2: Non- investment activities – preparatory projects

#### Table 3: HPMP stage and tranche requests

Country	Stage / Tranche #	Implementing agencies	Doc. #	Para. #	Issue	
Requests for stage II or III of the HPMP						
Guinea	Stage II	UNEP/UNIDO	93/58		All technical and cost issues resolved	
Lebanon	Stage III	UNDP	93/64		All technical and cost issues resolved	
Mozambique	Stage II	UNEP/UNDP	93/73		All technical and cost issues resolved	
Philippines (the)	Stage III	UNIDO	93/82		All technical and cost issues resolved	
Suriname	Stage II	UNEP/UNIDO	93/88		All technical and cost issues resolved	
Viet Nam	Stage III	World Bank	93/93	1-40	All technical and cost issues resolved	
Tranche requests under stage II of the HPMP						
China – XPS*	Sixth tranche	UNIDO/	93/47	27-45	All technical and cost issues resolved	
		Germany				
China – PU*	Fourth tranche	World Bank	93/47	46-70	All technical and cost issues resolved	
China – ICR*	Fifth tranche	UNDP	93/47	71-91	All technical and cost issues resolved	
China - Solvent	Sixth tranche	UNDP	93/47	92-113	All technical and cost issues resolved	
China –	Sixth tranche	UNEP/	93/47	114-134	All technical and cost issues resolved	
Servicing*		Germany/Japan				

\*XPS = extruded polystyrene foam sector; PU = polyurethane foam sector; ICR = industrial and commercial refrigeration and air-conditioning sector; Servicing = refrigeration and air-conditioning sector and the national enabling programme

#### Table 4: KIP stage I requests

Country	Implementing agencies	Doc. #	Para. #	Issue	
KIPs that may not require a presentation by the Secretariat					
Albania	a UNIDO/UNEP 93/39 18-65 All technical and cost issues resolved		All technical and cost issues resolved		

Country	Implementing agencies	Doc. #	Para. #	Issue		
Bolivia (Plurinational State of)	UNIDO/UNEP	93/43	29-87	All technical and cost issues resolved		
Cambodia	UNEP/UNDP	93/45		All technical and cost issues resolved		
Congo (the)	UNIDO/UNEP	93/49		All tech	nnical and cost issues resolved	
Grenada	UNEP/UNDP	93/56	19-63	All tech	nnical and cost issues resolved	
Kyrgyzstan	UNDP/UNEP	93/63	1-48	All technical and cost issues resolved		
Malawi	UNEP/UNIDO	93/67		All technical and cost issues resolved		
Nicaragua	UNIDO	93/75	1-61	All tech	nnical and cost issues resolved	
Niger (the)	UNIDO/UNEP	93/76		All tech	nnical and cost issues resolved	
North Macedonia	UNIDO	93/78	18-79	All tech	nnical and cost issues resolved	
Trinidad and Tobago	UNDP	93/89	20-80	All tech	nnical and cost issues resolved	
Turkmenistan	UNIDO	93/91	1-52	All tech	nnical and cost issues resolved	
	KIPs that requir	e a prese	ntation by	the Sec	retariat	
Chile	UNDP/UNEP	93/46			g requested for more than 10 per cent on from the baseline	
Cuba	UNDP	93/50			on of investment projects in the e of cost guidelines	
Dominican Republic	UNDP/UNEP/ UNIDO	93/51			lculation for the servicing sector	
Ecuador	UNIDO	93/52	33-98	Cost ca	lculation for the servicing sector	
Ghana	UNDP/UNEP	93/55			are of HFC consumption in the	
Jordan	UNIDO	93/62		Inclusion of investment projects in the absence of cost guidelines		
Malaysia	World Bank	93/68		Inclusion of investment projects in the absence of cost guidelines		
Mexico	UNIDO/UNDP/ UNEP	93/70	1-117	Inclusion of investment projects in the absence of cost guidelines; cost calculation for the servicing sector		
Panama	UNDP	93/80			lculation for the servicing sector	
Peru	UNDP	93/81		Cost ca	lculation for the servicing sector	
Viet Nam	World Bank/UNEP	93/93	41-110	Inclusio	on of investment projects in the e of cost guidelines	
HFC in	vestment projects in In	dia (to be	e included	in stage	I of the KIP) (UNDP)	
Р	roject title		Doc. #	Para. #	Issue	
Conversion from R-407C and R-410A to HFC-32 in the manufacturing of light commercial packaged and ducted AC units at Voltas, Ltd.		93/60	1-25	All technical and cost issues resolved		
Demonstration/conversion from R-404A and R-407C to CO <sub>2</sub> trans-critical heat pump technology in the food processing and cold storage refrigeration equipment manufacturing at Mech Air Industries		93/60	26-46	Limited impact and sustainability of conversion		
Conversion of the manufacturing of commercial refrigeration appliances at Rockwell Industries, Ltd. from HFC-134a to propane		93/60	47-71	All technical and cost issues resolved - The Secretariat will present this investment project together with the request for technical assistance to enhance the energy efficiency of converted equipment 93/60, para. 72-84 and included in table 5		

Country	Project title	IA	Doc. #	Para. #
	Non-investment projects			
Bolivia (Plurinational State of)	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down through provision of equipment and training to 30 trainers on the use of CO <sub>2</sub> -based technology in medium- and low-temperature applications; and a demonstration project for detecting and preventing leakages in HFC-based commercial refrigeration systems and reinforcing good practices in equipment installation, commissioning, operation, and maintenance in the commercial refrigeration sector	UNIDO	93/43	88-102
Ecuador	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down through promoting the coordination between the NOU and energy-efficiency and climate authorities; support to the servicing sector; and support for the introduction or improvement of MEPS and labelling systems, with emphasis on the commercial and industrial RAC systems	UNIDO	93/52	99-114
Egypt	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down through upgrading and strengthening three testing laboratories and implementing MEPS and equipment labelling	UNIDO	93/53	
Kyrgyzstan	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down through the development of MEPS and labelling for RAC equipment up to 3 kW	UNEP	93/63	49-66
Mexico	Energy-efficiency strategy for the Kigali HFC implementation plan: Institutional coordination with energy-efficiency authorities, strengthening of MEPS for equipment using alternatives to HFCs, and support provided to the servicing and local assembly sectors	UNIDO	93/70	118-138
Nicaragua	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down through provision of equipment and training to 45 trainers on the use of CO <sub>2</sub> -based technology in medium- and low temperature applications; and a demonstration project for detecting and preventing leakages in HFC-based commercial refrigeration systems and reinforcing good practices in equipment installation, commissioning, operation, and maintenance in the commercial refrigeration sector	UNIDO	93/75	62-79
Nigeria	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down through establishing labelling standards for refrigeration appliances, survey of the market, review and updates to MEPS, upgrading a laboratory testing facility and training staff in verification testing, developing a green procurement policy, training for customs officers, and raising awareness	UNIDO	93/77	29-53
South Africa	Energy-efficiency strategy for the Kigali HFC implementation plan: Replacement of chillers in public buildings and collection of data to assist in the development of relevant MEPS	UNIDO	93/87	
Turkmenistan	Pilot project to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down through support for inter-institutional coordination; and the introduction of MEPS, labelling systems, and a National Plan for Energy Efficiency in the RACHP sector	UNIDO	93/91	53-72

## Table 5: Pilot projects related to energy efficiency in the servicing sector (decision 91/65)

Country	Project title	IA	Doc. #	Para. #
	Investment projects			
China	Demonstration project of replacing HFC-134a with R-744 in the field of electric vehicles	UNIDO	93/47	135-176
India	Conversion of the manufacturing of commercial refrigeration appliances at Rockwell Industries, Ltd. from HFC-134a to propane: Technical assistance to enhance the energy efficiency of converted equipment	UNDP	93/60	72-84
India	Design and development of a pilot-scale energy-efficient rotary compressor and a microchannel heat exchanger compatible with R-290 technology at Godrej & Boyce Mfg., Ltd. in the manufacturing of room air conditioners	Germany	93/60	85-117