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执行蒙特利尔议定书
多边基金执行委员会
第九十七会议
2025 年 12 月 1 日至 5 日，蒙特利尔
临时议程¹ 项目 9(c)

世界银行 2025 年工作方案修正案

¹ UNEP/OzL.Pro/ExCom/97/1。

基金秘书处的评论和建议

1. 世界银行请执行委员会批准 100,000 美元，外加 7,000 美元的机构支助费用，用于表 1 所列其 2025 年工作方案修正案。所提交申请附于本文件之后。

表 1：世界银行 2025 年工作方案修正案

国家	活动/项目	申请数额 (美元)	建议数额 (美元)
A 部分：建议一揽子核准的活动			
A1：编制用过或不需要的受控物质国家库存清单和收集、运输和处置这些物质的计划²			
马来西亚	编制用过或不需要的受控物质国家库存清单和计划	100,000	100,000
	A1 小计	100,000	100,000
	机构支助费用	7,000	7,000
	A1 共计	107,000	107,000

A 部分：建议一揽子核准的活动

A1：编制用过或不需要的受控物质国家库存清单和收集、运输和处置这些物质的计划

项目说明

2. 世界银行提交了表 1 的 A1 部分所示编制用过或不需要的受控物质国家库存清单以及一个国家作为指定执行机构的计划的申请。

秘书处的评论

3. 在审查上述申请时，秘书处考虑了第 91/66 号决定中所载编制用过或不需要的受控物质国家库存清单和计划的标准，为项目编制所提议的各项活动，以及这些如何与该国的国家淘汰/逐步减少计划（即：含氢氯氟烃淘汰管理计划或基加利氢氟碳化物执行计划）相衔接。秘书处注意到，供资申请符合第 91/66 号决定。

4. 世界银行使用项目提案的相关提交表格，说明了编制马来西亚用过或不需要的受控物质国家库存清单和计划所需开展的活动。

5. 马来西亚供资申请的活动包括：审查现有数据；编制国家清单、行动计划和最终报告；利益攸关方的协商和验证；审查和分析现有条例和政策，包括废物管理政策；对今后可能需要回收、再生、再循环或处置的用过或不需要的消耗臭氧层物质和氢氟碳化物的数量作一次预测，并对各回收和再循环中心及其他参与废物管理的中心作一次审查；评估现有处置选项（再循环、再生、销毁）的可行性和费用；评价再生中心和销毁工厂的经济可行性；开发商业或融资模式以确保收集或处置行动的长期可持续性；以及性别平等主流化活动。

² 在此是指编制用过或不需要的受控物质国家库存清单和计划。

秘书处建议

6. 秘书处建议一揽子核准编制马来西亚的用过或不需要的受控物质国家库存清单和收集、运输和处置这些物质的计划，供资数额如表 1 的 A1 部分所示。

2025 BUSINESS PLAN
WORK PROGRAM AMENDMENT



WORLD BANK GROUP

WORLD BANK IMPLEMENTED
MONTREAL PROTOCOL OPERATIONS

Presented to the
97th Meeting of the Executive Committee
of the Multilateral Fund

6 October 2025

WORK PROGRAM FOR WORLD-BANK IMPLEMENTED MONTREAL PROTOCOL OPERATIONS

1. This proposed work program for Bank-Implemented Montreal Protocol Operations is prepared on the basis of the 2025-2027 World Bank Business Plan which was approved by the Executive Committee at its 95th meeting.
2. The 2025-2027 World Bank Business Plan consists of investment and non-investment activities to assist Article 5 partner countries to meet and sustain their HCFC reduction targets: the 2020 35% reduction in both production and consumption sectors. The Business Plan includes, in addition to deliverables associated with previously approved and new investment activities, requests to extend support for implementation of existing institutional strengthening projects in 2 countries.
3. The 2025-2027 Business Plan also includes investment and non-investment activities for the World Bank client countries that either have ratified or in the process of ratifying the Kigali Amendment to phasedown HFCs. These activities will ensure their compliance with the 2024 freeze target and the 2029 10% reduction in the consumption sectors.

2025 Work Program – ExCom 97 Amendment

4. The proposed 2025 Work Program being submitted for consideration at the 97th Meeting of the Executive Committee, includes one (1) funding requests:
 - (i) One (1) for preparing life cycle management plan for controlled substances for Malaysia
5. Brief description of the work program amendment activity request is highlighted below.

**Table 1: Funding Request Submitted for Consideration
by the 97th Meeting of the Executive Committee**

Country	Request (US\$)	Support Costs (US\$)	Duration (months)	Description	Supporting document
Malaysia	100,000	7,000	24	Development of Lifecycle Management Plan for Controlled Substances	Annex 1
Total	100,000	7,000			

Annex 1: Request for the Development of Lifecycle Management Plan for Controlled Substances for Malaysia

**MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL**

FUNDING REQUEST FOR THE PREPARATION OF NATIONAL INVENTORIES OF BANKS OF USED OR UNWANTED CONTROLLED SUBSTANCES AND A PLAN FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF SUCH SUBSTANCES, INCLUDING CONSIDERATION OF RECYCLING, RECLAMATION AND COST-EFFECTIVE DESTRUCTION

Part I: Project information

Project title:	Preparation of a national inventory of banks of controlled substances and development of a national plan for management of these substances	
Country:	Malaysia	
Lead implementing agency:	World Bank	
Cooperating agency:	(select)	N/A
Meeting where request is being submitted	97 th	
Implementation period	2026-2028	
Duration of implementation (i.e., time (in months)) from the approval of PRP to submission of the national inventory and action plan (please specify): 24 months		
Funding requested:		
Agency	Funding requested (US \$)*	
World Bank	107,000 including support costs	

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating roles of respective agencies (where more than one IA is involved), and that the national inventory/action plan will be completed within 24 months from the date of project approval	☒	☐
Project included in the bilateral/IA business plan?	☒	☐
If NO , please provide explanation:		
The endorsement letter is under clearance by the Government of Malaysia and will be submitted by October 13, 2025.		

A. Information required for PRP funding request for the national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances, including consideration of recycling, reclamation and cost-effective destruction

1. Brief overview of the the concept, methodology and approach to be taken for the preparation of the national inventory and / or action plan and how it is linked to other activities in the country (i.e., national plans like the KIP), in particular those activities in the refrigeration servicing sector such as recovery, recycling, and reclamation programmes
The proposed national inventory and plan will complement Malaysia's approved Stage I Kigali Implementation Plan (KIP) whereby recovery and recycling efforts are to be strengthened to reduce demand for and emissions of HFCs, for example by introducing electronic tracking of refrigerants. The ultimate goal of the activity is to assist

the Government of Malaysia to develop a plan (predicated on a solid understanding of controlled substances already in the country), including a financially self-sustaining business model, to ensure there is a supply of both HCFCs and HFCs as needed over time and across sectors, even after controls are in place that limit virgin material in the market. In order to craft such a plan, the following information would be needed: i) the amount and type of currently installed controlled substances; ii) the existing flow of and market for refrigerants and fire suppression agents and available and planned infrastructure (including under the KIP and Stage III HCFC Phaseout Management Plan (HPMP III) for tracking, monitoring, recovering and storing these chemicals; iii) the existing regulatory framework and system related to trade in chemicals and to waste management as well as recovery and recycling of MP controlled substances; iv) models and lessons learned from other countries in Southeast Asia that have a life-cycle management approach, or elements of an approach in place; v) technical capacity to analyze content and quality of reclaimed materials and purity standards of reclaimed materials required/expected by the market and how to ensure these are achieved; and vi) demand for recovered, recycled controlled substances within Malaysia and the Region as well as options for destruction of F-gases that comply with MP requirements and any opportunities for financing such disposal.

After understanding the current situation, the proposed activity will analyze the information and data collected, including estimating future streams (amounts and types of substances) for recovery, reuse or destruction. One of the main objectives will be to quantify real and sustained reductions in CO₂eq. emissions that Malaysia can claim in its Nationally Determined Contribution (NDC) and other climate related strategies and plans, for example towards its 2050 net zero goal. Financial analysis, most critically the break-even cost for a viable, self-sustained scheme will be conducted. Designing a scheme, or business model(s), and required regulation, infrastructure and other investments to make it viable will be done in close consultation with the various stakeholders in the country as well as external players that have already experience in the field. In the consultation process, the use of “insiders” to develop the inventory (i.e. industry associations) will be leveraged to further business partnerships and public-private sector cooperation, some of which will have already been underway through the HPMP and KIP. Recommendations will be formulated to assist the country and stakeholders to institute and implement the proposed life-cycle management plan, especially related to refrigerants, building on the country’s current import/export/destruction system, and to scale-up recovery, recycling and reuse of controlled substances across MP sectors and possibly across countries.

The development of the plan and business model will draw from recent experience in Thailand and Viet Nam which both are developing inventories and plans with World Bank support and possibly tap into expertise from the work in these countries.

2. Description of activities that will be implemented during the preparation of the national inventories/action plans of banks for used and/or unwanted controlled substances and an indication of the estimated costs for the activities described broken down per agency

Activity	Description	Agency
Data collection	Data collection will determine the installed stock of refrigeration and air-conditioning (RAC) equipment, including estimates on the amount and types of refrigerants used. A consulting firm that is versed in the sector including mobile / transport RAC, such as an industry association, will be selected (following competitive selection). The focus will be on larger units whereas for smaller appliances and equipment, statistical data and modeling will be used. Part of data collection will entail research of bankable management models in non-A5 and other A5 countries. Fire suppressant agents installed will also be estimated through cooperation with the industry association. The study will also investigate current in-country capacity to analyze quality of recovered and reclaimed materials.	World Bank
Stakeholder consultations	Consultations with importers of controlled substances, major equipment suppliers, associations such as the Malaysian Air-conditioning & Refrigeration Association (MACRA) and Malaysia Automotive Association (MAA), waste management and disposal operators, larger servicing shops and authorized dealers and regulators from ministries of	World Bank

	industry, environment, energy and finance (Customs). Consultations with companies active in the Region that specialize in recovery, reclamation, disposal and tracing refrigerants and to the extent possible companies engaging in carbon market trading, will also be consulted.	
Analysis of data collected	Analysis of collected data and modelling of quantities of equipment and controlled substances that will be decommissioned, available for collection over time by type of substance. The focus will also be given to collection options to minimize transaction costs of a recovery and recycling (R&R) and disposal scheme. The break-even cost of R&R and destruction will be calculated. Assessment of Malaysia's infrastructure and regulatory framework for lifecycle management of controlled substances, including the most recent initiatives through public-private cooperation, and relevant laws will be undertaken.	World Bank
Preparation of inventory report/national plan	A lifecycle management plan for controlled substances will be developed to track and manage refrigerants and possibly, fire suppression agents from first import through recovery and disposal (including destruction). The starting point for the plan, namely the existing inventory of controlled substances will be described as well as the results of the analysis, financing scheme and additional requirements if any, and recommendations for implementation, including needed infrastructure, facilities and equipment, and complementary actions needed or proposed in the KIP and HPMP III.	World Bank
3. Funding for the activities described in 2 above		
Activity	Indicative funding (US \$)	Agency
Data collection consultant	40,000	World Bank
In country stakeholder consultation	15,000	World Bank
Expert time for data analysis	20,000	World Bank
Expert time for designing a viable lifecycle management plan and sustainable business model(s)	20,000	World Bank
Report preparation	5,000	World Bank
TOTAL		100,000
4. How will the Multilateral Fund gender policy be considered during project preparation?		
The Government of Malaysia has a gender policy as does the World Bank which facilitates implementation of the Multilateral Fund gender policy. Relevant stakeholders will be sensitized on the gender policy and efforts will be made to encourage female stakeholders to contribute to the inventory and design of the proposed scheme/action plan for managing refrigerants and fire suppression agents and other related controlled substances. To the extent relevant, gender-disaggregated data will be collected in consultations and workshops.		