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执行蒙特利尔议定书
多边基金执行委员会
第九十二次会议
2023年5月29日至6月2日，蒙特利尔
临时议程第9(c)项¹

2023年世界银行工作方案

¹ UNEP/OzL.Pro/ExCom/92/1

基金秘书处的评论和建议

1. 世界银行向执行委员会提出申请，请求为表 1 所列 2023 年工作方案批准 390,000 美元，以及机构支助费用 27,300 美元。申请材料见本文件附件。

表 1：2023 年世界银行工作方案

国家	活动/项目	申请的款项 (美元)	建议的款项 (美元)
A 节：建议供一揽子核准的活动			
A1：基加利氢氟烃执行计划 (KIP) 项目编制			
印度尼西亚	编制 KIP (第一阶段)	220,000	220,000
越南	为 Aqua Electrical Appliances 公司、Darling Electronics 公司和 Hoa Phat Refrigeration Engineering 公司编制家用制冷行业的 KIP 投资项目	80,000	80,000
	为 Sanaky 公司编制商用制冷行业的 KIP 投资项目	30,000	30,000
	为 Quang Thang Refrigeration 公司编制工业制冷行业的 KIP 投资项目	30,000	30,000
	为 Thaco Auto 公司编制移动空调行业的 KIP 投资项目	30,000	30,000
小计		390,000	390,000
机构支助费用		27,300	27,300
总计		417,300	417,300

A 节：建议一揽子核准的活动

A1：基加利氢氟烃执行计划 (KIP) 项目编制

项目说明

2. 作为指定的执行机构，世界银行已为印度尼西亚提交一份编制 KIP 第一阶段的申请，并已向越南的家用制冷行业、商用制冷行业、工业制冷行业和移动空调 (MAC) 行业提交四份编制 KIP 第一阶段投资项目的申请，如表 1 的 A1 节所示。越南已在第八十八次会议上收到用于编制总体 KIP 第一阶段的资金。²

秘书处的评论

3. 秘书处在审查这些申请时，已考虑到第 87/50 号决定中的 KIP 编制指导原则、为项目编制建议的活动及其与该国获授权的活动和其他氢氟烃相关项目的联系。

4. 秘书处注意到，为编制 KIP 第一阶段，世界银行已向印度尼西亚提供编制 KIP 第一阶段总体战略所需活动的说明。提交的资料包括 2019 至 2021 年氢氟烃和氢氟烃混合物的消费数据。项目编制活动包括审查控制和监测氢氟烃的许可证和配额制度；海关官员和进口商的能力建设；国家层面的氢氟烃消费调查和数据收集；分析氢氟烃和替代品的使用情况；与氢氟烃淘汰有关的政

² 第 88/40 号决定 UNEP/OzL.Pro/ExCom/88/79 文件附录十四

策和立法审查；审查国家层面管理和处置消耗臭氧层物质和氢氟烃的方法；制定氢氟烃淘汰的总体战略；并与利益相关方协商和验证；以及制定宣传和外展计划。

5. 秘书处注意到，KIP 第一阶段的编制工作将涵盖制造业和服务业。秘书处还询问提交投资项目的预计日期，明确项目编制的期限，并注意在制定总体战略时纳入了性别平等考量。世界银行确认，投资项目编制申请将在初步数据收集和确定优先行业后进行准备，并预计将在 2023 年的第二次会议上提交以上请求；KIP 第一阶段项目编制的完成预计需要 12 至 18 个月。

6. 对于编制 KIP 投资项目的四项申请，秘书处注意到，世界银行提供了活动说明。在各个行业，这些活动主要是制定生产设施、设备和生产线的替换计划，包括安全处理易燃和/或有毒材料的环境管理计划；收集辅助材料以确认企业的氢氟烃消费量；与相关政府机构就易燃和/或有毒制冷剂的使用和产品标准进行磋商；以及根据多边基金的性别主流化政策，对每家企业的员工雇用政策进行性别平等方面的分析。

7. 秘书处注意到：

- (a) 家用制冷行业 KIP 投资项目的项目编制将针对三家制造独立家用制冷设备的企业（Aqua Electrical Appliances、Darling Electronics 和 Hoa Phat Refrigeration Engineering），并已为每家企业提供 2019 至 2021 年的氢氟烃消费数据。该投资项目将涉及从氢氟烃 HFC-134a 制冷剂到碳氢化合物的转换。
- (b) 对于商用制冷制造行业，KIP 投资项目的项目编制将针对一家制造独立商用制冷设备的企业（Sanaky），并已为该企业提供 2019 至 2021 年的氢氟烃消费数据。该投资项目将涉及从氢氟烃 HFC-134a 到碳氢化合物的转换。
- (c) 工业制冷方面的项目将针对一家企业（Quang Thang Refrigeration），该企业属于本地安装和装配的子行业，制造工业制冷部件（如蒸发器和冷凝器）并安装工业制冷系统。该投资项目旨在向该企业提供技术支持，以制造替代氢氟烃的氨基热交换器，并将包括一个提高终端用户认识的部分，以鼓励终端用户选择氨基工业制冷系统。
- (d) 移动空调行业的 KIP 投资项目的项目编制将针对一家汽车制造企业（Thaco Auto），并已为该企业提供 2019 至 2021 年的消费数据。项目编制活动包括技术支持以及研究与开发，以便与该企业的供应商和合作伙伴合作，开发基于替代性制冷剂的高效移动空调。这一投资项目将体现为一个示范项目，旨在赋予这一企业的其中一家工厂制造一款配备有 R-1234yf 移动空调系统的汽车的能力。

8. 经过此次审查，秘书处注意到，两国都已批准《基加利修正案》；两国已提供一份认可函，表明采取行动淘汰氢氟烃的意愿；且所申请的资金符合关于编制 KIP 的投资项目/行业计划的第 87/50(f)(v)号决定。秘书处还注意到，越南尚未提交其 2022 年国家方案执行报告。世界银行表示，投资项目将作为整个 KIP 的一部分提交，而不是在此之前提交；在获得执行委员会同意的情况下，这些企业减少的所有消费将从起点中扣除；越南将在 2023 年 5 月 1 日的最后期限前提交其国家方案执行报告。

秘书处的建议

9. 秘书处建议一揽子核准印度尼西亚的基加利氢氟烃执行计划的项目编制，以及越南的家用制冷行业、商用制冷行业、工业制冷行业和移动空调行业的基加利氢氟烃执行计划投资项目的编制，供资水平见表 1 的 A1 节。

2023 BUSINESS PLAN
WORK PROGRAM



WORLD BANK GROUP

WORLD BANK IMPLEMENTED
MONTREAL PROTOCOL OPERATIONS

Presented to the
92nd Meeting of the Executive Committee
of the Multilateral Fund

3 April 2023

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 2023-2025 World Bank Business Plan which was approved by the Executive Committee at its 91st meeting.
2. The 2023-2025 World Bank Business Plan consists of investment and non-investment activities to assist Article 5 partner countries to comply with their HCFC reduction target during 2020-2024: 35% reduction from the baseline 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 2023-2025 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.

2023 Work Program – 92nd ExCom

4. The proposed 2023 Work Program being submitted for consideration at the 92nd Meeting of the Executive Committee, includes two (6) funding requests:
 - (i) one (1) for preparation of Kigali Implementation Plan overarching strategy for Indonesia
 - (ii) four (4) for preparation of HFC investment and demonstration projects for Vietnam
5. Brief description of the work program amendment activity requests are highlighted below.

**Table 1: Funding Requests Submitted for Consideration
by the 92nd Meeting of the Executive Committee**

Country	Request (US\$)	Support Costs (US\$)	Duration (months)	Description	Supporting document
Indonesia	220,000	15,400	12-18	Preparation of Kigali Implementation Plan Stage I	Annex 1
Vietnam	80,000	5,600	6-12	Preparation of individual HFC projects (domestic ref.)	Annex 2-A
Vietnam	30,000	2,100	6-12	Preparation of individual HFC project (commercial ref.)	Annex 2-B
Vietnam	30,000	2,100	6-12	Preparation of individual HFC project (industrial ref.)	Annex 2-C
Vietnam	30,000	2,100	6-12	Preparation of individual HFC project (MAC)	Annex 2-D
Total	390,000	27,300			

Annex 1: Request for project preparation of Kigali Implementation Plan for Indonesia

**MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
KIP PROJECT PREPARATION REQUEST FORM
KIGALI HFC IMPLEMENTATION PLAN (OVERARCHING)**

Part I: Project Information

Project title:	Kigali HFC Implementation Plan Preparation	
Country:	Indonesia	
Lead implementing agency:	World Bank	
Implementation period:	July 2023 – December 2024	
Funding requested:		
Agency	Sector	Funding requested (US \$)
World Bank	Overarching	220,000

Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government specifying roles of respective agencies (where more than one IA is involved)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Ratification of the Kigali Amendment by Indonesia	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A. Information required to support PRP funding (Overarching strategy)

1. Montreal Protocol compliance target to be met in stage I of the KIP			
Phase-down commitment	Freeze 10% reduction	Year of commitment	2024 2029
<input type="checkbox"/> Servicing only	<input type="checkbox"/> Manufacturing only	<input checked="" type="checkbox"/> Servicing and manufacturing	
2. Brief background on previous activities related to the Kigali amendment and the HFC phasedown			
<p>Indonesia completed an 2010-2012 HFC inventory with the financial support of the Climate and Clean Air Coalition in 2014 through cooperation with UNDP. The HFC enabling activities with support of the Multilateral Fund (MLF) was completed in November 2021 with the overall survey work was undertaken between 2019-2021 by ASHRAE Indonesia Chapter, with technical guidance and oversight provided by the National Ozone Unit (NOU) of the Ministry of Environment and Forestry and the World Bank.</p>			
3. Current progress in implementation of Enabling Activities for HFC phase-down (Completed) Budget: US\$ 250,000 (Fully disbursed)			
Activity	Description		Implementing agency

Activities to facilitate early ratification of the Kigali Amendment	The Government of Indonesia ratified the Kigali Amendment on 14 December 2022.	World Bank
Institutional arrangements	Review existing institutional arrangements for control of ODSs and HFCs, and conduct gap analysis for HFC control. Review and propose updating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain	World Bank
Data collection and analysis of HFCs consumption	Identify and collect HFC consumption and equipment containing HFCs in key sectors. Project consumption trends in key sectors under a BAU scenario.	World Bank
Promoting energy efficiency improvement opportunities in the RAC sector	Review and assess policies and regulations related to energy efficiency in the RAC sector in Indonesia and other countries. Assessment of alternative technologies and identification of potential energy saving opportunities.	World Bank

4. Overview of current HFC consumption in metric tonnes by substance (last three years)

Substance	Sector	2019	2020	2021
HFC-23	Fire suppression	0.09	0.06	0.86
HFC-32	RAC manufacturing and servicing	779.05	782.42	1,477.36
HFC-125	Fire suppression	3.69	0	0
HFC-134a	RAC manufacturing and servicing	3,775.46	2,666.54	2,594.82
HFC-143a		0	0	0.23
HFC-152a	Others	3.57	12.12	14.40
HFC-227ea	Fire suppression	5.63	8.54	5.29
HFC-236fa	Fire suppression	2.50	1.54	16.00
HFC-245fa	Foam & Geothermal	56.11	505.01	202.00
R-404A	RAC manufacturing and servicing	721.44	522.88	293.32
R-407C	RAC manufacturing and servicing	356.09	250.95	191.26
R-407F	RAC manufacturing and servicing	0	0	0.07
R-410A	RAC manufacturing and servicing	1,121.77	1,075.97	1,050.30
R-417A	RAC manufacturing and servicing	37.63	19.25	3.66
R-422A	RAC manufacturing and servicing	0	69.50	51.98
R-422D	RAC manufacturing and servicing	0.15	0	0
R-427A	RAC manufacturing and servicing	0	0	0
R-438A	RAC manufacturing and servicing	0.91	3.52	0.92
R-449C	RAC manufacturing and servicing	0	0	0.06
R-507A	RAC manufacturing and servicing	120.24	72.80	26.07
R-508B	RAC manufacturing and servicing	0	0	0.14
R-513A	RAC manufacturing and servicing	0	0	0.95

5. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

HFCs are mainly used in the manufacturing and servicing of refrigeration and air-conditioning equipment. Other uses in Indonesia include fire suppression, aerosol, etc. The overall HFC

consumption trends are aligned with Indonesia's economic growth which averaged 4.86 percent from 2000 until 2022, reaching an all time high of 7.16 percent in the fourth quarter of 2004 and a record low of -5.32 percent in the second quarter of 2020.

HFCs used in the RAC sectors are on an increasing trend given increasing urbanization, expansion of the middle class and regional HCFC phaseout in these sectors, particularly in unitary air-conditioning. Both HFC-32 and R-410A in room AC are experiencing double growth in consumption from 2015 to 2019. The development of the livestock, fisheries, processed food, chemical and pharmaceutical and drug industry has a major influence on the development of the cold chain industry in Indonesia and have affected the increase in cold chain demand. The Government of Indonesia has also issued several policies to support the development of the cold chain industry by the user industry, such as the fisheries sector. Indonesia manufactures vehicles for primarily domestic sales and thus requires HFC-134a for the initial charge of mobile air conditioning and contributed the largest amount of HFC-134a consumed. Consumption of HFCs used in the other sectors are also on an increasing trend.

6. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during HFC enabling activities.

Information needed	Description	Agency
Others, specify.	Update Indonesia HFC survey (inclusion of actual 2022 and 2023 HFC consumption and analyze the impact of COVID-19 pandemic that may depress the demand of HFCs and HFC-based equipment during the baseline years (2020 – 2022), resulting in a lower HFC baseline than the previous estimate. Update HFC consumption projections for the immediate period (2023 – 2029) to assess potential compliance risk once demand returns to normal post COVID-19 pandemic.	World Bank

7. Activities to be undertaken for project preparation and funding

Activity	Indicative funding (US \$)	Agency
1. Import and export control		
1.1 Review of the national licensing and quota system to monitor and control the consumption of HFCs and HFC blends. Development of options in alignment with the preparation of the HFC phasedown strategy.	20,000	World Bank
1.2 Capacity building activities related to import/export licensing system including Customs and importers/exporters. Assistance in the development of options as necessary.	10,000	World Bank
2. Data collection and analysis		
2.1 Data collection by sector/sub-sector/HFC substance (2020-22)	50,000	World Bank
2.2 Stakeholder consultation: conducting interviews, organizing workshops and stakeholders' consultations on ODS alternatives and for the integration of national regulations and procedures for	25,000	World Bank

KA implementation and coordination of technical capacities in the institutions involved in HFC control		
2.3 Data analysis and development of BAU and growth modeling scenarios, sensitivity analysis, review of feasible options along with preparation of a related technology roadmap reflecting current and future HFC alternatives	25,000	World Bank
3. Development of overarching strategy		
3.1 Review and development of implementing policies and approaches as relevant and in the context of Indonesia's forthcoming national plan on the management and disposal of controlled ODS and GHGs, including inter-ministerial/agency and institutional arrangements for HFC phasedown.	10,000	World Bank
3.2 Development of the overarching strategy for the phase-down of HFCs and plan of action for stage I of the KIP to address the freeze and 10 per cent reduction in HFC consumption. HFC phase-down strategy development: Technical and legal experts to prepare all legal and technical documents; and if necessary, recommendations for update of institutional arrangements; consult all key stakeholders and develop detailed strategy.	50,000	World Bank
3.3 Development of and integration of the strategy for the phase-down of HFCs focusing on refrigeration servicing sector into the overarching strategy.	20,000	World Bank
4. Outreach and communication		
4.1 Preparation of a comprehensive communication and outreach plan in consultation with key stakeholders.	5,000	World Bank
4.2 Consultation with relevant stakeholders to identify challenges and conduct need assessment for development of outreach and communication methodology for the servicing sector.	5,000	World Bank
TOTAL	220,000	
8. How will activities related to implementation of HPMP be considered during project preparation for Kigali Implementation Plan?		
It is expected that there will be opportunities for synergies between the HPMP and the KIP, particularly in refrigeration and air-conditioning sectors that use both HCFCs and HFCs. Previous measures from the HPMPs in these sectors such as capacity building for technicians, can be integrated to a certain extent. However, there are other sectors that only use HFCs such as in the mobile air-conditioning and domestic refrigeration that were not addressed in the HPMPs. Moreover, integration of best practices in installed equipment maintenance related to energy performance was also not covered. Thus, the Kigali Implementation Plan will be broader and more complex undertaking than HCFC phase-out.		
9. How will the Multilateral Fund gender policy be considered during project preparation?		
The Government of Indonesia is aware of the Multilateral Fund gender policy contained in ExCom document 84/73, and the related Executive Committee decision 84/92. The project preparation will aim to advocate the importance of gender-responsive actions and provisions in developing the Kigali Implementation Plan. Relevant stakeholders will be sensitized on the gender policy and efforts will be		

made to encourage female stakeholders to contribute to the project preparation. To the extent possible, a gender-disaggregated data will be collected.

Annex 2: Preparation funding requests for investment and demonstration projects for Vietnam

- A. Preparation funding request for investment projects in domestic refrigeration
- B. Preparation funding request for an investment project in commercial refrigeration
- C. Preparation funding request for an investment project in industrial refrigeration
- D. Preparation funding request for an investment project in mobile air-conditioning

A. PRP funding request for investment projects in domestic refrigeration

1. Agency:	World Bank				
2. Sector:	Refrigeration				
3. HFC consumption in item #2 reported under country programme data?	<input type="checkbox"/> Yes, please specify reported amount and year: <input checked="" type="checkbox"/> No				
4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?	<input type="checkbox"/> Yes, please provide support letter <input checked="" type="checkbox"/> No The enterprises' HFC consumption to be phased out will be determined during the preparation of the investment project.				
5. If the project preparation is requested in advance of the KIP, did the Government provide a written commitment that the consumption associated with these investment projects, once approved, will be deducted from the country's starting point, once established?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Investment projects will be submitted as part of the final KIP.				
6. Please explain briefly how the investment project would relate to the overarching strategy for the country, and when the final KIP will be submitted (decision 87/50(e))	Investment projects will contribute to Vietnam curbing the growth of HFCs and meet 10% reduction target in 2029. The KIP Overarching Plan and Stage I will be submitted to ExCom meeting in 2023.				
7. Information on sector consumption (specify previous year HFC consumption)					
Substance			Consumption (metric tonnes)		
HFC-134a			1,729.4 (2021)		
8. Information on enterprise(s) for which funding is being sought					
Enterprise	Year established	HFC consumption (metric tonnes) (last three years)			HFC phase-out to be achieved (metric tonnes and CO ₂ -eq. tonnes)
		2019	2020	2021	
AQUA Electrical Appliances Vietnam	1998	46.5	25.0	15.0	TBD
Darling Electronics – Refrigeration	1999	2.8	2.0	1.5	TBD
Hoa Phat Refrigeration Engineering	2001	7.2	8.0	8.0	TBD
9. Activities to be undertaken for preparation of the investment project and funding requested					
Activity		Indicative funding (US \$)		Bilateral/implementing agency	
Prepare investment project for 3 enterprises manufacturing stand-alone domestic refrigeration equipment to convert from HFC-134a refrigerant to hydrocarbons		80,000		World Bank	
TOTAL		80,000			

B. PRP funding request for investment projects in commercial refrigeration

1. Agency:	World Bank				
2. Sector:	Refrigeration				
3. HFC consumption in item #2 reported under country programme data?	<input type="checkbox"/> Yes, please specify reported amount and year: <input checked="" type="checkbox"/> No				
4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?	<input type="checkbox"/> Yes, please provide support letter <input checked="" type="checkbox"/> No The enterprises' HFC consumption to be phased out will be determined during the preparation of the investment project.				
5. If the project preparation is requested in advance of the KIP, did the Government provide a written commitment that the consumption associated with these investment projects, once approved, will be deducted from the country's starting point, once established?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Investment projects will be submitted as part of the final KIP.				
6. Please explain briefly how the investment project would relate to the overarching strategy for the country, and when the final KIP will be submitted (decision 87/50(e))	Investment projects will contribute to Vietnam curbing the growth of HFCs and meet 10% reduction target in 2029. The KIP Overarching Plan and Stage I will be submitted to ExCom meeting in 2023.				
7. Information on sector consumption (specify previous year HFC consumption)					
Substance			Consumption (metric tonnes)		
HFC-134a			1,729.4 (2021)		
8. Information on enterprise(s) for which funding is being sought					
Enterprise	Year established	HFC consumption (metric tonnes) (last three years)			HFC phase-out to be achieved (metric tonnes and CO ₂ -eq. tonnes)
		2019	2020	2021	
SANAKY	1995	5.3	7.0	7.5	TBD
9. Activities to be undertaken for preparation of the investment project and funding requested					
Activity		Indicative funding (US \$)		Bilateral/implementing agency	
Prepare investment project for one enterprise manufacturing stand-alone commercial refrigeration equipment to convert from HFC-134a refrigerant to hydrocarbons.		30,000		World Bank	
TOTAL		30,000			

C. PRP funding request for an investment project in industrial refrigeration

1. Agency:	World Bank				
2. Sector:	Refrigeration				
3. HFC consumption in item #2 reported under country programme data?	<input type="checkbox"/> Yes, please specify reported amount and year: <input checked="" type="checkbox"/> No				
4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?	<input type="checkbox"/> Yes, please provide support letter <input checked="" type="checkbox"/> No The enterprises' HFC consumption to be phased out will be determined during the preparation of the investment project.				
5. If the project preparation is requested in advance of the KIP, did the Government provide a written commitment that the consumption associated with these investment projects, once approved, will be deducted from the country's starting point, once established?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Investment projects will be submitted as part of the final KIP.				
6. Please explain briefly how the investment project would relate to the overarching strategy for the country, and when the final KIP will be submitted (decision 87/50(e))	Investment projects will contribute to Vietnam curbing the growth of HFCs and meet 10% reduction target in 2029. The KIP Overarching Plan and Stage I will be submitted to ExCom meeting in 2023.				
7. Information on sector consumption (specify previous year HFC consumption)					
Substance			Consumption (metric tonnes)		
HFC-134a			1,729.4 (2021)		
R-404A			495.1 (2021)		
8. Information on enterprise(s) for which funding is being sought					
Enterprise	Year established	HFC consumption ¹ (metric tonnes) (last three years)			HFC phase-out to be achieved (metric tonnes and CO ₂ -eq. tonnes)
		2019	2020	2021	
Quang Thang Refrigeration	2003	59.9	75.3	90.0	TBD
9. Activities to be undertaken for preparation of the investment project and funding requested					
Activity		Indicative funding (US \$)		Bilateral/implementing agency	
Prepare an investment project for the local installation and assembly subsector. Quang Thang manufactures industrial refrigeration components (evaporator & condenser) and also installs industrial refrigeration systems for their customers. The project would comprise investment activities to assist Quang Thang to manufacture heat exchangers for use with ammonia and include end-user component to adopt ammonia-based industrial refrigeration systems instead of choosing HFCs.		30,000		World Bank	
TOTAL		30,000			

¹ Based on installations at customers

D. PRP funding request for an investment project in mobile air-conditioning

1. Agency:	World Bank				
2. Sector:	Mobile Air-conditioning				
3. HFC consumption in item #2 reported under country programme data?	<input checked="" type="checkbox"/> Yes , please specify reported amount and year: [REDACTED] <input type="checkbox"/> No				
4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?	<input type="checkbox"/> Yes , please provide support letter [REDACTED] <input checked="" type="checkbox"/> No The enterprises' HFC consumption to be phased out will be determined during the preparation of the investment project.				
5. If the project preparation is requested in advance of the KIP, did the Government provide a written commitment that the consumption associated with these investment projects, once approved, will be deducted from the country's starting point, once established?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Investment projects will be submitted as part of the final KIP.				
6. Please explain briefly how the investment project would relate to the overarching strategy for the country, and when the final KIP will be submitted (decision 87/50(e))	Investment projects will contribute to Vietnam curbing the growth of HFCs and meet 10% reduction target in 2029. The KIP Overarching Plan and Stage I will be submitted to ExCom meeting in 2023.				
7. Information on sector consumption (specify previous year HFC consumption)					
Substance			Consumption (metric tonnes)		
HFC-134a			1,729.4 (2021)		
8. Information on enterprise(s) for which funding is being sought					
Enterprise	Year established	HFC consumption (metric tonnes) (last three years)			HFC phase-out to be achieved (metric tonnes and CO ₂ -eq. tonnes)
		2020	2021	2022	
THACO AUTO	1997	40.7	48.8	65.2	TBD
9. Activities to be undertaken for preparation of the investment project and funding requested					
Activity		Indicative funding (US \$)		Bilateral/implementing agency	
A demonstration activity is proposed at one local car company to enhance one of its plants to manufacture one vehicle model equipped with R-1234yf mobile air-conditioning system. Preparation of investment activities will be in cooperation with its partner and suppliers of MAC components (compressor, evaporator/condenser, hoses) and include investments, TA and R&D to develop more efficient MACs that use alternative refrigerant. Its pathway to this transition would be documented for the remaining vehicle manufacturers and accompanied by concrete evidence to inform transport policy under Vietnam's national policy, strategy and action plan.		30,000		World Bank	
TOTAL		30,000			