



**Programa de las  
Naciones Unidas  
para el Medio Ambiente**



Distr.  
GENERAL

UNEP/OzL.Pro/ExCom/92/20  
27 de abril de 2023

ESPAÑOL  
ORIGINAL: INGLÉS

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COMITÉ EJECUTIVO DEL FONDO MULTILATERAL  
PARA LA APLICACIÓN DEL  
PROTOCOLO DE MONTREAL  
Nonagésima segunda reunión  
Montreal, 29 de mayo – 2 de junio de 2023  
Cuestión 9 c) del orden del día provisional<sup>1</sup>

**PROGRAMA DE TRABAJO DEL BANCO MUNDIAL PARA 2023**

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<sup>1</sup> UNEP/OzL.Pro/ExCom/91/1

## OBSERVACIONES Y RECOMENDACIÓN DE LA SECRETARÍA DEL FONDO

1. El Banco Mundial solicita la aprobación del Comité Ejecutivo de 390 000 \$EUA, más los gastos de apoyo al organismo de 27 300 \$EUA, para su programa de trabajo para 2023, indicados en el cuadro 1. La presentación se adjunta a este documento.

**Cuadro 1: Programa de trabajo del Banco Mundial para 2023**

País	Actividad/Proyecto	Importe solicitado (\$EUA)	Importe recomendado (\$EUA)
<b>SECCIÓN A: ACTIVIDADES RECOMENDADAS PARA APROBACIÓN GENERAL</b>			
<b>A1: Preparación de proyectos para los planes de aplicación de la Enmienda de Kigali relativos a los HFC (KIP)</b>			
Indonesia	Preparación de un KIP (fase I)	220 000	220 000
Vietnam	Preparación de un proyecto de inversión de los KIP en el sector de refrigeración doméstica para Aqua Electrical Appliances, Darling Electronics, y Hoa Phat Refrigeration Engineering	80 000	80 000
	Preparación de un proyecto de inversión de los KIP en el sector de refrigeración comercial para Sanaky	30 000	30 000
	Preparación de un proyecto de inversión de los KIP en el sector de refrigeración industrial para Quang Thang Refrigeration	30 000	30 000
	Preparación de un proyecto de inversión de los KIP en el sector de aire acondicionado móvil para Thaco Auto	30 000	30 000
Subtotal		390 000	390 000
Gastos de apoyo al organismo		27 300	27 300
Total General		417 300	417 300

### SECCIÓN A: ACTIVIDADES RECOMENDADAS PARA APROBACIÓN GENERAL

#### A1: Preparación de proyectos para los planes de aplicación de la Enmienda de Kigali relativos a los HFC (KIP)

##### Descripción del proyecto

2. El Banco Mundial presentó una solicitud para la preparación de la fase I de los KIP para Indonesia en su calidad de organismo de ejecución designado y cuatro solicitudes para la preparación de proyectos de inversión de la fase I de los KIP en Vietnam en el sector de refrigeración doméstica, el sector de refrigeración comercial, el sector de refrigeración industrial y el sector del aire acondicionado móvil, como se muestra en la sección A1 del cuadro 1. Vietnam recibió financiación para la preparación de la fase I de los KIP generales en la 88ª reunión.<sup>2</sup>

##### Observaciones de la Secretaría

3. Al examinar estas solicitudes, la Secretaría tuvo en cuenta las directrices para la preparación de los KIP contenidas en la decisión 87/50; las actividades propuestas para la preparación del proyecto y su conexión con las actividades de apoyo y otros proyectos relacionados con los HFC en el país.

4. La Secretaría señaló que, para la preparación de la etapa I de los KIP, el Banco Mundial proporcionó descripciones de las actividades necesarias para la preparación de la estrategia general de la etapa I de los KIP para Indonesia. La presentación incluía datos sobre el consumo de HFC y mezclas de HFC para 2019 a 2021. Las actividades de preparación del proyecto incluían la revisión del sistema de concesión de

<sup>2</sup> Decisión 88/40 Anexo XIV del documento UNEP/OzL.Pro/ExCom/88/79

licencias y cuotas para el control y la supervisión de los HFC; el desarrollo de capacidades para los funcionarios de aduanas y los importadores; una encuesta nacional y la recopilación de datos sobre el consumo de HFC; el análisis del uso de HFC y alternativas; revisiones políticas y legislativas relacionadas con la eliminación de los HFC; una revisión del enfoque nacional para la gestión y eliminación de SAO y HFC; el desarrollo de una estrategia general de eliminación de los HFC; y consultas y validación de las partes interesadas; y el desarrollo de un plan de comunicación y divulgación.

5. La Secretaría señaló que la preparación de la fase I de los KIP abarcará tanto el sector manufacturero como el de servicio y mantenimiento y preguntó cuándo se espera que se presenten los proyectos de inversión; aclaró la duración de la preparación del proyecto y señaló la incorporación de la perspectiva de género en el desarrollo de la estrategia general. El Banco Mundial confirmó que las solicitudes de preparación de proyectos de inversión se prepararán tras la recopilación de datos preliminares y la identificación de los sectores prioritarios, y que esperan presentarlas en la segunda reunión en 2023; y que se espera que la preparación de proyectos de la fase I de los KIP se realice en un plazo de 12 a 18 meses.

6. En cuanto a las cuatro solicitudes para la preparación de los proyectos de inversión de los KIP, la Secretaría señaló que el Banco Mundial proporcionó descripciones de las actividades y que en cada sector éstas incluían, entre otras cosas, el desarrollo de los planes de conversión para las instalaciones de fabricación, el equipo y la línea o las líneas de producción, incluidos los planes de gestión medioambiental para manejar de forma segura los materiales inflamables y tóxicos; la recopilación de documentación justificativa para confirmar el consumo de HFC por parte de las empresas; la consulta con los organismos gubernamentales pertinentes sobre el uso de refrigerantes inflamables y tóxicos y las normas de los productos; y un análisis de género de las políticas de contratación en cada empresa a la luz de la política de integración de la perspectiva de género del Fondo Multilateral.

7. La Secretaría observó que:

- a) La preparación del proyecto de inversión de los KIP en el sector de refrigeración doméstica incluiría tres empresas (Aqua Electrical Appliances, Darling Electronics y Hoa Phat Refrigeration Engineering) que fabrican equipos autónomos de refrigeración doméstica y que se proporcionaron datos de consumo de HFC para 2019 a 2021 para cada empresa. El proyecto de inversión implicaría la conversión del refrigerante HFC 134a a hidrocarburos.
- b) Para el sector de fabricación de refrigeración comercial, la preparación de un proyecto de inversión de los KIP sería para una empresa (Sanaky) que fabrica equipos autónomos de refrigeración comercial para la que se proporcionaron datos de consumo de HFC para 2019 a 2021. El proyecto de inversión implicaría la conversión del refrigerante HFC 134a a hidrocarburos.
- c) El proyecto de refrigeración industrial incluiría una empresa (Quang Thang Refrigeration) que forma parte del subsector local de instalación y montaje que fabrica componentes de refrigeración industrial (como evaporadores y condensadores) e instala sistemas de refrigeración industrial. El proyecto de inversión tendría como objetivo proporcionar asistencia técnica a la empresa para fabricar intercambiadores de calor a base de amoníaco para sustituir a los HFC e incluiría un componente de sensibilización para animar a los usuarios finales a elegir sistemas de refrigeración industrial a base de amoníaco.
- d) La preparación de un proyecto de inversión de los KIP en el sector de aire acondicionado móvil se dirigiría a una empresa de fabricación de automóviles (Thaco Auto), para la que se habían facilitado datos de consumo para 2019-2021. Las actividades de preparación del proyecto incluyen apoyo técnico e investigación y desarrollo para desarrollar aire acondicionado móvil más eficiente basado en un refrigerante alternativo en cooperación con los proveedores y socios de la empresa. El proyecto de inversión se destinaría a un

proyecto de demostración que mejoraría una de sus plantas para fabricar un modelo de vehículo equipado con el sistema de aire acondicionado móvil R-1234yf.

8. Tras esta revisión, la Secretaría ha observado que ambos países han ratificado la Enmienda de Kigali;<sup>3</sup> que los países habían presentado una carta de apoyo en la que manifestaban su intención de tomar medidas para la eliminación de los HFC; y que la financiación solicitada se ajustaba a la decisión 87/50 f) v) sobre la preparación de proyectos de inversión/planes sectoriales de los KIP. La Secretaría también señaló que Vietnam aún no había presentado su informe de ejecución del programa de país para 2022. El Banco Mundial indicó que los proyectos de inversión se presentarían como parte de los KIP generales y no antes, y que todo el consumo resultante reducido de estas empresas se deduciría del punto de partida, cuando así lo acordara el Comité Ejecutivo; y que Vietnam presentaría su informe sobre el programa de país antes de la fecha límite del 1 de mayo de 2023.

### **Recomendación de la Secretaría**

9. La Secretaría recomienda la aprobación general de la preparación de proyectos para el plan de aplicación de la Enmienda de Kigali relativo a los HFC (KIP) para Indonesia y para la preparación de los proyectos de inversión de los KIP en el sector de refrigeración doméstica, el sector de refrigeración comercial, el sector de refrigeración industrial y el sector del aire acondicionado móvil para Vietnam con el nivel de financiación que figura en la sección A1 del cuadro 1.

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<sup>3</sup> Fecha de ratificación (o aceptación) de la Enmienda de Kigali: Indonesia (14 de diciembre de 2022) y Vietnam (27 de septiembre de 2019).

2023 BUSINESS PLAN  
WORK PROGRAM



**WORLD BANK GROUP**

WORLD BANK IMPLEMENTED  
MONTREAL PROTOCOL OPERATIONS

Presented to the  
92<sup>nd</sup> 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 91<sup>st</sup> 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 – 92<sup>nd</sup> ExCom

4. The proposed 2023 Work Program being submitted for consideration at the 92<sup>nd</sup> 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 92<sup>nd</sup> 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
<b>Total</b>	<b>390,000</b>	<b>27,300</b>			

**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**

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

**Part II: Prerequisites for submission**

<b>Item</b>	<b>Yes</b>	<b>No</b>
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)**

<b>1. Montreal Protocol compliance target to be met in stage I of the KIP</b>			
<b>Phase-down commitment</b>	<b>Freeze 10% reduction</b>	<b>Year of commitment</b>	<b>2024 2029</b>
<input type="checkbox"/> <b>Servicing only</b>	<input type="checkbox"/> <b>Manufacturing only</b>	<input checked="" type="checkbox"/> <b>Servicing and manufacturing</b>	
<b>2. Brief background on previous activities related to the Kigali amendment and the HFC phasedown</b>			
<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>			
<b>3. Current progress in implementation of Enabling Activities for HFC phase-down (Completed) Budget: US\$ 250,000 (Fully disbursed)</b>			
<b>Activity</b>	<b>Description</b>		<b>Implementing agency</b>

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.**

<b>Information needed</b>	<b>Description</b>	<b>Agency</b>
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**

<b>Activity</b>	<b>Indicative funding (US \$)</b>	<b>Agency</b>
<b>1. Import and export control</b>		
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
<b>2. Data collection and analysis</b>		
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
<b>3. Development of overarching strategy</b>		
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
<b>4. Outreach and communication</b>		
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
<b>TOTAL</b>	<b>220,000</b>	
<b>8. How will activities related to implementation of HPMP be considered during project preparation for Kigali Implementation Plan?</b>		
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.		
<b>9. How will the Multilateral Fund gender policy be considered during project preparation?</b>		
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**

<b>1. Agency:</b>	World Bank				
<b>2. Sector:</b>	Refrigeration				
<b>3. HFC consumption in item #2 reported under country programme data?</b>	<input type="checkbox"/> Yes, please specify reported amount and year: <input checked="" type="checkbox"/> No				
<b>4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?</b>	<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.				
<b>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?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Investment projects will be submitted as part of the final KIP.				
<b>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))</b>	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.				
<b>7. Information on sector consumption (specify previous year HFC consumption)</b>					
<b>Substance</b>			<b>Consumption (metric tonnes)</b>		
HFC-134a			1,729.4 (2021)		
<b>8. Information on enterprise(s) for which funding is being sought</b>					
Enterprise	Year established	HFC consumption (metric tonnes) (last three years)			HFC phase-out to be achieved (metric tonnes and CO <sub>2</sub> -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
<b>9. Activities to be undertaken for preparation of the investment project and funding requested</b>					
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	
<b>TOTAL</b>		80,000			

**B. PRP funding request for investment projects in commercial refrigeration**

<b>1. Agency:</b>	World Bank				
<b>2. Sector:</b>	Refrigeration				
<b>3. HFC consumption in item #2 reported under country programme data?</b>	<input type="checkbox"/> Yes, please specify reported amount and year: <input checked="" type="checkbox"/> No				
<b>4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?</b>	<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.				
<b>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?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Investment projects will be submitted as part of the final KIP.				
<b>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))</b>	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.				
<b>7. Information on sector consumption (specify previous year HFC consumption)</b>					
<b>Substance</b>			<b>Consumption (metric tonnes)</b>		
HFC-134a			1,729.4 (2021)		
<b>8. Information on enterprise(s) for which funding is being sought</b>					
Enterprise	Year established	HFC consumption (metric tonnes) (last three years)			HFC phase-out to be achieved (metric tonnes and CO <sub>2</sub> -eq. tonnes)
		2019	2020	2021	
SANAKY	1995	5.3	7.0	7.5	TBD
<b>9. Activities to be undertaken for preparation of the investment project and funding requested</b>					
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	
<b>TOTAL</b>		30,000			

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

<b>1. Agency:</b>	World Bank				
<b>2. Sector:</b>	Refrigeration				
<b>3. HFC consumption in item #2 reported under country programme data?</b>	<input type="checkbox"/> Yes, please specify reported amount and year: <input checked="" type="checkbox"/> No				
<b>4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?</b>	<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.				
<b>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?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Investment projects will be submitted as part of the final KIP.				
<b>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))</b>	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.				
<b>7. Information on sector consumption (specify previous year HFC consumption)</b>					
<b>Substance</b>			<b>Consumption (metric tonnes)</b>		
HFC-134a			1,729.4 (2021)		
R-404A			495.1 (2021)		
<b>8. Information on enterprise(s) for which funding is being sought</b>					
Enterprise	Year established	HFC consumption <sup>1</sup> (metric tonnes) (last three years)			HFC phase-out to be achieved (metric tonnes and CO <sub>2</sub> -eq. tonnes)
		2019	2020	2021	
Quang Thang Refrigeration	2003	59.9	75.3	90.0	TBD
<b>9. Activities to be undertaken for preparation of the investment project and funding requested</b>					
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	
<b>TOTAL</b>		30,000			

<sup>1</sup> Based on installations at customers

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

<b>1. Agency:</b>	World Bank				
<b>2. Sector:</b>	Mobile Air-conditioning				
<b>3. HFC consumption in item #2 reported under country programme data?</b>	<input checked="" type="checkbox"/> <b>Yes</b> , please specify reported amount and year: <span style="background-color: #cccccc; display: inline-block; width: 100px; height: 1em;"></span> <input type="checkbox"/> <b>No</b>				
<b>4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?</b>	<input type="checkbox"/> <b>Yes</b> , please provide support letter <span style="background-color: #cccccc; display: inline-block; width: 100px; height: 1em;"></span> <input checked="" type="checkbox"/> <b>No</b> The enterprises' HFC consumption to be phased out will be determined during the preparation of the investment project.				
<b>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?</b>	<input type="checkbox"/> <b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> Investment projects will be submitted as part of the final KIP.				
<b>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))</b>	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.				
<b>7. Information on sector consumption (specify previous year HFC consumption)</b>					
<b>Substance</b>			<b>Consumption (metric tonnes)</b>		
HFC-134a			1,729.4 (2021)		
<b>8. Information on enterprise(s) for which funding is being sought</b>					
Enterprise	Year established	HFC consumption (metric tonnes) (last three years)			HFC phase-out to be achieved (metric tonnes and CO <sub>2</sub> -eq. tonnes)
		2020	2021	2022	
THACO AUTO	1997	40.7	48.8	65.2	TBD
<b>9. Activities to be undertaken for preparation of the investment project and funding requested</b>					
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	
<b>TOTAL</b>		30,000			