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COMITÉ EXÉCUTIF  
DU FONDS MULTILATÉRAL AUX FINS  
D'APPLICATION DU PROTOCOLE DE MONTRÉAL  
Quatre-vingt-onzième réunion  
Montréal, 5-9 décembre 2022  
Point 9(c) de l'ordre du jour provisoire<sup>1</sup>

**AMENDEMENTS AU PROGRAMME DE TRAVAIL DE LA BANQUE MONDIALE  
DE L'ANNÉE 2022**

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

## **OBSERVATIONS ET RECOMMANDATION DU SECRÉTARIAT DU FONDS**

1. La Banque mondiale demande au Comité exécutif d'approuver le montant de 350 000 \$ US, plus les coûts d'appui d'agence de 24 500 \$ US, pour les amendements à son programme de travail pour 2022 qui figurent au tableau 1. La communication est jointe au présent document.

**Tableau 1 : Amendements au programme de travail de la Banque mondiale pour l'année 2022**

Pays	Activité/Projet	Montant demandé (\$ US)	Montant recommandé (\$ US)
<b>SECTION A : ACTIVITÉS RECOMMANDÉES POUR APPROBATION GLOBALE</b>			
<b>A1 : Activités de préparation de projet pour les plans de gestion de l'élimination des HCFC (PGEH)</b>			
Viet Nam	Préparation pour un PGEH (phase III)	90 000	90 000
	Total partiel pour A1	90 000	90 000
	Coûts d'appui d'agence	6 300	6 300
	Total pour A1	96 300	96 300
<b>A2 : Préparation des projets pour les plans de mise en œuvre de l'Amendement de Kigali pour la réduction des HFC</b>			
Malaisie	Préparation d'un projet d'investissement pour le plan de mise en œuvre de l'Amendement de Kigali dans le secteur de la lutte contre l'incendie	150 000	150 000
	Préparation d'un projet d'investissement pour le plan de mise en œuvre de l'Amendement de Kigali dans le secteur de la climatisation d'automobile	30 000	30 000
	Préparation d'un projet d'investissement pour le plan de mise en œuvre de l'Amendement de Kigali dans le secteur de la fabrication d'équipements de réfrigération	80 000	80 000
	Total partiel pour A2	260 000	260 000
	Coûts d'appui d'agence	18 200	18 200
	Total pour A2	278 200	278 200
	Total pour A1, A2	350 000	350 000
	Coûts d'appui d'agence pour A1, A2	24 500	24 500
	Total global	374 500	374 500

### **SECTION A : ACTIVITÉS RECOMMANDÉES POUR APPROBATION GLOBALE**

#### **A1 : Préparation de projet pour un plan de gestion de l'élimination des HCFC**

##### **Description du projet**

2. La Banque mondiale a présenté une demande pour la préparation de la phase III du PGEH pour le Viet Nam, à titre d'agence d'exécution, comme indiqué à la section A1 du tableau 1. La Banque mondiale a fourni des descriptions des activités en appui de la demande de préparation de projet pour la phase III du PGEH, qui comprenaient : la justification du financement demandé pour la préparation de projet ; un rapport périodique sur la mise en œuvre de la phase II du PGEH ; la liste des activités à entreprendre pendant la préparation de projet, et les budgets correspondants.

##### **Observations du Secrétariat**

3. Lors de l'examen de cette demande, le Secrétariat a tenu compte des lignes directrices sur le financement de la préparation des PGEH pour les pays visés à l'Article 5, contenues dans la décision 71/42 ;<sup>2</sup> de l'avancement de la phase II du PGEH, dont l'état de la mise en œuvre des tranches au

<sup>2</sup> Lignes directrices sur le financement de la préparation de la phase II des plans de gestion de l'élimination des HCFC pour les pays visés à l'Article 5

moment de la préparation du présent document ; et de la décision 84/46(e).<sup>3</sup> Le Secrétariat a constaté que la demande de financement est conforme à la décision 71/42.

4. Le Secrétariat a observé que la phase II du PGEH avait été révisée à la 90<sup>e</sup> réunion, avec un report de la date d'achèvement du projet au 31 décembre 2023 ; que la dernière tranche de la phase II dont l'accord a été révisé a été soumise à la présente réunion conformément à la décision 90/22 ;<sup>4</sup> et a noté que la demande est conforme à la décision 82/45 qui demande que la phase III du PGEH soit soumise deux ans avant la date de fin de la phase II du PGEH.

5. La Banque mondiale a confirmé que la demande relative à la préparation de projet pour la phase III du PGEH pour le Viet Nam éliminera 100 pour cent de la consommation de HCFC d'ici le 1<sup>er</sup> janvier 2030.

### **Recommandations du Secrétariat**

6. Le Secrétariat recommande l'approbation globale de la préparation des projets pour la phase III du plan de gestion de l'élimination des HCFC pour le Viet Nam, avec le niveau de financement indiqué dans la section A1 du tableau 1.

### **A2 : Préparation des projets pour les plans de mise en œuvre de l'Amendement de Kigali pour la réduction des HFC**

#### **Description des projets**

7. La Banque mondiale a soumis trois demandes relatives à la préparation de projets d'investissement pour les plans de mise en œuvre de l'Amendement de Kigali, dans le secteur de la lutte contre l'incendie, de la climatisation d'automobile et de la fabrication d'équipements de réfrigération, pour la Malaisie en tant qu'agence d'exécution, comme indiqué dans la section A2 du tableau 1. La Malaisie a reçu un financement pour la préparation du plan de mise en œuvre de l'Amendement de Kigali à la 87<sup>e</sup> réunion.<sup>5</sup>

#### **Observations du Secrétariat**

8. Lors de l'examen de ces demandes, le Secrétariat a tenu compte des lignes directrices sur la préparation des plans de mise en œuvre de l'Amendement de Kigali telles que présentées dans la décision 87/50 ; et des activités proposées pour la préparation des projets et leur association avec les activités habilitantes et d'autres projets liés aux HFC dans leurs pays. La Banque mondiale, en tant qu'agence désignée, a fourni des descriptions des activités d'appui des demandes pour la préparation des projets d'investissement du plan de mise en œuvre de l'Amendement de Kigali en utilisant le format des demandes pour la préparation de projets pour les plans de mise en œuvre de l'Amendement de Kigali.

9. Le Secrétariat a observé que :

- (a) les activités de préparation du projet d'investissement pour le plan de mise en œuvre de l'Amendement de Kigali dans le secteur de la lutte contre l'incendie inclurait des consultations avec des experts de la protection contre l'incendie et des parties prenantes nationales pour examiner la disponibilité, l'accessibilité et le coût de solutions de remplacement appropriées ; une évaluation afin de déterminer dans quelle mesure le plan sectoriel peut s'appuyer sur le programme préalable de recyclage du halon soutenu par le Fonds multilatéral ; et le développement d'un plan sectoriel qui devrait consister en une combinaison de mesures d'investissement, d'assistance technique et de politique pour

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<sup>3</sup> L'inclusion de la phase III des PGEH dans le plan d'activités n'est autorisée que pour les pays dont la phase II du PGEH a été approuvée avec des objectifs de réduction inférieurs aux objectifs de conformité de 2025.

<sup>4</sup> UNEP/OzL.Pro/ExCom/91/57

<sup>5</sup> Décision 87/34

soutenir les entreprises éligibles dans l'élimination de l'approvisionnement et de l'installation de nouveaux systèmes utilisant des HFC et l'élimination progressive de la demande d'entretien. Le secteur comprend 38 entreprises qui importent des HFC ou s'approvisionnent en HFC sur le marché intérieur pour la fabrication et/ou l'installation de systèmes d'extinction neufs ou l'entretien de tels systèmes existants. La Malaisie a communiqué une consommation de 299,13 tm de HFC-227ea pour le secteur de la lutte contre l'incendie pour 2021, et cette consommation pourrait augmenter si aucun plan n'est préparé pour le secteur ; de beaucoup plus petites quantités de HFC-23 sont également utilisées dans ce secteur ;

- (b) la préparation d'un projet d'investissement pour le plan de mise en œuvre de l'Amendement de Kigali dans le secteur de la climatisation d'automobile concernerait une entreprise de fabrication de voitures, Proton, dont les données de consommation pour 2019 à 2021 ont été fournies. Les activités de préparation de projet comprendraient une assistance technique en coopération avec ses deux fournisseurs de composants afin d'évaluer les technologies qui utilisent des frigorigènes de remplacement ; une expertise internationale ; un examen de la politique de transport de la Malaisie en matière de climatisation d'automobile et de rendement du carburant ; la consultation d'agences gouvernementales, d'organismes de régulation, d'associations et de fournisseurs appropriés ; et la promotion des résultats du projet auprès des fabricants de véhicules restants ; et
- (c) pour la préparation d'un projet d'investissement pour le plan de mise en œuvre de l'Amendement de Kigali dans le secteur de la fabrication d'équipements de réfrigération, les activités permettraient la préparation de projets pour trois à sept entreprises fabriquant des équipements de réfrigération autonomes, ce qui impliquerait des études de données, des consultations et la préparation des propositions de projet finales. L'objectif serait de convertir ces entreprises du frigorigène HFC-134a aux hydrocarbures.

10. À la suite de cet examen, le Secrétariat a noté que la Malaisie a ratifié l'Amendement de Kigali<sup>6</sup> ; que le pays a fourni une lettre de confirmation indiquant son intention de prendre des mesures en matière de réduction des HFC ; et que le financement demandé est conforme à la décision 87/50(f)(v) sur la préparation des projets d'investissement/plans sectoriels des plans de mise en œuvre de l'Amendement de Kigali.

### **Recommandation du Secrétariat**

11. Le Secrétariat recommande une approbation globale de la préparation des projets d'investissement pour les plans de mise en œuvre de l'Amendement de Kigali pour les HFC, dans le secteur de la lutte contre l'incendie, de la climatisation d'automobile et de la fabrication d'équipements de réfrigération en Malaisie au niveau de financement indiqué dans la section A2 du tableau 1.

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<sup>6</sup> Date de ratification (ou d'acceptation) de l'Amendement de Kigali : Malaisie (21 octobre 2020)

# 2022 BUSINESS PLAN WORK PROGRAM



**WORLD BANK GROUP**

WORLD BANK IMPLEMENTED  
MONTREAL PROTOCOL OPERATIONS

Presented to the  
91<sup>st</sup> Meeting of the Executive Committee  
of the Multilateral Fund

10 October 2022

## **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 2022-2024 World Bank Business Plan which was approved by the Executive Committee at its 88<sup>th</sup> meeting.
2. The 2022-2024 World Bank Business Plan consists of investment and non-investment activities to assist Article 5 partner countries to meet their HCFC reduction target, 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 2022-2024 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.

#### **2022 Work Program – ExCom 91 Amendment**

4. The proposed 2022 Work Program being submitted for consideration at the 91<sup>st</sup> Meeting of the Executive Committee, includes four (4) funding requests:
  - (i) One (1) for preparation of HFC investment project in fire fighting sector for Malaysia
  - (ii) One (1) for preparation of HFC investment project in MAC sector for Malaysia
  - (iii) One (1) for preparation of HFC investment projects in refrigeration sector for Malaysia
  - (iv) One (1) for preparation of Stage III HPMP for Vietnam
5. Brief description of the work program amendment activity requests are highlighted below.

**Table 1: Funding Requests Submitted for Consideration  
by the 91<sup>st</sup> Meeting of the Executive Committee**

<b>Country</b>	<b>Request (US\$)</b>	<b>Support Costs (US\$)</b>	<b>Duration (months)</b>	<b>Description</b>	<b>Supporting document</b>
Malaysia	150,000	10,500	12-18	Preparation of HFC investment projects in fire fighting sector	Annex 1
Malaysia	30,000	2,100	12-18	Preparation of HFC investment project in mobile air-conditioning sector	
Malaysia	80,000	5,600	12-18	Preparation of HFC investment projects in refrigeration sector	
Vietnam	90,000	6,300	12-18	Preparation of Stage III HPMP for Vietnam	Annex 2
<b>Total</b>	<b>350,000</b>	<b>24,500</b>			

## Annex 1: Request for project preparation of HFC investment projects for Malaysia

### B. Information required for PRP funding request for investment projects/sector plans as part of or in advance of the KIP

<b>1. Agency:</b>	World Bank				
<b>2. Sector:</b>	Firefighting Mobile Air-conditioning Refrigeration				
<b>3. HFC consumption in item #2 reported under country programme data?</b>	<input type="checkbox"/> Yes, please specify reported amount and year: <span style="background-color: #cccccc; display: inline-block; width: 150px; height: 1.2em; vertical-align: middle;"></span> <input 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 <span style="background-color: #cccccc; display: inline-block; width: 150px; height: 1.2em; vertical-align: middle;"></span> <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 Malaysia curbing the growth of HFCs and meet 10% reduction target in 2029. The final KIP 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-227ea, HFC-23, HFC-125		325 (FIRE FIGHTING)			
HFC-134a		186.8 (MAC)			
HFC-134a		18 (REF)			
<b>8. Information on enterprise(s) for which funding is being sought</b>					
<b>Enterprise</b>	<b>Year established</b>	<b>HFC consumption (metric tonnes) (last three years)</b>			<b>HFC phase-out to be achieved (metric tonnes and CO<sub>2</sub>-eq. tonnes)</b>
		<b>2019</b>	<b>2020</b>	<b>2021</b>	
Proton (MAC)	1985	52.4	56.8	58.6	TBD
Fire Fighting and Ref TBD during preparation					
<b>9. Activities to be undertaken for preparation of the investment project and funding requested</b>					
<b>Activity</b>		<b>Indicative funding (US \$)</b>	<b>Bilateral/implementing agency</b>		
The preparation activity will seek to determine the extent that the sector plan can build upon the previously MLF supported halon recycling program. The sector plan is expected to consist of a combination of investment, technical assistance and policy measures to support eligible enterprises to eliminate supply and installation of new HFC systems and gradually eliminate service demand.		150,000	World Bank		

<ul style="list-style-type: none"> <li>• International technical expertise for sector advice, and designing the interventions &amp; proposed measures</li> <li>• Data collection at beneficiary enterprises</li> <li>• Consultations with regulators, association and other stakeholders</li> <li>• Travel</li> </ul>		
<p>A demonstration activity is proposed for the existing automobile manufacturing (internal combustion engines) whereby the enterprise would be supported on the technical side on assessment of technologies (in cooperation with its MAC component suppliers (compressor, evaporator/condenser, hoses)), possible investments, TA and R&amp;D to develop more efficient MACs that use alternative refrigerant, while its pathway to this transition would be documented for the remaining vehicle manufacturers and accompanied by concrete evidence to inform transport policy under Malaysia's national policy, strategy and action plan. The company would work with its partner in parallel to plan and develop the MAC system with electric compressors for its future EV production.</p> <ul style="list-style-type: none"> <li>• International technical expertise</li> <li>• Deep-dive in Malaysia transport policy related to MAC &amp; fuel efficiency</li> <li>• Consultations with relevant Government agencies, regulators, association, component suppliers, and site visits</li> <li>• Preparation of investment activity at 1 car company in cooperation with its 2 suppliers of MAC components to convert from HFC-134a to R-1234yf</li> </ul>	30,000	World Bank
Prepare investment project for 3-7 enterprises manufacturing stand-alone refrigeration equipment to convert from HFC-134a refrigerant to hydrocarbons	80,000	World Bank
<b>TOTAL</b>	260,000	

## Annex 2

### **MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HPMP PROJECT PREPARATION REQUEST FORM HCFC PHASE-OUT MANAGEMENT PLAN (OVERARCHING STRATEGY)**

#### **Part I: Project Information**

<b>Project title:</b>	<b>Project Preparation Request: Vietnam Stage III HCFC Phase-out Management Plan (HPMP)</b>		
<b>Country:</b>	<b>Viet Nam</b>		
<b>Lead implementing agency:</b>	<b>World Bank</b>		
<b>Implementation period:</b>	<b>18-24 months</b>		
<b>Funding requested:</b>			
Agency	Sector	<b>Funding requested (US \$)*</b>	
<b>World Bank</b>	<b>Overarching</b>	<b>90,000</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. Written confirmation – balances from previous PRP funding approved for stage I HPMP had been returned / will be returned (decision 71/42(i))	<input type="checkbox"/>	<input type="checkbox"/>
• Specify meeting at which PRP funding balance had been returned/will be returned	Not Applicable	

#### **C. Information required to support PRP funding (Overarching strategy)**

<b>1. Montreal Protocol compliance target to be met in <input type="checkbox"/> stage II / <input checked="" type="checkbox"/> stage III of the HPMP</b>			
<b>Phase-out commitment (%)</b>	<b>100% (with a servicing tail in line with the MP)</b>	<b>Year of commitment</b>	<b>2030</b>
<input checked="" type="checkbox"/> <b>Servicing only</b>	<input type="checkbox"/> <b>Manufacturing only</b>	<input type="checkbox"/> <b>Servicing and manufacturing</b>	
<b>2. Brief background on previous stage of the HPMP</b> (i.e., when the HPMP was approved; a description of the progress in implementation of the previous stage of the HPMP to demonstrate that substantial progress had been made.)			
Following the “HCFC Phase-out Management Plan Stage I” (HPMP I) which was successfully implemented in the period 2012-2017, the second phase of the HCFC phase-out management plan was approved with a total funding of US\$14,644,834 by the Executive Committee (ExCom) of the Multilateral Fund (MLF) through the World Bank with Japan as a Cooperating Agency. The HPMP II project was approved by the Minister of Natural Resources and Environment on 13 June 2018 (Decision			

No.1888/QD-BTNMT). The Grant Agreement between the Government of Viet Nam and the World Bank was signed on 7 March 2019 (Grant No. TF0A6361). The first tranche of US\$439,345 was approved at the 76th Meeting of the ExCom in 2016, but the actual receipt of the tranche by Viet Nam was 19 August 2019 once the project account became effective.

Since the approval of the Stage II HPMP, there have been several funding tranche-releases as well as adjustments to the funding envelope. The first tranche amount was reduced to \$345,987 through Executive Committee (ExCom) Decision 82/37 as a result of a change in technology at one of the planned beneficiary enterprises. The second tranche was approved at the 84th Meeting of the ExCom in 2019 and the third tranche was approved at the 87th Meeting through an intersessional process. At this latter meeting, Viet Nam returned \$613,568 that had been approved for one enterprise found to be no longer eligible. At the 90th ExCom Meeting and subsequent to an in-depth project review and recommended restructuring by DCC and the Bank, an additional US\$5,750,752 was cancelled from the overall Stage II multiyear agreement pertaining to the investments targeted in the foam, air-conditioning (AC) and refrigeration sectors as well as in technical assistance (TA) and project management. The ExCom also approved a reallocation of US\$1,330,000 from the refrigeration sector to servicing but in return for the deduction of 5.84 ODP tons from Viet Nam's remaining eligible HCFC consumption. In addition, the ExCom agreed to extending the Stage II HPMP by one year, to end-2023 and including 2022 in Schedule 2-A of the Stage II multi-year agreement with a maximum allowable consumption level of 143.78 ODP MT.

As of 26 September 2022, the PMU has disbursed US\$2,394,179 for subprojects, project management and technical assistance activities. PMU also secured the agreement or interest of more than 30 enterprises to participate in conversions or technical assistance activities that would be delivered in the last 15 months of the project. A third-party consumption verification confirmed that Viet Nam met its 2021 HCFC consumption obligation to both the MP and to the MLF ExCom.

### **3. Current progress in implementation of previous stage of the HPMP**

<b>Activity</b>	<b>Description</b>	<b>Implementing agency</b>
Manufacturing-AC	AC manufacturing enterprises have adjusted business operations in accordance with the rapidly evolving AC market due to continued growing demand for specific types of air conditioners. Subproject preparation was initiated for these enterprises as soon as the Stage II HPMP project became effective with frequent meetings and clarifications on details of implementation but shifting market demand, in combination with COVID has led to challenges that have now affected the number and level of participation of the four companies in the project. Two enterprises have signed SGAs and are in the equipment procurement stage while another two (Midea and ReeTech) will not participate in the project.	World Bank
Manufacturing-Foam PU	Five enterprises have signed individual subgrant agreements under the foam sector. These five SGAs	World Bank

	<p>cover 147.95 MT, or 22% of the originally targeted phaseout (684 MT). Due in part to COVID and in part to regional market trends, consumption of only 148 MT of HCFC-141b contained in preblended polyol was imported in 2020 and this officially decreased further to 88 MT in 2021. It was confirmed that some larger companies have converted operations on their own but small enterprises continue business as usual where supplies of imported preblended polyol permit. Due to supply chain issues, prices of pre-blended polyol have been unstable and generally high. To improve reliability of on the ground supply of alternative pre-blended polyols, the PMU concluded negotiations with 1 of 5 potential suppliers/ blending houses, Green Materials Co. (GreenMat) that will act as an intermediary and technology provided to downstream SMEs for provision of HFO-based preblended polyol. GreenMat will first receive TA to source the technology and choose a formulation that it will apply and market in Viet Nam. The second part of GreenMat's subproject will be to assist more than 20 SMEs on technology transfer/assistance, advisory support on minimum requirements to effectively and safely use the technology, and training and trials – in exchange for SME commitment letters to completely end the use of HCFC-141b contained in imported pre-blended polyols.</p>	
Manufacturing-REF	<p>The PMU experienced a low response rate for subprojects in the commercial refrigeration sector and has been able to secure SGAs with 2 companies to date. After careful reassessment and discussion with the industry, it is believed that some companies originally identified as manufacturers have changed to or are operating more in assembly, installation and charging field, while others remain in manufacturing but are small with little administrative and financial capacity to meet SGA requirements. These enterprises make low numbers of equipment based on orders and generally require the same basic equipment and safety measures to adopt the use of natural refrigerants (the approved technologies). Disinterest in participating in the project also continues to be linked to the unwillingness to forfeit the use of HFCs and HFC blends as per the conditions of the ExCom. As a result of these circumstances and consultations, 60% of the original US\$3.64 million in grants was cancelled or reallocated to servicing. As of the</p>	World Bank

	end of September, 11 SMEs have confirmed interest to participate; 6 of these have already been deemed as eligible to receive MLF support under a group project and a 7th is under review for preparation of an individual subproject. Review of the remaining 4 are underway to be completed by 10 October 2022.			
Refrigeration servicing sector	The PMU has procured and delivered toolkits for servicing equipment related to flammable refrigerants to 100 servicing centers and to 65 vocational schools as planned. Curriculum on good practice on handling flammable refrigerant developed. Training for technicians started in October 2021 subsequent to the completion of the train-the-trainers program for the first round of vocational schools with 50 technicians trained then and as of end September 2022, that number has increased to about 1,200. With the reallocation of \$1.33 million to this sector as agreed at the 90th Meeting, the PMU has put forward a plan of implementation for the sector for the remaining 15 months of the project.	World Bank		
Legal/regulatory framework	The Government of Vietnam has put into place a ban of imports and manufacturing of HCFC-22 based AC on 1 January 2022 as per Decision 76/42. A similar ban on imported HCFC-141b for foam has been formulated but will be effective on 1 January 2023 to give the foam sector more time subsequent to COVID and other related delays.	World Bank		
<b>4. Overview of current HCFC consumption in metric tonnes by substance (last three years)</b>				
Substance	Sector	2019	2020	2021
HCFC-22	Manufacturing-REF	889.64	517	266
HCFC-22	RAC servicing	2,668.91	2,068.024	2,308.948
HCFC-123	RAC servicing	16.344	0	8.172
HCFC-225ca	Solvent	21.46	0	0
<b>5. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)</b>				
HCFC consumption for manufacturing has dropped precipitously between 2019, when the project started implementation (after some procedural delays in approving the project and legal agreement) and 2021. The decrease in consumption was in part due to the signals received by the industry on the inevitable bans through workshops and outreach but also due to changes in the market and more recently the COVID pandemic. A number of manufacturers have converted on their own or moved operations (such as Midea AC manufacturing). Remaining HCFC consumption for manufacturing is in the refrigeration sector and expected to drop in 2022 and 2023 following several conversion activities and the overall trend in the sector to move to HFCs. Similarly, imports of HCFC-141b preblended polyol has been on a decline with only 88 MT of HCFC used in imported polyol in 2021, Final investment				

activities in the foam sector are expected to tackle all remaining use along with the ban in early 2023. The bulk of remaining HCFC consumption, by large HCFC-22, is for the servicing sector.

**6. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during preparation for the previous stage of the HPMP.**

Information needed	Description	Agency
Updated data on HCFC consumption in manufacturing/servicing sector	To better assess the type/size of typical providers, nature of work and options/readiness for introduction of climate-friendly, potentially flammable replacements.	World Bank
Analysis of the types of equipment using HCFCs	To estimate needs for servicing tail after 2030	World Bank
Updated sectoral consumption information	The Stage III HPMP will review and address the use of HCFCs in the solvents sector	World Bank
New information on ODS regulations	In accordance with the higher level 2022 decree on GHG emission reductions and ozone layer protection, the government may need to promulgate circulars specific to the servicing sector, remaining HCFC users and related stakeholders	World Bank

**7. Activities to be undertaken for project preparation and funding**

Activity	Indicative funding (US \$)	Agency
Data updates, reconciliation, and analysis	45,000	World Bank
Technology and servicing needs assessment	10,000	World Bank
Stakeholder workshops (2) and consultations and associated travel	25,000	World Bank
Policy and institutional framework review, including aspects related to gender, and actions needed if any	10,000	World Bank
<b>TOTAL</b>	<b>90,000</b>	

**8. How will activities related to implementation of the Kigali Amendment to phase down HFCs be considered during project preparation for stage III of the HPMP?**

Efforts will be undertaken to coordinate activities in servicing subsectors such as air-conditioning and commercial refrigeration that may use both HCFCs and HFCs. During preparation, survey data from the KIP preparation will be compared to that collected/updated under the HPMP to better identify consumption and use patterns in the servicing sector of the different types of refrigerants as well as to assess and understand supply and distribution channels beginning with imports to end-users and service shops. Efforts will be made in training and awareness workshops and other events to provide consistent messaging on phaseout and phasedown requirements.

**9. How will the Multilateral Fund gender policy be considered during project preparation?**

In Stage III preparation, first an assessment will be made of how gender was addressed in Stage II, lessons learned and results if any given that the MLF policy was adopted after the Stage II project was prepared and launched. The data update and collection period will be an opportunity to establish the starting point for measuring progress in integrating gender considerations. A WB gender specialist will be included in the preparation team to determine how to integrate gender into the project in accordance with the WBG gender policy and that of the MLF and to work with the government on incorporating practicable measures and indicators into the project design.