



**Programme des  
Nations Unies pour  
l'environnement**

Distr.  
GÉNÉRALE

UNEP/OzL.Pro/ExCom/91/32  
9 novembre 2022

FRANÇAIS  
ORIGINAL : ANGLAIS



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 DU PNUD  
POUR L'ANNÉE 2022**

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

## OBSERVATIONS ET RECOMMANDATION DU SECRÉTARIAT DU FONDS

1. Le PNUD demande au Comité exécutif d'approuver la somme de 1 325 534 \$US plus les coûts d'appui à l'agence de 95 187 \$US pour les amendements à son programme de travail pour l'année 2022 indiqués dans le tableau 1. La proposition est jointe à ce document.

Tableau 1 : Amendements au programme de travail du PNUD pour l'année 2022

Pays	Activité/projet	Somme demandée (\$US)	Somme recommandée (\$US)
<b>PARTIE A : ACTIVITÉS RECOMMANDÉES POUR APPROBATION GÉNÉRALE</b>			
<b>A1 : Renouvellement des projets de renforcement des institutions</b>			
Ghana	Renouvellement du projet de renforcement des institutions (XV <sup>e</sup> étape)	178 048	178,048
Iran (République islamique d')	Renouvellement du projet de renforcement des institutions (XIV <sup>e</sup> étape)	222 094	222,094
Nigeria	Renouvellement du projet de renforcement des institutions (XII <sup>e</sup> étape)	332 800	332,800
Sri Lanka	Renouvellement du projet de renforcement des institutions (XIV <sup>e</sup> étape)	171 592	171,592
Total partiel de la partie A1		904,534	904 534
Coûts d'appui à l'agence		63,317	63 317
Total de la partie A1		967,851	967 851
<b>A2 : Assistance technique pour la préparation du rapport de vérification de la consommation de HCFC</b>			
Costa Rica	Rapport de vérification pour la deuxième étape du plan de gestion de l'élimination des HCFC (PGEH)	30 000	30,000
El Salvador	Rapport de vérification pour la deuxième étape du plan de gestion de l'élimination des HCFC (PGEH)	30 000	30,000
Géorgie	Rapport de vérification pour la deuxième étape du plan de gestion de l'élimination des HCFC (PGEH)	30 000	30,000
Jamaïque	Rapport de vérification pour la deuxième étape du plan de gestion de l'élimination des HCFC (PGEH)	30 000	30,000
Total partiel de la partie A2		120 000	120 000
Coûts d'appui à l'agence		10 800	10 800
Total de la partie A2		130 800	130 800
<b>A3 : Préparation de projet pour les plans de gestion de l'élimination des HCFC (PGEH)</b>			
Haïti	Préparation d'un PGEH (deuxième étape)	30 000	30,000
Total partiel de la partie A3		30 000	30 000
Coûts d'appui à l'agence		2 100	2 100
Total de la partie A3		32 100	32 100
<b>A4 : Préparation de projet pour les plans de mise en œuvre de l'Amendement Kigali pour les HFC</b>			
Philippines	Préparation d'un plan de mise en œuvre de l'Amendement de Kigali (première étape)	220 000	220,000
Zimbabwe <sup>a</sup>	Préparation d'un plan de mise en œuvre de l'Amendement de Kigali (première étape)	51 000	51,000
Total partiel de la partie A4		271 000	271 000
Coûts d'appui à l'agence		18 970	18 970
Total de la partie A4		289 970	289 970
Total des parties A1, A2, A3, A4		1 325 534	1 325 534
Coûts d'appui à l'agence pour les parties A1, A2, A3, A4		95 187	95 187
Grand total		1 420 721	1 420 721

<sup>a</sup> PNUE en qualité d'agence d'exécution principale

## **PARTIE A : ACTIVITÉS RECOMMANDÉES POUR APPROBATION GÉNÉRALE**

### **A 1: Renouvellement des projets de renforcement des institutions**

#### **Description des projets**

2. Le PNUD a présenté des demandes de renouvellement des projets de renforcement des institutions pour les pays indiqués dans la partie A1 du tableau 1. La description de ces projets est présentée à l'annexe I au présent document.

#### **Observations du Secrétariat**

3. Le Secrétariat a examiné les demandes de renouvellement des quatre projets de renforcement des institutions au nom des gouvernements concernés par rapport aux lignes directrices et aux décisions pertinentes en matière d'admissibilité et de niveaux de financement. Les demandes ont aussi été vérifiées par rapport aux plans de travail originaux de l'étape précédente, aux données relatives au programme de pays et aux données déclarées en vertu de l'article 7, au plus récent rapport sur la mise en œuvre des plans de gestion de l'élimination des HCFC et aux décisions pertinentes de la Réunion des Parties. Ces pays ont déclaré leurs données relatives à leur programme de pays pour l'année 2021 et respectent les mesures de réglementation au titre du Protocole de Montréal, et leur consommation annuelle de HCFC ne dépasse pas la consommation annuelle maximum permise au titre de leurs accords de PGEH avec le Comité exécutif. De plus, leurs demandes comprennent des indicateurs d'efficacité pour les activités prévues à la prochaine étape de leurs projets de renforcement des institutions, conformément à la décision 74/51 e).

#### **Recommandation du Secrétariat**

4. Le Secrétariat recommande l'approbation générale du renouvellement des projets de renforcement des institutions pour le Ghana, l'Iran (République islamique d'), le Nigeria et le Sri Lanka aux niveaux de financement indiqués dans la partie A1 du tableau 1 de ce document. Le Comité exécutif pourrait souhaiter transmettre les observations figurant à l'annexe II aux présentes aux gouvernements des pays susmentionnés.

### **A2 : Assistance technique pour la préparation d'un rapport de vérification de la consommation de HCFC**

#### **Description du projet**

5. Le Comité exécutif a demandé aux agences bilatérales et d'exécution concernées d'inclure le financement de la préparation des rapports de vérification des pays visés à l'article 5 choisis dans les amendements à leurs programmes de travail respectifs. Le PNUD, en qualité d'agence d'exécution principale, demande le financement de la vérification de la deuxième étape du PGEH pour le Costa Rica, l'El Salvador, la Géorgie et la Jamaïque.<sup>2</sup>

#### **Observations du Secrétariat**

6. Le Secrétariat a pris note que le financement demandé est conforme aux sommes approuvées pour des vérifications semblables lors de réunions précédentes. Il a également pris note que les rapports de vérification doivent être remis au moins dix semaines avant la réunion du Comité exécutif à laquelle les tranches de financement subséquentes du PGEH seront demandées.

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<sup>2</sup> Décision 90/33.

## **Recommandation du Secrétariat**

7. Le Secrétariat recommande l'approbation générale de la préparation des rapports de vérification de la deuxième étape des plans de gestion de l'élimination des HCFC (PGEH) pour le Costa Rica, l'El Salvador, la Géorgie et la Jamaïque aux niveaux de financement indiqués dans la partie A2 du tableau 1, étant entendu que les rapports de vérification doivent être remis au moins dix semaines avant la réunion du Comité exécutif à laquelle la prochaine tranche de financement du PGEH sera demandée.

## **A3 : Préparation de projet pour les plans de gestion de l'élimination des HCFC**

### **Description du projet**

8. Le PNUD, en qualité d'agence d'exécution désignée, a présenté une demande pour la préparation de la deuxième étape du PGEH pour Haïti. La demande est indiquée dans la partie A3 du tableau 1.

9. Le PNUD a fourni une description des activités en appui à sa demande pour la préparation de projet pour la deuxième étape du PGEH qui comprend : la justification des fonds demandés pour le projet, un rapport périodique sur la mise en œuvre de la première étape du PGEH, une liste des activités qui seront entreprises au cours de la préparation du projet et les budgets correspondants.

### **Observations du Secrétariat**

10. Le Secrétariat a effectué son examen en tenant 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>3</sup> et des progrès accomplis à la première étape du PGEH, y compris l'état de la mise en œuvre des tranches au moment de la préparation du présent document. Le Secrétariat a pris note que le financement demandé est conforme à la décision 71/42.

11. Le Secrétariat a pris note que le PNUD avait été l'agence d'exécution principale à la première étape du PGEH pour Haïti, qu'il y a des retards dans la mise en œuvre de la tranche car deux des quatre tranches seulement ont été approuvées à ce jour, ce qui représente 60 pour cent de la somme totale approuvée en principe pour la première étape du PGEH,<sup>4</sup> que la consommation de HCFC déclarée pour Haïti est conforme au Protocole de Montréal et à l'Accord entre le gouvernement d'Haïti et le Comité exécutif, et que plus de 35 pour cent de la consommation de HCFC a été éliminée. Le PNUE a présenté une demande d'annulation de la première étape du PGEH pour Haïti à la présente réunion. Cette demande sera étudiée lors de l'examen du rapport périodique du PNUE.<sup>5</sup>

12. Le PNUD a expliqué que le gouvernement d'Haïti a demandé au PNUD de diriger l'élaboration de la deuxième étape du PGEH et que les sommes restantes pour la première étape soient reportées à la deuxième étape, après la vérification. Le PNUD a confirmé que la deuxième étape du PGEH permettra d'éliminer toute la consommation de référence de HCFC avant le 1<sup>er</sup> janvier 2030, sauf la consommation destinée au volet de l'entretien permise en vertu du Protocole de Montréal.

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<sup>3</sup> Lignes directrices sur le financement de la préparation de la deuxième étape des plans de gestion de l'élimination des HCFC pour les pays visés à l'article 5.

<sup>4</sup> La première étape du PGEH pour Haïti pour la période 2012 à 2020, afin de réduire la consommation de HCFC de 35 pour cent par rapport à la valeur de référence, a été approuvée à la 68<sup>e</sup> réunion pour la somme de 312 516 \$US, comprenant 182 881 \$US plus les coûts d'appui à l'agence de 23 775 \$US pour le PNUE, et 97 119 \$US plus les coûts d'appui à l'agence de 8 741 \$US pour le PNUD. La première tranche a été approuvée pour la somme de 40 000 \$US plus les coûts d'appui à l'agence de 5 200 \$US pour le PNUE. La deuxième tranche a été approuvée à la 76<sup>e</sup> réunion pour la somme de 127 119 \$US comprenant 30 000 \$US plus les coûts d'appui à l'agence de 3 900 \$US pour le PNUE et 97 119 \$US plus les coûts d'appui à l'agence de 8 741 \$US pour le PNUD.

<sup>5</sup> UNEP/OzL.Pro/ExCom/91/15.

### Recommandation du Secrétariat

13. Le Secrétariat recommande l'approbation générale de la deuxième étape du plan de gestion de l'élimination des HCFC pour Haïti au niveau de financement indiqué dans la partie A3 du tableau 1.

### A4 : Préparation de projet pour les plans de mise en œuvre de l'Amendement de Kigali pour les HFC

#### Description du projet

14. Le PNUD a présenté des demandes de préparation de la première étape des plans de mise en œuvre de l'Amendement de Kigali pour cinq pays, une première demande en qualité d'agence d'exécution désignée et une deuxième en qualité d'agence de coopération pour laquelle le PNUE agirait en qualité d'agence d'exécution principale, comme indiqué dans la partie A4 du tableau 1. Le PNUE, en qualité d'agence d'exécution principale pour le Zimbabwe, demande la somme de 119 000 \$US plus les coûts d'appui à l'agence de 15 470 \$US dans les amendements à son programme de travail pour l'année 2022.<sup>6</sup>

#### Observations du Secrétariat

15. Dans son examen de la demande, le Secrétariat a tenu compte des lignes directrices sur la préparation des plans de mise en œuvre de l'Amendement de Kigali contenues dans la décision 87/50, des activités proposées pour la préparation du projet, et du lien entre ces activités et les activités de facilitation et les autres projets sur les HFC dans ces pays. Le Secrétariat a pris note qu'en qualité d'agence d'exécution désignée, le PNUD a fourni une description des activités requises pour la préparation de la stratégie générale des plans de mise en œuvre de l'Amendement de Kigali pour les Philippines en utilisant le modèle de demande de préparation de projets pour les plans de mise en œuvre de l'Amendement de Kigali. La proposition comprend les données sur la consommation de HFC et de mélanges contenant des HFC pour le pays; que les activités de préparation de projet comprennent la collecte et l'analyse de données sur les HFC, une enquête sur la chaîne de froid, l'évaluation de la capacité du secteur de l'entretien, une analyse des politiques et réglementations pertinentes, l'élaboration d'une stratégie générale de réduction progressive des HFC, des réunions de consultation avec les parties prenantes et l'élaboration d'un plan d'action pour l'intégration de l'égalité des sexes. Le PNUD a aussi confirmé que la préparation de projet pour la stratégie générale de réduction progressive des HFC pour les Philippines puiserait dans les activités entreprises dans le cadre des activités de facilitation.

16. Le Secrétariat a pris note que le gouvernement des Philippines a ratifié l'Amendement de Kigali<sup>7</sup> et remis une lettre d'appui dans laquelle il fait part de son intention d'agir rapidement pour réduire progressivement les HFC, et que la demande de financement était conforme à la décision 87/50 c).

17. Le PNUE, en qualité d'agence d'exécution principale, a fourni une description des activités requises pour la préparation des plans de mise en œuvre de l'Amendement de Kigali au Zimbabwe et des coûts correspondants de chaque activité des amendements de son programme de travail;<sup>8</sup> les observations du Secrétariat y figurent également.

### Recommandation du Secrétariat

18. Le Secrétariat recommande l'approbation générale de la préparation de projet pour les plans de mise en œuvre de l'Amendement de Kigali pour les HFC pour les Philippines et le Zimbabwe aux niveaux de financement indiqués dans la partie A4 du tableau 1.

<sup>6</sup> UNEP/OzL.Pro/ExCom/91/33.

<sup>7</sup> Date de ratification (ou acceptation) de l'Amendement de Kigali : Philippines (3 novembre 2022).

<sup>8</sup> Ibid.



Annex I

**INSTITUTIONAL STRENGTHENING PROJECT PROPOSALS<sup>1</sup>**

**Ghana: Renewal of institutional strengthening**

<b>Summary of the project and country profile</b>		
Implementing agency:		UNDP
Amounts previously approved for institutional strengthening (US \$):		
	Phase I: Oct-92	183,200
	Phase II: Oct-96	107,000
	Phase III: Nov-98	107,000
	Phase IV: Dec-00	107,000
	Phase V: Nov-02	139,100
	Phase VI: Jul-04	139,100
	Phase VII: Nov-06	139,100
	Phase VIII: Nov-08	139,100
	Phase IX: Dec-10	139,100
	Phase X: Jul-12	139,100
	Phase XI: May-14	139,100
	Phase XII: May-16	178,048
	Phase XIII: Dec-18	178,048
	Phase XIV: Dec-20	178,048
	Total:	2,012,044
Amount requested for renewal (phase XV) (US \$):		178,048
Amount recommended for approval for phase XV (US \$):		178,048
Agency support costs (US \$):		12,463
Total cost of institutional strengthening phase XV to the Multilateral Fund (US \$):		190,511
Date of approval of country programme:		1992
Date of approval of HCFC phase-out management plan:		2010
Baseline consumption of controlled substances (ODP tonnes):		
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)		0.0
(b) Annex C, Group I (HCFCs) (average 2009-2010)		57.3
(c) Annex E (methyl bromide) (average 1995-1998)		0.0
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7:		
(a) Annex B, Group III (methyl chloroform)		0.0
(b) Annex C, Group I (HCFCs)		15.97
(c) Annex E (methyl bromide)		0.0
	Total:	15.97
Year of reported country programme implementation data:		2021
Amount approved for projects (as at June 2022) (US \$):		6,690,407
Amount disbursed (as at December 2021) (US \$):		5,310,343
ODS to be phased out (as at June 2022) (ODP tonnes):		468.68
ODS phased out (as at December 2021) (ODP tonnes):		428.30

1. Summary of activities and funds approved by the Executive Committee:

<b>Summary of activities</b>	<b>Funds approved (US \$)</b>
(a) Investment projects:	2,376,025
(b) Institutional strengthening:	2,012,044
(c) Project preparation, technical assistance, training and other non-investment projects:	2,302,338
	Total:
	6,690,407
(d) HFC activities funded from additional voluntary contributions	150,000

<sup>1</sup> Data as at December 2021 are based on document UNEP/OzL.Pro/ExCom/91/14.

Progress report

2. During phase XIV of the institutional strengthening (IS) project, Ghana undertook a number of important initiatives. Amongst other activities, the National Ozone Unit (NOU): ensured quota system operation, import controls and customs officers' sensitization and training; collected data, double-checked and reported required information on a timely basis; ensured proper consultation with key stakeholders at the national level, particularly through steering committee and industry associations; supervised and monitored project implementation, particularly as related to the servicing sector; raised awareness at the national level, through seminars and Ozone Day activities; and participated in regional and international meetings related to the Montreal Protocol. The country continues to successfully implement its HCFC phase-out management plan (HPMP) and has surpassed its compliance targets in terms of HCFC consumption reduction. Of the 19 indicators selected for the cycle, 15 were rated as fully achieved and four were partially achieved.

Plan of action

3. During the upcoming phase, Ghana intends to continue the activities and initiatives implemented during the previous phase. Ghana will also ensure the fulfilment of its Montreal Protocol commitments, focusing efforts on sustaining its HCFC reduction and enforcing plans agreed towards the 67.5 per cent reduction in 2025. Specifically, Ghana will focus on strengthening a conducive regulatory environment for the safe use of hydrocarbon (HC) and management of HCFCs and their alternatives; ensure continued ODS import controls and particularly of the licensing system; monitor dealers and warehouses; control brands of refrigerants to ensure availability of genuine refrigerants; cooperate with neighbouring West African countries to combat illegal trade; continue reporting, networking and stakeholder engagement; support monitoring of ongoing projects and ensure sustainability of completed ones; pursue awareness raising to keep ozone layer protection high on the public agenda.

**Iran (Islamic Republic of): Renewal of institutional strengthening**

<b>Summary of the project and country profile</b>			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US \$):			
	Phase I:	Oct-92	200,200
	Phase II:	Nov-97	133,470
	Phase III:	Dec-00	133,470
	Phase IV:	Nov-02	173,511
	Phase V:	Dec-04 & Nov-05	173,511
	Phase VI:	Nov-06 & Nov-07	173,511
	Phase VII:	Nov-08	173,511
	Phase VIII:	Jul-10	173,511
	Phase IX:	Jul-12	173,511
	Phase X:	May-14	173,511
	Phase XI:	Dec-16	222,094
	Phase XII:	Dec-18	222,094
	Phase XIII:	Dec-20	222,094
		Total:	2,347,999
Amount requested for renewal (phase XIV) (US \$):			222,094
Amount recommended for approval for phase XIV (US \$):			222,094
Agency support costs (US \$):			15,547
Total cost of institutional strengthening phase XIV to the Multilateral Fund (US \$):			237,641
Date of approval of country programme:			1993
Date of approval of HCFC phase-out management plan:			2011
Baseline consumption of controlled substances (ODP tonnes):			
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)			8.7



<b>Summary of the project and country profile</b>	
Implementing agency:	UNDP
(b) Annex C, Group I (HCFCs) (average 2009-2010)	380.5
(c) Annex E (methyl bromide) (average 1995-1998)	26.7
Latest reported ODS consumption (2021) (ODP tonnes) as per Article 7:	
(a) Annex B, Group III (methyl chloroform)	0.00
(b) Annex C, Group I (HCFCs)	123.84
(c) Annex E (methyl bromide)	0.00
Total:	123.84
Year of reported country programme implementation data:	2021
Amount approved for projects (as at June 2022) (US \$):	84,568,232
Amount disbursed (as at December 2021) (US \$):	74,007,903
ODS to be phased out (as at June 2022) (ODP tonnes):	7,438.9
ODS phased out (as at December 2021) (ODP tonnes):	7,063.3

4. Summary of activities and funds approved by the Executive Committee:

<b>Summary of activities</b>	<b>Funds approved (US \$)</b>
(a) Investment projects:	76,527,796
(b) Institutional strengthening:	2,347,999
(c) Project preparation, technical assistance, training and other non-investment projects:	5,692,437
Total:	84,568,232
(d) HFC activities funded from additional voluntary contributions	0

Progress report

5. The Islamic Republic of Iran, under its phase XIII of the IS project, successfully sustained the ODS phase-out through effective enforcement of regulation, monitoring and collaboration with the key stakeholders. The NOU worked closely with other national agencies and stakeholders to ensure monitoring of ODS phase-out and implemented various activities for raising awareness and training of stakeholders. The Islamic Republic of Iran also implemented activities under stage II of its HPMP and initiated activities for ratification of the Kigali Amendment. All submissions of Article 7 and country programme data were completed on-time. All 14 indicators for the phase were fully achieved.

Plan of action

6. Under the upcoming phase, the Islamic Republic of Iran will continue its efforts to fulfil its obligations under the Montreal Protocol and eliminate ODS consumption according to the agreed schedule. The country will continue implementation of ODS phase-out activities through enforcement of policies, strategies, control measures, technical assistance, and monitoring mechanisms to sustain the compliance with the provisions of the Montreal Protocol. The IS project supports the Ozone Layer Protection Unit to cooperate nationally with the established Ozone Cells in provinces to implement ODS policy and control measures and carry out other awareness-raising and training activities. Consideration of the Kigali Amendment by the Parliament will be facilitated through the next phase of the IS project.

**Nigeria: Renewal of institutional strengthening**

<b>Summary of the project and country profile</b>		
Implementing agency:		UNDP
Amounts previously approved for institutional strengthening (US \$):		
	Phase I: Mar-93	300,000
	Phase II: Jul-01	200,000
	Phase III: Jul-03	260,000
	Phase IV: Apr-06	260,000
	Phase V: Apr-08	260,000
	Phase VI: Dec-10	260,000
	Phase VII: Dec-12	260,000
	Phase VIII: Nov-14	260,000
	Phase IX: May-16	332,800
	Phase X: Dec-18	332,800
	Phase XI: Dec-20	332,800
	Total:	3,058,400
Amount requested for renewal (phase XII) (US \$):		332,800
Amount recommended for approval for phase XII (US \$):		332,800
Agency support costs (US \$):		23,296
Total cost of institutional strengthening phase XII to the Multilateral Fund (US \$):		356,096
Date of approval of country programme:		1997
Date of approval of HCFC phase-out management plan:		2010
Baseline consumption of controlled substances (ODP tonnes):		
	(a) Annex B, Group III (methyl chloroform) (average 1998-2000)	32.9
	(b) Annex C, Group I (HCFCs) (average 2009-2010)	344.9
	(c) Annex E (methyl bromide) (average 1995-1998)	2.9
Latest reported ODS consumption (2021) (ODP tonnes) as per Article 7:		
	(a) Annex B, Group III (methyl chloroform)	0.0
	(b) Annex C, Group I (HCFCs)	156.18
	(c) Annex E (methyl bromide)	0.0
	Total:	156.18
Year of reported country programme implementation data:		2021
Amount approved for projects (as at June 2022) (US \$):		46,218,206
Amount disbursed (as at December 2021) (US \$):		39,479,017
ODS to be phased out (as at June 2022) (ODP tonnes):		6,240.07
ODS phased out (as at December 2021) (ODP tonnes):		6,164.00

7. Summary of activities and funds approved by the Executive Committee:

<b>Summary of activities</b>	<b>Funds approved (US \$)</b>
(a) Investment projects:	36,688,851
(b) Institutional strengthening:	3,058,400
(c) Project preparation, technical assistance, training and other non-investment projects:	6,470,955
Total:	46,218,206
(d) HFC activities funded from additional voluntary contributions	250,000

Progress report

8. During phase XI of the IS project, Nigeria experienced challenges in implementation due to the COVID-19-related restrictions on travel, meetings, and awareness-raising activities. Implementation of the IS project continued amidst these challenges, while observing the necessary protocols and taking advantage of information and communication technology. During the phase, Nigeria commenced implementation of

stage II of the HPMP, including awareness-raising for importers and enforcement agencies on the HCFC quota system through effective collaboration. The data collection and reporting process was improved with timely submission of data to the Ozone and Fund Secretariats. Nigeria also developed and gazetted the updated ODS and HFC regulations. However, participation in regional and international meetings and consultations with local stakeholders were not fully carried out due to the COVID-19 pandemic. Of the 30 performance indicators selected for the phase, 12 were fully achieved and 18 were partially achieved.

### Plan of action

9. Under phase XII, Nigeria will continue to strengthen the National Ozone Office (NOO) to enable it to continue to carry out activities towards consolidating and sustaining the phase-out of ODS already achieved, as well as completion of the implementation of stage II of the HPMP. The NOO will also support the implementation of stage III of the HPMP, which is expected to commence by early 2023; support the preparation and commencement of the implementation of the Kigali Amendment; increase awareness-raising; strengthen collaboration with chemical regulatory agencies (particularly relating to data reporting); provide capacity building for sustainable implementation of the Montreal Protocol and provide an activity for gender mainstreaming.

### **Sri Lanka: Renewal of institutional strengthening**

<b>Summary of the project and country profile</b>		
Implementing agency:		UNDP
Amounts previously approved for institutional strengthening (US \$):		
	Phase I: Mar-94	154,680
	Phase II: Nov-97	103,120
	Phase III: Nov-99	103,120
	Phase IV: Jul-02	134,056
	Phase V: Jul-04	134,056
	Phase VI: Nov-06	134,056
	Phase VII: Jul-08	134,056
	Phase VIII: Jul-10	134,056
	Phase IX: Jul-12	134,056
	Phase X: May-14	134,056
	Phase XI: May-16	171,592
	Phase XII: Dec-18	171,592
	Phase XIII: Dec-20	171,592
	Total:	1,814,088
Amount requested for renewal (phase XIV) (US \$):		171,592
Amount recommended for approval for phase XIV (US \$):		171,592
Agency support costs (US \$):		12,011
Total cost of institutional strengthening phase XIV to the Multilateral Fund (US \$):		183,603
Date of approval of country programme:		1994
Date of approval of HCFC phase-out management plan:		2010
Baseline consumption of controlled substances (ODP tonnes):		
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)		3.0
(b) Annex C, Group I (HCFCs) (average 2009-2010)		13.9
(c) Annex E (methyl bromide) (average 1995-1998)		4.1
Latest reported ODS consumption (2021) (ODP tonnes) as per Article 7:		
(a) Annex B, Group III (methyl chloroform)		0.0
(b) Annex C, Group I (HCFCs)		8.58
(c) Annex E (methyl bromide)		0.0
	Total:	8.58
Year of reported country programme implementation data:		2021

<b>Summary of the project and country profile</b>	
Amount approved for projects (as at June 2022) (US \$):	7,018,201
Amount disbursed (as at December 2021) (US \$):	5,713,101
ODS to be phased out (as at June 2022) (ODP tonnes):	108.10
ODS phased out (as at December 2021) (ODP tonnes):	93.90

10. Summary of activities and funds approved by the Executive Committee:

<b>Summary of activities</b>	<b>Funds approved (US \$)</b>
(a) Investment projects:	1,427,972
(b) Institutional strengthening:	1,814,088
(c) Project preparation, technical assistance, training and other non-investment projects:	3,776,141
Total:	7,018,201
(d) HFC activities funded from additional voluntary contributions	150,000

Progress report

11. During phase XIII of the IS project, Sri Lanka faced difficulties due to COVID-19-related restrictions and subsequently an economic crisis in the country. Despite these challenges, the NOU continued implementation of activities to ensure sustainability of ODS phase-out to ensure the country's compliance with the Montreal Protocol obligations. The NOU also implemented various virtual activities for the awareness raising and training of stakeholders. All activities under stage I of the HPMP were completed during the phase and proposed activities under stage II of the HPMP commenced, aiming at 100 per cent phase-out of HCFCs by 2030. The NOU worked closely with other national agencies and stakeholders to ensure monitoring of ODS phase-out. Sri Lanka also initiated the preparation for a HFC phase-down plan during the phase. All 12 performance indicators selected for the phase were fully achieved.

Plan of action

12. During the upcoming phase, Sri Lanka will continue its efforts to fulfil its obligations under the Montreal Protocol and reduce ODS consumption according to the agreed schedule. Three major activities are planned for the phase including: implementation of stage II of the HPMP; preparation of the proposal for HFC phase-down and submission of the project document for the Kigali HFC implementation plan; and the initiation of the HFC phase-down from 1 January 2024. The activities of the IS project will support: continued effective management, monitoring and enforcement on ODS phase-out activities, including sustainability of ODS phase-out and HFC phase-down; monitoring the effective implementation of the HPMP and strengthening the institutional engagement in order to support achieving the compliance targets; continuing implementation and enforcement of the ODS legal framework; and continuing the awareness outreach activities for active involvement of all stakeholders in sustaining ODS phase-out and HFC phase-down.

## **Annexe II**

### **POINTS DE VUE EXPRIMÉS PAR LE COMITÉ EXÉCUTIF SUR LE RENOUVELLEMENT DES PROJETS DE RENFORCEMENT DES INSTITUTIONS PROPOSÉS À LA 91<sup>e</sup> RÉUNION**

#### **Ghana**

1. Le Comité exécutif a pris connaissance du rapport accompagnant la demande de renouvellement du projet de renforcement des institutions pour le Ghana (XV<sup>e</sup> étape) et constate avec satisfaction que le gouvernement du Ghana a déclaré aux Secrétariats de l’ozone et du Fonds des données pour 2020 et 2021 qui révèlent que le pays a atteint ses objectifs de réduction des HCFC. Le Comité exécutif a pris note des efforts constants du pays pour appliquer les mesures de réglementation pour assurer la pérennité de la réduction de SAO. Le Comité exécutif a également pris note des engagements du pays à respecter les normes les plus élevées d’assistance technique aux parties prenantes locales pour l’achèvement des activités de la première étape du plan de gestion de l’élimination des HCFC (PGEH) et du maintien de la coordination et de la surveillance pour la mise en œuvre de la deuxième étape du PGEH en cours. Le Comité exécutif félicite le gouvernement du Ghana de ses efforts pour faire avancer la préparation du plan de mise en œuvre de l’Amendement de Kigali et espère qu’au cours des deux prochaines années, le pays poursuivra ses activités, tant au niveau des politiques que des projets, pour qu’il puisse respecter les prochaines mesures de réglementation du Protocole de Montréal.

#### **Iran (République islamique d’)**

2. Le Comité exécutif a pris connaissance du rapport accompagnant la demande de renouvellement du projet de renforcement des institutions pour l’Iran (XIV<sup>e</sup> étape) et constate avec satisfaction que le gouvernement de la République islamique d’Iran a déclaré aux Secrétariat de l’ozone et du Fonds des données pour 2020 et 2021 qui révèlent que le pays a atteint ses objectifs de réduction des HCFC. Le Comité exécutif a aussi pris note que le pays poursuit ses efforts pour appliquer les mesures de réglementation pour assurer la pérennité de la réduction des SAO en mettant à jour les règles et les réglementations et grâce à un programme d’octroi de permis et de quotas efficace. Le Comité exécutif a félicité le gouvernement de la République islamique d’Iran de ses efforts pour poursuivre la mise en œuvre du plan de gestion de l’élimination des HCFC et recommander l’accélération des consultations internes en cours en vue de la ratification de l’Amendement de Kigali, et a espoir que le pays poursuivra ses activités, tant au niveau des politiques que des projets, pour qu’il puisse respecter les prochaines mesures de réglementation du Protocole de Montréal et ratifier l’Amendement de Kigali.

#### **Nigeria**

3. Le Comité exécutif a pris connaissance du rapport accompagnant la demande de renouvellement du projet de renforcement des institutions pour le Nigeria (XII<sup>e</sup> étape) et constate avec satisfaction que le gouvernement du Nigeria a déclaré aux Secrétariats de l’ozone et du Fonds des données pour 2020 et 2021 qui révèlent que le pays a atteint ses objectifs de réduction des HCFC. Le Comité exécutif a pris note de l’engagement du pays à maintenir les normes les plus élevées d’assistance technique pour les parties prenantes locales et à poursuivre la coordination et la surveillance pour la mise en œuvre de la deuxième étape du plan de gestion de l’élimination des HCFC (PGEH) en cours. Le Comité a également pris note que le pays a élaboré un plan d’action national de refroidissement. Le Comité exécutif félicite le gouvernement du Nigeria de ses efforts pour faire avancer la préparation de la troisième étape du PGEH et le plan de mise en œuvre de l’Amendement de Kigali, et a espoir que le pays poursuivra la mise en œuvre de ces activités avec succès afin de se conformer et de continuer à se conformer au Protocole de Montréal

## **Sri Lanka**

4. Le Comité exécutif a pris connaissance du rapport accompagnant la demande de renouvellement du projet de renforcement des institutions pour le Sri Lanka (XIV<sup>e</sup> étape) et constate avec satisfaction que le gouvernement du Sri Lanka a déclaré aux Secrétariats de l’ozone et du Fonds des données pour 2020 et 2021 qui révèlent que le pays a atteint ses objectifs de réduction des HCFC. Le Comité exécutif a pris note que le gouvernement du Sri Lanka a respecté le plan de mise en œuvre de la réduction de la consommation de SAO notamment l’achèvement de la première étape de son plan de gestion de l’élimination des HCFC (PGEH), l’initiation de la deuxième étape du PGEH et la préparation de la réduction progressive des HFC, malgré la situation difficile au pays en 2021 et 2022 causée par la pandémie de la COVID-19 et la conjoncture économique. Le Comité exécutif reconnaît les efforts du gouvernement du Sri Lanka et a donc espoir qu’au cours des deux prochaines années, le gouvernement du Sri Lanka poursuivra avec succès la coordination avec les autres agences et parties prenantes nationales afin de mettre en œuvre les politiques et les réglementations pour assurer la pérennité de l’élimination des SAO et faciliter la réduction progressive des HFC, et d’élaborer et mettre en œuvre les activités du Protocole de Montréal, dont la deuxième étape du PGEH, le plan de mise en œuvre de l’Amendement de Kigali et le projet de renforcement des institutions.



**91<sup>st</sup> Meeting of the Executive Committee of the Multilateral Fund  
for the Implementation of the Montreal Protocol**

*(5 – 9 December 2022)*

**UNDP  
2022 WORK PROGRAMME AMENDMENT**

## 2022 WORK PROGRAMME AMENDMENT

### I. EXECUTIVE SUMMARY

The present document constitutes UNDP's 2022 Work Programme Amendment and is being submitted for consideration of the Executive Committee (ExCom) at its 91<sup>st</sup> Meeting. The list of submissions for all funding requests (including investment projects) that will be submitted by UNDP to the 91<sup>st</sup> ExCom meeting in Annex 1 to this document is provided for information. Project documentation such as tranche requests under multi-year agreements (MYA), investment and demonstration project proposals and other individual proposals are not included in this document and are submitted separately as per normal practice. Only the following (non-investment) submissions are part of this document.

### II. FUNDING REQUESTS PART OF THE WORK PROGRAMME

#### Institutional Strengthening Extensions

UNDP is submitting the requests for funding the extension of institutional strengthening projects to the 91<sup>st</sup> ExCom Meeting as tabulated below. Relevant terminal reports and requests for extension of funding are being submitted separately.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Ghana	INS	Institutional Strengthening Renewal (Phase XV)	24	178,048	12,463	190,511
Iran	INS	Institutional Strengthening Renewal (Phase XIV)	24	222,094	15,547	237,641
Nigeria	INS	Institutional Strengthening Renewal (Phase XII)	24	332,800	23,296	356,096
Sri Lanka	INS	Institutional Strengthening Renewal (Phase XIV)	24	171,592	12,011	183,603
<b>Total (4 requests)</b>				<b>904,534</b>	<b>63,317</b>	<b>967,851</b>

#### Preparation funding requests for HPMP stages II

UNDP is submitting the following funding request for the preparation of stage II of HPMP to the 91<sup>st</sup> ExCom meeting. The Annex 2 contains the PRP submission.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Haiti	PRP	PRP for HPMP Stage II	24	30,000	2,100	32,100
<b>Total (1 request)</b>				<b>30,000</b>	<b>2,100</b>	<b>32,100</b>

#### Requests for funding for the preparation of HFC phase down plans

UNDP is submitting the requests for the preparation of an overarching strategy for stage I of the Kigali HFC implementation plan (KIP) as per the table below. The request, where UNDP is a Lead Agency, can be found in the Annex 3. The request for Zimbabwe will be submitted by UNEP as a Lead Agency.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Philippines	PRP	PRP for Kigali HFC implementation plan (KIP)	24	220,000	15,400	235,400
Zimbabwe	PRP	PRP for Kigali HFC implementation plan (KIP)	24	51,000	3,570	54,570
<b>Total (2 requests)</b>				<b>271,000</b>	<b>18,970</b>	<b>289,970</b>



## Other requests for non-investment projects

Pursuant to the ExCom decision taken at the 90<sup>th</sup> meeting, as part of the Work Programme Amendment, UNDP is requesting the ExCom to approve the funding for the following countries for verification reports for the HPMPs at the 91<sup>st</sup> ExCom meeting.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Costa Rica	TAS	HPMP verification report	12	30,000	2,700	32,700
El Salvador	TAS	HPMP verification report	12	30,000	2,700	32,700
Georgia	TAS	HPMP verification report	12	30,000	2,700	32,700
Jamaica	TAS	HPMP verification report	12	30,000	2,700	32,700
<b>Total (4 requests)</b>				<b>120,000</b>	<b>10,800</b>	<b>130,800</b>

### III. SUMMARY OF FUNDING REQUESTS (WORK PROGRAMME)

The table below summarizes the funding requests for non-investment activities and proposals being submitted to the 91<sup>st</sup> ExCom Meeting as part of UNDP's Work Programme Amendment for 2022:

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Costa Rica	TAS	HPMP verification report	12	30,000	2,700	32,700
El Salvador	TAS	HPMP verification report	12	30,000	2,700	32,700
Georgia	TAS	HPMP verification report	12	30,000	2,700	32,700
Ghana	INS	Institutional Strengthening Renewal (Phase XV)	24	178,048	12,463	190,511
Haiti	PRP	PRP for HPMP Stage II	24	30,000	2,100	32,100
Iran	INS	Institutional Strengthening Renewal (Phase XIV)	24	222,094	15,547	237,641
Jamaica	TAS	HPMP verification report	12	30,000	2,700	32,700
Nigeria	INS	Institutional Strengthening Renewal (Phase XII)	24	332,800	23,296	356,096
Philippines	PRP	PRP for Kigali HFC implementation plan (KIP)	21	220,000	15,400	235,400
Sri Lanka	INS	Institutional Strengthening Renewal (Phase XIV)	24	171,592	12,011	183,603
Zimbabwe	PRP	PRP for Kigali HFC implementation plan (KIP)	24	51,000	3,570	54,570
<b>Total (11 requests)</b>				<b>1,325,534</b>	<b>95,187</b>	<b>1,420,721</b>

**ANNEX 1**

**List of all UNDP submissions for funding to the 91<sup>st</sup> ExCom Meeting**

No	Country	Type	Description	Funding Request to the 91st ExCom (US\$)		
				Amount	Agency Fee	Total
1	China	INV	Stage II HPMP - fifth tranche (Solvents Sector Plan)	1,000,000	70,000	1,070,000
2	Costa Rica	TAS	HPMP verification report	30,000	2,700	32,700
3	El Salvador	TAS	HPMP verification report	30,000	2,700	32,700
4	Georgia	TAS	HPMP verification report	30,000	2,700	32,700
5	Ghana	INS	Institutional Strengthening Renewal (Phase XV)	178,048	12,463	190,511
6	Global	TAS	Core Unit Support	2,142,835	0	2,142,835
7	Haiti	PRP	PRP for HPMP Stage II	30,000	2,100	32,100
8	India	INV	Stage III HPMP - first tranche	8,592,462	601,472	9,193,934
9	Iran	INS	Institutional Strengthening Renewal (Phase XIV)	222,094	15,547	237,641
10	Jamaica	TAS	HPMP verification report	30,000	2,700	32,700
11	Nigeria	INS	Institutional Strengthening Renewal (Phase XII)	332,800	23,296	356,096
12	Philippines	PRP	PRP for Kigali HFC implementation plan (KIP)	220,000	15,400	235,400
13	South Sudan	INV	Stage I HPMP - second tranche	90,000	8,100	98,100
14	Sri Lanka	INS	Institutional Strengthening Renewal (Phase XIV)	171,592	12,011	183,603
15	Zimbabwe	PRP	PRP for Kigali HFC implementation plan (KIP)	51,000	3,570	54,570
<b>Total (15 requests)</b>				<b>13,150,831</b>	<b>774,760</b>	<b>13,925,591</b>

**Notes:**

- a. All amounts in are in US dollars.
- b. Special reports due (delays, balances, status reports, etc.) as well as other projects not part of the WPA will be submitted separately.

ANNEX 2

**Preparation funding requests for HPMP stages in:**

**1. Haiti (Stage II)**

**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>	Request for Project Preparation Proposal for the Second Stage of the HPMP of Haiti	
<b>Country:</b>	Haiti	
<b>Lead implementing agency:</b>	UNDP	
<b>Implementation period:</b>	January 2023 – December 2024	
<b>Funding requested:</b>		
<b>Agency</b>	<b>Sector</b>	<b>Funding requested (US \$)*</b>
UNDP	Overarching	30,000

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

**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 ( <b>Decision 71/42(i)</b> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>Specify meeting at which PRP funding balance had been returned/will be returned</li> </ul>	92nd meeting.	

**A. 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>	100	<b>Year of commitment</b>	2030
<input checked="" type="checkbox"/> Servicing only		<input type="checkbox"/> Manufacturing only	<input type="checkbox"/> Servicing and manufacturing
<b>2. Brief background on previous stage of the HPMP</b>			
<ul style="list-style-type: none"> <li>Please provide a brief background on the previous stage of the HPMP, when it was approved, a brief description of the progress in implementation of the previous stage of the HPMP to demonstrate that substantial progress had been made.</li> </ul>			
<p>The Stage I HPMP for Haiti was approved at the 68<sup>th</sup> meeting of the ExCom in December 2012 with a total value of 280,000 US\$ plus support costs, and the 1<sup>st</sup> tranche in the amount of US\$ 40,000. The second tranche request of HPMP I, with a total value of 127,119 US\$, was submitted for consideration and approved at the 76<sup>th</sup> meeting of the Executive Committee. 2 out of 4 tranches with a total value of 167,119 US\$ have been approved as of today (59.7% of funding). Of the already approved funds (tranche 1 and 2), about US\$ 157,119 has been disbursed as of today which represents more than 94% of the total stage I HPMP funding for Haiti.</p> <p>The third and fourth tranches under stage I of HPMP, with a total of 112,881US\$, have not been requested due to delays on implementation. The Government of Haiti has requested UNDP to lead the development of the HPMP Stage II. The Government of Haiti also requested that the funds from the remaining tranches under stage I to be included in the HPMP Stage II after the verification report is carried out.</p> <p>The Stage I of the HPMP in Haiti has achieved results such as:</p>			

<ul style="list-style-type: none"> <li>• Training of 20 custom officers on control of ODS imports, the use of Harmonized System (HS) codes and the use of identifiers for detecting illegal imports. Furthermore, the NOU staff and Customs authority received training on data collection, consumption monitoring, import control, data reporting, and approaches for HCFC quota distribution.</li> <li>• Training of 60 technicians in good refrigeration servicing practices, in recovery and reuse operations, and in safety aspects of the use of flammable refrigerants.</li> <li>• Support 30 technicians trained with tool kits for the application of good refrigeration practices and safety equipment for the possible use of flammable refrigerants.</li> <li>• Purchase of HCFC recovery equipment and Hydrocarbons training equipment.</li> <li>• Public awareness through lectures, conferences, and presentations on ozone depletion issues, the HPMP, and the adoption of alternative with low global-warming-potential (GWP) and high energy efficiency.</li> </ul>				
<b>3. Current progress in implementation of previous stage of the HPMP</b>				
<b>Activity</b>		<b>Description</b>		<b>Implementing agency</b>
Legal/regulatory framework		Despite the country has experienced serious social and political disturbs, the NOU has been reviewing the regulations and control measures to the HCFC import process to comply with the Montreal Protocol restrictions.		UNEP
Refrigeration servicing sector		Despite the social disturbs and COVID-19 restrictions, NOU has been able to conduct training courses for servicing technicians in the different training centres.		UNEP
Others, specify.		Support to service technicians with tool kits for the application of best refrigeration practices.		UNDP
<b>4. Overview of current HCFC consumption in metric tonnes by substance (last three years)</b>				
<b>Substance</b>	<b>Sector</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
HCFC-22	RAC servicing	48.18	28.54	20.55
HCFC-123	RAC servicing	0.00	0.00	0.00
HCFC-124	RAC servicing	0.00	0.00	0.00
HCFC-141b	RAC servicing	0.00	0.00	0.00
HCFC-142b	RAC servicing	0.00	0.00	0.00
HCFC-141b in imported pre-blended polyols	Manufacturing-Foam PU	0.00	0.00	0.00
<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>				
Haiti's consumption of HCFCs has experienced a progressive decrease in the consumption of HCFC-22, which has allowed the country to easily remain in compliance with its Montreal Protocol obligations as regards HCFCs.				
<b>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.</b>				
<b>Information needed</b>		<b>Description</b>		<b>Agency</b>
Updated data on HCFC consumption in manufacturing/servicing sector		HAITI will only have HCFC consumption in its servicing sector after the Stage 1, and HCFC-22 is the only one HCFC consumed. The national survey for Stage 2 will thus focus on further analysing the consumption and trends in the servicing sector and the main actors involved.		UNDP
New information on ODS regulations		It will review the status of ODS regulations and the need to adapt them.		UNDP

Others, specify.	An analysis of the specific phase-out targets by substance and/or subsector will be conducted, in order to meet upcoming obligations.	UNDP
Others, specify.	Assessment of the HPMP strategy and amend it based on the outcome of Stage 1.	UNDP
<b>7. Activities to be undertaken for project preparation and funding</b>		
<b>Activity</b>	<b>Indicative funding (US \$)</b>	<b>Agency</b>
Assessment of current situation and needs of stakeholders (Survey update, Data analysis, Institutional coordination, etc.)	15,000	UNDP
Technical support and updating of overall strategy for Stage 2, as well as specific strategy for the Servicing sector (International Consultant).	10,000	UNDP
Stakeholders' meetings (2)	2,000	UNDP
Reporting and monitoring	3,000	UNDP
<b>TOTAL</b>	<b>30,000</b>	
<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?</b>		
The surveys will strive to collect the information on HFC when possible. The stage II preparation will also take into account how imports of HFC-based equipment will impact the strategy for the servicing sector for the HPMP, being cognizance of similar activities for the servicing sector whether equipment uses HFC or HCFC.		
<b>9. How will the Multilateral Fund gender policy be considered during project preparation?</b>		
The projects and programs that will comprise HPMP will consider in their implementation the support to hiring female consultants, supervisors, trainers and designers to develop the activities of each one of the projects. Particularly for the projects involving workshops and training sessions for the RAC service sector, efforts will be developed to have more female trainers and technicians to be trained.		

## ANNEX 3

### Preparation funding requests for the Kigali HFC implementation plans (KIP) in:

#### 1. Philippines

**MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
HFC PHASE-DOWN PROJECT PREPARATION REQUEST FORM  
HFC PHASE-DOWN MANAGEMENT PLAN (OVERARCHING STRATEGY)**

**Part I: Project Information**

<b>Project title:</b>	HFCs Phase-down Management Plan Preparation – Over-Arching Strategy		
<b>Country:</b>	Philippines		
<b>Lead implementing agency:</b>	UNDP		
<b>Cooperating agency (1):</b>	n/a	Click or tap here to enter text.	
<b>Implementation period:</b>	January 2023 - December 2024 (24 months)		
<b>Funding requested:</b>			
<b>Agency</b>	<b>Sector</b>	<b>Funding requested (US\$)*</b>	
UNDP	Overarching	220,000	

\*Details should be consistent with information provided in the relevant sections below. Funding estimated based on Document 86/88

**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	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Country has ratified the Kigali Amendment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

<b>1. Montreal Protocol compliance target to the HFCs Phase-down;</b> to be determined			
<b>Phase-out commitment (%)</b>	<b>TBD</b>	<b>Year of commitment</b>	<b>TBD</b>
<input type="checkbox"/> Servicing only	<input type="checkbox"/> Manufacturing only	<input checked="" type="checkbox"/> Servicing and manufacturing	
<b>2. Brief background</b>			
<p>1. Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/52, funding was approved for Philippines for <i>Enabling Activities to prepare for the HFC phase-down</i> and to assure the early ratification of the Kigali Amendment (KA).</p> <p>2. Taking into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of January 2019, and that Philippines has a working Licensing and Reporting mechanism that include HFCs, the country will be able to follow up on the standard reporting obligation under the Kigali Amendment.</p> <p>3. Likewise, under the aforementioned project, it should be noted that information was obtained on the consumption and use of HFCs and their substitutes for the period 2010-2019. In addition, the economic evaluation of the implications that the implementation of the Kigali Amendment would generate in the country was estimated.</p>			
<b>3. Current progress in implementation of Enabling Activities for HFC phase-down</b>			



4. The EA project developed a forecast of HFCs demand at the national level (top-down approach) entailed by national surveys for 2020-2022, the collection and analysis of historical consumption records, traceable from the issuances of regulations on the movement of the substances, and institutional settings. The EA also assessed the current status of non-ODS and low GWP alternative substances for HFCs (as per market conditions in 2020/2021) as initial guide for decision makers during the ratification process. Strategic considerations around policy, directions, plans, programs, technical requirements and standards, administrative requirements, procedures, resources (human, financial, logistical, knowledge), protocols and data base were considered as part of the Roadmap developed for ratification. As result, the Philippines has completed the activities under “Enabling Activities for HFC Phase-down in the Philippines” and the country has also completed the internal steps that ratified the Kigali Amendment, in August 2022, and is expected to deposit the ratification instrument by end of 2022.
5. The EA project has carried out a thorough assessment of baseline ODS licensing system. The EA has initially screened three major entities involved in the licensing system of HFCs consumption in the Philippines as well as ODS Licensing Procedures in place. The EA has identified that the Control and Reporting System through CP and A7 Reports are in place and well-functioning. It is concluded that the current Licensing System has capacity to capture well the imports and exports of HFCs in the country.
6. The EA project was implemented during COVID-19 pandemic and has suffered constraints related to lockdowns impose to reduce the spread. Thus, a number of virtual activities and consultations were promoted. In this regards, Virtual Customs Trainings were carried out that included the assessment of the training needs and recommendations for future training activity(s) for the Customs Officers and expansion and enforcement of the Control Systems. In total, 147 Government Officials participated in these trainings/consultations.
7. The EA project also assessed baseline energy efficiency Policies and Programmes that, if aligned to improvement of EE due to alternative technologies uptake under the Kigali Amendment could enhance EE results. It is recommended to further investigations on EE potential interventions to be considered during KIP PRP and reflecting relevant MOP and ExCom guidelines.
8. Finally, there has been a strong public awareness campaign around the Kigali Amendment and several activities for awareness-raising among different governmental and non-governmental stakeholders have been carried out in the country.

**(a) Overview of estimated use of ODS alternatives 2010–2021:**

9. The entire domestic demand is met through imports. All ODSs and their alternatives are sold by the importers to manufacturers or users directly or indirectly through secondary distributors or retailers. They are also supplied to service establishments and contractors. Moreover, few large manufacturers also import directly.
10. The major component of the ODS alternatives substances used in the Philippines are HFCs which have been introduced into commercial use largely because they have been proven effective substitutes for CFCs and HCFCs in many sectors, namely the RAC sector. HFCs do not deplete the ozone layer but have an impact on climate change due to their high GWP.

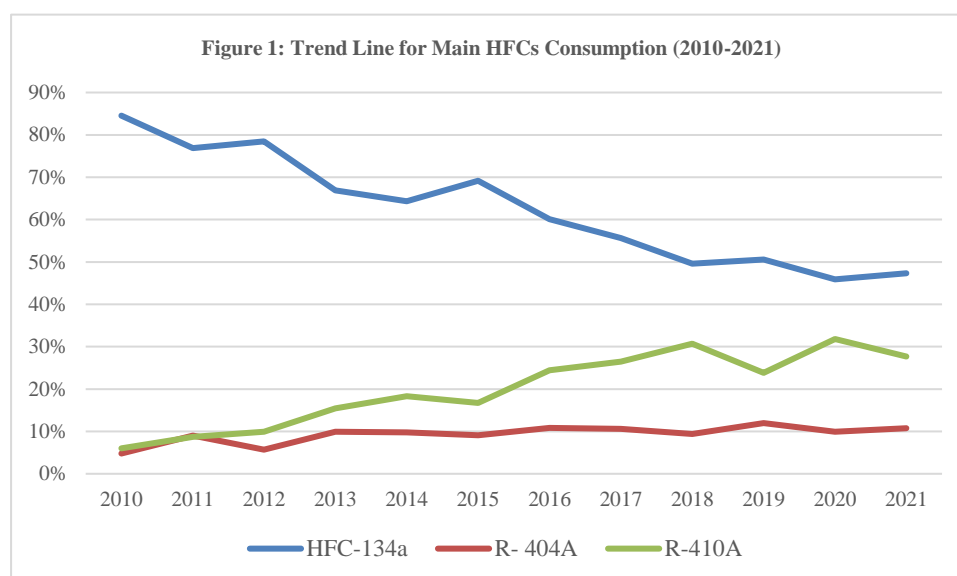
**(b) Overview of current HFC consumption in metric tonnes by substance, as per surveyed in EA**

11. The total consumption of HFCs was estimated to have increased from 1,419 MT in 2010 to a peak consumption of 4,017.98 MT in 2018, but dropped significantly in 2020 and 2021 due to Covid-19 impacts. Most of the consumption in the country was in pure substances than blended substances. The most dominant substance was HFC-134a, followed by R-410A and R-404A. There is a steady drop of HFC-134a in terms of percent weight of the total HFCs consumption, from 85% in 2010 to less than 50% in 2021; while R-404A is increasing from 6% in 2010 to around 10% in recent years, and R-410A increasing from 6% in 2010 to around 30% in recent years (See Table 1 for details). Throughout the years, these three substances make up for more than 93% of the HFC consumption, slightly reduced to below 90% in the last three years, showing more diverse types of HFCs being consumed in recent years. Figure 1 presents the consumption trendline of these three HFCs .

**Table 1: Consumption of HFCs in 2010-2021, in MT**

Substances	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>HFC-23</b>	0.63	0.27	0.63	0.54	0.09	0.59	-	0.36	-	1.66	0.71	0.13
<b>HFC-32</b>	-			0.81	6.76	8.03	15.78	28.52	42.74	133.25	133.33	131.33
<b>HFC-134a</b>	1,199.00	926.54	1,244.00	847.69	1,347.00	1,291.00	1,677.00	1,637.00	1,992.00	1,673.00	1,141.41	1,101.24
<b>HFC-152a</b>	0.52	0.35	-	-	-	-	-	-	-	-	18.40	24.00
<b>HFC-227ea</b>	-	0.03	1.90	0.82	1.62	3.59	1.41	19.48	4.55	14.94	5.47	20.28
<b>HFC-236fa</b>	27.00	9.60	30.00	40.70	54.20	23.70	6.30	44.40	138.10	98.10	49.30	23.50
<b>HFC-245fa</b>	-	-	-	-	12.39	-	-	13.21	31.00	32.00	14.00	10.00
<b>HFC-43-10mee</b>	0.45	0.73	1.05	1.30	0.88	-	-	-	-	1.33	0.63	0.31
<b>R-404A</b>	67.88	109.04	89.90	125.65	205.37	170.40	301.59	311.58	378.10	395.77	247.40	250.34
<b>R-407A</b>	-	-	-	-	-	-	-	-	-	0.39	-	0.11
<b>R-407C</b>	18.13	32.84	27.41	31.15	41.12	27.17	51.73	52.14	102.29	64.35	44.22	58.29
<b>R-410A</b>	85.19	104.80	157.81	195.59	383.56	311.59	681.61	778.36	1,235.00	788.40	791.30	644.28
<b>R-407F</b>	-	-	-	-	-	-	-	-	0.62	-	-	-
<b>R-407H</b>	-	-	-	-	-	-	-	-	-	-	0.44	0.60
<b>R-417A</b>	-	-	-	-	-	-	0.20	0.74	0.23	1.36	0.14	0.31
<b>R-427A</b>	-	-	-	-	-	-	-	-	-	-	-	2.19
<b>R-438A(MO99)</b>	-	-	-	-	-	-	-	-	0.06	-	-	-
<b>R-449A(XP40)</b>	-	-	-	-	-	-	-	-	0.06	0.11	-	0.27
<b>R-452A(XP44)</b>	-	-	-	-	-	-	-	-	0.06	0.11	-	0.02
<b>R-507A</b>	19.32	20.79	32.77	23.11	39.85	29.71	53.51	57.85	93.17	101.50	40.15	58.00

<b>R-508B</b>	0.15	0.14	0.32	0.11	0.14	0.14	0.28	0.17	-	0.43	0.17	0.06
<b>R-513A</b>	-	-	-	-	-	-	-	-	-	0.14	-	0.01
<b>Total</b>	1,418.27	1,205.13	1,585.79	1,267.47	2,092.98	1,865.92	2,789.41	2,943.81	4,017.98	3,306.84	2,487.06	2,325.25



12. An overview of the trend in the consumption of HFC by application or sector in 2017 to 2019 was obtained using the partially compiled transaction records from POD during the Enabling Activities. The refrigeration and air conditioning servicing (RAC-S) had the highest consumption (over 1,000 MT) among the sectors, followed by manufacturing/installation of equipment like refrigeration and air conditioning manufacturing (RAC-M) and mobile air conditioning (MAC). In addition, UNDP has reviewed the CP data for 2020 and 2021. Table 2 is presented below to cover all the breakdown data covered under EA Report and two most recent CP data.

**Table 2: Sector consumption of HFCs in 2017-2021, in MT**

Sector	Substance	2017 HCFC use				2018 HCFC use				2019 HCFC use				2020 HCFC use	2021 HCFC use
		mt	mt (%)	GW P (Ton CO2 e)	GW P (%)	mt	mt (%)	GW P (Ton CO2 e)	GW P (%)	mt	mt (%)	GW P (Ton CO2 e)	GW P (%)	mt	mt
RAC-M	HFC-134a	26	3%	37,309	3%	59	8%	85,056	8%	65	5%	92,635	5%	17	3
	R-410A	55	7%	114,381	12%	238	46%	496,840	46%	297	32%	619,656	32%	331	179
	R-404A	0	0%	981	0%	25	17%	99,423	17%	8	2%	29,493	2%	0	0
	HFC-152a													18	24

RA C-S	HFC-134a	575	70%	822,679	70%	534	68%	764,249	68%	1159	89%	1,657,942	89%	1124	1098
	R-410A	388	47%	810,937	69%	245	48%	512,019	48%	619	66%	1,291,825	66%	461	466
	R-404A	162	20%	635,442	93%	112	76%	437,421	76%	335	97%	1,315,203	97%	247	250
MA C	HFC-134a	219	27%	313,785	27%	195	25%	278,278	25%	84	9%	120,663	6%	NA	NA
	R-410A	8	1%	15,973	2%	33	6%	46,718	4%	21	2%	29,315	2%	NA	NA
	R-404A	12	1%	46,005	7%	9	6%	13,299	2%	3	1%	3,818	0%	NA	NA
Subt otal Total	HFC-134a	821	50%	1,173,773	50%	789	40%	1,127,584	40%	1309	78%	1,871,241	78%	1140	1101
	R-410A	451	58%	941,291	58%	516	42%	1,077,074	42%	936	119%	1,954,284	119%	791	644
	R-404A	174	56%	682,428	56%	146	39%	573,318	39%	346	87%	1,355,169	87%	247	0
Total	HFC-134a	1637	100%	2,340,910	100%	1992	100%	2,848,560	100%	1673	100%	2,392,390	100%	1141	1101
	R-410A	778	100%	1,625,216	100%	1235	100%	2,578,680	100%	788	100%	1,646,179	100%	791	644
	R-404A	312	100%	1,222,017	100%	378	100%	1,482,908	100%	396	100%	1,552,210	100%	247	250

**4. Based on the estimated use/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)**

13. The Philippines has made an analysis of the HFC consumption when the ODS alternative survey was developed and additional work will be done during the preparation stage of the HFC phase-down project. For instance, the data provided above has several major gaps: it is noted that unitary air conditioning (UAC) consumption is only available for 2017 at 284.2 MT. UAC use of HFCs since then is unknown. MAC sector consumption of refrigerants for 2019 dropped by more than 50% with reasons unknown. Given that the EA data have not taken into account 2020 and 2021 consumption data, MAC sector consumption for these years is also unknown. RAC- Servicing sector consumption increased by more than 50% in 2019 compared with both 2017 and 2018. R-410A consumption shown in summary for 2019 is 788.40 MT, while the breakdown of R-410A among RAC-M, RAC-S, and MAC add up to 935.96 MT.
14. In addition, the analysis of HFC consumption baseline in EA was based on the data before 2020, using a linear projection approach, without considering any disturbances and its impact to the supply chain. For instance, Covid-19 lockdowns and related supply chain issues have been a shock to consumption of substances. These data and projection have not been taken into account.
15. From the data analysis, it is obvious that the major consumption of HFC-134a is in RAC sector (manufacturing and servicing) and mobile air-conditioning (MAC) sector (servicing). RAC-S accounts

for 63%, 60%, and 79% of HFC consumptions for 2017-2019 respectively. RAC-M accounts for 4%, 21% and 14% of HFC consumption over the same period. MAC sector consumption is estimated to account for 13%, 15% and 4% over the same period. The balance of the consumption is consumed firefighting, commercial refrigeration, and foam sectors.

**RAC-S:** There are approximately 5,000 service workshops in the Philippines (2,000 located in Metro Manila). Each RAC service shop employs three to five technicians depending on the number and size of equipment to be repaired, installed or maintained. Industrial ACs and refrigeration units are mostly contracted by larger RAC agencies. RAC-S is the largest consumer of HFC-134a, R- 410A, and R404A.

**RAC-M:** It has been estimated that around 30-40% of aggregated HFCs consumption in Philippines is for the manufacturing sector, however, due to limitations (COVID-19 related, time and funding related) a bottom-up survey was not possible to be carried out to estimate the full range of companies in this sector, particularly the ones operating in commercial refrigeration that are of Micro, Small and Medium (MSEs) size. However, there are at least 7 large manufacturers of Air Conditioning units.

- **Residential A/C:** Four enterprises, namely Panasonic Manufacturing Philippines, Concepcion-Carrier Air-Conditioning Company, Hitachi Air-Conditioning Products Philippines, and Koppel, Inc., manufacture mostly residential AC with cooling capacities between 10,000 and 36,000 BTU/hour (the most popular of which are window-AC with 10,000 BTU/hour<sup>5</sup> capacity). Koppel, Inc., also produces light commercial AC with cooling capacities ranging from 3 to 15 tonne of refrigeration (TR). Three of these four manufacturers also import split-AC, and seven other enterprises (i.e., Daikin, LG, Allenaire, Kolin, Panasonic, Samsung, and Trane) exclusively import and distribute window and split residential ACs.
- **Industrial A/C:** The industrial AC sub-sector uses mostly imported equipment installed through local service providers. There are around 100 chillers using HCFC-22, while those installed between 2007 and 2010 operate with HCFC-123, R-407C, HFC-134a, or R-410A refrigerants.
- **Industrial Refrigeration:** the main refrigerant used for ice plants, cold rooms, and cold storage is ammonia. The transport refrigeration sub-sector use minimal amounts of HCFCs; HFC-134a, R-404A (for fishing vessels), or ammonia are widely used. Most commercial refrigeration companies are using HFC-134a or HFC blends (e.g., R-404A and R-507A).
- **MAC:** Repairs and servicing of MAC has an upward trend as well because of the car owners' growing market the country. However, 2019 has a significant drop (which has not been explained). This showcases the need for better MAC sector data.

**Firefighting:** Demand is increasing for HCFC-123 in the manufacture of portable fire extinguishers. Currently, various types of portable fire extinguishers including CO<sub>2</sub>, chemical dry powder, HCFC-123 and HFC-236fa, are commercially available in the local market. In addition, the industry has started to offer HFC-based fire-fighting equipment.

**Solvent:** A total of 153.20 mt of HCFC-141b was imported in 2016 for flushing AC and refrigerators during production and servicing. Some HCFC-141b was also used in the manufacture of industrial aerosol products, spot cleaning in the textile industry, and cleaning in the electronics industry. In addition, 0.42 mt of HCFC-225ca and HCFC-225cb for solvent cleaning applications were imported.

**Metered Dosed Inhalers (MDIs):** According to the World Health Organization (WHO), 12% of Philippine population of 90 million have asthma; and according to the Global Asthma Report, approximately 11 million or 1 out of 10 Filipinos are suffering from asthma, yet 98 percent of Filipino asthma patients continue to lack proper treatment, while asthma affects over six (6) million children. The EA project could not determine the potential size of market and propellants used in MDIs in the Health Sector, this thorough investigation is required to be continued during the KIP PRP procedures.

16. General perception was that, due to the steady economic growth in the last decade, the buying capacity of RAC equipment by the low-and middle-income group population has substantially increased. Furthermore, real estate is a growing sector (apartments), hospitals, hotels, shopping malls, leisure industries are growing exponentially. It is important to note that the COVID-19 global situation and its economic challenges had indeed momentarily impact the scenarios, nevertheless, the growth trend are expected to return to higher levels with the national recovery efforts in place.
17. The simplest projection of the yearly increase of HFCs in 2020-2022 was to calculate the average of difference between two consecutive years from 2010-2019, an arithmetic straight-line method so that the average is the yearly incremental increase or slope of the line. See below table for details.

**Table 4-4. HFCs Consumption Forecast for 2020-2022 Using Arithmetic Straight-Line Method**

Substance	History, MT			Forecast, MT			100-year GWP	Forecast, MT	
	2010	2019	Average Yearly Incremental Increase/change	2020	2021	2022		2020	2022
<b>A. Pure</b>									
HFC-23	0.63	1.66	0.11	1.77	1.89	2.00	14,800	26,261.78	27.9
HFC-32	0.00	133.25	14.81	148.05	162.86	177.66	675	99,933.75	109.9
HFC-134a	1199.79	1673.00	52.58	1,725.58	1,778.16	1,830.74	1,430	2,467,578.92	2,542.7
HFC-152a	0.52	0.00	0.00	0.00	0.00	0.00	124	0	
HFC-227ea	0.00	14.94	1.66	16.6	18.26	19.92	3,220	53,449.07	58.7
HFC-236fa	27.00	98.10	7.90	106	113.9	121.8	9,810	1,039,860.00	1,117.3
HFC-245fa	0.00	32.00	3.56	35.56	39.11	42.67	1,030	36,622.22	40.2
HFC-43-10mee	0.45	1.33	0.10	1.42	1.52	1.62	1,640	2,332.44	2.4
<b>B. Blend</b>									
R-404A	67.88	395.77	36.43	432.2	468.63	505.07	3,922	1,695,093.85	1,837.9
R-407A	0.00	0.39	0.04	0.43	0.47	0.51	2,107	903.43	9
R-407C	18.13	64.35	5.14	69.49	74.63	79.76	1,774	123,273.37	132.3
R-407F	0.00	0.00	0.00	0.00	0.00	0.00	1,825	0	
R-410A	85.19	788.40	78.13	866.54	944.67	1022.81	2,088	1,809,329.84	1,972.4
R-417A	0.00	1.36	0.15	0.96	1.11	1.26	2,346	2,251.17	2.6
R-438A (MO99)	0.00	0.00	0.00	0.00	0.00	0.00	2,265	0	
R-449A (XP40)	0.00	0.11	0.01	0.13	0.14	0.15	1,410	177.82	
R-452A (XP44)	0.00	0.11	0.01	0.13	0.14	0.15	2,140	269.88	2
R-507A	19.32	101.50	9.13	110.64	119.77	128.9	3,985	440,881.36	477.2
R-508B	0.15	0.43	0.03	0.46	0.49	0.52	13,396	6,175.56	6.5
R-513A	0.00	0.14	0.016	0.15	0.17	0.18	631	95.49	1
<b>TOTAL</b>	<b>1419.06</b>	<b>3306.84</b>		<b>3,516.10</b>	<b>3,725.91</b>	<b>3,935.72</b>		<b>7,804,489.94</b>	<b>8,330.4</b>

Average is 8.330,476.77 MT of CO2e

18. Based on the number of permits issued by the Government during the first three quarters of 2022, an estimate of 2022 HFCs consumption is provided below. Note that we have not received breakdown of HFCs or blends to present substance by substance estimate.

**Table 3: Estimated 2022 HFC consumption**

	In KG (Q1-3)	In MT (Q1-3)	Estimated 2022
HFCs	1,227,341.56	1,227	1,636
HFC Blends	1,119,613.78	1,120	1,493

19. When comparing the projected consumption for 2020- 2022 with the real consumption data for 2020&2021, it is noted that the difference is huge, showing that the methodology of an arithmetic straight-line assuming average annual increase is not applicable, especially when a year-on-year linear growth was not observed during 2010 and 2019 for many substances including R-404A, R-410A, HFC-236fa, and to some extent HFC-134a too, without mentioning the inability of the method to take into account any demand shocks such as Covid.

**5. Assessment of commonly used alternatives to HFCs available in the local market**

20. The replacement of high-GWP HCFCs and HFCs with low-GWP alternatives is a challenge for the Philippines. It has been identified/experienced that local industries as end-users are having the following concerns to be taken into consideration during the conversion process to the alternative technology:
- Flammability issues of low-GWP alternatives.
  - Price barriers of the alternatives.
  - Insufficient financial resources to meet the cost for transition to new technologies.
  - There is no simple solution that can be used in certain sectors.
  - Alternatives are new in the local market and market penetration is an incognito.
  - Fear to switch to other technology (lack of technical institutions and training).
  - Unclear policies/regulations introduced by authorities on refrigerant issues and the industry as a whole
21. The EA report also states that R-290, ammonia, CO<sub>2</sub>, and hydrofluoroolefins (HFOs) are available in the Philippine market and as alternatives to HFCs, they have significantly lower global warming potential. The most commonly used alternatives to HFCs available in the local market are listed in the table below:

Table 2 – Estimated Sector use of HFCs alternatives in the Philippines

	Application	Non-ODS Alternative	Low GWP Alternative Technologies		
			Substance	Characteristics: Flammability/Safety, etc.	Availability
1.	Industrial and commercial AC (New and retrofit equipment)	R-410A (GWP = 2,088)	R-454B (HFO/HFC blend) (GWP = 467)	Mildly flammable; Difficult to ignite; Relatively low energy release; Low flame speed	Limited stocks available in Malaysia
2.	Industrial and commercial AC (New System Only)	R-410A (GWP = 2,088)	R-452B Opteon XL55 (HFO/HFC Blend-452B) (GWP = 676)	Mildly flammable; Difficult to ignite; Relatively low energy release; Low flame speed	Not yet in the Philippines
3.	Mobile AC	HFC-134a (GWP = 1,430)	HFO-1234yf (Opteon YF) (GWP = <150)	Mildly flammable; Difficult to ignite; Relatively low energy release; Low flame speed	Available in the Philippines
4.	Refrigeration	R-404A (GWP = 3,922)	R-455A (HFO/HFC blend) (GWP = 146)	Mildly flammable; Difficult to ignite; Relatively low energy release; Low flame speed	Available in the Philippines
6.	Chiller/ Refrigeration (Retrofit)	HFC-134a (GWP = 1,430)	R515B (HFO/HFC blend) (GWP = 199)	No flame propagation at ≤ 63 deg C but still may be flammable at higher temperature and in building fires	Available in the Philippines
7.	Chiller/ Refrigeration (Retrofit)	HFC-134a (GWP = 1,430)	R-513A (HFO/HFC blend) (GWP = 573)	Safe and nonflammable (ASHRAE A1)	Available in the Philippines
8.	Chiller/ Refrigeration (New equipment)	HFC-134a (GWP = 1,430)	R-513A (HFO/HFC blend) (GWP = 573)	Safe and nonflammable (ASHRAE A1)	Available in the Philippines
9.	Chiller/ Refrigeration (New equipment)	HFC-134a (GWP = 1,430)	HFO-1234ze (GWP = <1)	Mildly flammable; Difficult to ignite; Relatively low energy release; Low flame speed	Available in the Philippines

	Application	Non-ODS Alternative	Low GWP Alternative Technologies		
			Substance	Characteristics: Flammability/Safety, etc.	Availability
10.	Chiller/ Refrigeration (New equipment)	HFC-134a (GWP = 1,430)	HFO-1234yf (Opteon XL10) (GWP = <1)	Mildly flammable; Difficult to ignite; Relatively low energy release; Low flame speed	Limited stocks available in Malaysia
11.	Chiller/ Refrigeration	HFC-134a (GWP = 1,430)	R600a (Iso-Butane) (GWP = 3)	Ignites very easily; Potentially explosive	Available in the Philippines
12.	Commercial/ Industrial Refrigeration	R-404A (GWP = 3,922)	R-454A (HFO/HFC blend) (GWP = 238)	Mildly flammable; Difficult to ignite; Relatively low energy release; Low flame speed	Limited stocks available in Malaysia
13.	Commercial/ Industrial Refrigeration	R-404A (GWP = 3,922)	R-454C (HFO/HFC blend) (GWP = 148)	Mildly flammable; Difficult to ignite; Relatively low energy release; Low flame speed	Limited stocks available in Malaysia
14.	Fire Suppression (Total Flooding)	HFC-227ea (GWP = 3,220)	Novect <sup>TM</sup> 1230 Fire Protection Fluid (Perfluoroketon) (GWP = <1)	5-day atmospheric lifetime; Large margin of safety for occupied spaces	Available in the Philippines
15.	Polyurethane Foam Blowing Agent	HFC-245fa (GWP = 1,030)	Ecomate (GWP = 0)	Health Risk – Level 2 Material can cause incapacitation or residual injury during intense or continued exposure. Flammability – Level 4 Material completely vaporizes at normal pressure and temperature and burn readily. Reactivity – Level 0 Material is stable even under exposure to fire.	Available in the Philippines
16.	Vapor Degreasing / Cleaning/ Flushing of Industrial Parts and in Electronics Industry	HFC-43-10mee (GWP = 1,640)	Novect <sup>TM</sup> 73DE Engineered Fluid (Hydrofluoroether) (GWP = 47)	Non-flammable liquid; Low toxicity	Available in the Philippines
17.	Aerosol Electrical	HFC-43-10mee (GWP = 1,640)	Novect <sup>TM</sup> Contact Cleaner Aerosol (Hydrofluoroether) (GWP = 297)	Non-flammable aerosol; Low toxicity; Non-corrosive;	Available in the Philippines
	Cleaning in Electronics, Aerospace, Aviation, Automotive			Non-chlorinated; Exempted from the US EPA's volatile organic compound (VOC) regulation	

22. Today, most of the ODS alternatives are HFCs, and they are used mainly in the different RAC sectors. R-134a is the most important refrigerant used in domestic refrigeration and MAC sectors.
23. However, HCFCs are gradually being phased-out, and the demand for HFCs is expected to increase in the short and medium terms to satisfy the expected growth in the country due to the work that has been done in the context of the HPMP activities.
24. DENR has issued on 13 October 2021 DAO 2021-31 for the Chemical Control Order (CCO) for HFCs similar to the CCO for ODS. Since the CCO was just recently issued, it is important to enabled the



importers since part of the preparation for the phase-down includes the operationalization of the quota system.

<b>6. Description of information that needs to be gathered and updated.</b>		
<b>Information needed</b>	<b>Description</b>	<b>Agency</b>
	Conducting interviews, organizing workshops and stakeholders' consultations for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control until 2022	UNDP
Updated data on HFC baseline, import and exports of HFCs consumption in manufacturing/servicing (2020, 2021, and 2022)	Collection and analysis of HFCs import and export data during 2020-2022, establishing the baseline of the Kigali Amendment for HFC phasing down.	UNDP
Survey of manufacturers that have used HFCs in their production, and their eligibilities for the MLF resources.	Identifying manufacturers using HFCs as much as possible; establishing a list of companies and a mechanism/database that can collect the data from the manufacturers annually regardless of their ownership.  Identifying the companies that are eligible for the MLF on the HFC phase-down and those who might be prioritized for conversion in the stage-I KIP. Assembly companies will also be identified as a separate group.	UNDP
Conducting a survey on the cold chain.	The cold chain survey will include the stakeholder mapping, type of the technologies and refrigerants in use, business models, energy efficiency, and infrastructures. Assembly companies will also be identified as a separate group.	UNDP
Capacity assessment of servicing sector	Assess the capacities of servicing sector and identify the main challenges, gaps and needs for capacity building and training. Identify the applications that have higher leakage rate of refrigerants and stakeholders/owners of large cold chain infrastructure.  Assessment of country level needs for trainings and certification in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions; including assessments of the needs for enhancing training programs on recovery, recycling and destruction	UNDP
Market analysis of types of equipment using HFCs and their energy efficiency level (Manufactured locally and imported), update the sectoral level consumption of HFCs/HCFCs	Update current market profile and trends of cooling equipment, data collection and analysis of HFC/HCFC consumption and alternatives by sector/sub-sectors, market penetration, baseline information of energy efficiency of prevailing models of cooling system and products in the market when possible.	UNDP
Policy and regulations	Further review current regulatory framework and carry on a holistic assessment on their effectiveness to better identify potential remaining barriers to be removed. Explore the policy framework that can facilitate the phase-down of HFCs and market transformation such as products import/manufacturing bans, sustainable public procurement, carbon tax, carbon credit, and so on.	UNDP
Stakeholder mapping and consultation	Carry on proper consultations with stakeholders, validate data, survey report and recommendations, policies, strategies, and action plans.	UNDP

	Draft the updated over-arching strategy, endorse strategies with stakeholders, obtain approvals from institutions responsible for the MP framework in country, translate documents, submit document to ExCom	
<b>7. Project preparation funding</b>		
<b>Activity</b>	<b>Indicative funding (US \$)</b>	<b>Agency</b>
HFC data collection and analysis	30,000	UNDP
Cold Chain survey	30,000	
Servicing sector capacity Assessment	20,000	UNDP
Market trend, technology mapping	20,000	
Policy and regulations	30,000	UNDP
Strategy development	40,000	
Gender Analysis and Acton Plan	5,000	UNDP
Stakeholders Meetings	10,000	
Travels and IT support	20,000	UNDP
Carry on Stakeholders Meetings (including missions)	15,000	UNDP
<b>TOTAL</b>	<b>220,000</b>	
<b>8. How will activities related to implementation of the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan?</b>		
<p>The Stage I of the HPMP was initially approved at the 68th meeting, at a total cost of US \$233,910 including agency support costs for UNEP. The Stage II HPMP for the Philippines was approved at the 80th meeting of the ExCom. The activities in the stage II HPMP focus on the sustainable phase-out in the use of HCFCs and, to the extent possible, promote the safe use of low-GWP alternatives.</p> <p>The HFC phase-down is a much more complex task as it requires inevitably introduction of flammable and new sophisticated technologies at scale in Philippines. Given limited efforts in servicing sector so far in HPMP in Philippines, relevant policy framework, safety standard, best practices, certification, theory and hands-on training must be deployed quickly at scale all over the country. The activities of KIP should also consider the needs of early investments for achieving the target beyond 10% reduction as the speed of phase-out will be accelerated after 2029.</p> <p>There will not be overlaps on activities in the manufacture sector between HPMP and KIP. In the preparation of KIP, in-depth assessment of servicing sector will be conducted. While some activities in the HPMP and KIP might be similar, the NOU and agencies will discuss with stakeholders to ensure the different focus of contents and beneficiaries in HPMP and KIP. At the same time, the KIP will explore the synergy with complementary activities between HPMP and KIP. The safe handling of these substances by all technicians in the country is a task of a completely different magnitude compared to what has been seen before. As such, KIP includes not only the training of technicians, but an associated update / introduction of standards, safety guidelines, regulation, etc. for the safe handling of refrigerants. In the policy and regulation aspect, apart from the licence/quota system, the KIP would like to facilitate the demonstration and market transformation at ender user side and align the strategy of HFC phasing down with national climate action framework, energy transition, and green economy approach.</p> <p>The NOU sees the main synergy could be achieved by coordinating all the activities by the same governmental entity –DENR in this case –for both the HPMPs and the HFC phase down.</p>		
<b>9. How will the Multilateral Fund gender policy be considered during project preparation?</b>		
<p>During the project preparation, gender considerations and actions on gender mainstreaming will be assessed and a proper Gender Management Plan is to be included in the Over-arching strategy: The following actions are expected to be carried in the preparation phase:</p> <ol style="list-style-type: none"> <li>To collect data to produce gender-disaggregated indicators</li> <li>Look into introduction of gender considerations when designing components and activities o (presentation of sex-disaggregated data and visuals of women and men where applicable);</li> <li>To establish a baseline of women technicians in R&amp;AC sector and compare it with the number of women involved in NOU R&amp;AC activities.</li> <li>To incorporate gender aspects in the recruitment of staff for the PRP (emphasizing that female candidates are welcome and encouraged to apply)</li> </ol>		

- e) Assurance that consultants and project personnel have the required gender competence to reflect on progress and challenges related to gender.
- f) Draft a Gender Management Plan to be supported as part of the over-arching strategy