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EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL Eighty-third Meeting Montreal, 27–31 May 2019

# PROGRAMME DE TRAVAIL DU PNUD POUR L'ANNEE 2019

Les documents de présession du Comité exécutif du Fonds multilatéral aux fins d'application du Protocole de Montréal sont présentés sous réserve des décisions pouvant être prises par le Comité exécutif après leur publication.

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

1. Le PNUD demande au Comité exécutif d'approuver le montant de 1 356 256 \$US, plus 94 938 \$US de coûts d'appui d'agence, pour son programme de travail pour 2019, résumé dans le tableau 1. La demande est jointe au présent document.

Pays	Activité/Projet	Montant sollicité (\$US)	Montant recommandé (\$US)
	TTÉS RECOMMANDÉES AUX FINS D'APPROBATION GLOBAL	Æ	
	le projets de renforcement des institutions		
Bangladesh	Renouvellement du projet de renforcement des institutions (phase IX)	166 400	166 400
Chili	Renouvellement du projet de renforcement des institutions (phase XIII)	238 784	238 784
Colombie	Renouvellement du projet de renforcement des institutions (phase XII)	352 768	352 768
Cuba	Renouvellement du projet de renforcement des institutions (phase XI)	190 804	190 804
Trinité-et-Tobago	Renouvellement du projet de renforcement des institutions (phase X)	85 000	85 000
	Total partiel pour A1	1 033 756	1 033 756
	Coûts d'appui d'agence (7 % pour le renforcement des institutions)	72 363	72 363
	Total pour A1	1 106 119	1 106 119
A2 : Préparation de p	rojets en vue de plans de gestion de l'élimination des HCFC	• • - • •	
République	Préparation d'un Plan de gestion de l'élimination des HCFC	60 000	60 000
dominicaine	(PGEH) (phase III)		
Eswatini (Royaume d')*	Préparation d'un Plan de gestion de l'élimination des HCFC (PGEH) (phase II)	10 000	10 000
Nigéria**	Préparation d'un Plan de gestion de l'élimination des HCFC (PGEH) (phase III)	22 500	22 500
Panama	Préparation d'un Plan de gestion de l'élimination des HCFC (PGEH) (phase III)	60 000	60 000
Uruguay	Préparation d'un Plan de gestion de l'élimination des HCFC (PGEH) (phase III)	60 000	60 000
Zimbabwe*	Préparation d'un Plan de gestion de l'élimination des HCFC (PGEH) (phase II)	20 000	20 000
	Total partiel pour A2	232 500	232 500
	Coûts d'appui d'agence (7 % pour la préparation des projets)	16 275	16 275
	Total pour A2	248 775	248 775
<b>SECTION B : ACTIV</b>	TTÉS RECOMMANDÉES AUX FINS D'EXAMEN INDIVIDUEL		
	rojets portant sur les HFC (décision 78/3 g))		
Indonésie	Conversion du HFC-134a dans la fabrication de réfrigérateurs ménagers	30 000	***
Liban	Conversion du R-404A dans les unités de réfrigération commerciale pour supermarchés chez Leon Industries S.A.R.L., Liban	30 000	***
Pakistan	Conversion du HFC-134a au R-600a/R-290 comme réfrigérant dans la fabrication de surgélateurs, de réfrigérateurs ménagers et de distributeurs d'eau chez PAK Elektron Limited, Lahore, Pakistan	30 000	***
	Total partiel pour B1	90 000	***
	Coûts d'appui d'agence (7 % pour les activités de facilitation)	6 300	***
	Total pour B1	96 300	***
	Total général (A1, A2, B1)	1 451 194	1 354 894
			100.071

# Tableau 1 : Programme de travail du PNUD pour 2019

\* Agence d'exécution principale : PNUE \*\* Agence d'exécution : ONUDI \*\*\* Pour examen individuel

# SECTION A : ACTIVITÉS RECOMMANDÉES AUX FINS D'APPROBATION GLOBALE

# A1: Renforcement des institutions

# **Description du projet**

2. Le PNUD a soumis les demandes de renouvellement des projets de renforcement des institutions concernant les pays figurant à la section A1 du tableau 1. Ces projets sont décrits à l'annexe I du présent document.

# **Observations du Secrétariat**

3. Le Secrétariat a examiné les demandes de renouvellement des cinq projets de renforcement des institutions soumises par le PNUD au nom des gouvernements concernés à la lumière des lignes directrices et des décisions pertinentes concernant l'admissibilité et les niveaux de financement. Ces demandes ont été recoupées avec les informations contenues dans le plan de travail initial sur le renforcement des institutions pour la phase précédente, le programme de pays et les données communiquées au titre de l'article 7, le plus récent rapport sur la mise en œuvre du plan de gestion de l'élimination des HCFC (PGEH), le rapport périodique de l'agence et les décisions pertinentes de la Réunion des Parties. Il a été noté que ces pays ont soumis les données de leurs programmes pour 2017/2018 et sont en conformité avec les objectifs de réglementation aux termes du Protocole de Montréal et que leur consommation annuelle de HCFC ne dépasse pas la consommation annuelle maximale admissible indiquée dans les accords de PGEH conclus avec le Comité exécutif. Qui plus est, toutes les demandes soumises comprennent des institutions, conformément à la décision 74/51 e).

# **Recommandation du Secrétariat**

4. Le Secrétariat recommande l'approbation globale des demandes de renouvellement des projets de renforcement des institutions concernant le Bangladesh, le Chili, la Colombie, Cuba et Trinité-et-Tobago au niveau de financement indiqué dans la section A1 du tableau 1 du présent document. Le Comité exécutif pourrait souhaiter transmettre aux gouvernements des pays susmentionnés les observations qui figurent à l'annexe II au présent document.

# A2 : Préparation de projets en vue de plans de gestion de l'élimination des HCFC (PGEH)

# **Description du projet**

5. Le PNUD a présenté les demandes de trois pays (Panama, République dominicaine et Uruguay) en qualité d'agence d'exécution désignée, et du Nigéria en qualité d'agence d'exécution principale avec l'ONUDI en qualité d'agence d'exécution coopérante, pour la préparation de la phase III des PGEH. En outre, des demandes de financement ont été soumises pour deux pays (Eswatini et Zimbabwe) pour la préparation de la phase II des PGEH en qualité d'agence d'exécution coopérante, le PNUE étant l'agence d'exécution principale, comme indiqué à la section A2 du tableau 1.

6. Le PNUD a fourni des descriptions des activités pour appuyer les demandes de préparation de projets pour les pays dont il est l'agence d'exécution désignée/principale. Les demandes soumises pour chaque pays comprennent : des arguments à l'appui des demandes de financement ; un rapport d'activité concernant la mise en œuvre de la phase II de leur PGEH respectif ; et la liste des activités potentielles accompagnée de leurs budgets. Le PNUE, en qualité d'agence d'exécution principale pour l'Eswatini et le Zimbabwe, a demandé 60 000 \$US, plus coûts d'appui d'agence, dans son programme de travail pour

2019<sup>1</sup>. L'ONUDI, en qualité d'agence coopérante pour le Nigéria, a demandé 72 500 \$US, plus coûts d'appui d'agence, dans son programme de travail pour 2019<sup>2</sup>.

# **Observations du Secrétariat**

7. Lors de l'examen des six demandes, le Secrétariat a tenu compte des directives relatives au financement de la préparation des PGEH pour les pays visés à l'article 5, stipulées dans la décision 71/42, de la phase II des PGEH approuvés, de l'état d'avancement des tranches à la date de préparation du présent document, et de la décision 82/45 c) i)<sup>3</sup>. Le Secrétariat a noté que les financements sollicités pour chaque pays sont conformes à la décision 71/42 et que le PNUD a confirmé que les tranches restantes concernant ces pays seront soumises comme prévu dans l'Accord.

8. Concernant la demande du Nigéria, le Secrétariat a noté que le Comité exécutif était convenu à sa 82<sup>e</sup> réunion d'inclure la préparation de projet pour la phase III des PGEH dans le plan d'activités général de 2019–2021 pour les pays dont la phase II du PGEH allait au-delà de 2020, étant entendu que des demandes de préparation de projet ne seraient pas présentées moins de deux ans avant la date d'achèvement de la phase II du PGEH<sup>4</sup>. Bien que la demande concernant le Nigéria ait été soumise plus de deux ans avant la date de fin de la phase II du PGEH<sup>5</sup>, il a été noté que cette phase avait été approuvée en précisant que son approbation n'empêchait pas le Nigéria de soumettre, au plus tôt en 2020, la phase III du PGEH<sup>6</sup>. À ce titre, le Secrétariat est convenu que la préparation du projet pourrait être demandée à la présente réunion.

9. Le PNUD a confirmé que la phase III du PGEH pour la République dominicaine, le Panama, le Nigéria et l'Uruguay atteindra au minimum l'objectif de 67,5 % en 2025.

# **Recommandation du Secrétariat**

10. Le Secrétariat recommande l'approbation globale des demandes relatives à la préparation de projets concernant la phase III des plans de gestion de l'élimination des HCFC (PGEH) pour la République dominicaine, le Panama, le Nigéria et l'Uruguay, et à la préparation de projets concernant la phase II des PGEH pour l'Eswatini et le Zimbabwe, au niveau de financement indiqué à la section A2 du tableau 1.

# SECTION B : ACTIVITÉS RECOMMANDÉES AUX FINS D'EXAMEN INDIVIDUEL

## B1 : Préparation de projets portant sur les HFC (décision 78/3 g))

## **Description du projet**

11. Le PNUD a présenté trois demandes de préparation de projet pour la conversion à des réfrigérants à faible PRP dans la fabrication de réfrigérateurs ménagers en Indonésie (HFC-134a), dans la fabrication de réfrigérateurs commerciaux pour les supermarchés au Liban (R-404A) et dans la fabrication de surgélateurs, réfrigérateurs ménagers et distributeurs d'eau au Pakistan (HFC-134a), comme indiqué à la section B1 du tableau 1 ci-dessus. Des précisions sur les demandes de préparation de projets sont fournies dans la soumission du PNUD jointe au présent document.

<sup>&</sup>lt;sup>1</sup> UNEP/OzL.Pro/ExCom/83/18

<sup>&</sup>lt;sup>2</sup> UNEP/OzL.Pro/ExCom/83/19

<sup>&</sup>lt;sup>3</sup> L'inclusion de la phase III des PGEH dans le plan d'activités général de 2019-2021, uniquement pour les pays dont on avait approuvé la phase II d'un PGEH pour respecter l'objectif de réduction d'ici 2020.

<sup>&</sup>lt;sup>4</sup> Décision 82/45 c) ii)

<sup>&</sup>lt;sup>5</sup> 31 décembre 2024

<sup>&</sup>lt;sup>6</sup> Décision 81/40 c)

# **Observations du Secrétariat**

12. Le Secrétariat a examiné les demandes de préparation de projets conformément aux décisions 78/3 g), 79/45 b) et 81/53 b) et a noté que :

- a) Le financement demandé est conforme aux décisions pertinentes concernant le financement de la préparation de projets ;
- b) Les demandes concernant l'Indonésie et le Liban n'ont pas été incluses dans le plan d'activités du PNUD pour la période 2018-2020, de sorte que les demandes ne répondent pas pleinement aux exigences de la décision 79/45 b)<sup>7</sup>;
- c) Les demandes concernant l'Indonésie et le Pakistan concernent des demandes pour lesquelles un certain nombre de projets d'investissement liés aux HFC ont déjà été approuvés (sur un total de 10 projets d'investissement approuvés, sept concernent la réfrigération ménagère); ces demandes ne sont donc pas conformes à la décision 81/53 b)<sup>8</sup>;
- d) Le Liban a reçu à la 81<sup>e</sup> réunion un financement pour un projet d'investissement lié aux HFC, étant entendu qu'aucun autre financement pour des activités liées aux HFC ne serait disponible pour ce pays tant que son instrument de ratification n'aura pas été reçu par le dépositaire au Siège de l'ONU à New York ; et
- e) Conformément à la décision 81/53 b), les propositions complètes de projets devraient être soumises à la 84<sup>e</sup> réunion.

13. Le PNUD a demandé une certaine souplesse concernant les projets qui ne figurent pas dans le plan d'activités en notant qu'il y avait eu des précédents en matière d'approbation de projets liés aux HFC non inclus dans ce plan. Quant aux demandes concernant la conversion du secteur de la réfrigération ménagère en Indonésie et au Pakistan, le PNUD a expliqué que ces projets sont importants car ils permettront de mieux comprendre la dynamique, la chaîne d'approvisionnement et les coûts relatifs de la conversion du secteur de la réfrigération ménagère dans la région.

14. Dans le cas du Liban, le PNUD a indiqué que le projet est important car il est le premier à se concentrer sur la technologie au  $CO_2$  transcritique. Le PNUD a fourni une copie de l'approbation parlementaire de la ratification de l'Amendement de Kigali ; au moment de la rédaction du présent document, les instruments de ratification n'avaient toutefois toujours pas été enregistrés aux Nations Unies à New York.

15. Le PNUD a également confirmé que si ces demandes de préparation de projets sont approuvées, tout sera fait pour que les projets soient soumis à la 84<sup>e</sup> réunion, conformément à la décision 81/53 b).

## **Recommandation du Secrétariat**

16. Au vu des observations du Secrétariat susmentionnées, le Comité exécutif est invité à envisager d'approuver les demandes de :

<sup>&</sup>lt;sup>7</sup> Décision 79/45 b) : Que les projets potentiels doivent figurer dans les plans d'activités de 2018-2020 des agences bilatérales et d'exécution qui seront proposés à la 80<sup>e</sup> réunion et les plans d'activités subséquents, selon le cas.

<sup>&</sup>lt;sup>8</sup> Décision 81/53 b) : D'inviter les agences bilatérales et les agences d'exécution à préparer et à présenter des propositions de projet pour la reconversion à des substances de remplacement des HFC et la promotion de nouvelles technologies, jusqu'à la 84<sup>e</sup> réunion inclusivement, en particulier dans les régions et les secteurs non couverts par les projets approuvés jusqu'à la 81<sup>e</sup> réunion inclusivement.

- a) Préparation de projet concernant la conversion du HFC-134a pour la fabrication de systèmes de réfrigération ménagère en Indonésie, d'un montant de 30 000 \$US, plus 2 100 \$US de coûts d'appui d'agence ;
- b) Préparation de projet concernant la conversion du R-404A pour la fabrication de systèmes de réfrigération commerciale pour supermarchés chez Leon Industries S.A.R.L, au Liban, d'un montant de 30 000 \$US, plus 2 100 \$US de coûts d'appui d'agence ; et
- c) Préparation de projet concernant la conversion du HFC-134a au R-600a/R-290 comme réfrigérant dans la fabrication de surgélateurs, de réfrigérateurs ménagers et de distributeurs d'eau chez PAK Elektron Limited, Lahore, Pakistan, d'un montant de 30 000 \$US, plus 2 100 \$US de coûts d'appui d'agence.

## Annex I

## INSTITUTIONAL STRENGTHENING PROJECT PROPOSALS

#### **Bangladesh: Renewal of institutional strengthening**

Implementing agency:			UNDP
Amounts previously approved for institutional streng	gthening (US \$):		
	Phase I:	Sept-94	150,000
	Phase II:	Nov-99	100,000
	Phase III:	Dec-01	100,000
	Phase IV:	Dec-04	130,000
	Phase V:	Nov-07	130,000
	Phase VI:	Jul-10	130,000
	Phase VII:	Dec-13	130,000
	Phase VIII:	Dec-16	166,400
		Total:	1,036,400
Amount requested for renewal (phase IX) (US \$):			166,400
Amount recommended for approval for phase IX (U	S \$):		166,400
Agency support costs (US \$):			11,648
Total cost of institutional strengthening phase IX to the Multilateral Fund (US \$):		178,048	
Date of approval of country programme:		1994	
Date of approval of HCFC phase-out management plant	lan (stage I):		2011
Date of approval of HCFC phase-out management plant	lan (stage II):		2018
Baseline consumption of controlled substances (ODI	P tonnes):		
Annex B, Group III (methyl chloroform) (average 19	998-2000)		0.9
Annex C, Group I (HCFCs) (average 2009-2010)			72.6
Annex E, (methyl bromide) (average 1995-1998)			0.0
Latest reported ODS consumption (2017) (ODP tonr	nes) as per Article 7:		
Annex B, Group III (methyl chloroform)	/ I		0.00
Annex C, Group I (HCFCs)			63.33
Annex E, (methyl bromide)			0.00
· · · ·		Total:	63.33
Year of reported country programme implementation	n data:		2017
Amount approved for projects (as at December 2018	B) (US \$):		13,858,651
Amount disbursed (as at November 2017) (US \$):	/		7,477,252
ODS to be phased out (as at December 2018) (ODP	tonnes):		735.9
ODS phased out (as at November 2017) (ODP tonne			493.8

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

Summary of activities	Funds approved (US \$)
(a) Investment projects:	9,455,248
(b) Institutional strengthening:	1,036,400
(c) Project preparation, technical assistance, training and other non-investment projects:	3,367,003
Total:	13,858,651
(d) HFC activities funded from additional voluntary contributions	3,350,823

#### Progress report

2. Phase VIII of the IS project for Bangladesh became operational in April 2018. The delay was due to the Government's approval process, which took longer than expected. The project continued to provide

support to strengthen the Ozone Cell; prepare and monitor all ODS and non-ODS related projects; update ODS data annually; issue ODS import permits; organize the International Ozone Day celebration and awareness raising activities; and coordinate all other related activities pertaining to the implementation of the Montreal Protocol, working closely with other national agencies and key stakeholders. The transfer of duties to a new project Director prevented the country from participating in network meetings in 2018. The funding request for the first project under the Kigali Amendment (fast-track funding) was approved for Bangladesh in November 2017 for HFC phase-down. The project is being implemented and will be completed within the stipulated time of 24 months, i.e. November 2019. Targets for all five performance indicators set by the country were fully achieved.

## Plan of action

3. During phase IX of the IS project, the Government of Bangladesh will continue sustaining the achieved ODS phase-out and will make use of existing capacities to focus on defining and implementing policies and measures to systematically reduce consumption of HCFCs; control and monitor consumption of all ODS; and monitor activities under stage II HPMP in close coordination with all implementing agencies and relevant stakeholders. The IS project implements ODS policy and control measures and will carry out other awareness-raising and training activities in collaboration with the media and schools. It will also continue to disseminate the importance of ozone layer protection and its linkage to climate change. The Government is working with the refrigeration and air-conditioning (RAC) industry to implement stage II of the HPMP with low-global-warming potential (GWP) climate-friendly alternatives. Through these activities, Bangladesh will sustain the compliance of ODS phase-out and achieve HCFC phase-out control targets in 2019 and 2020.

Implementing agency:			UNDP
Amounts previously approved for institutional s	strengthening (US \$):		
	Phase I:	Jun-92	213,000
	Phase II:	Oct-96	113,500
	Phase III:	Jul-98	143,500
	Phase IV:	Dec-00	143,500
	Phase V:	Nov-02	186,550
	Phase VI:	Apr-05 and Nov-05	186,550
	Phase VII:	Mar-07	186,55
	Phase VIII:	Apr-09	186,55
	Phase IX:	Apr-11	186,55
	Phase X:	Apr-13	186,55
	Phase XI:	May-15	186,55
	Phase XII:	Jul-17	238,784
		Total:	2,158,134
Amount requested for renewal (phase XIII) (US			238,78
Amount recommended for approval for phase X	XIII (US \$):		238,784
Agency support costs (US \$):			16,71
Total cost of institutional strengthening phase X	KIII to the Multilateral Fu	und (US \$):	255,499
Date of approval of country programme:			1992
Date of approval of HCFC phase-out managem	ent plan (stage I):		201
Date of approval of HCFC phase-out managem	ent plan (stage II):		2018
Baseline consumption of controlled substances	(ODP tonnes):		
Annex B, Group III (methyl chloroform) (avera	ige 1998-2000)		6.4
Annex C, Group I (HCFCs) (average 2009-201			87.:
Annex E, (methyl bromide) (average 1995-1998			212.

## **Chile: Renewal of institutional strengthening**

Summary of the project and country profile	
Latest reported ODS consumption (2017) (ODP tonnes) as per Article 7:	
Annex B, Group III (methyl chloroform)	0.00
Annex C, Group I (HCFCs)	66.20
Annex E, (methyl bromide)	0.00
Total:	66.20
Year of reported country programme implementation data:	2017
Amount approved for projects (as at December 2018) (US \$):	20,930,306
Amount disbursed (as at November 2017) (US \$):	14,136,420
ODS to be phased out (as at December 2018) (ODP tonnes):	1,327.2
ODS phased out (as at November 2017) (ODP tonnes):	1,011.0

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

Summary of activities		Funds approved (US \$)
(a)	Investment Projects	12,493,680
(b)	Institutional strengthening:	2,158,134
(c)	Project preparation, technical assistance, training and other non-investment projects:	6,278,492
	Total:	20,930,306
(d)	HFC activities funded from additional voluntary contributions	150,000

## Progress report

5. Phase XII of the IS project for Chile has been implemented successfully. Ozone matters are relevant within the Ministry of Environment, the National Ozone Unit (NOU) belongs to the Office of Climate Change, and the deputy Minister participates in Ozone activities. Chile, being the first country in Latin America to do so, ratified the Kigali Amendment. The NOU's work and support was key for this achievement. The country continues to implement stage II of the HPMP, working closely with local authorities and stakeholders. Multiple initiatives are underway, including the training of RAC technicians in low-GWP alternatives and good refrigeration practices. Implementation of enabling activities has begun; HCFC import and export controls are fully implemented, including formulated polyols; and the NOU is working in coordination with the National Customs service. The country also actively participated in regional and global meetings relevant to the implementation of the Montreal Protocol. Targets for all 11 performance indicators set by the country were fully achieved.

# Plan of action

6. During phase XIII of the IS project, the Government of Chile will maintain the ban on CFC and halons, and the reductions made in HCFC consumption. In 2020, the NOU will initiate the prohibition of HCFC-141b and achieve its reduction targets according to the commitments under the HPMP stage II Agreement. Furthermore, the NOU will work with public and private entities to enforce the control measures on the HCFC consumption. These activities will be accompanied by investment projects, a strong training programme on good refrigeration practices and continuous public awareness activities, while preparing the country for the implementation of the Kigali Amendment. The Government of Chile will continue to actively participate in regional network and global Montreal Protocol meetings, so as to exchange information and experience that will foster the implementation of national policies and strategies for the protection of the ozone layer.

# **Colombia: Renewal of institutional strengthening**

Implementing agency:			UNDP
Amounts previously approved for institutional streng	gthening (US \$):		
	Phase I:	Mar-94	317,790
	Phase II:	Mar-98	212,000
	Phase III:	Mar-00	212,000
	Phase IV:	Nov-02	275,600
	Phase V:	Apr-05	275,600
	Phase VI:	Jul-07	275,600
	Phase VII:	Jul-09	160,767
	Phase VIII:	Jul-11	275,600
	Phase IX:	Jul-13	275,600
	Phase X:	May-15	275,600
	Phase XI:	Jul-17	352,768
		Total:	2,908,925
Amount requested for renewal (phase XII) (US \$):			352,76
Amount recommended for approval for phase XII (U	JS \$):		352,76
Agency support costs (US \$):			24,694
Total cost of institutional strengthening phase XII to the Multilateral Fund (US \$):		377,462	
Date of approval of country programme:			1994
Date of approval of HCFC phase-out management p	lan (stage I):		2010
Date of approval of HCFC phase-out management plan (stage II):		201	
Baseline consumption of controlled substances (OD	P tonnes):		
Annex B, Group III (methyl chloroform) (average 19			0.0
Annex C, Group I (HCFCs) (average 2009-2010)	,		225.0
Annex E, (methyl bromide) (average 1995-1998)			110.
Latest reported ODS consumption (2017) (ODP ton	nes) as per Article 7.		
Annex B, Group III (methyl chloroform)	les) us per riticle 7.		0.00
Annex C, Group I (HCFCs)			148.52
Annex E, (methyl bromide)			0.00
		Total:	148.52
Year of reported country programme implementation	n data:		2018
Amount approved for projects (as at December 2018			37,486,638
Amount disbursed (as at November 2017) (US \$):	/ (		30,686,965
ODS to be phased out (as at December 2018) (ODP)	tonnes):		2053.
ODS phased out (as at November 2017) (ODP tonne			1,899.

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

Summary of activities		Funds approved (US \$)
(a)	Investment projects:	27,300,686
(b)	Institutional strengthening:	2,908,925
(c)	Project preparation, technical assistance, training and other non-investment projects:	7,277,027
	Total:	37,486,638
(d)	HFC activities funded from additional voluntary contributions	300,000

## Progress report

8. During phase XI of the IS project for Colombia, the Government continued working to maintain the achievement of compliance with the Montreal Protocol's HCFC phase-out schedules. The country is achieving its HCFC consumption reduction targets through the implementation of stage II of the HPMP while maintaining the total phase-out of CFCs, halon and CTC. The process of ratification of the Kigali

Amendment began with a consultation process with all stakeholders. The Government of Colombia continued to participate actively in regional and global Montreal Protocol meetings. Targets for all 11 performance indicators set by the country were fully achieved.

## Plan of action

9. Phase XII the IS project will support Colombia's compliance with its HCFC phase-out commitments, achieving the 60 per cent and 65 per cent reductions in HCFC consumption in 2020 and 2021, respectively. Activities implemented in the last few years will continue, such as: working closely with the Customs authority to achieve and maintain compliance with Montreal Protocol targets through monitoring trade, and coordinating the collection, analysis, verification and submission of progress reports on the implementation of country programmes; and strengthening the legal framework to control and monitor HCFC consumption through import/export licensing and quota systems and new regulations. Enabling activities will prepare the country for compliance with the measures of the Kigali Amendment. Synergies with climate change initiatives will enable the implementation of the Nationally Appropriate Mitigation Action for the domestic refrigeration sector in Colombia. The country contributed to the different discussions taking place at regional and international meetings, Executive Committee meetings and Meeting of the Parties.

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strength	nening (US \$):		
	Phase I:	Jun-93	172,000
	Phase II:	Nov-98	114,666
	Phase III:	Jul-01	114,666
	Phase IV:	Jul-03	149,066
	Phase V:	Nov-05	149,066
	Phase VI:	Nov-07	149,066
	Phase VII:	Nov-09	74,533
	Phase VIII:	Nov-11	149,066
	Phase IX:	Dec-13	149,066
	Phase X:	Nov-15	190,804
		Total:	1,411,999
Amount requested for renewal (phase XI) (US \$):			190,804
Amount recommended for approval for phase XI (US	\$):		190,804
Agency support costs (US \$):			13,356
Total cost of institutional strengthening phase XI to the Multilateral Fund (US \$):		\$):	204,160
Date of approval of country programme:			1993
Date of approval of HCFC phase-out management plan	n (stage I):		2011
Baseline consumption of controlled substances (ODP	tonnes):		
Annex B, Group III (methyl chloroform) (average 199	8-2000)		0.0
Annex C, Group I (HCFCs) (average 2009-2010)			16.9
Annex E, (methyl bromide) (average 1995-1998)			50.5
Latest reported ODS consumption (2017) (ODP tonne	s) as per Article 7:		
Annex B, Group III (methyl chloroform)	/ <b>I</b>		0.0
Annex C, Group I (HCFCs)			9.56
Annex E, (methyl bromide)			0.0
· · · · · · ·		Total:	9.56
Year of reported country programme implementation of	data:		2017
Amount approved for projects (as at December 2018) (US \$):			17,026,719
Amount disbursed (as at November 2017) (US \$):			15,664,949
ODS to be phased out (as at December 2018) (ODP to	nnes):		706.1
ODS phased out (as at November 2017) (ODP tonnes)	:		694.1

## Cuba: Renewal of institutional strengthening

Summary of activities	Funds approved (US \$)
(a) Investment projects:	11,943,567
(b) Institutional strengthening:	1,411,999
(c) Project preparation, technical assistance, training and other non-investment projects:	3,671,153
Total:	17,026,719
(d) HFC activities funded from additional voluntary contributions	0

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

#### Progress report

11. During phase X of the IS project, the Government of Cuba made progress in implementing the phase-out of HCFCs and maintained the first reduction goal (10 per cent of the baseline). The country also began the ratification process of the Kigali Amendment, which involves the identification of relevant stakeholders within the society. There was general progress in the work plans for the projects, with important strides in the training of technicians and the provision of technical classrooms for the refrigeration and air-conditioning sector, as well as in the conversion of the production lines of plants in the polyurethane foam manufacturing sector, and in the start-up of the ODS destruction plant. All these activities were accompanied by a public awareness-raising programme on the protection of the ozone layer. Targets for all 11 performance indicators set by the country were fully achieved.

## Plan of action

12. In phase XI of the IS project, Cuba will seek to consolidate the reductions achieved in HCFC consumption and continue with the implementation of the HPMP's work plans and other ongoing projects. It will seek to complete the process of ratifying the Kigali Amendment and prepare the country to start the reduction in consumption of HFCs. The Technical Ozone Office will maintain its work of integrating the national authorities involved in the control and consumption of ODS, while supporting outreach activities across the country. The country will also prepare its consumption reports and participate in meetings of the Montreal Protocol, both regionally and globally.

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional s	strengthening (US \$):		
	Phase I:	Oct-96	66,000
	Phase II:	Dec-00	44,000
	Phase III:	Nov-02	57,200
	Phase IV:	Dec-04	60,000
	Phase V	Nov-06	60,000
	Phase VI:	Nov-09 and Dec-10	60,000
	Phase VII:	Dec-12	60,000
	Phase VIII:	Nov-14	60,000
	Phase IX:	Jul-17	85,000
		Total:	552,200
Amount requested for renewal (phase X) (US \$)	):		85,000
Amount recommended for approval for phase X	X (US \$):		85,000
Agency support costs (US \$):			5,950
Total cost of institutional strengthening phase X to the Multilateral Fund (US \$):		90,950	
Date of approval of country programme:		1996	
Date of approval of HCFC phase-out manageme	ent plan (stage I):		2011

# Trinidad and Tobago: Renewal of institutional strengthening

Summary of the project and country profile	
Baseline consumption of controlled substances (ODP tonnes):	
Annex B, Group III (methyl chloroform) (average 1998-2000)	0.7
Annex C, Group I (HCFCs) (average 2009-2010)	46.0
Annex E, (methyl bromide) (average 1995-1998)	1.7
Latest reported ODS consumption (2017) (ODP tonnes) as per Article 7:	
Annex B, Group III (methyl chloroform)	0.00
Annex C, Group I (HCFCs)	12.22
Annex E, (methyl bromide)	0.00
Total:	12.22
Year of reported country programme implementation data:	2018
Amount approved for projects (as at December 2018) (US \$):	3,770,697
Amount disbursed (as at November 2017) (US \$):	2,692,014
ODS to be phased out (as at December 2018) (ODP tonnes):	141.7
ODS phased out (as at November 2017) (ODP tonnes):	120.2

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

Sum	mary of activities	Funds approved (US \$)
(a)	Investment projects:	1,756,303
(b)	Institutional strengthening:	522,200
(c)	Project preparation, technical assistance, training and other non-investment projects:	1,492,194
	Total:	3,770,697
(d)	HFC activities funded from additional voluntary contributions	150,000

# Progress report

14. Phase IX of Trinidad and Tobago's IS project has been implemented by the NOU at the Ministry of Planning and Development. The country has implemented stage I of its HPMP with strong commitments from the public and private sectors, as well as from academia and civil society organizations. In addition, Trinidad and Tobago has an operational licensing and quota system for HCFC management and has met its reduction targets as per its Agreement with the Executive Committee. The targets for all six performance indicators set by the country were achieved.

# Plan of action

15. Phase X of the IS project will provide support for the strengthening of the HCFC and licensing and quota system for the import of ODS substances. In addition, it will allow the country to continue the implementation of training programmes on good refrigeration practices and the expansion of its certification programme for RAC technicians. The country is currently developing stage II of its HPMP and relevant activities and stakeholder consultations will be carried out for the proper development of a strategy that will allow the country to continue its effective path toward ODS management and phase-out. The NOU will continue participating in global and regional network meetings, training sessions and high-level meetings for the promotion of Montreal Protocol activities in the country.

#### Annexe II

#### POINTS DE VUE PRÉLIMINAIRES DU COMITÉ EXÉCUTIF SUR LE RENOUVELLEMENT DU PROJET DE RENFORCEMENT DES INSTITUTIONS SOUMIS À LA 83° RÉUNION

#### Bangladesh

1. Le Comité exécutif a examiné le rapport accompagnant la demande relative au renouvellement du projet de renforcement des institutions du Bangladesh (phase IX) et a noté que le gouvernement bangladais a communiqué au Secrétariat du Fonds et au Secrétariat de l'ozone les données sur son programme de pays ainsi que les données visées à l'article 7 pour les années 2016 et 2017, indiquant que le pays respecte le Protocole de Montréal. Le Comité exécutif a en outre noté que le gouvernement s'est engagé à mener à bien les activités d'investissement liées aux HFC comme convenu, sur une période de 24 mois à compter de la date d'approbation, et que la phase I du plan de gestion de l'élimination des HCFC (PGEH) était terminée en mars 2019. Le Comité exécutif a reconnu que le pays a atteint les objectifs d'élimination des HCFC conformément à l'Accord conclu avec le Comité exécutif, et est donc convaincu que le gouvernement bangladais continuera d'appliquer les mesures de réglementation établies pour contrôler les importations de HCFC afin de permettre la mise en œuvre effective de la phase II du PGEH, et d'atteindre la réduction de 35 % de la consommation de HCFC requise par le Protocole de Montréal au 1<sup>er</sup> janvier 2020.

## Chili

2. Le Comité exécutif a examiné le rapport accompagnant la demande relative au renouvellement du projet de renforcement des institutions du Chili (phase XIII) et a noté que le gouvernement chilien a communiqué au Secrétariat du Fonds et au Secrétariat de l'ozone les données sur son programme de pays ainsi que les données visées à l'article 7 pour l'année 2017, indiquant que le pays respecte le Protocole de Montréal. Le Comité exécutif a en outre noté que le gouvernement chilien a continué d'appliquer des contrôles à l'importation des HCFC, grâce à un système d'autorisations et de quotas, et d'organiser la formation des agents des douanes et des techniciens en réfrigération. Le Comité exécutif a également noté avec satisfaction la ratification de l'Amendement de Kigali et les activités entreprises pour faciliter sa mise en œuvre. Il a également pris note de la participation du pays aux réunions du réseau régional et du Protocole de Montréal. Le Comité exécutif a pris acte des efforts déployés par le gouvernement chilien et espère qu'il poursuivra, au cours des deux prochaines années, la mise en œuvre des activités de la phase II du PGEH et du projet de renforcement des institutions afin de réduire la consommation de HCFC de 45 % d'ici au 1<sup>er</sup> janvier 2020, conformément à l'accord conclu avec le Comité exécutif.

## Colombie

3. Le Comité exécutif a examiné le rapport accompagnant la demande relative au renouvellement du projet de renforcement des institutions de la Colombie (phase XII) et a noté avec satisfaction que le gouvernement colombien a communiqué au Secrétariat du Fonds et au Secrétariat de l'ozone les données sur son programme de pays pour les années 2017 et 2018 ainsi que les données visées à l'article 7 pour l'année 2017, indiquant que le pays respecte le Protocole de Montréal. Le Comité exécutif a en outre noté que la mise en œuvre de la phase II du PGEH et des autres projets en cours se poursuit de manière harmonieuse et coordonnée. Le Comité exécutif a également noté avec satisfaction les activités préparatoires visant à faciliter la mise en œuvre de l'Amendement de Kigali. Le Comité exécutif a pris acte des efforts déployés par le gouvernement colombien et espère qu'il poursuivra, au cours des deux prochaines années, la mise en œuvre des activités de la phase II du PGEH et du projet de renforcement

#### UNEP/OzL.Pro/ExCom/83/17 Annexe II

des institutions afin de réduire la consommation de HCFC de 35 % d'ici au 1<sup>er</sup> janvier 2020, conformément aux dispositions du Protocole de Montréal.

## Cuba

4. Le Comité exécutif a examiné le rapport accompagnant la demande relative au renouvellement du projet de renforcement des institutions de Cuba (phase XI) et a noté que le gouvernement cubain a communiqué au Secrétariat du Fonds et au Secrétariat de l'ozone les données sur son programme de pays ainsi que les données visées à l'article 7 pour les années 2015, 2016 et 2017, indiquant que le pays respecte le Protocole de Montréal. Le Comité exécutif a noté avec satisfaction les progrès accomplis dans la mise en œuvre de la phase I du PGEH, y compris le contrôle des importations de HCFC par le biais du système d'autorisations et de quotas, la coopération avec les douanes et autres autorités locales et la sensibilisation du public à l'élimination des HCFC ; les activités préparatoires pour faciliter l'application de l'Amendement de Kigali ; et la participation du pays aux réunions du réseau régional et du Protocole de Montréal. Le Comité exécutif a pris acte des efforts déployés par le gouvernement cubain et espère qu'il poursuivra, au cours des deux prochaines années, la mise en œuvre des activités de la phase I du PGEH et du projet de renforcement des institutions afin de réduire la consommation de HCFC de 35 % d'ici au 1<sup>er</sup> janvier 2020, conformément aux dispositions du Protocole de Montréal.

# Trinité-et-Tobago

5. Le Comité exécutif a examiné le rapport accompagnant la demande relative au renouvellement du projet de renforcement des institutions de Trinité-et-Tobago (phase X) et a noté avec satisfaction que le gouvernement trinidadien a communiqué au Secrétariat du Fonds et au Secrétariat de l'ozone les données sur son programme de pays pour les années 2017 et 2018 ainsi que les données visées à l'article 7 pour l'année 2017, indiquant que le pays respecte le Protocole de Montréal. Le Comité exécutif a félicité le gouvernement trinidadien pour sa mise en œuvre de la phase I du PGEH, sa réglementation sur le contrôle des importations de SAO, y compris les mélanges et les équipements à base de SAO, ainsi que de sa norme d'étiquetage obligatoire des contenants de réfrigérants. Le Comité exécutif a en outre noté que le pays a dispensé une formation sur les bonnes pratiques en matière de réfrigération, élaboré des activités de sensibilisation du public à l'élimination des HCFC et participé aux réunions du réseau régional et du Protocole de Montréal. Le Comité exécutif a pris acte des efforts déployés par le gouvernement trinidadien et espère qu'il poursuivra la mise en œuvre des activités de la phase I du PGEH et de renforcement des institutions afin de réduire la consommation de HCFC de 35 % d'ici au 1<sup>er</sup> janvier 2020, conformément aux dispositions du Protocole de Montréal.

United Nations Development Programme Montreal Protocol / Chemicals Unit



Empowered lives. Resilient nations.

<u>83<sup>rd</sup> Meeting of the Executive Committee of the Multilateral Fund</u> for the Implementation of the Montreal Protocol

(27 – 31 May 2019)

UNDP 2019 WORK PROGRAMME

## I. EXECUTIVE SUMMARY

The present document constitutes UNDP's 2019 Work Programme and is being submitted for consideration of the Executive Committee (ExCom) at its 83<sup>rd</sup> Meeting. The list of submissions for all funding requests (including investment projects) that will be submitted by UNDP to the 83<sup>rd</sup> ExCom meeting in Annex 1 to this document is provided for information. Project documentation such as multi-year agreements (MYA) tranche requests, investment and demonstration project proposals and other individual/investment 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

Requests for funding of extensions of institutional strengthening projects for submission at the 83<sup>rd</sup> ExCom Meeting are tabulated below. The documents with terminal reports and requests for extension of IS funding are being submitted separately.

Country	Туре	TitleDuration (months)		Amount	Agency Fee	Total
Bangladesh	INS	Institutional Strengthening Renewal (Phase IX)	24	166,400	11,648	178,048
Chile	INS	Institutional Strengthening Renewal (Phase XIII)	24	238,784	16,715	255,499
Colombia	INS	Institutional Strengthening Renewal (Phase XII)	24	352,768	24,694	377,462
Cuba	INS	Institutional Strengthening Renewal (Phase XI)	24	190,804	13,356	204,160
Trinidad and Tobago	INS	Institutional Strengthening Renewal (Phase X)	24	85,000	5,950	90,950
Total (5 requests)					72,363	1,106,119

## Preparation funding requests for HPMP stages II and III

UNDP is submitting the following funding requests for the preparation of stages II and III of HPMPs to the 83<sup>rd</sup> ExCom meeting. The Annex 2 contains PRP submissions except for those for Eswatini and Zimbabwe which will be submitted by relevant lead agencies.

Country	Туре	Title Duration (months)		Amount	Agency Fee	Total
Dominican Republic	PRP	Stage III HPMP Preparation	12	60,000	4,200	64,200
Eswatini	PRP	Stage II HPMP Preparation	12	10,000	700	10,700
Nigeria	PRP	Stage III HPMP Preparation	12	22,500	1,575	24,075
Panama	PRP	Stage III HPMP Preparation	12	60,000	4,200	64,200
Uruguay	PRP	Stage III HPMP Preparation	12	60,000	4,200	64,200
Zimbabwe	PRP	Stage II HPMP Preparation 12		20,000	1,400	21,400
Total (6 requests)					16,275	248,775

## **Requests for preparation funding for HFC Investment projects**

UNDP is submitting requests for the preparation of HFC investment projects as per the table below. The associated requests for preparation funds are included in Annex 3.

Country	Туре	Title	Duration (months)	Amount	Agency Fee	Total
Indonesia	PRP	Conversion of HFC-134a in the manufacturing of lomestic refrigerators		30,000	2,100	32,100
Lebanon	PRP	Conversion of R-404A in the commercial refrigeration units for supermarkets at Leon Industries S.A.R.L., Lebanon	12	30,000	2,100	32,100
Pakistan	kistan PRP Conversion from HFC-134a to R-600a/R-290 as refrigerant in manufacturing of deep freezers, household refrigerators and water dispenser at PAK Elektron Limited, Lahore, Pakistan		12	30,000	2,100	32,100
Total (3 requests)					6,300	96,300

# Requests for extensions of enabling activities to support the phase-down of HFCs for Article 5 countries

UNDP is submitting the requests for extension of the enabling activities as per the table below.

Country	Туре	Title	Extension Duration (months)	Reason for extending the duration
Chile	TAS	Request to extend the Enabling activities for Kigali Amendment	12	The activities require more time as originally planned due to the need to consult extended range of stakeholders and consider linking the Kigali Amendment Enabling Activities broader issues of climate change in the country.
China	TAS	Request to extend the Enabling activities for Kigali Amendment	12	Implementation requires more time due to the complexity of the ratification process and engagement with stakeholders. So far, some activities are underway including assessment of current legal framework to meet initial compliance commitments, establishment of licensing system on HFCs import/export and initial research on national strategy on HFCs phase-down
Colombia	TAS	Request to extend the Enabling activities for Kigali Amendment	12	Implementation require more time due to the complexity of the ratification process, engagement with stakeholders and liason with Parliament over ratification steps that demand extended work. Additionally, assessment of current legal framework to meet initial compliance commitments are underway.
Costa Rica	TAS	Request to extend the Enabling activities for Kigali Amendment	12	Costa Rica has ratified the Kigali Amendment, however, further work is required to assess of current legal framework to meet initial compliance commitments are underway, mainly related to initial control and reporting requirements.
Fiji	TAS	Request to extend the Enabling activities for Kigali Amendment	12	The extension is requested due to complexity of process of ratification that require more time, associated with need to extend the assessment on regulation.
Jamaica	TAS	Request to extend the Enabling activities for Kigali Amendment	12	A strong stakeholder group was established and the Kigali EA is advancing well. However, the fact that the project has struggled with the need to develop national capacities for the implementation of the EA necessitates the extension.
Lebanon	TAS	Request to extend the Enabling activities for Kigali Amendment	12	The activities require more time as originally planned due to the need to consult extended range of stakeholders and consider linking the Kigali Amendment Enabling Activities broader issues of climate change in the country.

Country	Туре	Title	Extension Duration (months)	Reason for extending the duration			
Peru	TAS	Request to extend the Enabling activities for Kigali Amendment	12	The activities require more time as originally planned due to government changes that have resulted in additional coordination and therefore, making the implementation of the EA more time consuming.			
Trinidad and Tobago	TAS	Request to extend the Enabling activities for Kigali Amendment	12	The activities require more time as originally planned due to the need to consult extended range of stakeholders and consider linking the Kigali Amendment Enabling Activities broader issues of climate change in the country. Some activities are: the National Cooling Plan and the GEF project of Energy Efficiency for the RAC sector.			
Uruguay	TAS	Request to extend the Enabling activities for Kigali Amendment	12	Uruguay has ratified the Kigali Amendment, however, further work is required to assess of current legal framework to meet initial compliance commitments are underway, mainly related to initial control and reporting requirements.			
Total (10 r	Total (10 requests)						

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

The table below summarizes the funding requests for non-investment activities and proposals being submitted to the 83<sup>rd</sup> ExCom Meeting as part of UNDP's Work Programme for 2019:

Country	Туре	Title	Duration (months)	Amount	Agency Fee	Total
Bangladesh	INS	Institutional Strengthening Renewal (Phase IX)	24	166,400	11,648	178,048
Chile	INS	Institutional Strengthening Renewal (Phase XIII)	24	238,784	16,715	255,499
Colombia	INS	Institutional Strengthening Renewal (Phase XII)	24	352,768	24,694	377,462
Cuba	INS	Institutional Strengthening Renewal (Phase XI)	24	190,804	13,356	204,160
Dominican Republic	PRP	Stage III HPMP Preparation	12	60,000	4,200	64,200
Eswatini	PRP	Stage II HPMP Preparation	12	10,000	700	10,700
Indonesia	PRP	Conversion of HFC-134a in the manufacturing of domestic refrigerators	12	30,000	2,100	32,100
Lebanon	PRP	Conversion of R-404A in the commercial refrigeration units for supermarkets at Leon Industries S.A.R.L., Lebanon	12	30,000	2,100	32,100
Nigeria	PRP	Stage III HPMP Preparation	12	22,500	1,575	24,075
Pakistan	PRP	Conversion from HFC-134a to R-600a/R-290 as refrigerant in manufacturing of deep freezers, household refrigerators and water dispenser at PAK Elektron Limited, Lahore, Pakistan	12	30,000	2,100	32,100
Panama	PRP	Stage III HPMP Preparation	12	60,000	4,200	64,200
Trinidad and Tobago	INS	Institutional Strengthening Renewal (Phase X)	24	85,000	5,950	90,950
Uruguay	PRP	Stage III HPMP Preparation	12	60,000	4,200	64,200
Zimbabwe	nbabwe PRP Stage II HPMP Preparation		12	20,000	1,400	21,400
Total (14 requ	iests)			1,356,256	94,938	1,451,194

# List of all UNDP submissions for funding to the 83<sup>rd</sup> ExCom Meeting

No	Country	Country Type	Description	Funding Re	quest for the 8 (US\$)	83rd ExCom
Country		Type	Description	Amount	Agency Fee	Total
1	Bangladesh	INS	Institutional Strengthening Renewal (Phase IX)	166,400	11,648	178,048
2	Cambodia	INV	Stage I HPMP - 2019 tranche	150,000	11,250	161,250
3	Chile	INS	Institutional Strengthening Renewal (Phase XIII)	238,784	16,715	255,499
4	China	INV	Stage II HPMP - 3rd tranche (ICR)	12,000,000	840,000	12,840,000
5	China	INV	Stage II HPMP - 3rd tranche (Solvents)	5,549,492	388,464	5,937,956
6	Colombia	INS	Institutional Strengthening Renewal (Phase XII)	352,768	24,694	377,462
7	Costa Rica	INV	Stage I HPMP - 2019 tranche	56,000	4,200	60,200
8	Cuba	INS	Institutional Strengthening Renewal (Phase XI)	190,804	13,356	204,160
9	Dominican Republic	PRP	Stage III HPMP Preparation	60,000	4,200	64,200
10	Eswatini	PRP	Stage II HPMP Preparation	10,000	700	10,700
11	Guyana	INV	Stage II HPMP - 2018 tranche	66,750	4,673	71,423
12	Indonesia	PRP	Conversion of HFC-134a in the manufacturing of domestic refrigerators	30,000	2,100	32,100
13	Iran	INV	Stage II HPMP - 2018 tranche	1,593,980	111,579	1,705,559
14	Lebanon	PRP	Conversion of R-404A in the commercial refrigeration units for supermarkets at Leon Industries S.A.R.L., Lebanon	30,000	2,100	32,100
15	Nigeria	PRP	Stage III HPMP Preparation	22,500	1,575	24,075
16	Pakistan	PRP	Conversion from HFC-134a to R-600a/R-290 as refrigerant in manufacturing of deep freezers, household refrigerators and water dispenser at PAK Elektron Limited, Lahore, Pakistan	30,000	2,100	32,100
17	Panama	PRP	Stage III HPMP Preparation	60,000	4,200	64,200
18	Trinidad and Tobago	INS	Institutional Strengthening Renewal (Phase X)	85,000	5,950	90,950
19	Uruguay	PRP	Stage III HPMP Preparation	60,000	4,200	64,200
20	Zimbabwe	PRP	Stage II HPMP Preparation	20,000	1,400	21,400
Tota	ll (20 requests)			20,772,478	1,455,103	22,227,581

#### 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.
- c. HPMP Tranches for Armenia and Mali were submitted separately but not reflected in this table since there is no funding for UNDP.

Preparation funding requests for HPMP stages in:

- **1.** Dominican Republic (Stage III HPMP Preparation)
- 2. Nigeria (Stage III HPMP Preparation)
- **3.** Panama (Stage III HPMP Preparation)
- 4. Uruguay (Stage III HPMP Preparation)

# 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**

16.	Proj	ject title:		Request for Proj f the Dominican F			osal for the Third Sta	ge of the
18.	Cou	ntry:	19.	The Dominican R	epublic	;		
20. agenc		d implementing	21.	UNDP				
22. (1):	Coo	perating agency	23.	UNEP	24.	Click or ta	p here to enter text.	
25. ( <b>2</b> ):	Coo	perating agency	26.	(select)	27.	Click or ta	p here to enter text.	
28. ( <b>3</b> ):	Coo	perating agency	29.	(select)	30.	Click or ta	p here to enter text.	
31. <b>perio</b>		lementation	32.	July 2019 – June	2021			
33.	Fun	ding requested:						
	34.	Agency	35.	Sector		36. <b>Fu</b>	nding requested (US \$	)*
	37.	UNDP	38.	Overarching			39.	60,000
	40.	(select)	41.	(select)		42.	Click or tap here to e	enter text.
	43.	(select)	44.	(select)		45.	Click or tap here to e	enter text.
	46.	(select)	47.	(select)		48.	Click or tap here to e	enter text.

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

# Part II: Prerequisites for submission

	Item	Yes	No
1.	Official endorsement letter from Government specifying roles of respective	$\boxtimes$	
	agencies (where more than one IA is involved)		
2.	Written confirmation – balances from previous PRP funding approved for	$\boxtimes$	
	stage I HPMP had been returned / will be returned (Decision 71/42(i))		
	• Specify meeting at which PRP funding balance had been returned/will	79th meeting	
	be returned		

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

1. Montreal Protocol compliance target to be met in □ stage II / ⊠ stage III of the HPMP					
Phase-out commitment 67.5 Year of 2025					
(%)		commitment			
☑ Servicing only		□ Manufacturing	□ Servicing and		
		only	manufacturing		

# 2. Brief background on previous stage of the HPMP

• 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.

The Stage II HPMP for the Dominican Republic was approved at the 77<sup>th</sup> meeting of the ExCom in November 2016 with a total value of 1,474,558 US\$ plus support. 2 out of 3 tranches with a total value of 1,328,000 US\$ has been approved as of today (90 % of funding). Of the already approved funds (tranche 1 and 2), about US\$ 575,081 has been disbursed and committed as of today which represents more than 39% of the total stage II HPMP funding for Dominican Republic. The second tranche request, with a total value of 674,200 US\$, was approved at the 82<sup>nd</sup> meeting of the Executive Committee.

The Government of Republic of the Dominican Republic is implementing the Stage 2 of its HCFCs Phase-out Management Plan (HPMP) and has achieved results such as:

- New memorandum of agreement signed with INFOTEP for the training of RAC technicians in good refrigeration practices and alternatives to the HCFC.
- 463 new technicians have been certified on the safe use of new alternatives.
- Fourteen (14) technical institutes were provided with one set (educational kits) of RAC equipment to promote technicians' training on good practices.
- Strengthening of the legal framework for banning the importation of HCFC-based equipment and the introduction of additional fees to the importation of HCFC.
- Design and printing of technical information on alternatives of HCFC.
- 8 training workshops on ODSs controls were organized to all staff working in ports administration of Haina and Caucedo. 300 officers trained.
- One (1) international consultant was hired to manage the process of certification on norm of labor competences of Technicians of the Refrigeration and Air Conditioner Sector;
- 4 technical standards approved to define minimum requirements of certified technicians.
- Two (2) international seminars in the use of new alternatives and energy saving.

3. Current progress in implementation of previous stage of the HPMP						
Activity	Description	Implementing				
		agency				
Legal/regulatory framework	Close work with the customs authorities (DGA) has been done, regular visits to entry points of HCFC have been conducted, 8 training workshops on ODSs controls were organized to all staff working in ports administration of Haina and Caucedo, 300 customs officers trained. Also new regulations to control ODS imports and ODS- containing equipment has been issued.	UNEP				
Refrigeration servicing sector	NOU has been working with INFOTEP and ADOMTRA in the promotion of new technologies, training of good refrigeration practices. Also, 14 classrooms of technical schools have been strengthened with equipment and tools to promote the adoption of good refrigeration practices. 2 international workshops on alternatives to the HCFC have been conducted. 463 technicians have been trained.	UNDP				
(select)	Click or tap here to enter text.	(select)				
(select)	Click or tap here to enter text.	(select)				
(select)	Click or tap here to enter text.	(select)				
(select)	Click or tap here to enter text.	(select)				
(select)	Click or tap here to enter text.	(select)				

4. Overview of curren	t HCFC consumptio	on in metric tonnes b	y substance (last three	vears)
Substance	Sector	2015	2016	2017
HCFC-22	RAC servicing	720.1	759.72	806.55
HCFC-123	RAC servicing	0.4	15.00	2.61
HCFC-141b	RAC servicing	34.4	1.36	-
HCFC-141b in imported				
pre-blended polyols	Foam PU	100.0	40.00	-
(select)	(select)			
use HCFCs in the c increasing or decrea	ountry, including a s asing)	short analysis and ex	a description of the sec planation of the consu	mption trends (i.e.,
The consumption of				
maintenance of refrig	•	U		•
consumption of HCF	C-22 has increase	d, they may be rel	ated to the increase	of inventories by
the importers conside				
demand of HCFC. O				
January 2019, which				
imports of HCFC-bas				
imports of ficire-bas	seu KAC equipine	ant, which is in pla	ce since beginning o	1 2017.
		) be gathered and up previous stage of the	dated. Explain why thi HPMP.	s has not been
Information need		Description		Agency
Updated data on HCFC	The Do	minican Republic	only has HCFC	UNDP
consumption in	consum	nption in its servici		
manufacturing/servicing	contor	22 is the main HC		
		tional survey for S		
		•	0	
		n further analysing		
		nds in the servicing	g sector and the	
		ctors involved.		
New information on ODS	10 00111		f ODS regulations	UNDP
regulations		need to adapt the		
Others, specify.			c phase-out targets	UNDP
	by subs	stance and/or subse	ector will be	
	conduc	ted, in order to me	et upcoming	
	obligat	ions.		
Others, specify.	Assess	ment of the HPMP	strategy and	UNDP
		it based on the out		
(select)		tap here to enter text.		(select)
		preparation and fund	ling	
Activity		Indicative fundi		Agency
Assessment of currer	nt	30,000		UNDP
situation and needs o	f			
stakeholders (Survey				
Data analysis, Institu	-			
coordination, etc.)				
		1 = 000		
Technical support an		15,000	1	UNDP
updating of overall st				
for Stage 2, as well a				
specific strategy for t	ha			1

Servicing sector					
(International Consultant).					
Stakeholders' meetings (2)	10,000	UNDP			
Reporting and monitoring	5,000	UNDP			
Click or tap here to enter text.		(select)			
TOTAL	60,000				
8. How will activities related to i	mplementation of the Kigali Amendment to p	hase down HFCs be			
considered during project pre	paration for stage III of the HPMP?				
The surveys will strive to collect the	information on HFC when possible. The stage I	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. Information required for PRP funding request for investment projects as part of the HPMP

1. Agency:			(select)			
2. Sector:			(select)			
3. HCFC consumption in item #2 reported			□ Yes, plea	se specify reporte	d amount and year:	
under Country Programme (CP) data?						
			□ No			
4. Information on remaining eligible consumption						
	Substance		Remaining e	ligible consumptio	n (ODP tonnes)	
	(select)					
	(select)					
(select)						
5. Information on enterprise(s) for which funding			g is being sought			
Enterprise Year HCFC consumpt		ion (ODP tonnes)	(last three years)	HCFC phase-out		
	established	2016	2017	2018	to be achieved	
6. Activities to	be undertaken :	for preparation of	the investment pro	o <mark>ject and funding</mark> r	equestedi	
	Activity			Indicative funding	(US \$)	
Click or tap here t	o enter text.					
Click or tap here t	o enter text.					
Click or tap here t	o enter text.					
Click or tap here t	o enter text.					
Click or tap here t						
Click or tap here t	o enter text.					
TOTAL						

# MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HPMP PROJECT PREPARATION REQUEST FORM HPMP (OVERARCHING + INV)

# Part I: Project Information

49. <b>Project title:</b>	50.	PRP for the Th	hird Stage of the HPMP of Nigeria
51. Country:	52.	Nigeria	
53. Lead implementing agency:	54.	UNDP	
55. Cooperating agency (1):	56.	UNIDO	57. Click or tap here to enter text.
<ul><li>58. Cooperating agency</li><li>(2):</li></ul>	59.	(select)	60. Click or tap here to enter text.
<ul><li>61. Cooperating agency</li><li>(3):</li></ul>	62.	(select)	63. Click or tap here to enter text.
64. <b>Implementation</b> <b>period:</b>	65.	2019-2020	
66. <b>Funding requested:</b>			
67. Agency	68.	Sector	69. Funding requested (US \$)*
70. UNDP	71.	Overarching	72. 22,500
73. UNIDO	74.	Overarching	75. 22,500
76. UNIDO	77.	INV - REF	78. 25,000
79. UNIDO	80.	INV - AC	81. 25,000

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

#### Part II: Prerequisites for submission

	Item	Yes	No
3.	Official endorsement letter from Government specifying roles of respective	$\boxtimes$	
	agencies (where more than one IA is involved)		
4.	Written confirmation – balances from previous PRP funding approved for	$\boxtimes$	
	stage I HPMP had been returned / will be returned (Decision 71/42(i))		
	• Specify meeting at which PRP funding balance had been returned/will	Will be provia	led shortly.
	be returned		

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

9. Montreal Protocol compliance target to be met in $\Box$ stage II / $\boxtimes$ stage III of the HPMP					
Phase-out commitment	67.5	Year of	2025		
(%)		commitment			
□ Servicing only		□ Manufacturing	⊠ Servicing and		
		only	manufacturing		
10. Brief background on	10. Brief background on previous stage of the HPMP				

• 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.

# 11. Phase-out activities in the manufacturing sector

UNDP component:

# 82. Foam Sector Programme

As planned, a mission by the international consultant was conducted in Nigeria the week of 22<sup>nd</sup> of October 2018 for the completion of the foam UNDP programme, focusing on the operationalisation of the system house. Planning of Stage 2 main activities was initiated and a South-South exchange visit with Egypt is being planned at the moment for the first half of 2019.

83. UNIDO component:

# 84. **Refrigeration and A/C Manufacturing Sector**

As part of the final activities in Stage 1, an international expert visited beneficiary companies and trained them in November 2018. Personal protective equipment was delivered in November as well, and consultations on planning of Stage 2 were conducted as well.

UNIDO and BASF organized a training in March in Ibadan (19-20 March) and another session is planned in May in Abuja.

The procurement for the Stage II has been closed and the technical evaluation has been completed.

# Phase-out activities in the refrigeration servicing sector

85. The Pamaque Hydrocarbon Production Demonstration Project has been completed (Stage 1)

A detailed implementation plan for the refrigeration servicing sector activities is planned for completion by the first half of 2019.

12. Current progress in implementation of previous stage of the HPMP (please see section A.3 above)				
Activity		Description		Implementing
				agency
(select)	Click or t	ap here to enter text.		(select)
(select)	Click or t	ap here to enter text.		(select)
(select)	Click or t	ap here to enter text.		(select)
(select)	Click or t	ap here to enter text.		(select)
(select)	Click or t	ap here to enter text.		(select)
(select)	Click or t	ap here to enter text.		(select)
(select)	Click or t	ap here to enter text.		(select)
13. Overview of current H	HCFC consumption	n in metric tonnes by	substance (last thre	e years)
Substance	Sector	2016	2017	2018 (estimates
				are to be
				confirmed)
HCFC-22	(select)	3,554	3,262	
HCFC-141b	(select)	311	718	
HCFC-141b in imported	(select)	523	230	
pre-blended polyols				
HCFC-123	(select)	0	0	
HCFC-124	(select)	201	338	
HCFC-142b	(select)	9	0	

(select)	(select)		
(select)	(select)		
(select)	(select)		

14. 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)

# **Stage II – PRP for Overarching strategy**

(1) Brief overview of the current HCFC consumption by substance and distribution by sector/subsector

HCFC consumption - Article 7 data (ODP tonnes)

10						
2011	2012	2013	2014	2015	2016	2017
402.32	453.4	334.46	304.11	247.7	234.74	265.8

The 2018 data report is not confirmed yet, but initial estimates of Article 7 data point towards a reduced level compared to 2017, close to the 2016 data.

As per the conclusion of the review process for Stage 2, the following remaining consumption was noted (after phase-out of HCFC as per Stage 2 would be achieved):

- Consumption of HCFC141b will be completely phased out at the end of Stage 2.

- It is anticipated the following consumption would remain for HCFC22:

Manufacturing sector:

Commercial Refrigeration: ODP T11.46 AC Manufacturing: ODP T 2.87

It is assumed that the remaining consumption would be in the <u>refrigeration servicing</u> <u>sector</u>, i.e.: ODP T 153.48

The total remaining eligible consumption for HFC-22 is **ODP T 167.81.** 

# (2) <u>A description of the information that needs to be gathered and updated</u>

The exercise completed in Stage 2 PRP has demonstrated that the collection of data is challenging in Nigeria, due to the size of the country, as well as the need for verifications.

It is expected that the consumption indicated above for the manufacturing sector (commercial refrigeration) are on the lower hand of these estimates, and they will need to be confirmed, taking into account the evolution of the sector.

Additionally, consultations will need to be held with the company in the AC manufacturing sector, as the choice of technology will need to be discussed further with the manufacturer, to take into account the evolution of the market in the country. This was noted during the preparation of Stage 2 as well.

Finally, an effort at overall checking of the data as well as the preparation of the overarching strategy for Stage 3, including the complementarity of the servicing sector activities with those in Stage 2, will need to be conducted.

It is important to note that the surveys of these sectors were completed a first time in view of inclusion in Stage 2, though these components were not all included in the final HPMP stage 2, as per consultations with ExCom members in the 81<sup>st</sup> Meeting of the Executive Committee. This means that preliminary work has already been completed for the purpose of developing Stage 3, and this was taken into account in the requested funding for Stage 3 below.

# (3) An indication of the activities that need to be undertaken for PRP

The following activities will need to be conducted under this PRP:					
Activity	Indicative funding (in USD)				
Survey work (National consultants) – update and	20,000				
confirmation of data					
Technical support and updating of overall strategy	10,000				
for Stage 3, as well as specific strategy for the					
Servicing sector (International Consultant).					
Stakeholders' meetings (Final)	10,000				
Reporting and monitoring	5,000				
Total	USD 45,000				

As per Decision 71/42(d), following Stage II guidelines, Nigeria would be eligible to USD 90,000 for PRP of the overall strategy for Stage II, as remaining eligible HCFC consumption is comprised between 100.1 and 1,500 ODP tonnes. However, due to the particular situation discussed in the previous paragraph, a total funding of USD 45,000 is requested.

This amount will be equally allocated to the components implemented by UNDP and UNIDO.

15. 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	Click or tap here to enter text.	UNDP
consumption in		
manufacturing/servicing sector		
Updated sectoral consumption	Click or tap here to enter text.	UNIDO
information		
Others, specify.	Stakeholders' meeting, reporting and monitoring	UNIDO
Others, specify.	Stakeholders' meeting, reporting and monitoring	UNDP
(select)	Click or tap here to enter text.	(select)
16. Activities to be undertaken fo	r project preparation and funding	
Activity	Indicative funding (US \$)	Agency
Survey work, technical support,	22,500	UNDP
stakeholders' meeting and		
reporting		
Survey work, technical support,	22,500	UNIDO
stakeholders' meeting and		
reporting		
Click or tap here to enter text.		(select)
Click or tap here to enter text.		(select)
Click or tap here to enter text.		(select)

# TOTAL

# 17. How will activities related to implementation of the Kigali Amendment to phase down HFCs be considered during project preparation for stage II of the HPMP? It will be central part of the preparatory work. The Kigali Amendment was approved at the end of 2018 in

Nigeria.

# D. Information required for PRP funding request for investment projects as part of the HPMP

7. Agency:			UNIDO			
8. Sector:			Air-conditioning			
9. HCFC consumption in item #2 reported			⊠ Yes, pleas	<b>∑</b> Yes, please specify reported amount and year: _52.3		
under Coun	under Country Programme (CP) data?			2016		
10. Information	on remaining e	eligible consumptio	n			
	Substance		Remaining	eligible consumption	on (ODP tonnes)	
	HCFC-22			2.9		
	(select)					
	(select)					
	on enterprise(s	b) for which funding				
Enterprise	Year	HCFC consumption	tion (ODP tonnes)	(last three years)	HCFC phase-out	
	established	2016	2017	2018	to be achieved	
HPZ	2001	2.9 (2015-2016)	TBC	TBC	2.9 ODP T	
12. Activities to		for preparation of	the investment pr	oject and funding		
	Activity			Indicative funding (US \$)		
Confirmation of c		ation/analysis of			25,000	
technology option						
Click or tap here						
Click or tap here to enter text.						
	Click or tap here to enter text.					
	Click or tap here to enter text.					
	Click or tap here to enter text.					
TOTAL	TOTAL				25,000	

13. Agency:			UNIDO			
14. Sector:	14. Sector:			Refrigeration		
15. HCFC consumption in item #2 reported			🛛 Yes, ple	ease specify reporte	ed amount and year:	
under Country Programme (CP) data?			_Exact co	onsumption to b	e confirmed with	
			PRP			
			□ No			
16. Information	on remaining e	ligible consumptio	n			
	Substance			eligible consumption	on (ODP tonnes)	
	HCFC-22		TBC			
	(select)					
	(select)					
17. Information	on enterprise(s	) for which fundin	g is being sought			
Enterprise	Year	HCFC consumpt	tion (ODP tonnes) (last three years) HCFC phase-out			
	established	2016	2017	2018	to be achieved	
Group of	Specifics	TBC	TBC	TBC	11.46 ODP T	
entreprises	will be					
	provided in					
	PRP					

18. Activities to be undertaken for preparation of the investment project and funding requested				
Activity	Indicative funding (US \$)			
Confirmation of data and presentation/analysis of	25,000			
technology options				
Click or tap here to enter text.				
Click or tap here to enter text.				
Click or tap here to enter text.				
Click or tap here to enter text.				
Click or tap here to enter text.				
TOTAL	25,000			

# Annex: Stage III – PRP for the Manufacturing sector

# **RACM Sector Programme (UNIDO)**

As part of that component, UNIDO will address the remaining consumption in the manufacturing sector that could not be covered by Stage 2 of the HPMP.

This includes one Air Conditioning manufacturing company (HPZ Limited) and the sector of commercial refrigeration manufacturing. This is estimated to represent **<u>14.33 ODP tonnes</u>**. The details were included in the initial submission of Stage 2 HPMP for Nigeria.

As per Decision 71/42(d) and taking into account the remaining consumption in the manufacturing sector, the amount that could be requested is USD 100,000. However, due to the specific situation due to the linkage with Stage 2 and its PRP, USD 50,000 are being requested.

Activity	Indicative funding (in USD)
Survey work (National consultants) – updating	15,000
information on ca. 150 companies of the RACM	
sector, confirmation of the data; and the one	
company in AC manufacturing, their latest HCFC-	
22 consumption data and technology choices	
Technical support (International Consultants) for	15,000
preparation of technology option analysis and	
development of the HCFC-22 phase-out strategy	
for the AC and commercial refrigeration	
manufacturing sub-sectors under Stage 2.	
Stakeholders' meetings (Final)	15,000
Reporting and monitoring	5,000
Total	USD 50,000

#### 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**

86. <b>Project title:</b>	87. Request for Project Preparation Proposal for the Third Stage of the HPMP of Panama
88. Country:	89. Panama
90. Lead implementing agency:	91. UNDP
92. Implementation period:	93. July 2019 – June 2021
94. <b>Funding requested:</b>	
95. Agency	96. Sector 97. Funding requested (US \$)*
98. UNDP	99.         Overarching         100.         60,000

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

## Part II: Prerequisites for submission

	Item	Yes	No
5.	Official endorsement letter from Government specifying roles of respective	$\boxtimes$	
	agencies (where more than one IA is involved)		
6.	Written confirmation – balances from previous PRP funding approved for	$\boxtimes$	
	stage I HPMP had been returned / will be returned (Decision 71/42(i))		
	• Specify meeting at which PRP funding balance had been returned/will	81st and 83rd	meetings.
	be returned		

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

18. Montreal Protocol compliance target to be met in 🗆 stage II / 🛛 stage III of the HPMP					
Phase-out commitment 67.5 Year of 2025					
(%)		commitment			
Servicing only		□ Manufacturing	□ Servicing and		
		only	manufacturing		

#### 19. Brief background on previous stage of the HPMP

• 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.

The Stage II HPMP for the Panama was approved at the 76<sup>th</sup> meeting of the ExCom in May 2016 with a total value of 723,654 US\$ plus support. 2 out of 3 tranches with a total value of 650,900 US\$ has been approved as of today (90% of funding). Of the already approved funds (tranche 1 and 2), about US\$ 154.099 has been disbursed as of today which represents more than 21.3% of the total stage II HPMP funding for Panama. The second tranche request, with a total value of 385,800 US\$, was submitted for consideration and approved at the 82<sup>nd</sup> meeting of the Executive Committee.

The Stage 2 of the HPMP in Panama has achieved results such as:

• Inception workshop to discuss with stakeholders the scope and outcomes of the project. 40 stakeholders from key public and private entities participated in the meeting.

- Update of consumption and status of the beneficiary companies in the polyurethane foam sector. Visits were made by the project team to each company.
- One (1) workshop on alternatives to HCFC in the foam sector conducted by UNDP's international expert.
- Three (3) companies that were selected to participate in the Group Project for the Conversion of Manufacturing Processes of the Foams Sector have signed the contracts for the elimination of HCFC-141b
- Meeting with the Ministry of Education, the National Institution of Human Development (INADEH) and the Technological University of Panama (UTP) to review training and refrigeration classrooms needs.
- One (1) train-the-trainer course on natural refrigerants as alternatives to ODS and international safety standards in the developed RAC sector. Twenty five (25) instructors from INADEH assisted to this course as well as other people from UTP and the Ministry of Education (MEDUCA).
- Three (3) meetings and one (1) workshop were held on alignment and exchange of information as part of the efforts to improve the control of ozone-depleting substances in the Free Trade Zones.
- Draft ToR prepared for a consultancy for review and support the certification programme of refrigeration technicians.
- Eighty-seven (87) refrigeration technicians trained on good refrigeration practices.

Activity					
110011105		Description			
Legal/regulatory framewor	:k			ion to ban the use of HCl	
				of the use of HCFC-22	
		the produc			
				ols containing HCFC-14	
				d stakeholders have b	een
			to present the new re		
Refrigeration servicing sec	tor			gs with the Ministry	
			·	on of Human Developm	
				ical University of Pana	
				d refrigeration classroo	
				(1) train-the-trainer cou	
				lternatives to ODS the developed RAC sec	
			tor,		
Manufacturing-Foam PU		where twe One (1) w	am UNDP		
Manufacturing-Foant FO		sector con			
		three (3) c			
		Group Pr			
		Processes			
		the eliminate			
21. Overview of current	HCFC co	onsumption	in metric tonnes by	substance (last three y	/ears)
Substance		ctor	2015	2016	2017
HCFC-22		ervicing	318.13	332.04	300.27
HCFC-123	RAC s	servicing	1.46	4.50	0.53
HCFC-124	RAC s	servicing	0.071	0.00	0.00
HCFC-141b	RAC servicing		0.00	0.00	0.00
HCFC-142b RAC se		servicing	0.043	0.00	0.00
		acturing-	79.38	41.35	60.62
pre-blended polyols	m PU				

increasing or decreasing)

Panama'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. Consumption in the foam sector, as HCFC-141b in fully formulated polyols, has increased due its increasing use in the construction sector.

	at needs to be gathered and updated. Explain why thi	s has not been			
Information needed	on for the previous stage of the HPMP.	A			
Updated data on HCFC	Description	Agency UNDP			
consumption in	Panama will only have HCFC consumption	UNDI			
manufacturing/servicing sector	in its servicing sector after the Stage 2, and				
	HCFC-22 is the main HCFC consumed.				
	The national survey for Stage 3 will thus				
	focus on further analyzing the consumption				
	and trends in the servicing sector and the				
	main actors involved.				
New information on ODS	It will review the status of ODS regulations	UNDP			
regulations	and the need to adapt them.				
Others, specify.	An analysis of the specific phase-out targets	UNDP			
	by substance and/or subsector will be				
	conducted, in order to meet upcoming				
	obligations.				
Others, specify.	Assessment of the HPMP strategy and	UNDP			
	amend it based on the outcome of Stage 2.				
24. Activities to be undertaken fo	Ŭ				
Activity	Indicative funding (US \$)	Agency			
Assessment of current	30,000	UNDP			
situation and needs of	<i>,</i>				
stakeholders (Survey update,					
Data analysis, Institutional					
coordination, etc.)					
Technical support and	15,000	UNDP			
updating of overall strategy	10,000				
for Stage 2, as well as					
specific strategy for the					
Servicing sector					
(International Consultant).	10,000	UNDP			
Stakeholders' meetings (2)	10,000				
Reporting and monitoring	5,000	UNDP			
TOTAL	60,000 mulamentation of the Kizeli A mondment to phase de	wn HECa ha			
considered during project pre	mplementation of the Kigali Amendment to phase do paration for stage III of the HPMP?				
The surveys will strive to collect the information on HFC when possible. The stage III 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.					

## F. Information required for PRP funding request for investment projects as part of the HPMP

19. Agency:	(select)
20. Sector:	(select)
21. HCFC consumption in item #2 reported under Country Programme (CP) data?	☐ Yes, please specify reported amount and year: ☐ No
22. Information on remaining eligible consumption	n

Substance			Remaining eligible consumption (ODP tonnes)		
(select)					
	(select)				
	(select)				
23. Information	on enterprise(s	) for which fundin	g is being sought		
Enterprise	Year	HCFC consumpt	tion (ODP tonnes)	(last three years)	HCFC phase-out
-	established	2016	2017	2018	to be achieved
24. Activities to	be undertaken :	for preparation of	the investment pr	oject and funding	equestedi
	Activity		Indicative funding (US \$)		
Click or tap here to enter text.					
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Click or tap here to enter text.					
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TOTAL					

#### 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**

101. <b>Project title:</b>	102. Request for Project HPMP of Uruguay						
103. <b>Country:</b>	104. Uruguay						
105. Lead implementing agency:	106. UNDP						
107. Cooperating agency (1):	108. (select)	109. Click or tap here to enter text.					
110.Cooperating agency(2):	111. (select)	112. Click or tap here to enter text.					
<ul><li>113. Cooperating agency</li><li>(3):</li></ul>	114. (select)	115. Click or tap here to enter text.					
116. Implementation period:	117. July 2019 – June 2	021					
118. <b>Funding requested:</b>							
119. Agency	120. Sector	121. Funding requested (US \$)*					
122. UNDP	123. Overarching	124. 60,000					
125. (select)	126. (select)	127. Click or tap here to enter text.					
128. (select)	129. (select)	130. Click or tap here to enter text.					
131. (select)	132. (select)	133. Click or tap here to enter text.					

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

#### Part II: Prerequisites for submission

	Item	Yes	No
7.	Official endorsement letter from Government specifying roles of respective	$\boxtimes$	
	agencies (where more than one IA is involved)		
8.	Written confirmation – balances from previous PRP funding approved for	$\boxtimes$	
	stage I HPMP had been returned / will be returned (Decision 71/42(i))		
	• Specify meeting at which PRP funding balance had been returned/will	83rd meeting.	
	be returned		

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

26. Montreal Protocol compliance target to be met in 🗆 stage II / 🛛 stage III of the HPMP								
Phase-out commitment 67.5 Year of 2025								
(%)		commitment						
☑ Servicing only		□ Manufacturing	□ Servicing and					
		only	manufacturing					

#### 27. Brief background on previous stage of the HPMP

• 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.

The Stage II HPMP for the Uruguay was approved at the 77th meeting of the ExCom in November 2016 with a total value of 1,105,157 US\$ plus support. 2 out of 3 tranches with a total value of US\$ 993,889 has been approved as of today (90% of the total). Of the already approved funds (tranche 1 and 2), about US\$ 240,821 has been disbursed as of today which represents more than 21.8% of the total stage II HPMP funding for Uruguay. The second tranche request, with a total value of 679,889 US\$, was submitted for consideration at the 82nd meeting of the Executive Committee; The Government of Republic of Uruguay is implementing the Stage 2 of its HCFCs Phase-out Management Plan (HPMP) and has achieved results such as: - One (1) global training workshop, with participations of different customs departments and participants of all the country customs offices was carried out. 18 customs officers participated. - An international expert on refrigeration was hired by UNDP and worked for the NOU Uruguay on technical assistance to the refrigeration and air conditioning servicing sector to phase out the use of HCFC. - Six (6) 2 weeks-long campaigns about GRP, including train-the-trainer modality, not only in Montevideo, but also in other locations of the country, were conducted. 12 trainers and 240 technicians participated-One (1) workshop on the use of CO2 and his energy efficiency benefits in the refrigeration sector was conducted, 32 participants from the private sector and the academy attended.

	Activity Description			Implementing agency			
Legal/regulatory framewor	contr proc	rol system and to train edures and measures t	was hired to review the H the customs officials on ir o control illegal trade of ( ed and 18 officials trained.	ICFC UNDP nport ODS.			
Refrigeration servicing sec	tor Seve pract HCF HC- been	en done on good refriger alternative technologies t l workshops on CO2, on u ore than 240 technicians eration practices through si e country.	ation UNDP to the use of have				
(select)	Clicl	Click or tap here to enter text.					
(select)	Clicl	Click or tap here to enter text.					
(select)	Clicl	k or tap here to enter te	ext.	(select)			
(select)		k or tap here to enter te		(select)			
(select)		k or tap here to enter te		(select)			
29. Overview of current		<u> </u>	•				
Substance	Sector	2015	2016	2017			
HCFC-22	RAC servici		295.35	273.04			
HCFC-123	RAC servici	ng 1.60	2.02	1.30			
HCFC-124	RAC servici	ng 3.36	2.42	5.45			
HCFC-141b	RAC servici	ng 14.81	12.07	13.42			
HCFC-142b	RAC servici	ng 0.98	1.35	0.84			
(select)	(select)						
(select)	(select)						
(select)	(select)						
(select)	(select)						

increasing or decreasing)

As can be seen in the table above, Uruguay'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. Consumption in the foam sector, as HCFC-141b in fully formulated polyols, has increased due its increasing use in the construction sector, especially the use spray foam.

Information needed	Description	Agency
Updated data on HCFC	After the Stage 2, Uruguay will only have	UNDP
consumption in	HCFC consumption in its servicing sector,	
manufacturing/servicing sector	and HCFC-22 will be the main HCFC	
	consumed. The national survey for stage 3	
	will thus focus on further analyzing the	
	consumption and trends in the servicing	
	sector and the main actors involved.	
New information on ODS	It will review the status of ODS regulations	UNDP
regulations	and the need to adapt them.	
Others, specify.	An analysis of the specific phase-out targets	UNDP
	by substance and/or subsector will be	
	conducted, in order to meet upcoming	
	obligations.	
Others, specify.	Assessment of the HPMP strategy and	(select)
	amend it based on the outcome of Stage 2.	
(select)	Click or tap here to enter text.	(select)
32. Activities to be undertaken for		
Activity	Indicative funding (US \$)	Agency
Assessment of current	30,000	UNDP
situation and needs of		
stakeholders (Survey update,		
Data analysis, Institutional		
coordination, etc.)	17.000	LUIDD
Technical support and	15,000	UNDP
updating of overall strategy		
for Stage 2, as well as		
specific strategy for the		
Servicing sector		
(International Consultant).	10.022	Inma
Stakeholders' meetings (2)	10,000	UNDP
Reporting and monitoring	5,000	UNDP
Click or tap here to enter text.		(select)

#### 33. 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?

The surveys will strive to collect the information on HFC when possible. The stage III 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

#### H. Information required for PRP funding request for investment projects as part of the HPMP

25. A	gency:
-------	--------

26. Sector:			(select)					
	-	em #2 reported	□ Yes, please specify reported amount and year:					
under Coun	try Programme	(CP) data?						
			□ No					
28. Information on remaining eligible consumption								
	Substance		Remaining	eligible consumptio	on (ODP tonnes)			
	(select)							
	(select)							
	(select)							
	-	) for which funding						
Enterprise	Year		ion (ODP tonnes)		HCFC phase-out			
	established	2016	2017	2018	to be achieved			
<b>30.</b> Activities to		for preparation of	the investment pr	oject and funding 1				
	Activity		Indicative funding (US \$)					
Click or tap here								
Click or tap here								
Click or tap here to enter text.								
Click or tap here to enter text.								
Click or tap here								
Click or tap here	to enter text.							
TOTAL								

ANNEX 2

# Preparation funding requests for HFC Investment projects in:

- 1. Indonesia
- 2. Lebanon
- 3. Pakistan

#### FUNDING REQUEST FOR THE PREPARATION OF HFC-RELATED STANDALONE INVESTMENTS PROJECTS

# **COUNTRY: INDONESIA**

PROJECT TITLE: Conversion of HFC-134a in the manufacturing of domestic refrigerators LEAD IMPLEMENTING AGENCY: UNDP COOPERATING AGENCY: n/a NATIONAL COORDINATION AGENCY: Ministry of Environment & Forestry (KLHK) PROJECT INCLUDED IN CURRENT BUSSINESS PLAN: No ELIGIBLE CONSUMPTION: n/a (HFCs) AREA: Manufacturing SECTOR: Refrigeration and Air Conditioning SUB-SECTOR: Domestic Refrigeration NUMBER OF ENTERPRISES: one (1)

<b>PROJECT DURATION:</b>	12 months
PROJECT COST:	USD 30,000
SUPPORT COST: (7%)	USD 2,100
TOTAL COST FOR THE MLF:	USD 32,100

#### **Project Summary**

This document describes the proposed arrangements, preparation strategy and budgets for the preparation of the HFC-related standalone investment projects that will support Indonesia to assess the HFC conversion costs in the DRM sector and facilitate the early implementation of the Kigali Amendment to the Montreal Protocol.

The preparation of the stand-alone investment project will:

a) reflect national context and priorities, national policies and country-drivenness and consequently would need the agreement of Ministry of Environment and the national stakeholders to the investment project proposal;

b) facilitate seamless early implementation of the Kigali Amendment;

c) draw upon the lessons learnt from other projects prepared by UNDP;

d) be dynamic and evolve, and to be open for revisions and adaptation as necessary in response to evolving situations during the preparation process.

#### INTRODUCTION

- 1. Indonesia has acceded to the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol on Substances that deplete the Ozone Layer, and had ratified all the previous Amendments to the Montreal Protocol. Currently, the country is taking significant steps towards the ratification of the Kigali Amendment. The ratification process has already been initiated by the Ministry of Environment & Forestry (KLKH) going through the deliberation of relevant instances of the Government.
- 2. Indonesia is compliant to the Montreal Protocol commitments and is in the forefront of implementation of the Montreal Protocol-related activities. Since 2011, the Government of Indonesia has been implementing its HPMP (currently in parallel the completion of its Stage I and the full implementation of its Stage II) including the continuous monitoring and improvement of the licensing system for ODS imports and having a well-established and enforceable Quota and Licensing System to control the consumption of HCFCs, as established in 2012 and further updated in 2015. The country has a full coordination mechanism in place with the national stakeholders such as Customs Officers, concurring governmental and private sector entities impacted by the Montreal Protocol activities.
- 3. The Government of Indonesia is implementing the Stage II of its HCFCs Phase-out Management Plan (HPMP) and has:
  - (a) Complied with the 2013 HCFC freeze requirements;
  - (b) Complied with the 2015 10% HCFC reduction in consumption;
  - (c) Has timely reported Article 7 data to the Ozone and MLF Secretariats; and
  - (d) Has conducted several investment and non-investment activities under the project.
- 4. As additional efforts to investment and non-investment activities under the HPMP, the Government has prohibited the use of HCFC-22 and HCFC-141b in RAC manufacturing and assembly sectors from 1 January 2015 and has removed HFC-32 from the list of highly flammable substances to support the uptake to lower GWP alternative in the country, followed by the conversion of the local room air conditioning manufacturer, Panasonic, that has phase-out about 240 metric tonnes of HCFC-22 consumption by adopting HFC-32 as alternative refrigerant. Indonesia also is developing standards for A2L refrigerants safe use in RAC equipment.
- 5. Currently, there is no regulation restricting the import of products/substances with high-GWP refrigerants as no legal basis for such intervention is in place until the Kigali Amendment is ratified/adopted. However, is from the interest of the Government of Indonesia to promote the adoption of low-GWP refrigerants in many activities as possible under the HPMP, and is working in soft interventions in the servicing sector playing an important role to prepare the market in this direction, such as training activities, safety standards etc.

#### **OBJECTIVE OF THIS FUNDING REQUEST**

6. The objective of this document is to request funding for the preparation of an Investment Project for the elimination of HFC-134a at the company Panasonic Indonesia. This HFCs-related Stand-alone Investment Project will be prepared and submitted to the ExCom in compliance to the guidelines established under the Decisions 78/3(g) and 79/45.

Name of Company:	PT. Panasonic Manufacturing Indonesia
Sector	Domestic Refrigerators Manufacturer
Ownership:	40 % Article 5 (Indonesia)
	60 % non-Article 5 (Japan)
HFC-134a Consumption:	To be confirmed during the project preparation.
	Preliminary survey indicates:
	2016: 44 metric tonnes
	2017: 36 metric tonnes
	2018: 36 metric tonnes
Description of product	To be confirmed during the project preparation
manufacturing (quantity	
produced per year, quantity	
export to non A-5, type of	
products)	
Alternative technology	Hydrocarbons
proposed	HC-600a (isobutane)

#### POTENTIAL IMPACT OF THE PROJECT

- 7. In 2014, with support from the Climate and Clean Air Coalition (CCAC), the Government of Indonesia has undertaken an Alternatives Survey to carry out and initial analysis of the HCFCs alternatives scenario and to better understand historical consumption and predict future consumption trends of HFCs alternatives in different sectors and sub-sectors. The survey was conducted with support from UNDP and in accordance with the CCAC guidelines, and was based in 2012 consumption data (baseline).
- 8. As indicated by the Survey, by 2012 all four (4) local producers of domestic refrigerators used HFC-134a as refrigerant, and importation of HFC-600a based equipment was not identified. Initial consultation with local stakeholders indicated that, by 2018, all local producers still use HFC-134a as refrigerant, being responsible to meet almost 80% of local demand for domestic refrigerators, while 20% of the market demand is met by imported equipment, in which the HC-600a share is low, but growing.
- 9. Data from National Energy Council of Indonesia (2015) estimated that the penetration of household refrigerators in the country was 60%, and this sub-sector may be expected to grow by 20% in demand in the coming years, meaning that the growth demand will require more efficient equipment delivered with the lowest direct environment impact possible.
- 10 The use of R-600a in domestic refrigeration is slowly gaining momentum but still very limited to a parcel of imported units, and due to the size of the sub-sector to the Indonesian consumption profile (table 1), added to the fact to the number of companies locally manufacturing units in Indonesia, the implementation of a stand-alone project will support both the Government to identify needs and challenges related to future implementation of the Kigali Amendment by converting one of the leading companies in the sector, but will also provide to the Multilateral Fund (MLF) important data related to the conversion costs of the sector in the sub-region of the South-East Asia.

## Table 1 – HFCs Consumption per Sector (2012 metric tonnes)

Sector	Application	Substance	2012	2020 (estimated)
DRM	Manufacturing	HFC-134a	332.53	1,701.46
	Servicing		164.84	408.58
CRM and	Manufacturing	HFCs	27.30	921.27
Industrial Ref.	Servicing	HFCs	22.80	93.66
PU Foam	Manufacturing	HFCs	0.00	863.04
AC	Manufacturing	HFCs	60.83	582.79
	Servicing		164.44	1,772.35
MAC	Manufacturing	HFC-134a	486.63	1,659.72
	Servicing		2,589.93	5,200.04
Solvents	Manufacturing	HFCs	672.54	1,043.34
Aerosols	Manufacturing	HFC-134a	2,743.58	4,635.22

Source: HFCs Alternatives Survey (2014)

#### **PROJECT ACTIVITIES**

(a) Obtain technical information (and confirmation) on consumption of HFCs, number of production lines, description of production process, outputs and profile of appliances produced;

(b) evaluate the potential alternative technologies to HFCs, consultation process with Government and Company on reconversion process and technology choice and estimation of the environmental benefits to be achieved by the investment stand-alone project; and

(c) Draft of the full standalone project proposal, peer review and submit the final proposal to the ExCom.

No.	Budget description	Budget (US \$)
1.	International Experts	10,000
2.	National Consultant	8,000
3.	Information collection, consolidation and analysis	5,000
4.	Meetings, Missions	5,000
5.	Project Proposal review	2,000
	Total	30,000

#### **Implementation Timeframe**

	Activities		2019									
			2	3	4	5	6	7	8	9	10	11
1	ExCom Project Approval											
2	Receipt of Funds											
3	Project Document Signature											
4	Consultants Recruitment											
5	Data Collection											
6	Consultation Meetings											
7	Draft the project document											
8	Peer Review											
	Submission to the ExCom											

# FUNDING REQUEST FOR THE PREPARATION OF HFC-RELATED STAND-ALONE INVESTMENT PROJECT

# **COUNTRY:** LEBANON

**PROJECT TITLE:** Conversion of R-404A in the commercial refrigeration units for supermarkets LEAD IMPLEMENTING AGENCY: UNDP **COOPERATING AGENCY: N/A** NATIONAL COORDINATION AGENCY: Ministry of Environment PROJECT INCLUDED IN CURRENT BUSSINESS PLAN: No **ELIGIBLE CONSUMPTION:**N/A (HFCs) **AREA**: Manufacturing **SECTOR:** Refrigeration and Air Conditioning **SUB-SECTOR: Commercial Refrigeration** NUMBER OF ENTERPRISES: One (1)**PROJECT DURATION:** 12 months **PROJECT COST:** USD 30,000 SUPPORT COST: (7%) USD 2,100

TOTAL COST FOR THE MLF: USD 32,100

#### **Project Summary**

This document describes the proposed arrangements, preparation strategy and budgets for the preparation of the HFC-related standalone investment project that will support the Government of Lebanon to assess the HFC conversion costs in the domestic refrigeration manufacturing (DRM) sector and facilitate the early implementation of the Kigali Amendment to the Montreal Protocol.

The preparation of the stand-alone investment project will:

- a) reflect national context and priorities, national policies and country-drivenness and consequently would need the agreement of Ministry of Environment and the national stakeholders to the investment project proposal;
- b) facilitate seamless early implementation of the Kigali Amendment;
- c) draw upon the lessons learnt from other projects prepared by UNDP;
- d) be dynamic and evolve, and to be open for revisions and adaptation as necessary in response to evolving situations during the preparation process.

#### INTRODUCTION

- 1. Lebanon has acceded to the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol on Substances that deplete the Ozone Layer and had ratified all the previous Amendments to the Montreal Protocol. The Parliament of Lebanon approved in March 2019 the ratification of the Kigali Amendment.
- 2. Lebanon is compliant to the Montreal Protocol commitments and is in the forefront of implementation of the Montreal Protocol-related activities. Since approval of the Stage I of HPMP at the 64<sup>th</sup> Executive Committee meeting held in July 2011, the Government of Lebanon has been implementing its HPMP that includes the continuous monitoring and improvement of the licensing system for ODS imports and having a well-established and enforceable Quota and Licensing System to control the consumption of HCFCs. The country has a full coordination mechanism in place with the national stakeholders such as Customs Officers, concurring governmental and private sector entities impacted by the Montreal Protocol activities.
- 3. The Government of Lebanon is implementing the Stage II of its HCFCs Phase-out Management Plan (HPMP) approved at the 75th ExCom meeting held in November 2015, and has:
  - (e) Complied with the 2013 HCFC freeze requirements;
  - (f) Complied with the 2015 10% HCFC reduction in consumption;
  - (g) Has timely reported Article 7 data to the Ozone and MLF Secretariats; and
  - (h) Has conducted several investment and non-investment activities under the project.
- 4. In the implementation of the Stage II of HPMP, the Government of Lebanon has undertaken investment and investment activities to address phase out of HCFCs in the foam manufacturing sector, the air-conditioning manufacturing sector and the RAC servicing sector.
- 5. Currently, there is no regulation restricting the import of products/substances with high-GWP refrigerants. However, Lebanon is implementing the Enabling Activities to allow the initiation of the implementation of the Kigali Amendment, including the establishment of the control and reporting systems required under the Amendment. The Government of Lebanon reinforces its commitment to promote the adoption of low-GWP refrigerants and recalls that, under the HPMP, it is working in soft interventions in the servicing sector such as training activities, safety standards etc., plays an important role to prepare the market in this direction,
- 6. Although the Government of Lebanon has a well-established legal and institutional framework to implement the Montreal Protocol commitments ratified so far, the new Kigali Amendment will bring additional challenges to determine the national requirements to establish a sound foundation to undertake future work towards its implementation.
- 7. An Enabling Activities project was approved at the 80<sup>th</sup> ExCom meeting for Lebanon to undertake activities to facilitate and support the ratification of the Kigali Amendment, develop an overall national policy framework for addressing HFCs phase-down plan, access coordination mechanisms needed to implement the Amendment, provide technical assistance for safe adoption of alternatives, review the licensing and data report systems on HFCs, conduct study to establish a baseline of existing HFCs banks in the RAC sector, and raise awareness on the ratification and implementation processes of the Kigali Amendment.
- 8. Some of the activities implemented undertaken in this ongoing Enabling Activities project, it has facilitated the Parliament of Lebanon to approve the ratification of the Kigali Amendment in March 2019.

#### **OBJECTIVE OF THIS FUNDING REQUEST**

9. The objective of this document is to request funding for the preparation of an Investment Project for the elimination of R-404A at the company Leon Industries. This HFCs-related Stand-alone Project will be prepared and submitted to the ExCom in compliance with the guidelines established under the ExCom decisions 78/3(g) and 79/45.

Name of Company:	Leon Industries S.A.R.L
Sector	Refrigeration and Air-conditioning
Ownership:	100% Article 5 (Lebanon)
R-404A Consumption:	To be confirmed during the project preparation.
_	Preliminary survey indicates:
	2016: 11.84 metric tonnes
	2017: 10.68 metric tonnes
	2018: 12.8 metric tonnes
Description of product	Detailed manufacturing profile to be confirmed during
manufacturing (quantity	the project preparation
produced per year, quantity	
export to non-A-5, type of	Company manufactures stand-alone and plug in
products)	refrigerators, cabinets and condensing units for use in
	supermarkets and commercial stores.
Alternative technology	Natural Refrigerant
proposed	$CO_2$ (R-744) super-critical

#### **COMPANY PROFILE**

#### POTENTIAL IMPACT OF THE PROJECT

- 10. In 2016, with support from the MLF, the Government of Lebanon has undertaken an ODS Alternatives Survey to carry out and initial analysis of the HCFCs alternatives scenario and to better understand historical consumption and predict future consumption trends of HFCs alternatives in different sectors and sub-sectors. The survey was conducted with support from UNDP and in accordance with the ExCom guidelines, and was based on the 2012-2015 consumption data (baseline).
- 11. The survey indicated a wide range of HFC uses in Lebanon mainly under the RAC (Refrigeration and Air Conditioning) sector. Whereas, there were limited applications of HFCs in fire suppression systems. Moreover, the survey did not result in any indication of HFC applications in the foam, solvent and aerosol sectors.
- 12. However, the survey shows that there was no production or exportation of ODS alternatives in the country. All ODS alternatives including HFCs are imported primarily from USA, UK, Spain, UAE, Japan and China. The estimated total quantity imported/consumed by individual substance during the period 2012-2015 is shown in the table below:

Table 1: Estimated Total (	Quantity Imported/Consumed by	Individual Substance (2012-2015)
Tuble II Estimated Total	Quantity imported, combanied of	

Substance	2012 (Tons)	2013 (Tons)	2014 (Tons)	2015 (Tons)
Cyclopentane	144	154	158.2	214.6
Butane/Propane mix	213.5	254.55	224.1	146.2
Methylene Chloride	243	220.4	188.7	185.5

HFC-134a	580	610	628	650
HFC-410A	28.70	25.20	75.75	95.50
HFC-404A	113.5	130.25	135.80	133.70
HFC-407C	42.20	33.71	31.85	37.35
HFC-227ea	12.20	17.50	21	23.70
R-600A	7.15	6.20	5.50	5
R-744	0	0	13.60	14.30
CO2	76	91.80	101	88.75
NOVEL (Fire Fighting)	1.20	1.40	2.20	2.15

- 13. In conclusion, the survey report clearly shows that most of the ODS alternatives are HFCs, and they are used in RAC sectors. R-22 is still the most important refrigerant currently used in residential air conditioning systems and R-134a is the most important refrigerant used in domestic refrigeration and MAC (Mobile Air Conditioning) sectors . However, HCFCs are gradually being phased-out, and the demand on HFCs is increasing in the short and medium term to satisfy the expected growth in the country.
- 14. Household refrigerators mostly operate on R-134a even though R-600a refrigerant is already introduced in Lebanon, but domestic refrigeration market transformation will take time to be changed from R-600a or any other alternative.
- 15. MAC sector accounts for a major share of the country's use of refrigerant R-134a and alternatives are not well known and are not freely available (except for the case of HFO-1234yf which is still not commercially available), therefore, the sector is expected to keep on using HFCs (R-134a).
- 16. Furthermore, Lebanon is a middle-income country and its development is rapid. This in turn has increased the demand for household refrigerators, residential air conditioning system and with the increase of the automobile fleet, the MAC sector demand will grow at a very rapid rate. However, with the increasing impact of climate change in Lebanon and other countries, a proper direction from the government and the authority will be forth coming for replacing high-GWP refrigerant. In order to achieve this, decision makers will have to be well informed on the subject. This will help bring up a policy decision towards low-GWP technologies.
- 17. However, considering the above future actions are needed to be taken regarding HFCs in the context of the Kigali Amendment and related discussions during the Executive Committee meetings.

Sector	Application	Substance	2015
Domestic refrigeration	Manufacturing & Servicing	HFC-134a	64
Commercial and Industrial		HFC-134a	40.83
refrigeration	Manufacturing &	HFC-404A	97.7
	Servicing	HFC-407C	22.5
	-	<b>R-744</b>	14.3
Industrial chillers	Monufootuning	HFC-134a	61.5
	Manufacturing	HFC-404A	11.5
Transport refrigeration	Manufacturing	HFC-134a	15.2
	&	HFC-404A	13.0
	Servicing		
Residential air-conditioning	Manufacturing	R-410A	63.7

	Table 2 – HFCs	<b>Consumption per</b>	Sector in Lebanon	(metric tonnes)
--	----------------	------------------------	-------------------	-----------------

	& Servicing		
Commercial air-conditioning chiller	Manufacturing	HFC-134a HFC-404A HFC-410A HFC-407C	23.5 11.5 31.8 14.85
Mobile air-conditioning (MAC)	Servicing only	HFC-134a	241

Source: HFCs Alternatives Survey (2015 and 2018)

- 18. The ODS Alternative Survey estimates that the supermarkets sub-sector will experience a growth of 15-20% in demand in the coming years, meaning that under the business as usual (BAU) scenario, where HFCs-based alternatives are consolidated in the markets and with competitive cost, the growth demand will require greatest efforts from the Government of Lebanon to meet the phase-down commitments under the Kigali Amendment, putting more pressure to the HFCs consumption tail, and in this regard is critical that low-GWP and energy efficient alternatives are available to the market.
- 19. The use of R-744 in commercial refrigeration is growing in many countries, but still limited to countries with moderate-to-low annual average temperatures; sub-tropical and temperate regions (cooler than 15° C) where, historically, gains of energy efficiency and technology development and penetration were more prone to, such as Europe. However, more evidence and field application experience are needed in countries that have warmer average temperatures, such as in the Middle East and tropical regions, in order to fully assess the technology challenges, efficiency and costs.
- 20. In this regard, an investment project supported by the Multilateral Fund (MLF) can allow important data to be collected and made publicly available relating to the conversion costs of the sector in the sub-region of the Middle-East and Central Asia.

## **PROJECT ACTIVITIES**

21. The proposed project will carry out the following activities to gain experience in terms of cost and technical elements:

(a) Obtain technical information (and confirmation) on consumption of HFCs, number of lines, description of production process, outputs and profile of appliances produced;

(b) evaluate the potential alternative technologies to HFCs, consultation process with Government and Company on reconversion process and technology choice and estimation of the environmental benefits to be achieved by the investment stand-alone project; and

(c) Draft of the full stand-alone project proposal, peer review and submit the final proposal to the ExCom.

22. A Project Preparation grant in the amount of US\$ 30,000, plus 7% agency support costs are requested for the preparation of a stand-alone investment project:

No.	Budget description	Budget (US \$)
6.	International Experts	10,000
7.	National Consultant	8,000
8.	Information collection, consolidation and analysis	5,000
9.	Meetings, Missions	5,000
10.	Project Proposal review	2,000
	Total	30,000

23. Proposed Implementation Timeframe:

	Activities						201	9				
			2	3	4	5	6	7	8	9	10	11
1	ExCom Project Approval											
2	Receipt of Funds											
3	Project Document Signature											
4	Consultants Recruitment											
5	Data Collection											
6	Consultation Meetings											
7	Draft the project document											
8	Peer Review											
	Submission to the ExCom											

FUNDING REQUEST FOR THE PREPARATION	OF HFC-RELATED STANDALONE INVESTMENTS PROJECT
Country: PAKISTAN	
PROJECT TITLE:	
Conversion from HFC-134a to R-600a/R-2	290 as refrigerant in manufacturing of deep freezers,
household refrigerators and water disper	nser at PAK Elektron Limited, Lahore, Pakistan
INTERNATIONAL IMPLEMENTING AGENC	Y: UNDP
PROJECT DURATION	: 12 months
PROJECT COSTS	: US\$ 30,000
<b>IMPLEMENTING AGENCY SUPPORT COST</b>	: US\$ 2,100 (7%) – UNDP
TOTAL COST OF PROJECT TO MLF	: US\$ 32,100
NATIONAL COORDINATING AGENCY	: Ministry of Climate Change, Pakistan
Project Summary	

#### **Project Summary:**

This document describes the anticipated arrangements, preparation strategy, budget and work plan for the preparation of an HFC-related standalone investment project that will support Pakistan to reduce the HFC-134a consumption and facilitate the early implementation of the Kigali Amendment to the Montreal Protocol.

## A. Background

Pakistan ratified the Montreal Protocol, Vienna Convention and the London amendment in 1992. Pakistan also ratified the subsequent amendments including Copenhagen amendment in 1995, Montreal amendment in 2005 and Beijing amendment in 2005.

In 2016, the Parties to the Montreal Protocol adopted the agreement on HFCs at the close of the 28th Meeting of the Parties (MOP 28) in Kigali, Rwanda. Presently, the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer entered into force on 1 January 2019, following ratification by 65 countries. The process of ratification in Pakistan has started and will be ratified in due course.

In Pakistan, HFCs were adopted to replace CFC-12 by the domestic refrigerator industry during the period of 1995 – 2007. Thanks to the CFC Phase-out plans in Pakistan, 100% CFCs have been phased out from all the sectors and sub-sectors.

The Government of Pakistan is implementing Stages II of its HCFCs Phase-out Management Plan (HPMP) and is

- 1. Meeting the HCFCs compliance targets as per the Montreal Protocol;
- 2. Maximizing climate benefits while phasing-out HCFCs;

## **B. PROJECT OBJECTIVE**

- a) The objective of this document is to request funding for the preparation of an individual investment project for the elimination of HFC-134a in the manufacturing of deep freezers, household refrigerators and water dispenser;
- b) To phase out the use of HFC-134a in 2 household refrigerator production lines, 1 deep freezer production line and 1 water dispenser production line at PAK Elektron Limited (PEL), Lahore, Pakistan (the pics of industry lines are as below). This will

result in phasing-out of about 121 MT of HFC-134a per annum which translated to 173,030 Tons CO2 equivalent emission reduction in initial charge in Pakistan.

- c) To achieve the phase-down of HFCs in Refrigerator (Manufacturing) Sector in Pakistan
- d) To ensure timely, sustainable and cost-effective HFC phase-down in the Refrigeration (Manufacturing) Sector, through development and implementation of a combination of investment, technical support and policy/management support components.
- e) To adopt energy efficiency technologies

## C. SECTOR/SUB-SECTOR

The project cascades under Refrigeration Sector and sub-sector is Manufacturing. The ODS alternative survey has already been submitted separately to the MLFs in 2017. The following table presents the summary of the ODS alternatives imported from 2012-2015.

Alternatives	2012	2013	2014	2015
HFCs and Blends (major share HFC-134a)	1,818.57	1,453.00	1,816.24	2,530.51
HFOs	0.00	0.00	0.00	0.00
Natural Refrigerant (major share Pentane)	344.89	313.07	629.99	938.30
Synthetic Alternatives	2911.82	3364.24	3897.40	3414.20
Total annual import	5,075.27	5,130.31	6,343.63	6,883.01

There are ten manufacturers that are manufacturing water dispenser/domestic refrigerator/ deep freezers including PEL, Orient, Cool Industries (Waves), Icage, Singer Pakistan, URIL, Dawlance, Haier, Electrolux and Changhong Ruba. Few of them are manufacturing water dispenser and deep freezers. These industries are in the manufacturing of various capacities and models of all the products. The estimated growth of HFC consumption in the next 11 years is expected to be 100%.

## **D. TECHNOLOGY**

The selection of an alternative sustainable refrigerant technology would be seen to be ruled by the following considerations:

- Cost effective conversion.
- Proven and reasonably mature technology.
- Thermodynamics properties must be obtained in the end-product.
- Higher energy efficiency.

For water dispenser/domestic refrigerator/ deep freezers the reasonable technology is R-600a and/or R-290 depending upon the cooling capacity of each model the selection of refrigerant will be done.

PAK Elektron Limited (PEL) has identified R-600a/R-290 refrigerant as the concluding substitute for the HFC gases employed in its production.

## E. COMPANY PROFILE

The company was established in 1956 with AEG Germany under the flag of Saigol Group of Companies, with an area of 96,000 Sq. mtr. And 250 employees with manufacturing of Distribution Transformer, Power Transformer, Energy Meter, Switch Gear and EPC & Grid Station. In 1980s the manufacturing facility split into two areas a) Power division and b) Appliance Division. In 1980 window type room air-conditioners manufacturing facility was setup under the brand name of PEL. As usual the growth factor was high, and the company introduced refrigerators in 1986, deep freezers in 1987 and water dispenser in 2007.

PEL has two refrigerator lines with a production capacity of 600,000 units/year but manufactured 500,000 units in 2018, running two shifts at factory. PEL has one line of deep freezer with a production capacity of 130,000 units/year but could manufacture 85,000 units. PEL has one production line of Water Dispenser with annual production capacity of 70,000 units whereas the actual production in 2018 was 50,000 units based on the demand.

The PEL brand in 2018 stood at number two in the Pakistan market as per the survey made by local company Surmewala. The product from PEL is treated as affordable yet carries all the great features. PEL is one of the best consumer goods manufacturing brands in Pakistan with millions of buyers across the country.

Presently the company have 2018 employees in the Appliance Division. PEL got the ISO:9001 in 2000 for refrigerators, ISO:9001 in 2011 for deep freezers and split air-conditioners. The gross sales of appliance division in 2018 is US\$ 321.9 million.

## NAME OF THE ENTERPRISE AND ADDRESS

M/s. PAK ELEKTRON LIMITED, H.O. 14-Km, Ferozpur Road, LAHORE-54760, Pakistan Tel: +92 42 35920151-9

# F. AMOUNT OF HFC-134a TO BE PHASED OUT (in MT)

The total amount to be phased out of HFC-134a under this project will be 121 MT based on the 2018 consumption. The product wise detail is tabulated below:

Product	2014	2015	2016	2017	2018
Refrigerator	68	70	88	94	100
Deep freezers	3.3	6.9	10.2	13.1	19
Water dispenser	0.44	0.75	0.85	1.2	2

# G. TOTAL PROJECT DURATION

The stand-alone investment project will be submitted to 84<sup>th</sup> ExCom.

## H. BUDGET

Budget for preparing the project document: USD 30,000 is requested for the preparation of the project document for conversion from HFC-134a to R-600a/R-290 as refrigerant in manufacturing of deep freezers, household refrigerators and water dispenser at PAK Elektron Limited, Lahore, Pakistan.

No.	Budget description	Budget (US \$)			
1.	International Experts	7,000			
2.	National Consultant	8,000			
3.	Travel	5,000			
4.	Information collection, consolidation and analysis	4,000			
5.	Meetings, Missions	4,000			
6.	Documentation and information materials	2,000			
	Total	30,000			

## I. SCHEDULE

Activities	2019
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		Мау	Jun	Jul	Aug	Sep	Oct	Nov	
Pr	Project Start-up								
1	ExCom Project Approval								
2	Receipt of Funds								
3	Project Document Signature								
4	Consultants Recruitment								
Project Implementation									
5	Data Collection								
6	Consultation Meetings								
7	Draft the project document								
8	Peer Review								
9	Submission to the ExCom								