



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



Distr.
GÉNÉRALE

UNEP/OzL.Pro/ExCom/84/36
25 novembre 2019

FRANÇAIS
ORIGINAL: ANGLAIS

COMITÉ EXÉCUTIF
DU FONDS MULTILATÉRAL AUX FINS
D'APPLICATION DU PROTOCOLE DE MONTRÉAL
Quatre-vingt-quatrième réunion
Montréal, 16 – 20 décembre 2019

**AMENDEMENTS AU PROGRAMME DE TRAVAIL DE L'ONU
POUR L'ANNEE 2019**

OBSERVATIONS ET RECOMMANDATION DU SECRÉTARIAT DU FONDS

1 L'ONUDI demande au Comité exécutif d'approuver le montant de 1 542 396 \$US, plus les coûts d'appui d'agence de 109 717 \$US, pour les amendements à son programme de travail pour 2019 qui figurent au tableau 1. La présentation est jointe au présent document.

Tableau 1 : Amendements au programme de travail de l'ONUDI pour 2019

| Pays | Activité/projet | Montant demandé (\$US) | Montant recommandé (\$US) |
|--|---|------------------------|---------------------------|
| SECTION A : ACTIVITÉS RECOMMANDÉES POUR APPROBATION GLOBALE | | | |
| A1 : Renouvellement de projets de renforcement des institutions | | | |
| Bosnie-Herzégovine | Renouvellement du projet de renforcement des institutions (phase VII) | 122 026 | 122 026 |
| Serbie | Renouvellement du projet de renforcement des institutions (phase VII) | 168 064 | 168 064 |
| Tunisie | Renouvellement du projet de renforcement des institutions (phase IX) | 316 506 | 316 506 |
| Turquie | Renouvellement du projet de renforcement des institutions (phase IX) | 332 800 | 332 800 |
| A1 – total partiel | | 939 396 | 939 396 |
| Coûts d'appui d'agence (7 % pour le renforcement des institutions) | | 65 757 | 65 757 |
| A1 – total | | 1 005 153 | 1 005 153 |
| A2 : Assistance technique pour la préparation des rapports de vérification de la consommation de HCFC | | | |
| Guatemala | Rapport de vérification pour la phase I du plan de gestion de l'élimination des HCFC | 30 000 | 30 000 |
| Honduras | Rapport de vérification pour la phase I du plan de gestion de l'élimination des HCFC | 30 000 | 30 000 |
| Montenegro | Rapport de vérification pour la phase I du plan de gestion de l'élimination des HCFC | 30 000 | 30 000 |
| A2 – total partiel | | 90 000 | 90 000 |
| Coûts d'appui d'agence | | 8 100 | 8 100 |
| A2 - total | | 98 100 | 98 100 |
| A3 : Activités de préparation de projet pour les plans de gestion de l'élimination des HCFC (PGEH) | | | |
| Arménie* | Préparation pour un PGEH (phase III) | 20 000 | 20 000 |
| Bahamas** | Préparation pour un PGEH (phase II) | 10 000 | 10 000 |
| Bénin** | Préparation pour un PGEH (phase II) | 20 000 | 20 000 |
| Burkina Faso** | Préparation pour un PGEH (phase II) | 20 000 | 20 000 |
| Côte d'Ivoire** | Préparation pour un PGEH (phase II) | 20 000 | 20 000 |
| Guinée équatoriale ** | Préparation pour un PGEH (phase II) | 10 000 | 10 000 |
| Érythrée** | Préparation pour un PGEH (phase II) | 10 000 | 10 000 |
| Gabon** | Préparation pour un PGEH (phase II) | 20 000 | 20 000 |
| Koweït** | Préparation pour un PGEH (phase II) | 15 000 | 15 000 |
| | Préparation pour les activités d'investissement en vue de l'élimination des HCFC (réfrigération et climatisation) | 80 000 | 80 000 |
| Libéria** | Préparation pour un PGEH (phase II) | 10 000 | 10 000 |
| Madagascar** | Préparation pour un PGEH (phase II) | 20 000 | 20 000 |
| Sierra Leone** | Préparation pour un PGEH (phase II) | 10 000 | 10 000 |
| A3 – total partiel | | 265 000 | 265 000 |
| Coûts d'appui d'agence (7 % pour la préparation de projet) | | 18 500 | 18 500 |
| A3 - total | | 283 500 | 283 550 |
| A4 : Assistance technique pour les activités de facilitation (décision 79/46) | | | |
| Algérie | Activités de facilitation pour l'élimination des HCFC | 150 000 | 150 000 |

| Pays | Activité/projet | Montant demandé (\$US) | Montant recommandé (\$US) |
|--|--|------------------------|---------------------------|
| | A4 – total partiel | 150 000 | 150 000 |
| | Coûts d'appui d'agence (7 % pour l'assistance technique) | 10 500 | 10 500 |
| | A4 – total | 160 500 | 160 500 |
| SECTION B : ACTIVITÉS RECOMMANDÉES POUR EXAMEN INDIVIDUEL | | | |
| B1 : Préparation du projet | | | |
| Bahreïn** | Préparation d'un plan de gestion de l'élimination des HCFC (phase II) | 18 000 | *** |
| | Préparation des activités d'investissement en vue de l'élimination des HCFC (phase II) (secteur des mousses) | 80 000 | *** |
| | B1 – total partiel | 98 000 | *** |
| | Coûts d'appui d'agence (7 % pour la préparation de projet) | 6 860 | *** |
| | B1 – total | 104 860 | *** |
| | Total général (A1, A2, A3, A4, B1) | 1 652 113 | 1 547 253 |

* PNUE à titre d'agence de coopération

** PNUE à titre d'agence d'exécution principale

***Pour examen individuel

SECTION A : ACTIVITÉS RECOMMANDÉES POUR APPROBATION GLOBALE

A1 : Renouvellement des projets de renforcement des institutions

Description des projets

2. L'ONUDI a présenté les demandes pour le renouvellement de quatre projets de renforcement des institutions dans les pays figurant dans la section A1 du tableau 1. Les descriptions de ces projets sont présentées à l'annexe I du présent document.

Observations du Secrétariat

3 Le Secrétariat a examiné les demandes de renouvellement de quatre projets de renforcement des institutions soumises par l'ONUDI au nom des gouvernements concernés, en fonction des lignes directrices et des décisions pertinentes concernant l'admissibilité et les niveaux de décaissement. Les demandes ont été comparées avec le plan de travail initial sur le renforcement des institutions de la phase précédente, les données du programme de pays et les données communiquées au titre de l'article 7, le rapport le plus récent sur la mise en œuvre du plan de gestion de l'élimination des HCFC (PGEH), le rapport périodique de l'agence, et toutes les décisions pertinentes de la Réunion des Parties. Il a été noté que ces pays ont transmis leurs données de programme de pays pour 2018, sont en conformité avec les objectifs de réglementation du Protocole de Montréal, et que leur consommation annuelle de HCFC n'excède pas la consommation maximale annuelle autorisée figurant dans leurs Accords respectifs avec le Comité exécutif. De plus, toutes les demandes présentées renfermaient les indicateurs d'efficacité concernant les activités prévues pour la phase suivante des projets de renforcement des institutions, conformément à la décision 74/51 e).

Recommandations du Secrétariat

4. Le Secrétariat recommande l'approbation globale des demandes de renouvellement des projets de renforcement des institutions pour la Bosnie-Herzégovine, la Serbie, la Tunisie et la Turquie, aux niveaux de financement indiqués dans la section A1 du tableau 1 du présent document. Le Comité exécutif pourrait souhaiter communiquer aux gouvernements susmentionnés les observations figurant à l'annexe II du présent document.

A2 : Assistance technique pour la préparation des rapports de vérification de la consommation des HCFC

Description des projets

5. Le Comité exécutif a demandé aux agences bilatérales et aux agences d'exécution d'inclure dans les amendements à leurs programmes de travail respectifs devant être présentés à la 84^e réunion, le financement pour la préparation des rapports de vérification pour la phase I des PGEH au Guatemala, au Honduras et au Montenegro (décision 81/33), avec l'ONUDI comme agence d'exécution principale.

Observations du Secrétariat

6. Le Secrétariat a noté que le financement demandé correspondait aux fonds approuvés pour des vérifications semblables lors des réunions précédentes. Il a par ailleurs souligné que le rapport de vérification devrait être soumis au moins 60 jours avant la réunion du Comité exécutif lors de laquelle la tranche suivante de financement du PGEH est demandée.

Recommandations du Secrétariat

7. Le Secrétariat recommande l'approbation globale du financement pour la préparation des rapports de vérification pour la phase I des plans de gestion de l'élimination des HCFC au Guatemala, au Honduras et au Montenegro, au niveau de financement indiqué à la section A2 du Tableau 1, étant entendu que les rapports devraient être présentés au moins 60 jours avant la réunion du Comité exécutif lors de laquelle la tranche suivante de financement des PGEH de ces pays est demandée.

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

Description des projets

8. L'ONUDI a présenté une demande, en sa qualité d'agence d'exécution principale, pour la préparation de la phase III du PGEH dans un pays, et des demandes, en sa qualité d'agence de coopération, pour la préparation de la phase II des PGEH dans 11 pays, le PNUE étant l'agence d'exécution principale. En outre, l'ONUDI a demandé un financement pour la préparation des activités d'investissement dans le secteur de la réfrigération et de la climatisation, dans le cadre de la phase II du PGEH au Koweït. Ces demandes sont présentées dans la section A3 du tableau 1.

9. L'ONUDI a soumis des descriptions des activités à l'appui de la demande de préparation de projet pour l'Arménie, et le PNUE, pour les 11 autres pays.¹ Les présentations pour chaque pays comportaient les documents suivants : justification du financement demandé pour les activités de préparation de projet; rapport périodique sur la mise en œuvre de la phase I et de la phase II de leurs PGEH respectifs; et la liste des activités potentielles, avec les budgets correspondants. Le nombre d'entreprises et les données de consommation de base ont également été fournis pour la demande concernant le projet d'investissement au Koweït.

10. Le PNUE, en sa qualité d'agence d'exécution principale pour 11 pays et d'agence de coopération pour un pays, a demandé respectivement les montants de 435 000 \$US, plus les coûts d'appui d'agence, et de 10 000 \$US, plus les coûts d'appui d'agence, dans les amendements à son programme de travail pour 2019.²

Observations du Secrétariat

¹ UNEP/OzL.Pro/ExCom/84/35.

² Ibid.

11. En examinant les 12 demandes, le Secrétariat a tenu compte des lignes directrices sur le financement de la préparation des phases II et III des PGEH pour les pays visés à l'article 5 voir la décision 71/42; des phases I et II des PGEH approuvés, ainsi que de l'état d'avancement des tranches au moment de la préparation du présent document, et de la décision 82/45 c)i).³ Le Secrétariat a noté que le financement demandé pour chaque pays est conforme à la décision 71/42, et que l'ONUDI a confirmé que les tranches de financement restantes pour ces pays seront soumises comme prévu dans leurs Accords avec le Comité exécutif.

12. L'ONUDI a confirmé que la phase II des PGEH aux Bahamas, au Bénin, au Burkina Faso, en Côte d'Ivoire, en Guinée équatoriale, en Érythrée, au Gabon, au Libéria, au Madagascar et à Sierra Leone respectera l'objectif de réduction de 100 % de la consommation de HCFC d'ici 2030, et que le Koweït se conformera à l'objectif de réduction de 67,5 % en 2025. La phase III du PGEH en Arménie satisfera l'objectif de réduction de 97,5 % en 2030.

Recommandation du Secrétariat

13. Le Secrétariat recommande l'approbation globale des activités de préparation de projet pour la phase II des plans de gestion de l'élimination des HCFC (PGEH) aux Bahamas, au Bénin, au Burkina Faso, en Côte d'Ivoire, en Guinée équatoriale, en Érythrée, au Gabon, au Koweït, au Libéria, à Madagascar et à Sierra Leone, et de la phase III en Arménie, aux niveaux de financement figurant dans la section A3 du tableau 1.

A4 : Assistance technique pour les activités de facilitation

Contexte

14. Conformément à la décision 79/46,⁴ l'ONUDI a soumis une demande pour le financement de la mise en œuvre des activités de facilitation en Algérie, comme on peut le voir dans la section A4 du tableau 1.

15. Les activités de financement sont les suivantes :

- a) Examen du cadre juridique pour la ratification et l'application des obligations initiales de l'Amendement de Kigali, y compris l'évaluation des lois et politiques en vigueur, et l'établissement des exigences relatives à l'instauration du cadre législatif et politique pour la gestion de l'élimination des HFC;
- b) Coordination institutions gouvernementales/intervenants au niveau des politiques et plans d'action requis pour la ratification et l'application de l'Amendement de Kigali;
- c) Élaboration du cadre réglementaire pour l'établissement des systèmes d'octroi de licences pour les importations et exportations de HFC et solutions de remplacement des HFC; préparation de codes douaniers harmonisés pour les engagements en matière de communication des données relatives aux HFC, avec une attention spéciale aux mélanges de HFC; examen des mécanismes nationaux utilisés pour rendre compte des SAO, de manière à inclure la consommation de HFC, notamment dans le secteur de l'entretien;
- d) Activités de sensibilisation.

³ 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.

⁴ Le Comité exécutif a notamment décidé d'approuver des activités de facilitation de manière à ce que les pays profitent de la souplesse nécessaire pour entreprendre diverses activités de facilitation afin de s'acquitter de leurs premières obligations, conformément à l'Amendement de Kigali; les activités de facilitation comprendraient, entre autres, les activités pour faciliter la ratification hâtive de l'Amendement de Kigali; les arrangements institutionnels de soutien; l'examen des programmes d'octroi de permis; la communication de données sur les HFC; et la démonstration d'activités ne portant pas sur des investissements.

Observations du Secrétariat

16 Le Secrétariat a examiné la demande concernant les activités de facilitation, et a conclu que celles-ci répondaient à toutes les exigences stipulées dans la décision 79/46, comme cela est indiqué plus bas :

- a) La lettre du gouvernement de l'Algérie indiquant son intention de ratifier dès que possible l'Amendement de Kigali a été présentée par l'ONUDI;
- b) La proposition de projet comportait la description de chacune des activités de facilitation, les arrangements institutionnels, la ventilation des coûts et le calendrier de mise en œuvre; et
- c) La durée de la mise en œuvre du projet sera de 18 mois.

17 Le financement demandé pour l'Algérie était conforme à la décision 69/46 c), et calculé à partir de la valeur de référence des HCFC pour le pays.

Recommandation du Secrétariat

18 Le Secrétariat recommande l'approbation globale de la demande pour les activités de facilitation de l'élimination des HFC en Algérie, au niveau de financement indiqué dans la section A4 du tableau 1 ci-dessus.

SECTION B : ACTIVITÉS RECOMMANDÉES POUR EXAMEN INDIVIDUEL

B1 : Préparation de projet pour le plan de gestion de l'élimination des HCFC

Description des projets

19 L'ONUDI a présenté une demande pour la préparation de la phase II du PGEH, ainsi qu'une autre demande pour la préparation de projets d'investissement dans le secteur des mousses au Bahreïn, en sa qualité d'agence de coopération, le PNUE étant l'agence d'exécution principale, comme on peut le voir dans la section B1 du tableau 1. Le PNUE, en sa qualité d'agence d'exécution principale, a demandé le montant de 42 000 \$US, plus les coûts d'appui d'agence, pour les amendements à son programme de travail pour 2019.⁵

20 L'ONUDI a fourni la description des activités à l'appui de la demande pour la préparation de projets d'investissement dans le secteur des mousses, y compris le nombre d'entreprises et les données de consommation de base, alors que le PNUE incluait des détails sur la stratégie globale et demandait le montant de 42 000 \$US, plus les coûts d'appui d'agence, comme cela figure dans les amendements à son programme de travail pour 2019.⁶

Observations du Secrétariat

21 Le Secrétariat a examiné la demande de préparation de projet pour la phase II du PGEH et la demande de préparation de projets d'investissement dans le secteur des mousses au Bahreïn, à partir des lignes directrices sur le financement de la préparation de la phase II des PGEH dans les pays visés à l'article 5 figurant dans la décision 71/42, et de l'état d'avancement de la phase I au moment de la préparation du présent document. La phase II du PGEH pour le Bahreïn devrait satisfaire l'objectif de réduction de 67,5 % en 2025. Il a été noté que le Bahreïn avait soumis une demande de tranche à l'attention du Comité exécutif lors de la 84^e réunion.⁷

22 Le Secrétariat a souligné que l'Accord entre le gouvernement du Bahreïn et le Comité exécutif pour la

⁵ UNEP/OzL.Pro/ExCom/84/35

⁶ UNEP/OzL.Pro/ExCom/84/35

⁷ UNEP/OzL.Pro/ExCom/84/40

phase I du PGEH expirait en 2023. Par conséquent, la demande de préparation de projet pour la phase II ne pourrait être soumise que deux années avant la clôture de l'Accord pour la phase I (c.-à-d., 2021),⁸ conformément à la décision 71/42. Le gouvernement du Bahreïn a transmis à la 84^e réunion une demande de tranche associée à la phase I du PGEH, accompagnant une demande de modification de la date d'achèvement de la phase I, soit du 31 décembre 2023 au 31 décembre 2020. Si le Comité exécutif approuve la nouvelle date d'achèvement de la phase I du PGEH, sollicitée par le gouvernement du Bahreïn, le financement demandé à la 84^e réunion pour la préparation de la phase II serait admissible.

Recommandation du Secrétariat

23 Le Comité exécutif pourrait souhaiter envisager d'approuver la demande de préparation de projet pour la phase II du plan de gestion de l'élimination des HCFC (PGEH) au Bahreïn, pour le montant de 18 000 \$US, plus les coûts d'appui d'agence de 1 260 \$US, ainsi que la demande de préparation de projets d'investissement dans le secteur des mousses, pour un montant de 80 000 \$US, plus les coûts d'appui d'agence de 5 600 \$US, sous réserve de l'approbation de la révision de l'Accord entre le gouvernement du Bahreïn et le Comité exécutif (date d'achèvement de la phase I du PGEH d'ici le 31 décembre 2020), qui sera examinée au titre du point à l'ordre du jour 9 f) Projets d'investissement.

⁸ Décision 82/45 c)i)

Annex I

INSTITUTIONAL STRENGTHENING PROJECT PROPOSAL¹

Bosnia and Herzegovina: Renewal of institutional strengthening

| Summary of the project and country profile | | |
|---|---------------|----------------|
| Implementing agency: | | UNIDO |
| Amounts previously approved for institutional strengthening (US \$): | | |
| Phase I: | Mar-99 | 110,000 |
| Phase II: | Jul-04 | 95,333 |
| Phase III: | Nov-11 | 95,333 |
| Phase IV: | Dec-13 | 95,333 |
| Phase V: | May-15 | 95,333 |
| Phase VI: | Nov-17 | 122,026 |
| | Total: | 613,358 |
| Amount requested for renewal (phase VII) (US \$): | | 122,026 |
| Amount recommended for approval for phase VII (US \$): | | 122,026 |
| Agency support costs (US \$): | | 8,542 |
| Total cost of institutional strengthening phase VII to the Multilateral Fund (US \$): | | 130,568 |
| Date of approval of country programme: | | 1997 |
| Date of approval of HCFC phase-out management plan: | | 2012 |
| Baseline consumption of controlled substances (ODP tonnes): | | |
| Annex B, Group III (methyl chloroform) (average 1998-2000) | | 1.6 |
| Annex C, Group I (HCFCs) (average 2009-2010) | | 4.7 |
| Annex E (methyl bromide) (average 1995-1998) | | 3.5 |
| Latest reported ODS consumption (2018) (ODP tonnes) as per Article 7: | | |
| Annex B, Group III (methyl chloroform) | | 0.00 |
| Annex C, Group I (HCFCs) | | 2.00 |
| Annex E (methyl bromide) | | 0.00 |
| | Total: | 2.00 |
| Year of reported country programme implementation data: | | 2018 |
| Amount approved for projects (as at May 2019) (US \$): | | 4,658,617 |
| Amount disbursed (as at December 2018) (US \$): | | 4,212,462 |
| ODS to be phased out (as at May 2019) (ODP tonnes): | | 257.6 |
| ODS phased out (as at December 2018) (ODP tonnes): | | 315.4 |

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

| Summary of activities | Funds approved (US \$) |
|--|-------------------------------|
| (a) Investment projects: | 3,340,659 |
| (b) Institutional strengthening: | 613,358 |
| (c) Project preparation, technical assistance, training and other non-investment projects: | 704,600 |
| | Total: |
| | 4,658,617 |
| (d) HFC activities funded from additional voluntary contributions | 95,000 |

Progress report

2. In phase VI of the institutional strengthening (IS) project, Bosnia and Herzegovina has continued the implementation of the HCFC phase-out management plan (HPMP) activities along with increased capacity building of the national ozone unit (NOU). The HCFC quota system, HFC licenses, and the ban

¹ Data as at December 2018 are based on document UNEP/OzL.Pro/ExCom/84/20.

on equipment based on HCFCs and its blends, have been approved by the Council of Ministers and implemented by the NOU in cooperation with the Indirect Taxation Authority. Bosnia and Herzegovina's representative was a Vice-President of the Bureau of the Twenty-eighth Meeting of the Parties to the Montreal Protocol. All the 24 performance indicators of this phase have been fully achieved.

Plan of action

3. In phase VII, the NOU will continue building up capacity to achieve and maintain compliance with the HCFC consumption phase-out targets and supporting ongoing legislative and regulatory efforts, with a special focus on additional HCFC restrictions. Cooperation with the customs authorities to prevent illegal trade in ODS, and with the refrigeration and air-conditioning (RAC) association to train technicians, will be continued. Bosnia and Herzegovina is committed to ratifying the Kigali Amendment and has made the necessary initial steps by including the ratification into the bi-annual work plan of the Council of Ministers and collecting opinions from relevant administrative institutions. The date of ratification will depend on the establishment of the new Parliament.

Serbia: Renewal of institutional strengthening

| Summary of the project and country profile | | |
|---|--------|-----------|
| Implementing agency: | | UNIDO |
| Amounts previously approved for institutional strengthening (US \$): | | |
| Phase I: | Jul-98 | 151,500 |
| Phase II: | Dec-04 | 131,300 |
| Phase III: | Nov-09 | 119,938 |
| Phase IV: | Nov-11 | 131,300 |
| Phase V: | Dec-13 | 131,300 |
| Phase VI: | Nov-17 | 168,064 |
| | Total: | 833,402 |
| Amount requested for renewal (phase VII) (US \$): | | 168,064 |
| Amount recommended for approval for phase VII (US \$): | | 168,064 |
| Agency support costs (US \$): | | 11,764 |
| Total cost of institutional strengthening phase VII to the Multilateral Fund (US \$): | | 179,828 |
| Date of approval of country programme: | | 1997 |
| Date of approval of HCFC phase-out management plan: | | 2010 |
| Baseline consumption of controlled substances (ODP tonnes): | | |
| Annex B, Group III (methyl chloroform) (average 1998-2000) | | 0.0 |
| Annex C, Group I (HCFCs) (average 2009-2010) | | 8.4 |
| Annex E (methyl bromide) (average 1995-1998) | | 8.3 |
| Latest reported ODS consumption (2018) (ODP tonnes) as per Article 7: | | |
| Annex B, Group III (methyl chloroform) | | 0.00 |
| Annex C, Group I (HCFCs) | | 6.61 |
| Annex E (methyl bromide) | | 0.00 |
| | Total: | 6.61 |
| Year of reported country programme implementation data: | | 2018 |
| Amount approved for projects (as at May 2019) (US \$): | | 9,970,907 |
| Amount disbursed (as at December 2018) (US \$): | | 8,077,009 |
| ODS to be phased out (as at May 2019) (ODP tonnes): | | 1,121.2 |
| ODS phased out (as at December 2018) (ODP tonnes): | | 1,121.2 |

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

| Summary of activities | Funds approved (US \$) |
|--|------------------------|
| (a) Investment projects: | 7,125,743 |
| (b) Institutional strengthening: | 833,402 |
| (c) Project preparation, technical assistance, training and other non-investment projects: | 2,011,762 |
| Total: | 9,970,907 |
| (d) HFC activities funded from additional voluntary contributions | 150,000 |

Progress report

5. In phase VI of the IS project, amendments to the Regulation on ODS Management, and revised conditions for issuing licenses for import and export of ODS, were adopted (March 2018), which restricted the import of HCFCs to servicing sector maintenance activities and introduced a ban on equipment containing HCFCs. The NOU has initiated, and is following up on, the procedure for the ratification of the Kigali Amendment, under the enabling activities for HFC phase-down. Public awareness activities have been organized on the occasion of the International Ozone Day. The NOU has strengthened the cooperation with the refrigeration association in the process of certification of technicians and provision of technical support on alternatives to HCFC use to other countries in the region, through organization of exhibitions, conferences and other initiatives. All the 16 performance indicators of this phase have been fully achieved.

Plan of action

6. In phase VII, the NOU will continue to coordinate activities to finalize the implementation of stage I of the HPMP in 2020 and submit stage II to the 85th meeting. The NOU will prepare early implementation of the Kigali Amendment through enabling activities for HFC phase-down. Priority will be given to liaising with stakeholders, in particular from the RAC sector, on promoting low-global-warming-potential (GWP) alternatives on the local market. Awareness-raising activities will also be implemented.

Tunisia: Renewal of institutional strengthening

| Summary of the project and country profile | |
|--|-----------------|
| Implementing agency: | UNIDO |
| Amounts previously approved for institutional strengthening (US \$): | |
| Phase I: | Oct-92 285,312 |
| Phase II: | June-98 186,700 |
| Phase III: | Apr-03 242,667 |
| Phase IV: | Apr-06 247,270 |
| Phase V: | Jul-08 247,270 |
| Phase VI: | Jul-10 247,270 |
| Phase VII: | Apr 12 247,270 |
| Phase VIII: | May-15 247,270 |
| Total: | 1,951,029 |
| Amount requested for renewal (phase IX) (US \$): | 316,506 |
| Amount recommended for approval for phase IX (US \$): | 316,506 |
| Agency support costs (US \$): | 22,155 |
| Total cost of institutional strengthening phase IX to the Multilateral Fund (US \$): | 338,661 |
| Date of approval of country programme: | 1991 |
| Date of approval of HCFC phase-out management plan: | 2014 |
| Baseline consumption of controlled substances (ODP tonnes): | |
| Annex B, Group III (methyl chloroform) (average 1998-2000) | 0.1 |
| Annex C, Group I (HCFCs) (average 2009-2010) | 40.7 |
| Annex E (methyl bromide) (average 1995-1998) | 8.3 |
| Latest reported ODS consumption (2018) (ODP tonnes) as per Article 7: | |

| Summary of the project and country profile | |
|---|------------|
| Annex B, Group III (methyl chloroform) | 0.00 |
| Annex C, Group I (HCFCs) | 25.91 |
| Annex E (methyl bromide) | 0.00 |
| Total: | 25.91 |
| Year of reported country programme implementation data: | 2018 |
| Amount approved for projects (as at May 2019) (US \$): | 13,389,657 |
| Amount disbursed (as at December 2018) (US \$): | 10,185,179 |
| ODS to be phased out (as at May 2019) (ODP tonnes): | 1,397.3 |
| ODS phased out (as at December 2018) (ODP tonnes): | 1,566.5 |

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

| Summary of activities | Funds approved (US \$) |
|--|-------------------------------|
| (a) Investment projects: | 8,408,446 |
| (b) Institutional strengthening: | 1,951,029 |
| (c) Project preparation, technical assistance, training and other non-investment projects: | 3,030,182 |
| Total: | 13,389,657 |
| (d) HFC activities funded from additional voluntary contributions | 150,000 |

Progress report

8. In phase VIII, the NOU has advanced with the implementation of the HPMP activities through strict monitoring of HCFC trade through the ODS regulatory framework and allocation of quotas; further strengthening of the cooperation with the customs authorities ensuring sustained ODS phase-out; sharing of information with industry associations; updating the membership of the National Ozone Steering Committee on Montreal Protocol matters; coordination and preparation of stage II of the HPMP; implementation of enabling activities for HFC phase-down to prepare for the ratification of the Kigali Amendment; public awareness activities, including the celebration of the International Ozone Day; country programme and Article 7 data reporting; and participation in regional network and Montreal Protocol-related meetings.

Plan of action

9. Planned activities in phase IX include: country programme and Article 7 data reporting; continued cross-checking of the licensing system and quota allocation against the customs records to control HCFC imports; implementation of stage II of the HPMP following its approval; updating the legislation to include HFCs; establishing a certification system for RAC technicians; banning the import or manufacturing of HCFC-based equipment, including HCFC-22; continued cooperation with custom authorities and industry associations; and facilitating the ratification of the Kigali Amendment through the implementation of enabling activities for HFC phase-down. The celebration of the International Ozone Day and the participation in regional network and Montreal Protocol-related meetings are also envisaged.

Turkey: Renewal of institutional strengthening

| Summary of the project and country profile | |
|--|----------------|
| Implementing agency: | UNIDO |
| Amounts previously approved for institutional strengthening (US \$): | |
| Phase I: | Oct-92 300,000 |
| Phase II: | Dec-00 200,000 |
| Phase III: | Dec-04 260,000 |

| Summary of the project and country profile | | | |
|--|-------------|--------|------------|
| | Phase IV: | Jul-09 | 195,000 |
| | Phase V: | Jul-11 | 260,000 |
| | Phase VI: | Jul-13 | 260,000 |
| | Phase VII: | May-15 | 260,000 |
| | Phase VIII: | Nov-17 | 332,800 |
| | | Total: | 2,067,800 |
| Amount requested for renewal phase IX (US \$): | | | 332,800 |
| Amount recommended for approval for phase IX (US \$): | | | 332,800 |
| Agency support costs (US \$): | | | 23,296 |
| Total cost of institutional strengthening phase IX to the Multilateral Fund (US \$): | | | 356,096 |
| Date of approval of country programme: | | | 1992 |
| Date of approval of HCFC phase-out management plan: | | | 2012 |
| Baseline consumption of controlled substances (ODP tonnes): | | | |
| Annex B, Group III (methyl chloroform) (average 1998-2000) | | | 37.4 |
| Annex C, Group I (HCFCs) (average 2009-2010) | | | 551.5 |
| Annex E (methyl bromide) (average 1995-1998) | | | 479.7 |
| Latest reported ODS consumption (2018) (ODP tonnes) as per Article 7: | | | |
| Annex B, Group III (methyl chloroform) | | | 0.00 |
| Annex C, Group I (HCFCs) | | | 10.57 |
| Annex E (methyl bromide) | | | 0.00 |
| | | | Total: |
| | | | 10.57 |
| Year of reported country programme implementation data: | | | 2018 |
| Amount approved for projects (as at May 2019) (US \$): | | | 55,116,145 |
| Amount disbursed (as at December 2018) (US \$): | | | 48,245,319 |
| ODS to be phased out (as at May 2019) (ODP tonnes): | | | 4,937.0 |
| ODS phased out (as at December 2018) (ODP tonnes): | | | 5,002.1 |

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

| Summary of activities | Funds approved (US \$) |
|--|------------------------|
| (a) Investment projects: | 47,172,947 |
| (b) Institutional strengthening: | 2,067,800 |
| (c) Project preparation, technical assistance, training and other non-investment projects: | 5,875,398 |
| | Total: |
| | 55,116,145 |
| (d) HFC activities funded from additional voluntary contributions | 250,000 |

Progress report

11. The capacity of the NOU has been increased by allocating additional staff from the Ministry of Environment and Urbanization, and by enhancing the functionality of the Steering Committee. Progress has been achieved in reviewing the national ODS legislation and on enabling activities for HFC phase-down. The Kigali Amendment is already in the parliamentary procedure with a view of its adoption. Cooperation with the refrigeration association has been enhanced through awareness-raising and pilot demonstration activities undertaken in the context of the HPMP implementation, and the HFC consumption trend analysis carried out annually. Prevention of illegal trade has been enhanced through improvement of a centralized electronic system. Turkey has fully achieved 11 indicators and two were partially achieved.

Plan of action

12. In phase IX, new ODS alternative technologies will be supported through training and awareness-raising activities. Monitoring of ODS trade will be strengthened, especially through the use of

information-technology-based and context-dependent approaches. Data collection and reporting, communication and networking, as well as the awareness of the protection of ozone layer among stakeholders, will be strengthened.

Annexe II

PROJET DE POINTS DE VUE EXPRIMÉS PAR LE COMITÉ EXÉCUTIF SUR LE RENOUVELLEMENT DES PROJETS DE RENFORCEMENT DES INSTITUTIONS SOU MIS À LA 84^E RÉUNION

Bosnie-Herzégovine

1. Le Comité exécutif a examiné le rapport accompagnant la demande de renouvellement du projet de renforcement des institutions pour la Bosnie-Herzégovine (phase VII), et s'est réjoui du fait que le pays avait communiqué au Secrétariat de l'ozone les données de consommation de SAO au titre de l'article 7 du Protocole de Montréal pour 2017 et 2018, et les données du programme de pays au Secrétariat du Fonds, indiquant que le pays est en conformité avec ses obligations en vertu du Protocole de Montréal. Le Comité exécutif a par ailleurs noté que la Bosnie-Herzégovine avait pris les dispositions nécessaires de manière coordonnée pour respecter les objectifs d'élimination de la consommation de HFC, et lancé le processus de réduction progressive des HFC. Reconnaissant les efforts du pays, il espère qu'il continuera à mener à bien dans les délais fixés les activités prévues au titre du Protocole de Montréal, y compris la mise en œuvre du PGEH et l'exécution des projets de renforcement des institutions.

Serbie

2. Le Comité exécutif a examiné le rapport accompagnant la demande de renouvellement du projet de renforcement des institutions pour la Serbie (phase VII), et s'est réjoui du fait qu'il avait communiqué au Secrétariat de l'ozone les données de consommation des SAO au titre de l'article 7 du Protocole de Montréal pour 2017 et 2018, et les données du programme de pays au Secrétariat du Fonds, indiquant que le pays est en situation de conformité avec ses obligations en vertu du Protocole de Montréal. Il a par ailleurs souligné que la Serbie avait mené des efforts concertés pour satisfaire les objectifs d'élimination de la consommation de HCFC, conformément à son Accord avec le Comité exécutif, y compris par l'application de l'interdiction d'importer des appareils à base de HCFC en vigueur depuis mars 2018, et la conduite d'activités régionales d'échange de données techniques. Reconnaissant les efforts déployés par la Serbie, le Comité exécutif espère que ce pays continuera de mener à bien dans les délais fixés les activités prévues en vertu du Protocole de Montréal, dont la mise en œuvre du PGEH et l'exécution du projet de renforcement des institutions.

Tunisie

3. Le Comité exécutif a examiné le rapport accompagnant la demande de renouvellement du projet de renforcement des institutions pour la Tunisie (Phase IX) et s'est réjoui du fait qu'il avait communiqué au Secrétariat de l'ozone les données en vertu de l'article 7 du Protocole de Montréal, et les données de programme de pays au Secrétariat du Fonds, indiquant que le pays est en situation de conformité avec ses obligations au titre du Protocole de Montréal. Le Comité exécutif a par ailleurs souligné que la Tunisie avait pris les dispositions nécessaires pour éliminer la consommation de HCFC, y compris la mise en place d'un système rigoureux de suivi du commerce de SAO par le biais du cadre réglementaire national, et l'organisation de formations à l'intention des autorités douanières. Reconnaissant les efforts déployés par la Tunisie pour mettre en œuvre la phase I du PGEH, il a noté que le gouvernement avait soumis la phase II de son PGEH à l'attention du Comité exécutif; ce dernier espère par conséquent que la Tunisie continuera de mener à bien dans les délais fixés l'application du PGEH et l'exécution du projet de renforcement des institutions.

Turquie

4. Le Comité exécutif a examiné le rapport accompagnant la demande de renouvellement du projet de renforcement des institutions pour la Turquie (phase IX), et s'est réjoui du fait que ce pays est en situation de conformité avec ses obligations en matière de présentation de rapport au titre de l'article 7 du Protocole de Montréal et de son programme de pays, et avec les objectifs d'élimination accélérée des HCFC figurant dans son Accord avec le Comité exécutif. Ce dernier a par ailleurs noté que la Turquie joue un rôle déterminant sur le plan de la promotion des solutions de remplacement des HCFC dans le secteur de la réfrigération et de la climatisation en Europe et en Asie centrale. Reconnaisant les efforts déployés par la Turquie, le Comité exécutif espère que ce pays continuera à mener à bien dans les délais fixés les activités prévues au Protocole de Montréal, y compris l'application du PGEH et l'exécution du projet de renforcement des institutions.



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO WORK PROGRAMME

Presented to the 84th Meeting of the Executive Committee of the Multilateral Fund

Introduction

The UNIDO Work Programme Amendment (WPA) for the consideration of the 84th Meeting of the Executive Committee (ExCom) of the Multilateral Fund (MLF) has been prepared following the Government requests as well as based on ongoing and planned activities. The Work Programme Amendment will support the implementation of UNIDO's three year Rolling Business Plan 2019-2021.

The 84th UNIDO WPA is addressing preparatory assistance, institutional strengthening, verification report and enabling activities requests.

Preparatory assistance is submitted for the 84th Executive Committee Meeting consideration for the Bahamas, Bahrain, Benin, Burkina Faso, Cote d'Ivoire, Equatorial Guinea, Eritrea, Gabon, Kuwait, Liberia, Madagascar and Sierra Leone to enable the countries to overview and update data necessary for the launch and implementation of HPMP Stage II. Also, preparatory assistance is submitted for the 84th Executive Committee Meeting consideration for Armenia to enable the country to overview and update data necessary for the launch and implementation of HPMP Stage III. For the first time, UNIDO is submitting preparatory assistance for HFC phase-down plans for Cameroon, Gabon, the Gambia, Jordan and Mexico to assist the countries with the implementation of the next phases of the Kigali Amendment to the Montreal Protocol.

Institutional strengthening extension requests are submitted based on the country requests for Bosnia and Herzegovina, Serbia, Tunisia and Turkey.

Verification Report related funding is required in line with the Decisions 61/46(c) and 83/48 for Guatemala, Honduras and Montenegro.

Request for funding of enabling activities is submitted in line with Decision 79/46 in Algeria. UNIDO is the only implementing agency in Algeria and the proposal is submitted as part of UNIDO's WPA. Detailed description of tasks and budget is included in the project concept.

As per decision 81/31(a), Enabling activities for HFC phase-down were approved with a duration of 18 months, however if needed, that period can be extended for additional 12 months, when an official request is submitted. UNIDO has received official letters from Argentina, Egypt, Libya, Morocco, the Niger, Nicaragua and the Bolivarian Republic of Venezuela, requesting the duration of the implementation period to be extended for additional 12 months. The reasons for the extensions are provided in Section 3.

The UNIDO Work Programme Amendment for the consideration of the 84th ExCom Meeting comprises the following sections:

- **Section 1:** Consolidated list of activities foreseen for the above requests by project types and country;
- **Section 2:** Project concepts indicating details and funding requirements; and
- **Section 3:** Requests for extension of the duration of the Enabling activities for HFC phase down.

Funding is requested as follows:

- Preparatory assistance funding for HPMP Stage II in the Bahamas, Bahrain, Benin, Burkina Faso, Cote d'Ivoire, Equatorial Guinea, Eritrea, Gabon, Kuwait, Liberia, Madagascar and Sierra Leone¹ and for HPMP Stage III for Armenia amounting to US\$ 388,410 (including US\$ 25,410 representing 7.0 % A.S.C.);
- Preparatory assistance funding for HFC phase-down plans in Cameroon, Gabon, Gambia, Jordan and Mexico² amounting to US\$ 1,182,350 (including US\$ 77,350 representing 7.0% A.S.C.)
- Institutional strengthening projects amounting to US\$ 1,005,153 (including US\$ 65,757 representing 7.0 % A.S.C.);
- Verification Report funding amounting to US\$ 98,100 (including US\$ 8,100 representing 9.0 % A.S.C.); and
- Enabling activities funding amounting to US\$ 160,500 (including US\$ 10,500 representing 7.0 % A.S.C.).

Total: US\$ 2,834,513 (including US\$ 187,117 agency support cost).

¹ The Project Concepts for the Bahamas, Bahrain, Benin, Burkina Faso, Cote d'Ivoire, Equatorial Guinea, Eritrea, Gabon, Kuwait, Liberia, Madagascar and Sierra Leone are included in the Lead Agency (UN Environment) Work Programme.

² The project proposal for Mexico includes four sub-projects, all related to HFC phase-down.

SECTION 1

| Country | MLF HCFC Status | Type | Substance | Sector and Sub-Sector | Title of Project | Total amount USD | A.S.C. | Total (incl ASC) USD | A.S.C. % | P.D. | Remarks |
|--|-----------------|------|-----------|-----------------------|-------------------------------|------------------|--------|----------------------|----------|------|---|
| Preparatory Assistance for HPMP | | | | | | | | | | | |
| Armenia | LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage III HPMP | 20,000 | 1,400 | 21,400 | 7% | 24 | In cooperation with UN Environment. |
| Bahamas (the) | LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 10,000 | 700 | 10,700 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Bahrain | Non-LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 18,000 | 1,260 | 19,260 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Bahrain | Non-LVC | PRP | HCFC-141b | Foam | Preparation of Stage II HPMP | 80,000 | 5,600 | 85,600 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Benin | Non-LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 20,000 | 1,400 | 21,400 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Burkina Faso | Non-LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 20,000 | 1,400 | 21,400 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Cote d'Ivoire | Non-LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 20,000 | 1,400 | 21,400 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |

| Country | MLF HCFC Status | Type | Substance | Sector and Sub-Sector | Title of Project | Total amount USD | A.S.C. | Total (incl ASC) USD | A.S.C. % | P.D. | Remarks |
|-------------------|-----------------|------|-----------|-----------------------|------------------------------|------------------|--------|----------------------|----------|------|---|
| Equatorial Guinea | LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 10,000 | 700 | 10,700 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Eritrea | LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 10,000 | 700 | 10,700 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Gabon | Non-LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 20,000 | 1,400 | 21,400 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Kuwait | Non-LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 15,000 | 1,050 | 16,050 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Kuwait | Non-LVC | PRP | HCFC-141b | REF-Air Conditioning | Preparation of Stage II HPMP | 80,000 | 5,600 | 85,600 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Liberia | LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 10,000 | 700 | 10,700 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| Madagascar | Non-LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 20,000 | 1,400 | 21,400 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |

| Country | MLF HCFC Status | Type | Substance | Sector and Sub-Sector | Title of Project | Total amount USD | A.S.C. | Total (incl ASC) USD | A.S.C. % | P.D. | Remarks |
|------------------------------------|-----------------|------|-----------|-----------------------------|---|------------------|---------------|----------------------|----------|------|---|
| Sierra Leone | LVC | PRP | HCFC-22 | REF-Servicing | Preparation of Stage II HPMP | 10,000 | 700 | 10,700 | 7% | 24 | In cooperation with UN Environment. Concept is submitted by UN Environment. |
| SUBTOTAL | | | | | | 363,000 | 25,410 | 388,410 | | | |
| Institutional Strengthening | | | | | | | | | | | |
| Cameroon | Non-LVC | PRP | HFC | SEV | Preparation of HFC phase-down plan | 150,000 | 10,500 | 160,500 | 7% | 24 | |
| Gabon | Non-LVC | PRP | HFC | SEV | Preparation of HFC phase-down plan | 150,000 | 10,500 | 160,500 | 7% | 24 | |
| Gambia (the) | LVC | PRP | HFC | SEV | Preparation of HFC phase-down plan | 95,000 | 6,650 | 101,650 | 7% | 24 | |
| Jordan | Non-LVC | PRP | HFC | SEV | Preparation of HFC phase-down plan | 150,000 | 10,500 | 160,500 | 7% | 24 | |
| Mexico | Non-LVC | PRP | HFC | Overarching | Preparation of HFC phase-down plan | 250,000 | 17,500 | 267,500 | 7% | 24 | |
| Mexico | Non-LVC | PRP | HFC | MAC sector | Preparation of HFC phase-down plan | 150,000 | 10,500 | 160,500 | 7% | 24 | |
| Mexico | Non-LVC | PRP | HFC | Demonstration refrigeration | Demonstration pilot project | 80,000 | 5,600 | 85,600 | 7% | 24 | |
| Mexico | Non-LVC | PRP | HFC | Investment refrigeration | Preparation of umbrella project in manufacturing sector | 80,000 | 5,600 | 85,600 | 7% | 24 | |
| SUBTOTAL | | | | | | 1,105,000 | 77,350 | 1,182,350 | | | |
| Institutional Strengthening | | | | | | | | | | | |
| Bosnia and Herzegovina | LVC | INS | All | SEV | Institutional strengthening | 122,026 | 8,542 | 130,568 | 7% | 24 | |
| Serbia | LVC | INS | All | SEV | Institutional strengthening | 168,064 | 11,764 | 179,828 | 7% | 24 | |

| Country | MLF HCFC Status | Type | Substance | Sector and Sub-Sector | Title of Project | Total amount USD | A.S.C. | Total (incl ASC) USD | A.S.C. % | P.D. | Remarks |
|---|-----------------|------|-----------|-----------------------|-----------------------------|------------------|----------------|----------------------|----------|------|---------|
| Tunisia | Non-LVC | INS | All | SEV | Institutional strengthening | 316,506 | 22,155 | 338,661 | 7% | 24 | |
| Turkey | Non-LVC | INS | All | SEV | Institutional strengthening | 332,800 | 23,296 | 356,096 | | | |
| SUBTOTAL | | | | | | 939,396 | 65,757 | 1,005,153 | | | |
| Verification Reports | | | | | | | | | | | |
| Guatemala | LVC | TAS | HCFC-22 | SEV | Verification report | 30,000 | 2,700 | 32,700 | 9% | 24 | |
| Honduras | LVC | TAS | HCFC-22 | SEV | Verification report | 30,000 | 2,700 | 32,700 | 9% | 24 | |
| Montenegro | LVC | TAS | HCFC-22 | SEV | Verification report | 30,000 | 2,700 | 32,700 | 9% | 24 | |
| SUBTOTAL | | | | | | 90,000 | 8,100 | 98,100 | | | |
| Enabling activities for HFC phase-down | | | | | | | | | | | |
| Algeria | Non-LVC | TAS | SEV | SEV | Enabling activities | 150,000 | 10,500 | 160,500 | 7% | 18 | |
| SUBTOTAL | | | | | | 150,000 | 10,500 | 160,500 | | | |
| GRAND TOTAL | | | | | | 2,647,396 | 187,117 | 2,834,513 | | | |

SECTION 2

PROJECT CONCEPT - Armenia

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

| | | |
|----------------------------------|---|-----------------------------------|
| Project title: | Preparation of a HCFC phase-out management plan (stage III) | |
| Country: | Armenia | |
| Lead implementing agency: | UNIDO | |
| Cooperating agency (1): | UNEP | Click or tap here to enter text. |
| Implementation period: | January 2020 – December 2021 | |
| Funding requested: | | |
| Agency | Sector | Funding requested (US \$)* |
| UNIDO | Overarching | 20,000 |
| UNEP | Overarching | 10,000 |

*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 agencies (where more than one IA is involved) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Written confirmation – balances from previous PRP funding approved for stage I HPMP had been returned / will be returned (Decision 71/42(i)) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> Specify meeting at which PRP funding balance had been returned/will be returned | UNDP will return the balance to ExCom 84; UN Environment disbursed 100% of preparatory funding; UNIDO was not involved in HPMP stage II. | |

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

| | | |
|--|-------|--|
| 1. Montreal Protocol compliance target to be met in <input type="checkbox"/> stage II / <input checked="" type="checkbox"/> stage III of the HPMP | | |
| Phase-out commitment (%) | 97.5% | Year of commitment 2030 |
| <input checked="" type="checkbox"/> Servicing only | | <input type="checkbox"/> Manufacturing only <input type="checkbox"/> Servicing and manufacturing |
| 2. Brief background on previous stage of the HPMP | | |
| <ul style="list-style-type: none"> 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. | | |
| <p>Armenia's HPMP stage II was approved by ExCom 77 in November 2016 to reduce the HCFC consumption to a sustained level of 2.34 ODP tonnes by 1 January 2020, with UNDP as lead and UN Environment as cooperating agency. Tranche 1 was approved for both agencies in November 2016. Tranche 2 was approved by ExCom 83 in May 2019 for UN Environment only. Tranche 3 is scheduled for 2020 and contains only UNDP components. Armenia is in compliance with the Montreal Protocol provisions and the Agreement with the Executive Committee. Armenia has an enforceable import/export licensing and quota system for HCFCs in place, which is operational, effective and capable of ensuring compliance with the Montreal Protocol phase-out provisions for HCFCs. UN Environment's preparatory funds for HPMP stage II have fully been disbursed. UNIDO has not been involved in HPMP stage II. UNDP will return the balance of their preparatory funding for HPMP stage II. The endorsement</p> | | |

from the Government requesting UNIDO as lead agency and UN Environment as cooperating agency to prepare HPMP stage III has been received.

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

| Activity | Description | Implementing agency |
|--------------------------------|---|---------------------|
| Refrigeration servicing sector | Purchase of advanced multi-gas identifiers | UNDP |
| Refrigeration servicing sector | Purchase of training / servicing equipment / tools | UNDP |
| Legal/regulatory framework | Regulatory updates in HCFC control frameworks | UNEP |
| Legal/regulatory framework | Electronic licensing system | UNEP |
| Refrigeration servicing sector | Strengthening capacity in the refrigeration sector | UNEP |
| Refrigeration servicing sector | Strengthening capacity in prevention of illegal trade | UNEP |
| (select) | Monitoring HPMP implementation | UNEP |

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

| Substance | Sector | 2016 | 2017 | 2018 |
|-----------|---------------|--------|--------|--------|
| HCFC-22 | RAC servicing | 11,458 | 17,000 | 42,664 |

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

HCFC consumption is below the reduction targets of the Montreal Protocol and the agreement between Armenia and the Executive Committee. However, it is fluctuating depending on the economic development and due to imports in one year, which might be used in subsequent years (stock-piling).

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

| Information needed | Description | Agency |
|--|--|--------|
| Updated sectoral consumption information | Review available data and collect additional sector-specific data through questionnaires and interviews. | UNIDO |
| Analysis of the types of equipment using HCFCs | Review available data and collect additional equipment data through questionnaires and interviews. | UNIDO |
| New information on ODS regulations | Review existing legislation and identify gaps and need for new legislation, amendments and policy development. | UNEP |
| Others, specify. | Review available Article 7 and CP data, data from ODS alternatives surveys, enabling activities and progress reports and collect additional data as needed to determine needs for training and awareness raising | UNEP |

7. Activities to be undertaken for project preparation and funding

| Activity | Indicative funding (US \$) | Agency |
|--|----------------------------|--------|
| Consultant to conduct surveys, interviews and consultations with key stakeholders to draft the investment components of the HPMP stage III overarching strategy / tranche 1 request in consultation with the Montreal Protocol focal point and implementing agencies. | 20,000 | UNIDO |
| Consultant to conduct surveys, interviews and consultations with key stakeholders including importers, wholesalers, service workshops, end-users, technology providers, training institutes, academia, RAC and consumer associations, NGOs, relevant Government bodies and to draft the non-investment components of the | 10,000 | UNEP |

| | | |
|---|---------------|--|
| HPMP stage III overarching strategy / tranche 1 request in consultation with the Montreal. | | |
| TOTAL | 30,000 | |
| 8. 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? | | |
| The overarching strategy will focus on the HCFC phase-out while promoting ozone-friendly, climate-friendly and energy-efficient technologies to the extent that this is possible without significant additional costs. The strategy will also raise awareness of stakeholders on the Kigali Amendment and its future obligations. | | |

PROJECT CONCEPT – Cameroon

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HFC PROJECT PREPARATION REQUEST FORM HFC Phase-down Management plan (OVERARCHING)

Part I: Project Information

| | | |
|-------------------------------|--|-----------------------------------|
| Project title: | HFC Phase-Down Management Plan Preparation | |
| Country: | Cameroon | |
| Implementing agency: | UNIDO | |
| Implementation period: | January 2020 – December 2021 | |
| Funding requested: | | |
| Agency | Sector | Funding requested (US \$)* |
| UNIDO | Overarching | 150,000 |

*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 for choice of agency | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Letter of intent to ratify the KA | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

| | | |
|--|---|----------------------------|
| <p>3. Brief background on previous activities related to the Kigali amendment and the HFC phase-down</p> <ul style="list-style-type: none"> Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date. | | |
| <p>Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/50(e), funding was approved for Cameroon for <i>Enabling Activities for HFC phase-down</i> towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare Cameroon for the ratification and implementation of the KA to the Montreal Protocol, considering HFC phase-down in the country. Cameroon had requested an extension for the implementation of the project that was granted for additional 12 months implementation as per decision 83/40(b). Since the project approval, workshops and consultations have been organized, national consultant has been hired, awareness raising meetings have been organized with customs and the reporting mechanisms were updated to include HFCs. Both the National Assembly and the Senate have adopted the Kigali Amendment, and the Law was signed by the President of the Republic. Currently, the instrument of ratification is at the Presidency awaiting final signature and onward transmission to the UN Secretariat in New York. All project activities are advancing well and the project will end as planned in June 2020. The Government of Cameroon has reinstated its intent to ratify the KA and requested UNIDO to proceed with the next steps and requesting funding for preparing HFC phase-down plan.</p> <p>Taking into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of January 2019, and Cameroon has updated its reporting mechanism to include HFC, the country will be able to follow up on the reporting obligation, once the amendment is officially ratified. Cameroon has already created an enabling environment for the phasedown of HFCs.</p> | | |
| <p>4. Current progress in implementation of Enabling Activities for HFC phase-down Budget: 150,000 USD</p> | | |
| Activity | Description | Implementing agency |
| Activities to support the early ratification of the KA | Coordination with Government representatives; Supporting national ratification instruments | UNIDO |

| | | |
|-------------------------------------|---|-------|
| Institutional arrangements | Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain; Training of technicians on reducing refrigerant emissions as well as on the use of flammable and toxic low-GWP alternatives | UNIDO |
| Licensing systems | Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends | UNIDO |
| Data reporting on HFC consumption | Review of the national mechanisms used for ODS reporting to include HFCs consumption | UNIDO |
| Preparation for national strategies | Assessment of the refrigeration and air-conditioning servicing sector; Survey to cover the sectors that have not been analyzed in the ODS alternatives survey; Identification of policies and regulations to facilitate the phase-down of HFCs and the introduction of low-GWP alternative technologies | UNIDO |

5. Overview of estimated use of ODS alternatives 2012 – 2015 in Mt

| Substance | 2012 | 2013 | 2014 | 2015 |
|-----------------|-------|-------|-------|-------|
| HFC | | | | |
| HFC 134a | 1,700 | 1,768 | 1,904 | 1,999 |
| HFC blends | | | | |
| R 404A | 141.7 | 152.6 | 163.5 | 174.4 |
| R 407C | 7.9 | 10.2 | 11.3 | 11.3 |
| R 410A | 282.5 | 293.8 | 316.4 | 327.7 |
| Others | | | | |
| Methyl formate | 1.2 | 2.4 | 1.2 | 3.6 |
| HC 600a | 0.007 | 0.13 | 0.13 | 0.65 |
| R-717 | 1.5 | 0 | 0 | 1.5 |
| Ethanol | 1.5 | 3 | 4.5 | 4.5 |
| Pentane (C,N,I) | 30.0 | 30.0 | 30.0 | 30.0 |

6. 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)

The HCFC baseline of Cameroon amounts to 88.8 ODP tonnes.

The ODS alternative survey estimated a steady growth of 4% per annum over the next four years for the consumption of HFCs and blends, as result of the expected GDP growth and population push (increase of total population and population living in urban areas) for more air-conditioning, refrigeration units and their service. The survey found that as the country is phasing out ODS substance, the import of readily available alternatives on the market (i.e. high-GWP HFCs and their blends) increases. The high values for the consumption of HFC-134a are due to earlier conversion of the domestic refrigeration sub-sector to HFC-134. Furthermore, chillers and air-conditioning equipment are also using HFC-134a. HFC-blends used in the refrigeration sub-sector (R-404A) and in chillers (R-407C) are used in Cameroon for more than ten years. The use of R-410A is second to R-134a in metric tonnes since this alternative is increasingly being used in the commercial and central air conditioning applications like rooftop packaged units and large splits.

Cameroon, uses HFCs and their blends mainly in three sectors:

- Manufacturing of refrigerant equipment;
- Servicing sector for air-conditioning and refrigeration;
- Mobile air-conditioning sector for small cars and vans and large vehicles.

As Europe phases out the use of HFCs and their blends, they are imported by Cameroon in pre-owned machines. The lack of awareness, control and training were identified as a reason for refrigerant emissions in the informal sector.

The *Enabling activities for HFC phase-down* are preparing the ground works on which should be built up a detailed strategy and action plans for HFC phase-down in line with the reduction targets.

Initial funding is requested for preparation of the overarching strategy. Once the preparatory funding is approved and based on the requirements, the need for requesting preparatory funding for investment component will be assessed.

7. Activities to be undertaken for project preparation and funding

| Activity | Indicative funding (US \$) | Agency |
|---|-----------------------------------|---------------|
| Conducting interviews, organizing workshops and stakeholders' consultations for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control | 50,000 | UNIDO |
| Assessment of country level needs for trainings and certification in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions; including assessments of the needs for enhancing training programs on recovery, recycling and destruction | 30,000 | UNIDO |
| Communication and outreach plan preparation and development of awareness raising activities | 25,000 | UNIDO |
| Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency | 35,000 | UNIDO |
| Validation: Consultations, review and validation of the consolidated overarching strategy | 10,000 | UNIDO |
| TOTAL | 150,000 | |

8. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan?

Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development without significant additional costs.

PROJECT CONCEPT – Gabon

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HFC PROJECT PREPARATION REQUEST FORM HFC Phase-down Management plan (OVERARCHING)

Part I: Project Information

| | | |
|-------------------------------|--|-----------------------------------|
| Project title: | HFC Phase-Down Management Plan Preparation | |
| Country: | Gabon | |
| Implementing agency: | UNIDO | |
| Implementation period: | January 2020 – December 2021 | |
| Funding requested: | | |
| Agency | Sector | Funding requested (US \$)* |
| UNIDO | Overarching | 150,000 |

*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 for choice of agency | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Kigali Amendment ratified by the country | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

| <p>1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down</p> <ul style="list-style-type: none"> Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date. | | |
|--|---|---------------------|
| <p>Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/49(h), funding was approved for Gabon for <i>Enabling Activities for HFC phase-down</i> towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare Gabon for the ratification and implementation of the KA to the Montreal Protocol, considering HFC phase-down in the country. Gabon had requested an extension for the implementation of the project that was granted for additional 12 months as per decision 83/40(b). In the meantime, Gabon successfully completed the ratification process of the Kigali Amendment to the Montreal Protocol. The Government of Gabon has requested UNIDO to proceed with the next steps and request funding for preparing HFC phase-down plan.</p> | | |
| <p>2. Current progress in implementation of Enabling Activities for HFC phase-down Budget: 150,000 USD</p> | | |
| Activity | Description | Implementing agency |
| Facilitation of Ratification of the Kigali Amendment | Analysis of existing Ozone and Climate Policy and Legislation and drafting the amendments in the existing legislation to allow for ratification of the Kigali amendment; Stakeholder consultations; Translation of the Kigali amendment into national language; Drafting the Law on ratification of the Kigali amendment; Production of information sheets on the Kigali amendment to facilitate consultations and speed up the ratification; Finalizing the package on the ratification of Kigali amendment and advancing the ratification process. | UNEP |
| Capacity-Building & | Undertaking the training needs assessment for the | UNEP |

| | | | | |
|--|--|-------------|-------------|---------------|
| Training on Alternatives | servicing sector and preparing an assessment report that will be used for further planning of the activities related to use of HFCs and low-GWP alternatives; Conduct sensitization meetings for technicians on safe handling of HFCs and its alternatives. | | | |
| Article 4B Licensing and Reporting | Revision of existing legislation and drafting the ODS alternative regulation to allow early ratification of the Kigali Amendment; Assisting Customs Office in developing national custom codes for different HFCs and include them into the Customs Tariff. | | | UNEP |
| 3. Overview of estimated use of ODS alternatives 2012 – 2015 in Mt | | | | |
| Substance | 2012 | 2013 | 2014 | 2015 |
| HFC | | | | |
| HFC 134a | 12,988 | 20,948 | 14,814 | 7,906 |
| HFC blends | | | | |
| R 404A | 3,992 | 35,406 | 11,605 | 11,997 |
| R 407C | 4,678 | 3,868 | 79,077 | 24,795 |
| R 410A | 3,327 | 4,545 | 5,889 | 4,963 |
| 4. 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) | | | | |
| <p>The HCFC baseline of Gabon amounts to 29.74 ODP tonnes.</p> <p>HFC-134a and R-410A, R-407C and R-404A mixtures are the main HFC refrigerants used in the country, mostly in refrigeration and air-conditioning servicing sector. Annual demand for HFCs has been fluctuating in the period of 2012-2015 but with a generally increasing trend, which is also a result of the HCFCs phase out and use of ODS alternative readily available at the market.</p> <p>The ODS survey results have demonstrated that HFCs-134a is used in the mobile air-conditioning sector for cars, small vans and large vehicles. HFCs and their blends are also imported in the country as part of equipment that contains HFCs (furniture chest-type freezers conservatives; household refrigerators; furniture cabinet-type freezers; refrigerator freezer with separate doors; monobloc air conditioners wall-type split system or window, machines and air conditioners with cooling devices). The country, following the ratification of the Kigali Amendment, needs to develop a detailed plan for the phase-down of HFCs and blends in the sectors identified as part of the ODS survey.</p> | | | | |
| 5. 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 ODS alternatives data | Review available data and collect additional sector-specific data, especially for the years for 2016-2018 through questionnaires and interviews (this was not included in the enabling activities and previous ODS alternatives data collection only covered data until 2015). | | | UNIDO |
| 6. Activities to be undertaken for project preparation and funding | | | | |
| Activity | Indicative funding (US \$) | | | Agency |
| Consultant to prepare and conduct questionnaires and interviews with relevant stakeholders to update available data on ODS alternatives; consultant to conduct surveys and consultations with key stakeholders for the | 50,000 | | | UNIDO |

| | | |
|--|----------------|-------|
| integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control | | |
| HFC phase-down strategy development: Technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed strategy, including assessment of needs to develop/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions | 35,000 | UNIDO |
| Communication and outreach plan preparation and development of awareness raising activities | 20,000 | UNIDO |
| Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency | 35,000 | UNIDO |
| Validation: Consultations, review and validation of the consolidated overarching strategy | 10,000 | UNIDO |
| TOTAL | 150,000 | |
| 7. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan? | | |
| Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development without significant additional costs. | | |

PROJECT CONCEPT – Jordan
MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
PROJECT PREPARATION REQUEST FORM
HFC Phase-down Management plan (OVERARCHING)

Part I: Project Information

| | | |
|-------------------------------|--|-----------------------------------|
| Project title: | HFC Phase-Down Management Plan Preparation | |
| Country: | Jordan | |
| Implementing agency: | UNIDO | |
| Implementation period: | January 2020 – December 2021 | |
| Funding requested: | | |
| Agency | Sector | Funding requested (US \$)* |
| UNIDO | Overarching | 150,000 |

*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 for choice of agency | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Letter of intent to ratify the KA (by end of 2019) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

| | | |
|--|--------------------|----------------------------|
| 1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down | | |
| <ul style="list-style-type: none"> Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date. | | |
| <p>Following the outcomes of the 82th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, funding was approved for Jordan for Enabling Activities towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare Jordan for the ratification and implementation of the KA to the Montreal Protocol, considering HFC phase-down in the country. All project activities are advancing well and the project will end as planned in June 2020. Jordan is yet to ratify but significant progress has been made. All necessary procedures of ratification process have been initiated, including the final step, the signature by the ministry of foreign affairs which will now forward the ratification document to the United Nations Head office in Washington for Jordan's inclusion in the list of parties that already ratified the KA to the Montreal Protocol. The Government of Jordan confirms its intention to ratify the KA before the end of 2019 in an attached letter.</p> <p>Jordan has conducted a national inventory of HFCs and a survey on alternatives to ODS financed by CCAC and the MLF. This survey indicates the current supply and consumption of HFC and ODS alternatives and provides future projections of growth patterns by substances and sector in line with the multilateral fund secretariat decision 75/77.</p> <p>Jordan has started to create an enabling environment for the phasedown of HFCs through the Enabling Activities project as well as the ODS alternative survey and inventory. Taking also into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of January 2019, Jordan is ready to take further early action on HFCs and submit preparatory funding request to prepare its HFC phase-down plans. The Enabling activities for HFC phase-down are preparing the ground works on which will be built up a detailed strategy and action plan for HFC phase-down in line with the reduction targets. Initial funding is requested for preparation of the overarching strategy. Once the preparatory funding is approved and based on the requirements, the need for requesting preparatory funding for investment component will be assessed.</p> | | |
| 2. Current progress in implementation of Enabling Activities for HFC phase-down | | |
| Budget: 150,000 USD | | |
| Activity | Description | Implementing agency |

| | | |
|---|--|-------|
| Activities to support the early ratification of the KA | Coordination with Government representatives Supporting national ratification instruments | UNIDO |
| Institutional arrangements | Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain | UNIDO |
| Review of licensing systems and data reporting | Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends and review of the national mechanisms used for ODS reporting to include HFCs | UNIDO |
| Assessment of national barriers and opportunities for the use and further uptake of low- and zero-GWP ODS alternative | Assessment of national barriers and opportunities for the use and further uptake of low- and zero-GWP ODS alternative, with a special focus on the availability and accessibility and their related equipment. | UNIDO |
| Awareness, communication and dissemination | Awareness raising of stakeholders (public and private sectors) on HFC phase-down and energy efficiency improvement options | UNIDO |

3. Overview of estimated use of ODS alternatives 2012 – 2015 in Mt

Total consumption of HFC and HFC blends in all sectors during the period 2012-2015.

| ODS Alternative in (Mt/Year) | Year | | | | Growth Rate 2012-2015 (%) |
|------------------------------|------|-------|------|------|---------------------------|
| | 2012 | 2013 | 2014 | 2015 | |
| R-134a | 693 | 723.5 | 714 | 773 | 11.5 |
| FM200 (HFC-227ea) | 30 | 30 | 30 | 35 | 16.7 |
| R-404A | 232 | 218 | 210 | 235 | 1.3 |
| R-407C | 113 | 110 | 105 | 150 | 33.6 |
| R-410A | 73 | 94 | 100 | 117 | 60 |

The table shows a consistent increase in consumption of HFC, HFC blends and other alternatives. Consumption of HFC is primarily dominated by consumption of R-134a, which is used in the refrigeration and air conditioning sector. This increase in HFCs use can be attributed to the growth in population in the wake of Syrian crisis, local market growth and the magnitude of Jordanian exports of RAC appliances to the neighbouring countries.

Total consumption of other ODS alternatives in all sectors during the period 2012-2015

| ODS Alternative in (Mt/Year) | Year | | | | Growth Rate 2012-2015 (%) |
|------------------------------|------|------|------|------|---------------------------|
| | 2012 | 2013 | 2014 | 2015 | |
| R-600a | - | - | 3 | 5 | 66.7 |
| R-717 | 0.55 | 0.55 | 3.2 | 5.2 | 945 |
| C-Pentane | 355 | 382 | 405 | 405 | 14.1 |
| Methylene Chloride | 238 | 261 | 283 | 270 | 13.2 |
| HC: LPG | 500 | 500 | 500 | 500 | 0 |
| Butane | 145 | 145 | 150 | 150 | 3.5 |
| CO ₂ | 12 | 12 | 13 | 13 | 8.3 |
| NOVEC 1230 | 10 | 10 | 10 | 10 | 0 |
| NAF S III | 20 | 20 | 20 | 0 | - |

| | | |
|--|---|---------------|
| <p>The increase in consumption of HFC blends is almost equally dominated by consumption of R-404A, R-407C and R-410A in RAC sector. R-600a and R-717 are recently introduced into the market with small amount. Tables 3-22 until 3-29 show the total consumption of HFC, HFC blends and other ODS alternatives by sectors for the period 2012-2015.</p> | | |
| <p>4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)</p> | | |
| <p>The consumption of ODS alternatives in Jordan has been observed in the refrigeration and air-conditioning (RAC) sector including their servicing, MAC, firefighting, aerosol and foam application. Under the RAC sector, it is used in unitary air-conditioning, water chillers, domestic refrigeration (refrigerators and plug-in-freezers), commercial refrigeration (stand-alone system, centralized system), industrial refrigeration (small, medium and large sized cold rooms), mobile air-conditioning, and transport refrigeration (road vehicles such as vans, trucks and trailers).</p> <p>Jordan neither produces nor export ODS or ODS alternatives and entirely relies on imports for its own consumption. Growing population, increase in income levels, increase in number of construction activities in the residential sector, expansion in the commercial and institutional (education institute, office space) sector and expansion in transportation, hospitality and tourism industry are the prime factors that drive the growth in consumption of ODS and ODS alternatives in Jordan.</p> <p>The survey reveals that R-134a, R-404A, R-407C, R-410A, R-600a and R-717 are the main refrigerants used in the RAC sector. The R-134a is the main ODS alternatives employed and count for 70% of the total alternatives been used during the period 2012-2015 with annual growth rate of up to 10%, followed by R-404A (18%) and R-407C (10%) with annual growth rate of 5% for each. The rest of the alternatives (R-410A, R-600a and R-717) are introduced recently and count for only 2% of the total alternatives. For insulation, the C-Pentane found to be the main alternative for the HFC-141b used in this sector as blowing agent.</p> <p>The consumption of HFCs and other alternatives of the main refrigerants (R-134a, R-404A, R-407C, R-410A, R-600a and R-717) in Jordan has increased from about 1307 MT in 2012 to 1532 MT in 2015, representing a compound annual growth of about 17% over the said period. Based on projected annual growth rates in demand forecasted for ODS alternatives until 2030, it is estimated that the consumption of these substances is likely to reach about 7638 MT in 2030. This demand of ODS alternatives will be dominated by the RAC and MAC sector.</p> <p>While the survey indicated a wide range of HFCs uses in the RAC and MAC, there were limited applications of HFCs in firefighting system, aerosol and foam application. Moreover, the survey didn't result in any HFCs applications in the solvent.</p> <p>Among various alternatives used in the country, consumption of HFC and its blends are likely to increase tremendously by 2030, potentially leading to notable environmental impacts on global warming. The total potential direct emission of HFC in all sector applications is estimated to reach 2650.171 Thousand tCO₂eq. in the year 2015 and this is expected to increase to 15753.28 Thousand tCO₂eq. in the year 2030.</p> <p>However this can be avoided through introduction of low-GWP based alternatives to replace HCFCs and HFCs.</p> | | |
| <p>5. Description of information that needs to be gathered and updated. Explain why this has not been undertaken in previous projects.</p> | | |
| Information needed | Description | Agency |
| Updated ODS alternatives data | Review available data and collect additional sector-specific data for the years 2016-2018 through questionnaires and interviews as this was not included in the enabling activities and previous ODS alternatives data collection only covered data until 2015. | UNIDO |
| <p>6. Activities to be undertaken for project preparation and funding</p> | | |
| Activity | Indicative funding (US \$) | Agency |

| | | |
|---|---------------|--------------|
| <p>Ground work: Consultant to prepare and conduct questionnaires and interviews with relevant stakeholders to update available data on ODS alternatives; consultant to contact surveys and consultations with key stakeholders for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control</p> | <p>15,000</p> | <p>UNIDO</p> |
| <p>HFC phase-down strategy development: Technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed strategy, including: - assessment and development/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions; - Communication and outreach plan preparation and development of awareness raising activities; - Enhance the training program on recovery and recycling of refrigerants and improve the monitoring and evaluation system of R&R practices</p> | <p>65,000</p> | <p>UNIDO</p> |
| <p>Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency in all sectors, by: - Promoting upgrades for mandatory and voluntary standards;- Promoting the replacement of RAC equipment in homes, businesses and industry; - Promoting efficient practices of operation, maintenance and installation in RAC</p> | <p>50,000</p> | <p>UNIDO</p> |

| | | |
|---|----------------|-------|
| systems; - Developing detail studies for RAC equipment characterization and project portfolio evaluation for energy efficiency upgrades. | | |
| Validation: Consultations, review and validation of the prepared strategy | 20,000 | UNIDO |
| TOTAL | 150,000 | |
| 7. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan? | | |
| Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development without significant additional costs. | | |

PROJECT CONCEPT – Mexico

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL PROJECT PREPARATION REQUEST FORM

Click or tap here to enter text.

Part I: General Information

| | | |
|--|-----------------------------------|----------------------------------|
| Country: | Mexico | |
| Implementing agency: | UNIDO | |
| Implementation period: | 2020-2021 | |
| Funding requested: | | |
| Project titles | Type of project and sector | Funding requested (US \$) |
| A. Development of country strategy on HFC phase-down | Overarching | 250,000 |
| B. Preparation of sub-sector plan | Sub-sector plan MAC | 150,000 |
| C. Demonstration Pilot project | Demonstration Refrigeration | 80,000 |
| D. Preparation of Umbrella project in manufacturing sector | Investment Refrigeration | 80,000 |

Part II: Prerequisites for submission

| Item | Yes | No |
|---|-------------------------------------|--------------------------|
| 1. Official endorsement letter from Government for choice of agency | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Kigali Amendment ratified by the country | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

BACKGROUND

On October 15 of 2016, 197 countries adopted the Kigali Amendment (KA) to phase down HFCs under the Montreal Protocol. Under the amendment, countries committed to cut the production and consumption of HFCs by more than 80% over the next 30 years. The ambitious phase down schedule will avoid more than 80 billion metric tons of carbon dioxide equivalent (CO₂e) emissions by 2050—avoiding up to 0.5° Celsius warming by the end of the century—while continuing to protect the ozone layer.

The Kigali Amendment came into force globally on January 1, 2019, after the ratification of at least twenty countries. The ratification of Mexico occurred on September 25, 2018 and its promulgation decree was published in the Official Gazette of the Federation (OGF), on November 30, 2018.

The Kigali amendment to phase down HFCs was the result of years of negotiation by parties to the Montreal Protocol (MP), with numerous HFC amendment proposals, with Mexico, actively participating as a key player in the proposal submitted by North America together with the United States and Canada in order to control the production and consumption of HFCs.

Following the pronouncement of the Kigali Amendment, at its 79th Meeting, the Executive Committee approved decision 79/46, which allowed A5 countries to undertake a range of enabling activities. As a result of this decision, the Government of Mexico identified the main actions to initiate the institutional provisions to facilitate the introduction of HFC phase-down obligations in future and enforce the role of the National Ozone Unit in terms of HFC and energy efficiency.

The Roadmap to implement the Kigali Amendment in Mexico was the main result of these enabling activities, it presents the general “way forward” for Mexico to implement the KA and is based on the national diagnosis on use, consumption and sectoral distribution of HFCs and the analysis of the national legal framework for the control of the consumption of substances regulated by the MP and its amendments.

The Roadmap has made an initial general identification of the short, medium and long-term actions of four pillars of public policy on which the HFC phase-down will be supported: 1) regulation, 2) strategic planning, 3) implementation, 4) reporting and verification.

Furthermore, Mexico is one of the first countries that has 2 approved projects to eliminate HFCs, including: 1) Conversion of commercial refrigeration manufacturing in two facilities from the use of HFC-134a and R-404A as the refrigerants to isobutane (R-600a) and propane (R-290) at Imbera, and 2) Conversion of a domestic refrigeration manufacturing facility from HFC-134a as the refrigerant to isobutane (R-600a) and conversion of a compressor manufacturing facility from HFC-134a-based compressors to isobutane-based compressors at Mabe Mexico SA de CV.

A project was submitted to the 84th ExCom Meeting addressing HFC-23 by-product emissions in the HCFC-22 production plant of the company Quimobasicos.

Like the companies described above, there are many others in the different national HFC user sectors that are ready and mature to move to new alternatives with low Global Warming Potential (GWP). For these reasons and those listed above, and continuing with the leadership and commitment shown by the country with the Montreal Protocol, Mexico is prepared to elaborate its **National HFC Phase-Down Strategy**.

A. Information required to support PRP funding for Overarching strategy

Project Title: DEVELOPMENT OF COUNTRY STRATEGY ON HFC PHASE-DOWN

Description:

Primary activities were identified by the Government of Mexico and targeted actions were undertaken in the enabling activities to initiate institutional provisions which can facilitate the introduction of HFC phase-down obligations in future and can enforce the role of the National Ozone Unit in terms of HFC and energy efficiency.

As a second step in the roadmap established in Mexico, the strategy preparation is crucial at this stage to ensure a consolidated regulatory framework and integrate the existing procedures on the operative and administrative mechanism in the institutions involved in the HFC control.

As part of the development of the strategy, the country has already identified a set of initial strategic lines that will be decisive for the implementation of the KA in Mexico. Additional lines of actions will be identified during or after the preparatory funding will be approved. Main actions under an Overarching strategy are described below:

1. Integrate national regulations and procedures for KA implementation and consolidate technical capacities in the institutions involved in HFC control

National Ozone Unit (NOU) of Mexico is the government unit responsible for managing national programmes to comply with the Montreal Protocol on Substances that Deplete the Ozone Layer and now they are in charge to support the government in the implementation of the Kigali Amendment as well. Due to the new approach, the NOU would need to fulfil their obligations with regard to HFC phase-down under the Kigali Amendment.

The integration of updated or new regulations with the existing procedures in the NOU and institutions involved in the HFC control is a long process that need to consolidate the technical capacities and consists in the next components:

- HFC phase-down coordination and monitoring
- Procedures and control mechanism integrated
- Improvement of the Quota and license system
- Support Custom Activities to control HFC imports
- Standards ban and policy controls

2. Training and certification in the use of flammable refrigerants

With the evident growth of hydrocarbon consumption for the manufacture of commercial stand-alone and domestic refrigeration equipment, it is necessary to update the technicians dedicated to the service and maintenance of these sectors. In addition, other sectors are expected to move towards these types of refrigerants in the coming years, such as the case of mini-split air conditioning equipment or larger commercial refrigeration systems and the country has to ensure they have access to consistent information on how to manage risks associated with these substances.

Refrigeration technicians must be competent to manage any foreseeable hazard (including a flammability hazard) during installation or maintenance work. They should have the required experience and training, and where flammable refrigerants are or may be used.

The national strategy, will include a specific component to improve the national training and certification schemes taking into consideration: the study of flammable refrigerants; inclusion of new content and covering specialized procedures for servicing and repair air conditioning and refrigeration equipment using hydrocarbon refrigerant; reinforce safe working practices and cover specialized

knowledge of refrigeration principles applicable for hydrocarbons; manuals; testing, locating and rectifying faults and defective components and completing the necessary service documentation.

It is expected that a new certification scheme must enable existing qualified refrigeration and air conditioning technicians to gain additional knowledge and skills to safely and effectively handle these low Global Warming Potential (GWP) refrigerants.

Also, in the case of hydrocarbons as well as for HFCs, training and certification processes must emphasize in the knowledge and skills to safely and effectively recover non-flammable and flammable refrigerants from end of life refrigeration and air conditioning appliances using appropriate tools and equipment.

3. Strategic Communication and Outreach Plan

With the fulfillment of activities proposed in Mexico for the phase-down of HFCs, it is necessary to contemplate a communication and outreach plan that accompanies the reduction strategy aimed at the sectors involved as well as, a broader public.

The first objective of the communication and outreach plan will be to make visible the efforts that Mexico is making to reduce the consumption of HFCs.

Therefore, a series of communication activities are proposed to be carried out in conjunction with the implementation of the HFC phase-out plan, which will be targeted at specific audiences and will be implemented by the Montreal Protocol Unit in Mexico, with support of the institutions that are counterpart (mainly SEMARNAT), and the participating international agencies.

Target publics

- Private sector of air conditioning and automotive air conditioning, aerosols, foams, fire extinguishers, commercial, domestic, industrial and transport refrigeration, including managers, workers and technicians.
- Public of the government sector involved on HFCs phase-down is contemplated (SEMARNAT, INECC, SENER, CONUEE, SAT, and COFEPRIS).
- International organizations and donors.
- Universities, specialized centers and NGOs.
- The media and general public.

According to the projected phases of HFC reduction in Mexico (*Roadmap to implement the Kigali Amendment in Mexico, SEMARNAT, 2019*), various communication activities will be carried out, such as stakeholder meetings, design and creation of campaigns and multimedia content, and the design and dissemination of technical documents and training manuals, for instance.

4. Recovery, recycling and destruction

A relevant issue for the strategy is the control of HFCs, they must be recovered from home appliances, cars, and commercial equipment when the equipment containing these gases is discarded. Recovered gas must be recycled or destroyed, instead of being released into the air as it happens mostly to date in Mexico.

In addition to increase the recovery and destruction rates during the time of implementation of the HFC phase-down, it will be necessary to recover the amount of HCFC-22 refrigerant that are still contained in a large stock of commercial refrigeration equipment and in mini-splits and window air conditioning equipment. So, it will be necessary to ensure the supply chain to transfer the un-wanted refrigerant to the facilities present in Mexico that have the destruction technologies approved by the MP.

The project will evaluate the new recovery and recycling equipment per sector/sub-sector(if necessary) and strengthen the national recycling network to be run by SEMARNAT. Additionally, it will be necessary to improve the monitoring and evaluation system of these practices.

In line with the above, the strategy will consider actions to continue and to enhance the Training Program on Recovery and Recycling of refrigerants and to increase the destruction rates that are a

fundamental part of a comprehensive approach to reduce the national HFC consumption in the refrigeration and air conditioning servicing sector.

5. Promoting Energy efficiency in the RAC sector

As well known, energy efficiency is one of the most important issues to get global goals in climate change challenge in present century. In this way, energy efficiency (EE) in the RAC sector is a real need to accompany Kigali Amendment actions and accomplish the commitments established about HFC reduction.

The enabling activities supported the initial studies and assessment of opportunities on EE in the RAC sector. However, specific measures and program need to be promoted into the main sectors and with effective engagement of main actors and stakeholders.

Energy efficiency in RAC sector will allow implementing alternative refrigerants to reduce HFC with economic benefits to end users due to energy savings. Therefore, actions in energy efficiency must be included in the Strategy to HFC Phase-Down. Proposed actions are:

- Promote upgrades for mandatory and voluntary standards.
- Promote the replacement of RAC equipment in homes, businesses and industry
- Promote efficient practices of operation, maintenance and installation in RAC systems.
- Develop detail studies for RAC equipment characterization and project portfolio evaluation for energy efficiency upgrades.

Activities and Funding:

Activities to be undertaken for project preparation and funding are presented in the table below.

Table 1. Activities and indicative funding for PRP of country strategy

| Line of Actions and Activities | Estimated Resources | Indicative funding (US \$) | Total Funds (US \$) |
|---|---|---|---------------------|
| <p>1. Integrate national regulations and procedures for KA implementation and consolidate technical capacities in the institutions involved in HFC control</p> <ul style="list-style-type: none"> • HFC phase-down coordination and monitoring • Procedures and control mechanism prepared/integrated between institutions • Improvement of the Quota and license system • Support Custom Activities to control HFC imports • Standards ban and policy controls | <ul style="list-style-type: none"> - National Consultants to prepare and conduct interviews and procedures with relevant stakeholders; - Trips for the consultants - Workshops with key stakeholders for institutional coordination and, private sector engagement and capacity building - National or International consultant to conduct special trainings or assessments | <p>45,000.00</p> <p>20,000.00</p> <p>25,000.00</p> <p>12,000.00</p> | <p>102,000</p> |
| <p>2. Training and certification in use of flammable refrigerants</p> <ul style="list-style-type: none"> • Update certification schemes to include the study of flammable refrigerants • Improve National training with a new program covering specialized procedures for HC • Set up training and certification processes for HFCs | <ul style="list-style-type: none"> - National and international technical experts to prepare all documents, consult all key stakeholders and develop detailed programs and certification schemes. - Workshops for main stakeholders and training advocated institutions | <p>12,000.00</p> <p>15,000.00</p> | <p>27,000</p> |
| <p>3. Strategic Communication and Outreach Plan</p> <ul style="list-style-type: none"> • Communication and outreach plan preparation • Awareness activities and development of initial communicational material/instruments | <ul style="list-style-type: none"> - Communicational experts /service to prepare the plan - Meetings/workshops with relevant stakeholders Development of reference communicational material | <p>28,000.00</p> <p>15,000.00</p> <p>10,000.00</p> | <p>53,000</p> |
| <p>4. Recovery, recycling and destruction</p> <ul style="list-style-type: none"> • Enhance the training program on recovery and recycling of refrigerants • Improve the monitoring and evaluation system of R&R practices | <ul style="list-style-type: none"> - National Consultants - Meetings and workshops with relevant stakeholders | <p>16,000.00</p> <p>7,000.00</p> | <p>23,000</p> |
| <p>5. Promote Energy Efficiency in RAC</p> <ul style="list-style-type: none"> • Promote upgrades for mandatory and voluntary standards. • Promote the replacement of RAC equipment in homes, businesses and industry. • Promote efficient practices of operation, maintenance and installation in RAC systems. • Develop detail studies for RAC equipment characterization and project portfolio evaluation for energy efficiency upgrades. | <ul style="list-style-type: none"> - National Consultants to prepare and conduct studies; - Workshops with key stakeholders (private sector engagement and capacity building) - National or International consultant to conduct special trainings and assessments | <p>15,000.00</p> <p>18,000.00</p> <p>12,000.00</p> | <p>45,000</p> |
| TOTAL | | | 250,000 |

B. Information required to support PRP funding for preparation of sub-sector plan

Project Title: Servicing PLAN for the Mobile Air Conditioning (MAC)

Description:

The MAC sector is the third major HFC user nationwide, mainly consuming HFC-134a. It is estimated that 46% of this consumption corresponds to the manufacture of new vehicles, while the other 54% is for service and maintenance.

During the last 4 years, this sector has been rapidly moving from the use of HFC-134a replacing it with HFO-1234yf, particularly in new vehicles for export. The previous trend can be confirmed by observing that HFO-1234yf consumption has increased from 200 metric tons in 2015 to just over 1200 in 2018.

Derived from this rapid replacement, it will be necessary to execute a plan aimed at recovering the HFC-134a refrigerant that is still in the vehicle fleets, for which technical assistance for the MAC servicing will be required. For the sub-sectorial plan a project might include providing equipment for servicing refrigeration systems, establish a recovery/recycling scheme, a program for the retrofit of HFC-134a-based MACs to HFO-1234yf refrigerant, and conduct training workshops for service technicians in retrofitting and the use of recovery and recycling machines; as well as the implementation of monitoring and reporting activities.

The implementation of this project may represent the phase-out of approximately 2600 metric tons of HFC-134a, which represent an estimated reduction of 3.7 million tCO₂e.

Activities and Funding:

Activities to be undertaken and funding for project preparation of the Plan in servicing sub-sector of MAC are presented in the table below.

Table 2. Activities and indicative funding for preparation of sub-sector plan in MAC

| Activities | Estimated Resources | Indicative funding (US \$) | Total Funds (US \$) |
|---|--|---|---------------------|
| <p>1. Evaluation of relevant information and scenarios on new alternatives in the MAC sector and existing recovery/recycling scheme (proposed plan for servicing sector)</p> <ul style="list-style-type: none"> Data collection on monitoring and evaluation system of R&R practices. Preparation of proposals | <p>National Consultants to collect data and prepare relevant documents;</p> <p>Trips for the Consultants</p> <p>Workshops with key stakeholders (institutional, private sector engagement)</p> <p>International consultant to conduct specific assessments</p> | <p>20,000.00</p> <p>10,000.00</p> <p>15,000.00</p> <p>10,000.00</p> | <p>55,000</p> |
| <p>2. Establishing recovery/recycling scheme, a program for the retrofit of HFC-134a-based MACs to HFO-1234yf refrigerant</p> <ul style="list-style-type: none"> Update certification schemes to include new alternatives Improve National training with a new program covering specialized procedures for new alternatives Set up training and certification processes if applicable | <p>National and international technical experts to prepare all documents; consult all key stakeholders and develop detailed programs and certification schemes.</p> <p>Meeting for main stakeholders and training advocated institutions</p> | <p>20,000.00</p> <p>6,000.00</p> | <p>26,000</p> |
| <p>3. Technical evaluation and cost estimation on equipment for servicing</p> <ul style="list-style-type: none"> Technical and cost evaluation | <p>National and international consultants on technical evaluation of equipment including cost estimation</p> <p>Meetings and Workshops with relevant stakeholders</p> | <p>21,000.00</p> <p>15,000.00</p> | <p>36,000</p> |
| <p>4. Plan for MAC sector prepared and Workshop for technicians conducted</p> <ul style="list-style-type: none"> Presentation of MAC plan to stakeholders Conduct training workshops for service technicians in retrofitting and the use of recovery and recycling machines | <p>National Consultants to prepare the documents and estimated activities</p> | <p>8,000.00</p> | <p>33,000</p> |
| | <p>Training Workshop and logistic services for meetings</p> | <p>15,000.00</p> | |
| | <p>International consultant</p> | <p>10,000.00</p> | |
| TOTAL | | | 150,000 |

C. Information required to support PRP funding for Demonstration pilot project

Project Title: PILOT PROJECTS FOR THE SUBSTITUTION OF LARGE COMMERCIAL REFRIGERATION SYSTEMS

Description:

Due to their large charge sizes, the multiplex rack systems and condensing units typically used in supermarkets and convenience stores account for the greatest percentage of HFC refrigerants installed in the commercial refrigeration sector. According to 2017 data, R-404A is the most consumed substance in commercial refrigeration (with 80%), followed by the R-507A (13%) and HFC-134a (4%). In addition to that, Mexico has a large stock of equipment that still operates with HCFC-22.

Since this kind of equipment typically lasts approximately 15–20 years, this offers an interesting panorama for replacing obsolete equipment and testing new technologies operating with low global warming potential alternatives.

Many design strategies exist today to reduce the amount of refrigerant needed while at the same time reducing the likelihood of leaks and mitigating risks if using a flammable or toxic refrigerant.

Although most of these advanced refrigeration systems still rely on HFC refrigerants, they have great potential for drastically reducing HFC charges.

Additionally, a number of climate-friendly alternatives to HFC refrigerants are, rapidly becoming available for use in commercial refrigeration applications. Alternatives available today include hydrocarbons isobutane (R-600a) and propane (R-290), ammonia (R-717), and carbon dioxide (R-744). Other alternatives, such as new HFCs/HFOs blends, are also likely to enter the Mexican market in the coming years.

As part of the relevant sector considered in the strategy of HFC phase-down, a pilot project will be proposed to test the adoption of higher energy efficiency technologies to reduce the HFCs use. Among which can be found, the conversion or retrofit of R-404A/R-507A in the commercial refrigeration units for supermarkets, and pilot project could consider testing as well the adoption of transcritical CO₂ refrigeration systems or CO₂/NH₃ or Hydrocarbons/CO₂ cascade systems. The results obtained in pilot project will show the advantage/disadvantages between options.

Activities and Funding:

Table 3. Activities and indicative funding for preparation of sub-sector plan in MAC

| Activities | Estimated Resources | Indicative funding (US \$) | Total Funds (US \$) |
|---|--|-----------------------------------|----------------------------|
| 1. Data collection and evaluation of current situation • Data collection and evaluation of scenarios for new alternatives in commercial refrigeration units for supermarkets. | -National Consultants to collect data and prepare relevant documents; | 14,000.00 | 26,000 |
| | -Trips for the Consultants | 8,000.00 | |
| | -Meetings with stakeholders (institutional, private sector engagement) | 4,000.00 | |
| 2. Technical evaluation and cost estimation of options identified • Evaluation on conversion or retrofit of R-404A/R-507A in the commercial refrigeration units for supermarkets, test the adoption of transcritical CO ₂ refrigeration systems or CO ₂ /NH ₃ or Hydrocarbons/CO ₂ cascade systems. | -National consultants on technical evaluation | 6,000.00 | 30,000 |
| | -International expert/consultancy | 15,000.00 | |
| | -Trips for the Consultants and logistic for meetings | 9,000.00 | |

| | | | |
|---|---|-----------|---------------|
| 3. Present and validate the proposal with the stakeholders on the Pilot project on testing the adoption of higher energy efficiency technologies (transcritical CO2 refrigeration systems or CO2/NH3 or Hydrocarbons/CO2 cascade systems) and reduction of HFCs in supermarkets. | -National Consultants to prepare the document | 8,000.00 | 24,000 |
| | -International expert/consultancy | 10,000.00 | |
| | - Workshop with stakeholders to validate the proposal | 6,000.00 | |
| TOTAL | | | 80,000 |

D. Information required to support PRP funding for preparation of Umbrella project in Manufacturing sector

Project Title: UMBRELLA PROJECT FOR COMMERCIAL STAND-ALONE EQUIPMENT

In Mexico there are different national companies like Criotec, Metaplus, Refrigeración Ojeda and Fersa, which are dedicated to the manufacture of stand-alone commercial refrigeration equipment.

All of them have been converting their HFC-134a production lines to hydrocarbon refrigerants, mainly R-290 (propane) during the last 5 years.

Due to the disaggregation of consumption in these various companies, it is proposed to carry out an umbrella project that groups them together and allows the phase-out of approximately 168 metric tons of HFC-134a used for original equipment manufacturing and another 70 metric tons for servicing, which represent a potential emission reduction of about (340 thousand tCO₂e).

The project preparation will provide the necessary relevant information on current situation and options to consider in 4 manufacturing companies to estimate the most cost-effective conversion process in this sector. Additionally, the meetings and technical discussion will support the agreement with the beneficiaries and stakeholders involved in the Kigali implementation in Mexico

Activities and Funding:

The following table summarize the activities and funds requested for a project preparation in refrigeration manufacturing sector to phase-down HFC.

Table 4. Activities and indicative funding for project preparation in Refrigeration sector (Umbrella project)

| Activities | Estimated Resources | Indicative funding (US \$) | Total Funds (US \$) |
|---|---|----------------------------|---------------------|
| 1. Data collection and evaluation of 5 companies' situation/consumption of HFC and conversion process applicable. | National Consultants to collect data and prepare relevant documents; | 15,000.00 | 27,000 |
| | Trips for the Consultants | 8,000.00 | |
| | Meetings with key stakeholders (institutional, private sector engagement) | 4,000.00 | |
| 2. Technical evaluation and cost estimation of the Umbrella conversion project in the specific scope of manufacturing of stand-alone commercial refrigeration equipment. | International expert/consultancy | 20,000.00 | 29,000 |
| | Trips for the Consultants and logistic for meetings | 9,000.00 | |
| 3. Present and validate the proposal with the companies and stakeholders on the project conversion on manufacturing sector of commercial stand-alone equipment | National Consultants to prepare the document | 8,000.00 | 24,000 |
| | International expert/consultancy | 10,000.00 | |
| | Workshop/Meeting with stakeholders to validate the proposal | 6,000.00 | |
| TOTAL | | | 80,000 |

PROJECT CONCEPT – The Gambia

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HFC PROJECT PREPARATION REQUEST FORM HFC Phase-down Management plan (OVERARCHING)

Part I: Project Information

| | | |
|-------------------------------|---|-----------------------------------|
| Project title: | HFC Phase-Down Management Plan Preparation | |
| Country: | The Gambia | |
| Implementing agency: | UNIDO | |
| Implementation period: | January 2020 – December 2021 | |
| Funding requested: | | |
| Agency | Sector | Funding requested (US \$)* |
| UNIDO | Overarching | 95,000 |

*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 for choice of agency | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Letter of intent to ratify the KA | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

| | | |
|---|--|----------------------------|
| <p>1. Brief background on previous activities related to the Kigali amendment and the HFC phase-down</p> <ul style="list-style-type: none"> Please provide a brief background on the Enabling Activities project, when it was approved, a brief description of the progress in implementation and expected end date. | | |
| <p>Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/50(d), funding was approved for the Gambia for Enabling Activities towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare the Gambia for the ratification and implementation of the KA to the Montreal Protocol, considering HFC phase-down in the country. The Gambia had requested an extension for the implementation of the project. All project activities are advancing well and the project will end as planned in June 2020. The Gambia is yet to ratify but significant progress has been made. All necessary preliminary procedures of ratification process have been initiated, this included information and awareness raising meetings with Environment minister, Perm Secretary and technical staff as well as targeted meetings with ministry of energy and finance. A cabinet paper has been developed, reviewed and sent to the secretary to cabinet by the permanent secretary Ministry of Environment Climate Change and Natural Resources. The cabinet paper is discussed and waiting for approval by Government Ministers as the last step before it goes to the ministry of foreign affairs for the development of a ratification instrument which will be forwarded to the United Nations Head office in Washington for Gambia's inclusion in the list of parties that already ratified the KA to the Montreal Protocol. The Government of the Gambia confirms its intention to ratify the KA by the end of 2019.</p> <p>The Gambia has started to create an enabling environment for the phasedown of HFCs. Taking also into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of January 2019, the Gambia is ready to take further early action on HFCs and submit preparatory funding request to prepare its HFC phase-down plans. The Enabling activities for HFC phase-down are preparing the ground works on which will be built up a detailed strategy and action plan for HFC phase-down in line with the reduction targets. Initial funding is requested for preparation of the overarching strategy. Once the preparatory funding is approved and based on the requirements, the need for requesting preparatory funding for investment component will be assessed.</p> | | |
| <p>2. Current progress in implementation of Enabling Activities for HFC phase-down Budget: 95,000USD</p> | | |
| Activity | Description | Implementing agency |
| Activities to support the early ratification of the KA | Coordination with Government representatives Supporting national ratification instruments | UNIDO |
| Institutional arrangements | Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain | UNIDO |

| | | | | |
|---|--|-------------|-------------|---------------|
| Licensing systems | Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends | | | UNIDO |
| Data reporting on HFC consumption | Review of the national mechanisms used for ODS reporting to include HFCs consumption | | | UNIDO |
| Preparation for national strategies | Identification of policies and regulations to facilitate the phase-down of HFCs and the introduction of low-GWP alternative technologies | | | UNIDO |
| 3. Overview of estimated use of ODS alternatives 2012 – 2015 in Mt | | | | |
| Substance | 2012 | 2013 | 2014 | 2015 |
| HFC | | | | |
| HFC 134a | 9 | 11 | 13 | 15 |
| HFC blends | | | | |
| R 404A | 6 | 7 | 8 | 10 |
| R 407C | 5 | 6 | 10 | 12 |
| R 410A | 4 | 6 | 8 | 9 |
| Others | | | | |
| Methyl formate | 12 | 13 | 15 | 16 |
| HC 600a | 4 | 5 | 7 | 8 |
| 4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing) | | | | |
| <p>The HCFC baseline of Gambia amounts to 1.5 ODP tonnes.</p> <p>The major ODS alternatives in use in the country are R-134a, R-404A, R-407C, R-410A, R-600a, R-290. These are used in sectors and subsectors mainly in the Refrigeration and Air conditioning servicing and installation.</p> <p>Consumption of ODS alternatives are generally on the increase from 2012 to 2015 while consumption of HCFC-22 is on the decline in compliance with the accelerated HCFC phase out provisions. Although the use of ODS alternatives are increasing in most sectors, HCFC-22 is still the predominant refrigerant in the refrigeration and air conditioning sector.</p> <p>Through a pilot project, 100 units of R290 AC split-units have been installed in the country along with extensive training and capacity building. This lead also to local supply of (imported) R290 refrigerant since 2019.</p> | | | | |
| 5. Description of information that needs to be gathered and updated. Explain why this has not been undertaken in previous projects. | | | | |
| Information needed | Description | | | Agency |
| Updated ODS alternatives data | Review available data and collect additional sector-specific data, especially for the years for 2016-2018 through questionnaires and interviews (this was not included in the enabling activities and previous ODS alternatives data collection only covered data until 2015). | | | UNIDO |
| 6. Activities to be undertaken for project preparation and funding | | | | |
| Activity | Indicative funding (US \$) | | | Agency |
| Ground work: Consultant to prepare and conduct questionnaires and interviews with relevant stakeholders to update available data on ODS alternatives; consultant to contact surveys and consultations with key stakeholders for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions | 15,000 | | | UNIDO |

| | | |
|--|---------------|-------|
| involved in HFC control | | |
| HFC phase-down strategy development: Technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed strategy, including: - assessment of needs to develop/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions, - Communication and outreach plan preparation and development of awareness raising activities | 40,000 | UNIDO |
| Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency | 30,000 | UNIDO |
| Validation: Consultations, review and validation of the prepared strategy | 10,000 | UNIDO |
| TOTAL | 95,000 | |
| 7. How will activities related to the stage II of the HPMP implementation be considered during project preparation for the HFC phase-down management plan? | | |
| Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development without significant additional costs. | | |

Project Concept

| | |
|-----------------------------|--|
| Country: | Bosnia and Herzegovina |
| Title: | Extension of Institutional Strengthening for the implementation of Montreal Protocol in Bosnia and Herzegovina – Phase VII |
| Project Duration: | 24 months (March 2020 – February 2022) |
| Project Budget: | 122,026 (excl. 7% Agency Support Costs) |
| Implementing Agency: | UNIDO |
| Coordinating Agency: | Ministry of Foreign Trade and Economic Relations/ National Ozone Unit |

Project Summary

The project is addressing further institutional strengthening and capacity building for the Ministry of Foreign Trade and Economic Relations/ National Ozone Unit and will ensure that the Government will meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer.

In this context, the role and functions of the National Ozone Unit (NOU) established within the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina in the past two years remained unchanged. The NOU is further committed to build up capacity at country level in view of compliance with the HCFCs consumption phase-out targets and it is expected that the ongoing regulatory efforts will be further enhanced by the implementation of new phase of the institutional strengthening project. The NOU is coordinating the promulgation and enforcement of policy and legislation with a specific focus on HCFCs phase-out management plan and the additional HCFCs restrictions, cooperation with customs authorities on prevention of illegal trade and cooperation with the RAC Association. Under the new institutional strengthening phase the NOU will continue the communication with environmental inspectorates and will train them in order to improve enforcement of ozone legislation.

The country has introduced permits for F-gases and HCFC quota in accordance with the approved HPMP and MYA, and ban on import of HCFCs and HCFC mixtures based equipment and products. Furthermore, tariff codes have been fully harmonized with the EU tariff codes, permits for HFCs have been introduced, as well as criteria for allocating import quotas for HCFCs, procedures for obtaining import licenses for ODSs used for special purposes and for substitute substances and reporting system on import of substitute substances has been defined.

Under the current phase, the Government of Bosnia and Herzegovina was supported through increased capacity building of the NOU, by achieving a smooth implementation of the HPMP activities, ODS alternatives survey prepared for period 2013 to 2015. Also, lessons have been learned by finalizing the NoPP. New legal procedures for controlling the HCFCs introducing quota

system for HCFCs, permits for HFCs and ban on HCFC and its mixtures based equipment are approved by Council of Ministers of Bosnia and Herzegovina and is operated smoothly by the NOU in cooperation with BiH ITA. For three cases of successful seizure of ACs containing R-22 BiH ITA Customs was awardee with UNEP and WCO global award. The NOU in 2015 established the RAC Association within Foreign Trade Chamber and since then is cooperating successfully. Seminars on F-gas regulation, alternative low-GWP commercially available technologies using CO₂, ammonia, R290 were organized, as well as seminar on energy efficiency and safety standards in cooling sector. Also, the NOU participated in Verification report preparation for years 2016 and 2017 based on which fourth HPMP tranche was approved by the ExCom in 2018.

The Government of Bosnia and Herzegovina is committed to ratify the Kigali amendment and is committed to finalize the enabling activities for early actions in this context. Procedure for the ratification of Kigali amendment is commenced and it is in the procedure of collection of opinions from numerous institutions in Bosnia and Herzegovina. Ratification is pending on new parliament establishment. HFC outlook model is under preparation and NOU will continue work on it in order to define proper starting point and strategy for HFC phase-down. The NOU will continue cooperation with climate authorities on inclusion of F-gases in NDC and will continue cooperation with safety standards authorities.

The IS Phase VII extension request aims to address sustainability of the NOU by ensuring continuity of the staff. The IS Phase VII will assist the Government meet its obligations on the HCFCs phase out process and will prepare the country for HFCs restrictions, in an integrated manner.

The National Ozone Unit within the Ministry of Foreign Trade and Economic Relations will be responsible for and oversee the implementation of the project in accordance with the objectives and activities. The NOU will continue to actively cooperate with ministries and inter-ministerial bodies as well as with advisory groups such as NGOs, RAC and others.

Project Concept

| | |
|-----------------------------|--|
| Country: | Serbia |
| Title: | Extension of Institutional Strengthening for the implementation of Montreal Protocol in Serbia – Phase VII |
| Project Duration: | 24 months (December 2019 – November 2021) |
| Project Budget: | 168,064 (excl. 7% Agency Support Costs) |
| Implementing Agency: | UNIDO |
| Coordinating Agency: | Ministry of Environmental Protection/National Ozone Unit |

Project Summary

The project is addressing further institutional strengthening and capacity building for the Ministry of Environmental Protection/National Ozone Unit and will ensure that the Government will meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer.

Following the administrative restructuring of Government (central administration) in Serbia, NOU is established currently in the Ministry of Environmental Protection. Substantive progress was achieved during IS Phase V. The NOU has ensured compliance with quota and bans and the import control measures are in place and enforced. In line with the annual inspection's work plan, the Customs Officers are checking shipments containing ODS and f-gases regularly. Furthermore, training was organized on the control of cooling installations (commercial/industrial) for the environmental inspectors. Illegal export to Serbia has been prevented in several cases due to the application of the informal Prior Informed Consent (iPIC) mechanism of communication and consultations between importing and exporting countries. The NOU is exchanging information with the Customs Authorities on an ongoing basis. Annual data reports were submitted on time and data discrepancies have been addressed accordingly. Serbia is preparing for ratification of the Kigali Amendment with the assistance provided as part of the project *Enabling activities for HFC phase-down*.

The NOU is providing ongoing support to the implementation of the HPMP and ensures that all Montreal Protocol related activities are integrated into national environmental plans and policies. In addition, awareness raising activities have been organized on an ongoing basis, including celebration of the Ozone Day, distribution of promotional material at the International Fair of Protection of Environment and Natural Resources in Belgrade, publishing of press articles, posting information on the website, printing posters and other promotional material.

The IS Phase VII extension request aims to address sustainability of the NOU, to remain active, to liaise with consumer sectors, and will assist the Government meet its obligations on the HCFCs phase out process and will prepare the country for HFCs restrictions, in an integrated manner and having regarded the enabling activities separately approved funding.

Project Concept

| | |
|-----------------------------|--|
| Country: | Tunisia |
| Title: | Extension of Institutional Strengthening for the implementation of Montreal Protocol in Tunisia – Phase IX |
| Project Duration: | 24 months (January 2020 – December 2022) |
| Project Budget: | 316,506 (excl. 7% Agency Support Costs) |
| Implementing Agency: | UNIDO |
| Coordinating Agency: | National Agency for Environmental Protection (ANPE)/ National Ozone Unit (NOU) |

Project Summary

The project is addressing further institutional strengthening and capacity building for the Ministry of Local Affairs and Environment - National Agency for Environmental Protection (ANPE) / National Ozone Unit and will ensure that the Government will meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer.

The National Ozone Unit is an autonomous entity operating directly under the General Director of the ANPE. It operates under the auspices of the Ministry of Local Affairs and Environment. It is the Focal Point of the Montreal Protocol and Vienna Convention; and is responsible for the implementation of the Montreal Protocol. In this context, the roles and responsibilities of the NOU are related to ensuring overall coordination and monitoring of all Montreal Protocol activities in the country, ensuring compliance with the decisions of the Parties to the Montreal Protocol, collecting data on ODS use, identification and execution of ODS elimination projects, presiding over the National Ozone Committee responsible for allocation HCFC quotas, preparing legislation with regards to implementation of the Montreal Protocol and preparing amendments where needed for Government adoption.

The focus in the current phase was on: strict monitoring of HCFC trade through the national ODS regulatory framework and allocation of quotas, further strengthening the cooperation with the customs authorities ensuring sustained ODS phase-out, organization of training activities with customs officers, collaboration and sharing information with the industry associations, updating the National Ozone Steering Committee on Montreal Protocol matters, coordination of the HPMP Stage I activities and preparation of HPMP Stage II; implementation of the enabling activities project to prepare the country for ratification of the Kigali Amendment; public awareness activities including celebration of International Ozone Day; Country Programme and Article 7 data reporting; and, active participation in regional network and Montreal Protocol meetings.

The IS Phase IX extension request aims to address sustainability of the NOU by ensuring continuity of the staff and resources. The IS Phase IX will assist the Government meet the 35 per

cent HCFC reduction target in 2020. Activities planned include: CP and Article 7 data reporting; continued monitoring the licensing system and allocate quotas against the records of customs to achieve full control over the imports of all HCFCs; start with implementation of activities under the HPMP Stage II, following its approval; update the legislation to include HFCs, establish national certification system for RAC technicians, ban importing or manufacturing HCFC equipment, including HCFC-22; continue cooperation with custom authorities and industry associations; facilitate the ratification process of the Kigali Amendment through implementation of the enabling activities project. Public awareness activities will include celebration of international ozone day and the country plans to participate in regional network and Montreal Protocol meetings.

The National Ozone Unit within the National Agency for Environmental Protection will be responsible for and oversees the implementation of the project in accordance with the objectives and activities. The NOU will continue to actively cooperate with ministries, customs authorities, inter-ministerial bodies, training centers, RAC association other parties involved in the Montreal Protocol activities.

Project Concept

| | |
|-----------------------------|--|
| Country: | Turkey |
| Title: | Extension of Institutional Strengthening for the implementation of Montreal Protocol in Armenia – Phase IX |
| Project Duration: | 24 months (December 2019 – November 2021) |
| Project Budget: | 332,800 (excl. 7% Agency Support Costs) |
| Implementing Agency: | UNIDO |
| Coordinating Agency: | Ministry of Environment and Urbanization/ General Directorate of Environmental Management |

Project Summary

The project is addressing further institutional strengthening and capacity building for the Ministry of Environment and Urbanization / National Ozone Unit and will ensure that the Government will meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer. The National Ozone Unit (Division for the Protection of the Ozone Layer) is located under Climate Change and Adaptation Department / Directorate General of Environment Management of the Ministry of Environment and Urbanization of Turkey (herein after referred as the Ministry). The Unit is in charge of the national coordination of all policies, regulations, projects and activities with the objective of implementation of the Vienna Convention and Montreal Protocol. The NOU is also responsible for ensuring the cooperation and coordination at country level and contributes to the work of the implementing agencies of the Montreal Protocol and other relevant governmental institutions, NGOs as well as other specific stakeholders. Beside the role and its responsibilities in regard of MP implementation, NOU has been given also the mandate to follow up the implementation of the policies and regulations related to HFCs controls.

Under the current IS Phase the country has ensured the online ODS tracking programme is fully operating, implemented strict licencing and quota system and coordinated with stakeholders to identify required legislative/regulatory measures related to ODS alternatives. The national structure for collection, verification and disposal of unwanted/waste ODS has been improved, series of meetings have been conducted with relevant stakeholders and authorities in charge of ODS waste management. Activities under the HPMP Stage I have been coordinated and the preparation of HPMP Stage II has been rescheduled to 2020 due to the extension of the HPMP Stage I. Significant progress has been made with the Kigali Amendment ratification. The document was translated into Turkish language, was sent to the Ministry of Foreign Affairs for ratification process that pursued with parliamentary ballot. Upon completion of the administrative procedure, ratification instruments will be submitted to the UN Secretariat and is expected the procedure to be finalized by end of 2019. Training for customs officers are organized and the training module is integrated into the standard training delivery for the newly appointed customs officials. Ozone Panel meetings are taking place each year when HCFC quotas are set. The two technical

committees on Identification of Equipment containing ODSs and F-gases and committee on Training of Technicians and Certification Schemes have been merged for easier coordination and continue to be active and serve as communication channels among various stakeholders. The Article 7 and Country Programme data has been submitted every year by the provided deadlines.

The IS Phase IX extension request aims to address sustainability of the NOU by ensuring continuity of the staff and resources. The IS Phase IX will assist the Government meet its obligations on the HCFCs phase out process and will prepare the country for HFCs restrictions. Furthermore, the plan of activities for the next phase includes organization of trainings and meetings on new generations of ODS alternatives, strengthening the monitoring of ODS trade through the use of innovative and IT based approaches, strengthen the ODS data collection and reporting and continue with the communication and networking activities, raising awareness on the protection of the ozone layer and ongoing activities for ratification of the Kigali Amendment.

The National Ozone Unit within the Ministry of Environment and Urbanization will be responsible for and oversees the implementation of the project in accordance with the objectives and activities. The NOU will continue to actively cooperate with ministries, customs authorities, technical committee, ozone panel, inter-ministerial bodies, media as well as with other advisory groups.

Project Concept

| | |
|-----------------------------|---|
| Country: | Guatemala |
| Title: | Verification report on the implementation of the HCFC phase-out management plan |
| Project Duration: | 24 months |
| Project Budget: | US\$ 30,000 (excl. 9% Agency Support Costs) |
| Implementing Agency: | UNIDO |
| Coordinating Agency: | Ministerio de Ambiente y Recursos Naturales - MARN - NOU |

Project Summary

1. Background

Funding requirement for the preparation of verification report of compliance with HPMP agreement is being requested in accordance with decision made at the 83rd meeting of the Executive Committee for Implementation of the Montreal Protocol, held in May 2019 in Montreal, as stated in document UNEP/OzL.Pro/ExCom/83/48.

The HCFC Phase-out Management Plan for Guatemala was approved in July 2011 at the 64th Meeting of the Executive Committee held in Montreal, Canada and updated in December 2012 at the 68th meeting held in Montreal, Canada. The project was approved in accordance with the agreement between the Government and the Executive Committee for the period 2011 to 2020 to meet the 35 per cent reduction in HCFC consumption, and on the understanding that the total funding of US\$ 345,637 (US\$ 33,000 is still to be requested in the remaining years of Stage I) has been provided to address HCFC consumption in the refrigeration servicing sector to reach up to and include the 35 per cent reduction in 2020 in line with decision 60/44.

2. Decision 83/48: Verification reports of low-volume consuming countries' compliance with their HPMP agreements

The Executive Committee decided to request relevant bilateral and implementing agencies to include in their amendments to their respective work programmes, due for submission to the 84th meeting, funding, in the amount of US \$30,000, plus agency support costs, for verification reports for stage I of the HCFC phase-out management plans (HPMPs) for Burkina Faso, Cambodia, Cook Islands, Guatemala, Honduras, Kiribati, Lesotho, Marshall Islands, Micronesia (Federated States of), Montenegro, Nauru, Niue, South Sudan, Tuvalu and Vanuatu and for verification reports for stage II of the HPMPs for Angola and Armenia.

Project Concept

| | |
|-----------------------------|---|
| Country: | Honduras |
| Title: | Verification report on the implementation of the HCFC phase-out management plan |
| Project Duration: | 24 months |
| Project Budget: | US\$ 30,000 (excl. 9% Agency Support Costs) |
| Implementing Agency: | UNIDO |
| Coordinating Agency: | Unidad Tecnica de Ozono de Honduras - UTOH - NOU |

Project Summary

1. Background

Funding requirement for the preparation of verification report of compliance with HPMP agreement is being requested in accordance with decisions made at the 83rd meeting of the Executive Committee for Implementation of the Montreal Protocol, held in May 2019 in Montreal, as stated in document UNEP/OzL.Pro/ExCom/83/48.

The HCFC Phase-out Management Plan for Honduras was approved in April 2011 at the 63rd Meeting of the Executive Committee held in Montreal, Canada. The project was approved in accordance with the agreement between the Government and the Executive Committee for the period 2011 to 2020 to meet the 35 per cent reduction in HCFC consumption, and on the understanding that the total funding of US\$ 630,000 (both for UNIDO and UNEP and still to request the last 2020 tranche in the total amount of US\$ 65,000) has been provided to address HCFC consumption in the refrigeration servicing sector to reach up to and include the 35 per cent reduction in 2020 in line with decision 60/44.

2. Decision 83/48: Verification reports of low-volume consuming countries' compliance with their HPMP agreements

The Executive Committee decided to request relevant bilateral and implementing agencies to include in their amendments to their respective work programmes, due for submission to the 84th meeting, funding, in the amount of US \$30,000, plus agency support costs, for verification reports for stage I of the HCFC phase-out management plans (HPMPs) for Burkina Faso, Cambodia, Cook Islands, Guatemala, Honduras, Kiribati, Lesotho, Marshall Islands, Micronesia (Federated States of), Montenegro, Nauru, Niue, South Sudan, Tuvalu and Vanuatu and for verification reports for stage II of the HPMPs for Angola and Armenia.

Project Concept

| | |
|-----------------------------|---|
| Country: | Montenegro |
| Title: | Verification report on the implementation of the HCFC phase-out management plan |
| Project Duration: | 24 months |
| Project Budget: | US\$ 30,000 (excl. 9% Agency Support Costs) |
| Implementing Agency: | UNIDO |
| Coordinating Agency: | Agency for Nature and Environmental Protection |

Project Summary

1. Background

Funding requirement for the preparation of verification report of compliance with HPMP agreement is being requested in accordance with decisions made at the 83rd meeting of the Executive Committee for Implementation of the Montreal Protocol, held in May 2019 in Montreal.

The HCFC Phase-out Management Plan for Montenegro was approved in April 2011 at the 63rd Meeting of the Executive Committee held in Montreal, Canada and updated in December 2013 at the 71st meeting held in Montreal, Canada. The project was approved in accordance with the agreement between the Government and the Executive Committee for the period 2011 to 2020 to meet the 35 per cent reduction in HCFC consumption, and on the understanding that the total funding of US\$ 404,500, as per the updated Agreement, (fifth tranche is still to be requested) has been provided to address HCFC consumption in the refrigeration servicing sector.

2. Decision 83/48: Verification reports of low-volume consuming countries' compliance with their HPMP agreements

The Executive Committee decided to request relevant bilateral and implementing agencies to include in their amendments to their respective work programmes, due for submission to the 84th meeting, funding, in the amount of US \$30,000, plus agency support costs, for verification reports for stage I of the HCFC phase-out management plans (HPMPs) for Burkina Faso, Cambodia, Cook Islands, Guatemala, Honduras, Kiribati, Lesotho, Marshall Islands, Micronesia (Federated States of), Montenegro, Nauru, Niue, South Sudan, Tuvalu and Vanuatu and for verification reports for stage II of the HPMPs for Angola and Armenia.

Project Concept

| | |
|-----------------------------|--|
| Country: | Algeria |
| Title: | Enabling activities for HFC phase-down |
| Project Duration: | 18 months |
| Project Budget: | US\$ 150,000 (excl. 7% Agency Support Costs) |
| Implementing Agency: | UNIDO |
| Coordinating Agency: | National Ozone Unit |

Project Summary

General Statements

The Government of Algeria as well as UNIDO, as the implementing agency, confirm that implementation of the enabling activities would not delay implementation of HCFC phase-out projects.

The Government of Algeria confirms that the budget for activities under Enabling Activities will follow the UNIDO rules and regulations. Execution modalities will follow the principle of best value for money.

1. Background

HPMP and HCFC baseline

Algeria's starting point for aggregate reductions in its HCFC consumption is the same as its HCFC baseline consumption of 62.1 ODP tonnes (ODPt). The analysis of the data by substance and by sector showed that HCFC-22 is used almost entirely in the RAC sector and is the most predominant ODS in metric terms. HCFC-141b was used in the servicing sector for flushing, and was banned in 2015.

The Twenty Fourth Meeting of the Parties adopted Decision XXIV/16 with regard to the request of Algeria to change its consumption in 2009 to 60.35 ODPt and for 2010 to 63.88 with a resulting baseline of 62.1 ODPt. The phase-out schedule of Algeria is shown in table 1 below:

Table 1: Algeria HCFC phase-out schedule

| Phase-out step | Date | Maximum HCFC consumption (ODPt) |
|------------------------------|------------------------------|---------------------------------|
| Freeze at the baseline level | 1 st January 2013 | 62.1 |
| Reduction step of 10% | 1 st January 2015 | 55.9 |
| Reduction step of 20% | 1 st January 2017 | 49.7 |
| Reduction step of 35% | 1 st January 2020 | 40.4 |
| Reduction step of 67.5% | 1 st January 2025 | 20.2 |
| Reduction step of 97.5% | 1 st January 2030 | 1.6 |

Algeria has implemented strict controls on ODS through its national legislative structure. In accordance with Decision IX/8 of the Parties, Algeria introduced an ODS control system for ODS users, and established ODS import and monitoring procedures as well as policies for discouraging the use of ODS through its awareness activities. A quota system has been established in order to meet the ODS phase-out schedules set by the Montreal Protocol.

Algeria and Montreal Protocol ratifications

Algeria has ratified the Montreal Protocol and its various amendments to control/phase out the ozone depleting substances. Over the past two decades, all necessary legal instruments/directives have been issued by the Algerian government to effect requirements of Montreal Protocol. The status of ratification is summarized in Table 2.

Table 2: Status of Ratification of Montreal Protocol and its amendments

| Protocol/Amendment | Date | Type |
|----------------------|----------------|--------------|
| Vienna Convention | Sept 23, 1992 | Ratification |
| Montreal Protocol | Sept 23, 1992 | Ratification |
| London Amendment | Sept 23, 1992 | Ratification |
| Copenhagen Amendment | June 14, 1999 | Ratification |
| Montreal Amendment | March 19, 2007 | Ratification |
| Beijing Amendment | March 19, 2007 | Ratification |

As Party to the Montreal Protocol, Algeria adopted the agreement on HFCs (Kigali Amendment) at the close of the 28th Meeting of the Parties in Kigali, Rwanda. Governments, including Algeria, agreed that it would enter into force on 1 January 2019, provided that at least 20 Parties to the Montreal Protocol had ratified it, which has been fulfilled. Algeria has not yet ratified the Kigali Amendment.

HFC data

Algeria has not conducted a national inventory of HFCs and/or a survey on alternatives to ODS. Therefore, there is no reliable data on the current supply and consumption of HFC and ODS

alternatives nor future projections of growth patterns by substances and/or sector.

Known used alternatives can be obtained from the HPMP, stage I conversions of one foam manufacturing enterprise (Cristor – from HCFC-141b to cyclopentane technology/hydrocarbons) and one assembler of air-conditioning equipment (Condor – from HCFC-22 to HFC-32). Both conversions have been completed.

Overall, first indications show: Algeria neither produces nor export ODS or ODS alternatives and entirely relies on imports for its own consumption. Although Algeria's economic growth is currently subdued, the population is growing, the number of construction activities in several sectors is increasing, expansion in the commercial and industrial sector is expanding. These are indicators for a growth in consumption of ODS and ODS alternatives in Algeria.

It is expected that R-134a, R-404A, R-407C, R-410A, as well as a low rate of R-600a and R-717 are the main refrigerants used or used first in the RAC sector. It is likely that R-134a is the main ODS alternative employed in the country.

Consumption of HFC and its blends are likely to increase tremendously by 2030, potentially leading to notable environmental impacts on global warming. However this can be avoided through introduction of low-GWP based alternatives to replace HCFCs and HFCs.

High Ambient Temperature (HAT) exemption

There is an exemption for Parties with high ambient temperature conditions where suitable alternatives do not exist for the specific subsector of use. This exemption allows for a delay in the HFC freeze date and initial control obligations by an initial duration of four years. Algeria is included in the list of Parties this exemption applies.

2. Objectives

The main objective of these enabling activities is to prepare Algeria for the ratification and early implementation of the Kigali Amendment to the Montreal Protocol, considering the situation above through the following lines of action:

- Support for the early ratification of the Kigali Amendment,
- Support to the institutional arrangements,
- Review of the licensing systems,
- Review of the data reporting systems and
- Demonstration of non-investment activities.

3. Proposed approach and activities

a. Activities to facilitate and support the early ratification of the Kigali Amendment

National Ozone Officers should facilitate the ratification process by providing the required data, information and background documents to the ratification institutions.

These activities are aiming to inform and prepare all involved stakeholders specifically for the ratification of the Kigali amendment.

| Activities | Responsible entity | Target group | Start date | Completion date | Budget (US \$) | Milestones | Expected outputs |
|---|---|---|------------|-----------------|----------------|--|--|
| Coordination with Government representatives and other national stakeholders --- Raising awareness amongst the public and other stakeholders. | National Consultant with support of UNIDO and NOU | Related ministries, legislators, the refrigeration association, and other stakeholders. --- The public and relevant stakeholders, including but not limited to the economic sector, the civil society and NGOs. | Jan 2020 | April 2020 | 10,000 | One or two national workshop(s) delivered. --- Workshop report(s) published. | Steering committee, task forces and/or working groups set up as appropriate. --- Roles and tasks for the ratification of the amendment distributed among relevant bodies. --- Awareness on the ratification raised among relevant stakeholders including the public. |
| Supporting national ratification instruments | | Legislators | | | 5,000 | Supporting documents distributed among ministries and legislators | Legislators have all necessary documents and knowledge for the vote on the amendment's ratification |

b. Initial activities identified in paragraph 20 of decision XXVIII/2, excluding institutional strengthening, as addressed in decision 78/4(b)

b.1 Country-specific activities aimed at initiating supporting institutional arrangements

Institutional arrangement is what integrates analysis and decision-making tools, and it is the precondition of a successful ratification.

| Activities | Responsible entity | Target group | Start date | Completion date | Budget (US \$) | Milestones | Expected outputs |
|---|---|--|-------------------|------------------------|-----------------------|--|---|
| Review of codes and standards, permits, inspections, operating standards for HFC and flammable/toxic medium and low (or lower) -GWP alternatives (use, maintenance, end-user), prohibitions, testing, labelling (customs, wholesalers or distributors), taking into account regional and international practices. | National Consultant with support of UNIDO and NOU | Related ministries, departments, legislators, servicing sector, suppliers, standards bodies. | April 2020 | Sept 2020 | 20,000 | Meetings conducted if needed. --- A desktop study delivered. --- A report published. | A proposal for updating codes and standards prepared and presented. |

b.2 Review of licensing systems

Properly established and functioning licensing systems play a key role in sustaining the impressive results achieved so far under the Montreal Protocol and also in facilitating the realization of new, ambitious strategies.

| Activities | Responsible entity | Target group | Start date | Completion date | Budget (US \$) | Milestones | Expected outputs |
|--|---|--|-------------------|------------------------|-----------------------|--|--|
| Enhancement of the import and export license system to include HFCs and other alternatives. | UNIDO with support from National Consultant and NOU | Customs division, Trade Department, relevant ministries. | Jun 2020 | Feb 2021 | 35,000 | A workshop with relevant stakeholders delivered --- A report published on this topic | Identification of necessary regulatory and administrative measures for the control of HFCs' imports and exports. |
| Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends. | | | | | | A workshop with relevant stakeholders delivered --- A report published on this topic | Proposal on local harmonized tariff codes for HFCs. |

b.3 Data reporting on HFC consumption

National data reporting is the backbone of the strategic planning, monitoring and evaluation of the institutions of the Montreal Protocol.

These activities are investigating the need for updates in Jordan's in the existing reporting system to prepare and improve for future reporting needs under the Kigali Amendment.

| Activities | Responsible entity | Target group | Start date | Completion date | Budget (US \$) | Milestones | Expected outputs |
|---|---|---------------------------------|-------------------|------------------------|-----------------------|--|----------------------------|
| Review of the national mechanisms used for ODS reporting to include HFCs consumption, especially considering the servicing sector (the informal sector in particular) | UNIDO with support from National Consultant and NOU | Relevant ministries and Customs | Jun 2020 | Mar 2021 | 16,000 | A workshop with relevant stakeholders delivered --- A report published on this topic | National mechanism updated |

c. Demonstration of non-investment activities

Demonstration projects assist the country to gain a more precise and targeted overview on ODS alternatives and have a better understanding on their characteristics and potential applications.

These activities are particularly addressing Jordan’s concern about its technology choices and technology future in the context of MP and Kigali implementation. This will help to better understand the current and future role of HFCs as well as other HCFC alternatives in its economy.

| Activities | Responsible entity | Target group | Start date | Completion date | Budget (US \$) | Milestones | Expected outputs |
|--|---|---|------------|-----------------|----------------|---|--|
| Assessment of national barriers and opportunities for the use and further uptake of medium and low or (lower) GWP ODS alternative, with a special focus on the availability and accessibility and their related equipment. | UNIDO with support from National Consultant and NOU | Importers, technicians, technology suppliers, end users and other relevant stakeholders | Jul 2020 | Jan 2021 | 30,000 | Working group meetings conducted. Technical feasibility study on alternatives prepared. A report published. | An assessment of national barriers and opportunities prepared. --- First proposals on possible financial instruments, policies and technical assistance to address national barriers to the introduction of alternatives prepared. |

d. Awareness, Communication and Dissemination

d.1 Awareness activities on key information and results from the activities A to C

These activities are planned to ensure that all involved stakeholders are informed about the activities conducted relevant to their areas.

| Activities | Responsible entity | Target group | Start date | Completion date | Budget (US \$) | Milestones | Expected outputs |
|---|---|---|------------|-----------------|----------------|--|---|
| <p>Awareness raising of stakeholders (public and private sectors) on HFC phase-down and energy efficiency improvement options</p> <p>Dissemination of documents and materials obtained during the enabling activities project implementation and preparation of additional information material</p> | UNIDO with support from National Consultant and NOU | Sectors involved in HFC phase-down (manufacturing and servicing sector); Public | Jun 2020 | Jun 2021 | 34,000 | <p>National Workshop with main stakeholders developed.</p> <p>Leaflets, informative material elaborated and disseminated.</p> <p>Documents or materials are edited, printed and distributed.</p> | <p>Public and private stakeholders are informed and aware of KA commitments, current situation on HFC and actions as well as national challenges and technical alternatives</p> <p>---</p> <p>Communication and dissemination of national key information on HFC phase-down (e.g. roadmap, studies)</p> |

4. Implementation budget and plan

| Enabling Activity | | Budget per cost item (USD) | Budget Requested (USD) |
|---|---|---|------------------------|
| a. Activities to support the early ratification of the Kigali Amendment | <ul style="list-style-type: none"> - Workshops - National consultants - Travel | 6,000 7,000 2,000 | 15,000 |
| b.1. Institutional arrangements | <ul style="list-style-type: none"> - Coordination meetings - National consultants - International consultant - Travel - Misc. (printing, document preparation, communication etc.) | 2,000 4,000 7,000 5,000 2,000 | 20,000 |
| b.2. Licensing systems | <ul style="list-style-type: none"> - Workshop and coordination meetings - National consultants - Travel - Other contractual services (internet, consulting company) | 5,000 4,000 6,000 20,000 | 35,000 |
| b.3. Data reporting on HFC consumption | <ul style="list-style-type: none"> - Meeting - National consultants - Travel - Misc. (printing, document preparation, communication etc.) | 3,000 10,000 2,000 1,000 | 16,000 |
| c. Demonstration of non-investment activities | <ul style="list-style-type: none"> - Meetings - National consultant - Travel - Other contractual service (internet, consulting company) | 3,000 6,000 5,000 16,000 | 30,000 |

5. Institutional arrangements

The National Ozone Unit (NOU) and the United Nations Industrial Development Organization (UNIDO) will be jointly responsible for the correct implementation of the above mentioned activities.

The role of UNIDO will be focused on the general implementation and execution of the enabling activities and the appropriate expenditure of the funds allocated for each of them. Besides, UNIDO will provide technical assistance based on the support of international experts on the different areas of work.

On its turn, the NOU will collaborate in the implementation of the different activities, including the identification of local experts on the different areas of work, when necessary. Besides, the NOU will provide general guidance on the implementation of the enabling activities based on the national priorities.

SECTION 3

| Country | Project Title | Extension Duration (months) | Reason for extending the duration | Official request for extension received? |
|------------------------------------|--|-----------------------------|--|--|
| Argentina | Enabling activities for HFC phase-down (ARG/SEV/81/TAS/02+) | 12 | Longer period was required to coordinate the inception phase of the project and to proceed with the legislative proposal and licensing system changes in the country that are still in progress. In order to ensure the proper identification and contract of the expert and pertinent actions, the country needs additional time to advance with the planned enabling activities. | Yes |
| Egypt | Enabling activities for HFC phase-down (EGY/SEV/81/TAS/02+ and EGY/SEV/81/TAS/03+ implemented by UNEP) | 11 ³ | UN Environment is taking the lead on the Enabling activities for phase-down in Egypt. The justification is provided in UN Environment's WPA. | Yes |
| Libya | Enabling activities for HFC phase-down (LIB/SEV/81/TAS/01+) | 12 | The implementation of the project is delayed due to the unstable situation in the country. The selection of consultants has been delayed. Preparatory activities for the ratification progress are ongoing. Extension is needed to complete all planned activities. | Yes |
| Morocco | Enabling activities for HFC phase-down (MOR/SEV/81/TAS/01+) | 12 | The ratification process is underway, however is not yet completed. The extension of the enabling activities is required to support the completion of ratification, ensure adequate execution of all activities and compensate for the late start due to delay in consultant identification and recruitment. | Yes |
| Niger (the) | Enabling activities for HFC phase-down (NER/SEV/81/TAS/01+) | 12 | Niger has already ratified the Kigali Amendment. The extension of the Enabling activities is needed for finalization of the national legislation, support for relevant legislative activities and respective workshops, as well as for completion of the information dissemination and awareness campaign. | Yes |
| Nicaragua | Enabling activities for HFC phase-down (NIC/SEV/81/TAS/01+) | 12 | Together with MARENA, UNIDO and the international experts have prepared a good working plan. Furthermore, UNIDO has provided coordination and other support, however the Enabling Activities have not been completed. It was agreed with the NOU to request extension for the project implementation and to ensure that all the stakeholders are well prepared for the next steps. The ratification is underway and it is expected to be submitted soon. | Yes |
| Venezuela (Bolivarian Republic of) | Enabling activities for HFC phase-down (VEN/SEV/81/TAS/01+) | 12 | Due to the political situation some of the projects have faced certain delays, however UNIDO keeps the implementation modality and has found ways to ensure the project can achieve the goals. UNIDO with cooperation of international experts, local experts and FONDOIN – NOU has advanced and progresses with the project, but still more time for smooth implementation will be required. | Yes |

³ In the request from Egypt is included that the requested endorsement is by the end of 2020, which translates into 11 months.