



Programa de las Naciones Unidas para el Medio Ambiente Distr. GENERAL

UNEP/OzL.Pro/ExCom/83/17 30 de abril de 2019

ESPAÑOL

ORIGINAL: INGLÉS

COMITÉ EJECUTIVO DEL FONDO MULTILATERAL PARA LA APLICACIÓN DEL PROTOCOLO DE MONTREAL Octogésima tercera Reunión Montreal, 27 – 31 de mayo de 2019

PROGRAMA DE TRABAJO DEL PNUD PARA 2019

COMENTARIOS Y RECOMENDACIONES DE LA SECRETARÍA DEL FONDO

1. El PNUD presenta a la aprobación del Comité Ejecutivo una solicitud de financiación por un monto de 1 356 256 \$EUA, más gastos de apoyo por valor de 94 938 \$EUA para su programa de 2019 enunciado en el Cuadro 1. Dicha solicitud se adjunta al presente documento.

Cuadro 1: Programa de Trabajo del PNUD para 2019

| País | Actividad/Proyecto | | Cantidad recomendada (\$EUA) |
|------------------------------|--|--------------------|------------------------------------|
| | TVIDADES RECOMENDADAS PARA APROBACIÓN GENERAL | | |
| Bangladesh | proyectos de fortalecimiento institucional | 166 400 | 166 400 |
| Chile | Renovación del proyecto de fortalecimiento institucional (fase IX) | 166 400 238 784 | 166 400 |
| Colombia | Renovación del proyecto de fortalecimiento institucional (fase XIII) | 352 768 | 238 784 352 768 |
| Cuba | Renovación del proyecto de fortalecimiento institucional (fase XII) Renovación del proyecto de fortalecimiento institucional (fase XI) | 190 804 | 190 804 |
| Trinidad y Tobago | Renovación del proyecto de fortalecimiento institucional (fase X) | 85 000 | 85 000 |
| Trinidad y Tobago | Total parcial para A1 | 1 033 756 | 1 033 756 |
| Castos | s de apoyo al organismo (7 por ciento para fortalecimiento institucional) | 72 363 | 72 363 |
| Gastos | | 1 106 119 | 1 106 119 |
| A2. Duomanasión da | Total para A1 | 1 106 119 | 1 106 119 |
| | e proyectos para planes de gestión de eliminación de los HCFC | (0.000 | (0.000 |
| República Dominicana (La) | Preparación de un plan de gestión de eliminación de los HCFC (etapa III) | 60 000 | 60 000 |
| Eswatini (El Reino de)* | Preparación de un plan de gestión de eliminación de los HCFC (etapa II) | 10 000 | 10 000 |
| Nigeria** | Preparación de un plan de gestión de eliminación de los HCFC (etapa III) | 22 500 | 22 500 |
| Panamá | Preparación de un plan de gestión de eliminación de los HCFC (etapa III) | 60 000 | 60 000 |
| Uruguay | Preparación de un plan de gestión de eliminación de los HCFC (etapa III) | 60 000 | 60 000 |
| Zimbabwe* | Preparación de un plan de gestión de eliminación de los HCFC (etapa II) | 20 000 | 20 000 |
| | Total parcial para A2 | 232 500 | 232 500 |
| Gas | stos de apoyo al organismo (7 por ciento para preparación de proyectos) | 16 275 | 16 275 |
| | Total para A2 | 248 775 | 248 775 |
| SECCIÓN B: ACT | IVIDADES RECOMENDADAS PARA CONSIDERACIÓN INDIVI | | |
| | ara proyectos conexos a la reducción de los HFC (decisión 78/3 g)) | | |
| Indonesia | Conversión de HFC-134a en la fabricación de refrigeradores para viviendas | 30 000 | *** |
| Líbano | Conversión de R-404A en los equipos de refrigeración comercial de supermercados fabricados en Leon Industries S.A.R.L., Líbano | 30 000 | *** |
| Paquistán | Conversión de HFC-134a a R-600a/R-290 como refrigerante en la fabricación de congeladores rápidos, refrigeradores de viviendas y surtidores de agua en PAK Elektron Limited, Lahore, Paquistán | 30 000 | *** |
| | Total parcial para B1 | 90 000 | *** |
| | Gastos de apoyo al organismo (7 por ciento para actividades de apoyo) | 6 300 | *** |
| | Total para B1 | 96 300 | *** |
| | Suma total (A1, A2, B1) | 1 451 194 | 1 354 894 |

^{*} PNUMA como organismo director de ejecución

^{**} ONUDI como organismo de ejecución

^{***} Para consideración individual

SECCIÓN A: ACTIVIDADES RECOMENDADAS PARA APROBACIÓN GENERAL

A1: Fortalecimiento institucional

Descripción del proyecto

2. El PNUD presentó las solicitudes de financiación para la renovación de los proyectos de fortalecimiento institucional (FI) del país citados en la sección A1 del Cuadro 1. La descripción de estos proyectos se recoge en el anexo I del presente documento.

Observaciones de la Secretaría

3. La Secretaría examinó las solicitudes de financiación para la renovación de los cinco proyectos de fortalecimiento institucional (FI) presentadas por el PNUD en nombre de los Gobiernos en cuestión, confrontándolas con las directrices y decisiones pertinentes a la admisibilidad para financiación y los volúmenes de financiación. Las solicitudes se sometieron a una verificación cruzada comparándolas con el plan de trabajo original conexo a la FI de la fase anterior, al programa de país y a los datos en virtud del artículo 7 data, al más reciente informe sobre la implantación del plan de gestión de eliminación de los HCFC, al informe del organismo sobre la marcha de las actividades, así como con toda decisión pertinente de la Reunión de las Partes. Se tomó nota de que estos países habían presentado sus datos de programa de país para 2017/2018, y de que se encuentran en situación de cumplimiento con los objetivos a los que se han obligado en virtud del Protocolo de Montreal, y de que su consumo anual de HCFC no supera el máximo permitido que se recoge en sus respectivos Acuerdos para los planes de gestión de eliminación de los HCFC firmados con el Comité Ejecutivo. Lo que es más, todas las solicitudes presentadas incluyeron indicadores de desempeño atinentes las actividades planificadas para la siguiente fase de los proyectos de FI, de conformidad con la decisión 74/51 e).

Recomendaciones de la Secretaría

4. La Secretaría recomienda la aprobación general de las solicitudes de renovación de FI para Bangladesh, Chile, Colombia, Cuba y Trinidad y Tobago respecto de los volúmenes de financiación recogidos en la sección A1 del Cuadro 1 del presente documento. El Comité Ejecutivo puede considerar oportuno poner en conocimiento de los Gobiernos antedichos las observaciones que figuran en el anexo II del presente documento.

A2: Preparación de proyectos para los planes de gestión de eliminación de los HCFC

Descripción de los proyectos

- 5. El PNUD presentó las solicitudes correspondientes a los tres países (La República Dominicana, Panamá y Uruguay) en su calidad de organismo de ejecución, y para Nigeria cual organismo director de ejecución, conjuntamente con la ONUDI como organismo cooperante de ejecución, con fines a la preparación de la etapa III del plan de gestión de eliminación de los HCFC. Además, se presentaron también las solicitudes de financiación de la preparación de la etapa II del plan de gestión de eliminación de los HCFC para dos países (El Reino de Eswatini y Zimbabwe) en los que el PNUD ejercerá como organismo cooperante de ejecución, actuando el PNUMA como el organismo director de ejecución, como se recoge en la sección A2 del Cuadro 1.
- 6. El PNUD facilitó una descripción de las actividades de apoyo a las solicitudes de financiación para la preparación de proyectos destinados a aquellos países en los que el PNUD quede designado como organismos director de ejecución. Las presentaciones de solicitud de cada país incluyeron: la justificación por la que se solicita la financiación para la preparación de proyectos; un informe sobre la marcha de las actividades de la etapa II de sus respectivos planes de gestión de eliminación de los HCFC; y la lista de

actividades potenciales con sus presupuestos correspondientes. El PNUMA, en su calidad de organismo director de ejecución para el Reino de Eswatini y para Zimbabwe, ha presentado una solicitud de financiación por valor 60 000 \$EUA, más gastos de apoyo para el organismo en el desempeño de su programa de trabajo durante 2019.¹ La ONUDI, en su calidad de organismo cooperante para Nigeria, ha solicitado 72 500 \$EUA, más gastos de apoyo para el organismo, para desempeñar su programa de trabajo durante 2019.²

Observaciones de la Secretaría

- 7. Al examinar las seis solicitudes, la Secretaría tuvo en cuenta las directrices para financiar la preparación de los planes de gestión de eliminación de los HCFC correspondientes a los países que operan al amparo del artículo 5, como se recoge en la decisión 71/42, la etapa II del plan de gestión de eliminación de los HCFC tal y como fueron aprobados, la situación en que se encuentra la ejecución de los tramos a fechas de la preparación del presente documento, y la decisión 82/45 c) i). La Secretaría tomó nota de que la solicitud de financiación para cada país es conforme a la decisión 71/42, y de que el PNUD confirmó que el resto de los tramos para dichos países se presentarán conforme al calendario especificado en el Acuerdo.
- 8. En lo tocante a la solicitud para Nigeria, la Secretaría tomó nota de que en la 82ª reunión el Comité Ejecutivo acordó incluir la preparación de proyectos para la etapa III del plan de gestión de eliminación de los HCFC en el plan administrativo 2019–2021 para aquellos países para los que la etapa II del plan de gestión de eliminación de los HCFC continuó después del 2020, dándose por entendido que las solicitudes para la preparación de proyectos no habrán de presentarse antes de los dos años de la fecha final de la etapa II del plan de gestión de eliminación de los HCFC. Si bien la solicitud para Nigeria se presentó más de dos años antes de la fecha final de su etapa II del plan de gestión de eliminación de los HCFC, si bien no antes del 2020. Así pues, la Secretaría convino en que la preparación del proyecto podría solicitarse en el transcurso de la presente reunión.
- 9. El PNUD confirmó que la etapa III del plan de gestión de eliminación de los HCFC para la República Dominicana, Panamá, Nigeria, y Uruguay cumplirá un mínimo del 67,5 por ciento del objetivo para 2025.

Recomendación de la Secretaría

10. La Secretaría recomienda la aprobación general de la solicitud de financiación para la preparación de proyectos destinados a la etapa III de los planes de gestión de eliminación de los HCFC para la República Dominicana, Panamá, Nigeria, y el Uruguay, así como para la preparación de proyectos para la etapa II de los planes de gestión de eliminación de los HCFC para Eswatini (el Reino de) y Zimbabwe, por los volúmenes de financiación indicados en la sección A2 del Cuadro 1.

¹ UNEP/OzL.Pro/ExCom/83/18

² UNEP/OzL.Pro/ExCom/83/19

³ La inclusión de la etapa III de los planes de gestión de eliminación de los HCFC en el plan administrativo consolidado para el periodo 2019–2021 solamente para aquello países que hayan acometido y culminado una etapa II de un plan de gestión de eliminación de los HCFC que se haya aprobado para reducir el objetivo a cumplir para 2020.

⁴ Decisión 82/45 c) ii)

⁵ 31 de diciembre de 2024

⁶ Decisión 81/40 c)

SECCIÓN B: ACTIVIDADES RECOMENDADAS PARA CONSIDERACIÓN INDIVIDUAL

B1: Preparación para proyectos conexos a la reducción de los HFC (decisión 78/3 g))

Descripción de los proyectos

11. El PNUD presentó las solicitudes de financiación de la preparación de proyectos destinados a la conversión de refrigerantes de bajo PCA, pasando de HFC-134a en la fabricación de refrigerantes destinados a refrigeradores para viviendas en Indonesia, de R-404A en la fabricación de refrigeradores comerciales para supermercados en el Líbano, y de HFC-134a en la fabricación de congeladores rápidos, refrigeradores para viviendas y surtidores de agua en Paquistán, enumerados en la sección B1 del Cuadro 1 anterior. Los pormenores de las solicitudes para la preparación de proyectos se recogen en la presentación del PNUD adjuntada al presente documento.

Observaciones de la Secretaría

- 12. La Secretaría examinó las solicitudes de financiación para la preparación de proyectos en sintonía con las decisiones 78/3 g), 79/45 b), y 81/53 b), y tomó nota de que:
 - a) La financiación solicitada era congruente con las decisiones pertinentes a la financiación para la preparación de proyectos;
 - b) Las solicitudes atinentes a Indonesia y al Líbano no se recogieron en el plan administrativo del PNUD para el periodo de 2018 a 2020, por lo que las presentaciones no se atuvieron completamente a lo estipulado en la decisión 79/45 b);⁷
 - c) Las solicitudes para Indonesia y Paquistán fueron para una serie de proyectos de inversión relativos a los HFC que ha se habían aprobado (es decir, de un total de proyectos de inversión aprobados, siete correspondían a refrigeración para viviendas); por lo que las solicitudes no fueron congruentes con la decisión 81/53 b);⁸
 - d) El Líbano ya ha recibido financiación para un proyecto de inversión conexo a los HFC en la 81ª reunión, dándose por entendido que dicho país no podría obtener más financiación para actividades conexas a los HFC, a menos que su instrumento de ratificación lo hubiese recibido el servicio de depósito y custodia emplazado en la Sede Social de la Organización de las Naciones Unidas de Nueva York; y
 - e) De conformidad con la decisión 81/53 b), las propuestas completas para el proyecto se presentarán a la 84ª reunión.
- 13. Como respuesta a la cuestión de los proyectos no recogidos en el plan administrativo, el PNUD pidió flexibilidad, al tiempo que observó que había habido precedentes a la aprobación de los proyectos atinentes a los HFC que no se habían incluido en el plan administrativo. En lo tocante a las solicitudes para la conversión de refrigeradores para viviendas en Paquistán e Indonesia, el PNUD explicó que estos proyectos son importantes dado que permitirán entender mejor la dinámica, cada de suministro y los costos relativos a la conversión del sector de refrigeradores para viviendas de la región.

⁷ Decisión 79/45 b): Que los posibles proyectos deberían incluirse en los planes administrativos de los organismos bilaterales y de ejecución para los años 2018 a 2020 que se presentarían a la 80ª reunión o planes administrativos subsiguientes, según proceda.

⁸ Decisión 81/53 b): Invitar a los organismos bilaterales y de ejecución a preparar y presentar, hasta la 84ª reunión, propuestas de proyecto relativas a la conversión a alternativas a los HFC y la promoción de nuevas tecnologías, en especial en sectores y regiones no comprendidos en proyectos aprobados hasta la 81ª reunión, inclusive.

- 14. En el caso del Líbano, el PNUD indicó que el proyecto era importante dado que era el primero en centrarse en la tecnología de CO₂ transcrítico. El PNUD facilitó una copia de la aprobación que el Parlamento había promulgado de la ratificación de la Enmienda de Kigali; sin embargo, en las fechas de la redacción del presente documento, aún no se había registrado su recepción en el servicio de depósito y custodia de la Organización de las Naciones Unidas situ en Nueva York.
- 15. El PNUD confirmó así mismo que de aprobarse estas solicitudes para la preparación de proyectos, se desplegarían los esfuerzos necesarios para asegurar la solicitud de la financiación de tales proyectos y para asegurar que se presentara a la 84ª reunión, de conformidad con la decisión 81/53 b).

Recomendación de la Secretaría

- 16. A la luz de las observaciones anteriores de la Secretaría, el Comité Ejecutivo puede estimar oportuno considerar aprobar las solicitudes de:
 - a) La preparación del proyecto de conversión de HFC-134a en la fabricación de refrigeradores de uso en viviendas en Indonesia por un monto de 30 000 \$EUA, más gastos de apoyo para el organismo por valor de 2 100 \$EUA;
 - b) La preparación del proyecto de conversión de R-404A en los equipos de refrigeración comercial para supermercados en Leon Industries S.A.R.L., en el Líbano, por un monto que asciende a 30 000 \$EUA, más gastos de apoyo para el organismo por valor de 2 100 \$EUA; y
 - c) La preparación del proyecto de conversión para pasar de HFC-134a a R-600a/R-290 como refrigerante en la fabricación de congeladores rápidos, refrigeradores para viviendas y surtidores de agua en PAK Elektron Limited, Lahore, Paquistán por un monto de 30 000 \$EUA, más gastos de apoyo para el organismo por valor de 2 100 \$EUA.

Annex I

INSTITUTIONAL STRENGTHENING PROJECT PROPOSALS

Bangladesh: Renewal of institutional strengthening

| Summary of the project and country profile | | | |
|--|---------------------------|---------|------------|
| Implementing agency: | | | UNDP |
| Amounts previously approved for institutional s | trengthening (US \$): | | |
| | Phase I: | Sept-94 | 150,000 |
| | Phase II: | Nov-99 | 100,000 |
| | Phase III: | Dec-01 | 100,000 |
| | Phase IV: | Dec-04 | 130,000 |
| | Phase V: | Nov-07 | 130,000 |
| | Phase VI: | Jul-10 | 130,000 |
| | Phase VII: | Dec-13 | 130,000 |
| | Phase VIII: | Dec-16 | 166,400 |
| | | Total: | 1,036,400 |
| Amount requested for renewal (phase IX) (US \$ | | | 166,400 |
| Amount recommended for approval for phase IX | X (US \$): | | 166,400 |
| Agency support costs (US \$): | | | 11,648 |
| Total cost of institutional strengthening phase IX to the Multilateral Fund (US \$): | | | 178,048 |
| Date of approval of country programme: | | | 1994 |
| Date of approval of HCFC phase-out management | ent plan (stage I): | | 2011 |
| Date of approval of HCFC phase-out management | ent plan (stage II): | | 2018 |
| Baseline consumption of controlled substances | | | |
| Annex B, Group III (methyl chloroform) (average | | | 0.9 |
| Annex C, Group I (HCFCs) (average 2009-2010 | 0) | | 72.6 |
| Annex E, (methyl bromide) (average 1995-1998 | 3) | | 0.0 |
| Latest reported ODS consumption (2017) (ODP | tonnes) as per Article 7: | | |
| Annex B, Group III (methyl chloroform) | , 1 | | 0.00 |
| Annex C, Group I (HCFCs) | | | 63.33 |
| Annex E, (methyl bromide) | | | 0.00 |
| • | | Total: | 63.33 |
| Year of reported country programme implement | tation data: | | 2017 |
| Amount approved for projects (as at December 2 | 2018) (US \$): | | 13,858,651 |
| Amount disbursed (as at November 2017) (US \$ | | | 7,477,252 |
| ODS to be phased out (as at December 2018) (C | DDP tonnes): | | 735.9 |
| ODS phased out (as at November 2017) (ODP to | onnes): | | 493.8 |

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

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

Progress report

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

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

Plan of action

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

Chile: Renewal of institutional strengthening

| Summary of the project and country profile | | | |
|---|-----------------------------|-------------------|-----------|
| Implementing agency: | | | UNDP |
| Amounts previously approved for institutional s | strengthening (US \$): | | |
| | Phase I: | Jun-92 | 213,000 |
| | Phase II: | Oct-96 | 113,500 |
| | Phase III: | Jul-98 | 143,500 |
| | Phase IV: | Dec-00 | 143,500 |
| | Phase V: | Nov-02 | 186,550 |
| | Phase VI: | Apr-05 and Nov-05 | 186,550 |
| | Phase VII: | Mar-07 | 186,550 |
| | Phase VIII: | Apr-09 | 186,550 |
| | Phase IX: | Apr-11 | 186,550 |
| | Phase X: | Apr-13 | 186,550 |
| | Phase XI: | May-15 | 186,550 |
| | Phase XII: | Jul-17 | 238,784 |
| | | Total: | 2,158,134 |
| Amount requested for renewal (phase XIII) (US | | | 238,784 |
| Amount recommended for approval for phase X | XIII (US \$): | | 238,784 |
| Agency support costs (US \$): | | | 16,715 |
| Total cost of institutional strengthening phase X | XIII to the Multilateral Fu | and (US \$): | 255,499 |
| Date of approval of country programme: | | | 1992 |
| Date of approval of HCFC phase-out management | ent plan (stage I): | | 2011 |
| Date of approval of HCFC phase-out management | ent plan (stage II): | | 2018 |
| Baseline consumption of controlled substances | (ODP tonnes): | | |
| Annex B, Group III (methyl chloroform) (avera | ge 1998-2000) | | 6.4 |
| Annex C, Group I (HCFCs) (average 2009-2010 | 0) | | 87.5 |
| Annex E, (methyl bromide) (average 1995-1998 | 8) | | 212.5 |

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

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

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

Progress report

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

Plan of action

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

Colombia: Renewal of institutional strengthening

| Implementing agency: | | | UNDP |
|--|--------------------------|--------|------------|
| Amounts previously approved for institutional strength | nening (US \$): | | |
| | Phase I: | Mar-94 | 317,790 |
| | Phase II: | Mar-98 | 212,000 |
| | Phase III: | Mar-00 | 212,000 |
| | Phase IV: | Nov-02 | 275,600 |
| | Phase V: | Apr-05 | 275,600 |
| | Phase VI: | Jul-07 | 275,600 |
| | Phase VII: | Jul-09 | 160,767 |
| | Phase VIII: | Jul-11 | 275,600 |
| | Phase IX: | Jul-13 | 275,600 |
| | Phase X: | May-15 | 275,600 |
| | Phase XI: | Jul-17 | 352,768 |
| | | Total: | 2,908,925 |
| Amount requested for renewal (phase XII) (US \$): | | | 352,768 |
| Amount recommended for approval for phase XII (US | \$): | | 352,768 |
| Agency support costs (US \$): | | | 24,694 |
| Total cost of institutional strengthening phase XII to the | ne Multilateral Fund (US | \$): | 377,462 |
| Date of approval of country programme: | | | 1994 |
| Date of approval of HCFC phase-out management plan | n (stage I): | | 2010 |
| Date of approval of HCFC phase-out management plan (stage II): | | | 2015 |
| Baseline consumption of controlled substances (ODP t | tonnes): | | |
| Annex B, Group III (methyl chloroform) (average 199 | 8-2000) | | 0.6 |
| Annex C, Group I (HCFCs) (average 2009-2010) | | | 225.6 |
| Annex E, (methyl bromide) (average 1995-1998) | | | 110.1 |
| Latest reported ODS consumption (2017) (ODP tonner | s) as per Article 7: | | |
| Annex B, Group III (methyl chloroform) | , 1 | | 0.00 |
| Annex C, Group I (HCFCs) | | | 148.52 |
| Annex E, (methyl bromide) | | | 0.00 |
| • | | Total: | 148.52 |
| Year of reported country programme implementation of | lata: | | 2018 |
| Amount approved for projects (as at December 2018) | | | 37,486,638 |
| Amount disbursed (as at November 2017) (US \$): | · | | 30,686,965 |
| ODS to be phased out (as at December 2018) (ODP to | nnes): | | 2053.3 |
| ODS phased out (as at November 2017) (ODP tonnes) | | | 1,899.1 |

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

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

Progress report

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

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

Plan of action

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

Cuba: Renewal of institutional strengthening

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

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

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

Progress report

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

Plan of action

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

Trinidad and Tobago: Renewal of institutional strengthening

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

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

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

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

Progress report

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

Plan of action

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

Anexo II

OPINIONES PRELIMINARES EXPRESADAS POR EL COMITÉ EJECUTIVO SOBRE LA RENOVACIÓN DE PROYECTOS DE FORTALECIMIENTO INSTITUCIONAL PRESENTADOS A LA 83ª REUNIÓN

Bangladesh

1. El Comité Ejecutivo examinó el informe presentado junto con la solicitud de financiación para la renovación del proyecto de fortalecimiento institucional en Bangladesh (fase IX), y tomó nota de que el Gobierno de Bangladesh había notificado los datos del programa de país para 2016 y 2017, y los datos atinentes al artículo 7, a las Secretarías del Fondo y del Ozono, respectivamente, indicando que el país se encontraba en situación de cumplimiento del Protocolo de Montreal. El Comité Ejecutivo tomó nota además del compromiso al que se obligaba el Gobierno de dicho país para culminar las actividades de inversión atinentes a los HFC, como se había convenido durante el periodo de 24 meses desde la fecha de la aprobación, y que esa etapa I del plan de gestión de eliminación de los HCFC se había terminado en el mes de marzo de 2019. El Comité Ejecutivo reconoció que el país había cumplido los objetivos de eliminación del consumo de HCFC conforme al Acuerdo firmado con el Comité Ejecutivo, y que, por ende, confía en que el Gobierno de Bangladesh continúe implantando las medidas regulatorias reglamentarias destinadas a controlar las importaciones de los HCFC con objeto de ejecutar efectivamente la etapa II del plan de gestión de eliminación de los HCFC, y alcanzar la reducción del 35 por ciento del consumo de HCFC para el 1 de enero de 2020 tal y como se estipula en el Protocolo de Montreal.

Chile

2. El Comité Ejecutivo examinó el informe presentado junto con la solicitud de financiación para la renovación del proyecto de fortalecimiento institucional en Chile (fase XIII) y tomó nota de que el Gobierno de Chile había notificado los datos del programa de país para 2017, y los datos atinentes al artículo 7, a las Secretarías del Fondo y del Ozono, respectivamente, indicando que el país se encontraba en situación de cumplimiento del Protocolo de Montreal. El Comité Ejecutivo tomó nota además de que el Gobierno de Chile había continuado con la implantación de los controles a las importaciones de HCFC sirviéndose de un sistema de concesión de cuotas y licencias, y formando también a los funcionarios de aduanas y a los técnicos en equipos de refrigeración. El Comité Ejecutivo tomo nota también, con reconocimiento, de la ratificación de la Enmienda de Kigali y de las actividades iniciadas para facilitar su implantación. Así mismo, tomó nota de la participación del país en la red regional y en las reuniones del Protocolo de Montreal. El Comité Ejecutivo reconoció los esfuerzos desplegados por el Gobierno de Chile y confía en que, en el plazo de los próximos dos años, el Gobierno de Chile continúe implantando la etapa II del plan de gestión de eliminación de los HCFC y las actividades del proyecto de FI con objeto de alcanzar la reducción del 45 por ciento del consumo de HCFC para el 1 de enero de 2020 tal y como se estipula en el Acuerdo firmado con el Comité Ejecutivo.

Colombia

3. El Comité Ejecutivo examinó el informe presentado junto con la solicitud de financiación para la renovación del proyecto de fortalecimiento institucional en Colombia (fase XII) y tomó nota, con reconocimiento, de que el Gobierno de Colombia había notificado los datos del programa de país para 2017 y 2018, y también los datos atinentes al artículo 7, a las Secretarías del Fondo y del Ozono, respectivamente, indicando así que el país se encontraba en situación de cumplimiento del Protocolo de Montreal. El Comité Ejecutivo tomó nota además de que se siguen implantando la etapa II del plan de gestión de eliminación de los HCFC y otros proyectos en curso coordinada y uniformemente. El Comité

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Ejecutivo tomó nota también, con reconocimiento, de las actividades preparatorias destinadas a facilitar la ejecución de la Enmienda de Kigali. El Comité Ejecutivo reconoció los esfuerzos acometidos por el Gobierno de Colombia y confía en que, en el plazo de los próximos dos años, el Gobierno de Colombia continúe ejecutando la etapa II del plan de gestión de eliminación de los HCFC y las actividades del proyecto de FI a fin de alcanzar la reducción del 35 por ciento del consumo de HCFC para el 1 de enero de 2020 tal y como se estipula en el Protocolo de Montreal.

Cuba

4. El Comité Ejecutivo examinó el informe presentado junto con la solicitud de financiación para la renovación del proyecto de fortalecimiento institucionalen Cuba (fase XI) y tomó nota de que el Gobierno de Cuba había notificado los datos del programa de país para 2015, 2016 y 2017, y también los datos atinentes al artículo 7, a las Secretarías del Fondo y del Ozono, respectivamente, indicando así que el país se encontraba en situación de cumplimiento del Protocolo de Montreal. El Comité Ejecutivo tomó nota, con reconocimiento, de los avances alcanzados en la ejecución de la etapa I del plan de gestión de eliminación de los HCFC, incluido el control de las importaciones de HCFC, sirviéndose para ello de un sistema de concesión de cuotas y licencias, de la cooperación con los funcionarios de aduanas y con las autoridades locales y del incremento de la concienciación pública respecto de la eliminación de los HCFC; las actividades preparatorias destinadas a facilitar la ejecución de la Enmienda de Kigali; y la participación del país en la red regional y en las reuniones del Protocolo de Montreal. El Comité Ejecutivo reconoció los esfuerzos desplegados por el Gobierno de Cuba y confía en que, en el plazo de dos años, el Gobierno de Cuba siga implantando la etapa I del plan de gestión de eliminación de los HCFC y las actividades del proyecto de FI a fin de alcanzar la reducción del 35 por ciento del consumo de HCFC para el 1 de enero de 2020 tal y como se estipula en el Protocolo de Montreal.

Trinidad y Tobago

El Comité Ejecutivo examinó el informe presentado junto con la solicitud de financiación para la renovación del proyecto de fortalecimiento institucional en Trinidad and Tobago (fase X) y tomó nota, con reconocimiento, de que el Gobierno de Trinidad y Tobago había notificado los datos del programa de país para 2017 y 2018, y también los datos atinentes al artículo 7 para 2017, a las Secretarías del Fondo y del Ozono, respectivamente, indicando así que el país se encontraba en situación de cumplimiento del Protocolo de Montreal. El Comité Ejecutivo elogió al Gobierno de Trinidad y Tobago por su implantación de la etapa I del plan de gestión de eliminación de los HCFC, sus regulaciones para controlar la importación de SAO, incluyendo las mezclas que las contengan, y los equipos con SAO, y por su norma de etiqueta de obligado cumplimiento para los contenedores de refrigerantes. El Comité Ejecutivo tomó nota ulteriormente de que el país había aportado capacitación en prácticas idóneas para tareas de refrigeración, desarrollado actividades para incrementar el grado de concienciación pública respecto de la eliminación de los HCFC, y participado en la red regional y en las reuniones del Protocolo de Montreal. El Comité Ejecutivo reconoció los esfuerzos realizados por el Gobierno de Trinidad y Tobago y confía en que el Gobierno de dicho país continúe ejecutando la etapa I del plan de gestión de eliminación de los HCFC y el proyecto de FI a fin de alcanzar la reducción del 35 por ciento del consumo de HCFC para el 1 de enero de 2020 tal y como se estipula en el Protocolo de Montreal.



83rd Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

(27 – 31 May 2019)

UNDP2019 WORK PROGRAMME

2019 WORK PROGRAMME

I. EXECUTIVE SUMMARY

The present document constitutes UNDP's 2019 Work Programme and is being submitted for consideration of the Executive Committee (ExCom) at its 83rd Meeting. The list of submissions for all funding requests (including investment projects) that will be submitted by UNDP to the 83rd ExCom meeting in Annex 1 to this document is provided for information. Project documentation such as multi-year agreements (MYA) tranche requests, investment and demonstration project proposals and other individual/investment proposals are not included in this document and are submitted separately as per normal practice. Only the following (non-investment) submissions are part of this document.

II. FUNDING REQUESTS PART OF THE WORK PROGRAMME

Institutional Strengthening Extensions

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

| Country | Type | Title Duration (months) | | Amount | Agency Fee | Total |
|------------------------|--|--|---|---------|---------------|-----------|
| Bangladesh | INS | Institutional Strengthening Renewal (Phase IX) | 24 | 166,400 | 11,648 | 178,048 |
| Chile | INS | NS Institutional Strengthening Renewal (Phase XIII) 24 | | 238,784 | 16,715 | 255,499 |
| Colombia | INS | Institutional Strengthening Renewal (Phase XII) 24 | | 352,768 | 24,694 | 377,462 |
| Cuba | INS | Institutional Strengthening Renewal (Phase XI) | Institutional Strengthening Renewal (Phase XI) 24 | | 13,356 | 204,160 |
| Trinidad and Tobago | I INS Institutional Strengthening Renewal (Phase X) 74 | | 24 | 85,000 | 5,950 | 90,950 |
| Total (5 reque | Total (5 requests) | | | | | 1,106,119 |

Preparation funding requests for HPMP stages II and III

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

| Country | Туре | Title Duration (months) | | Amount | Agency Fee | Total |
|-----------------------|-------|------------------------------|-----------------------------|--------|---------------|--------|
| Dominican Republic | PRP | Stage III HPMP Preparation | ge III HPMP Preparation 12 | | 4,200 | 64,200 |
| Eswatini | PRP | Stage II HPMP Preparation | tage II HPMP Preparation 12 | | 700 | 10,700 |
| Nigeria | PRP | Stage III HPMP Preparation | 12 | 22,500 | 1,575 | 24,075 |
| Panama | PRP | Stage III HPMP Preparation | 12 | 60,000 | 4,200 | 64,200 |
| Uruguay | PRP | Stage III HPMP Preparation | 12 | 60,000 | 4,200 | 64,200 |
| Zimbabwe | PRP | Stage II HPMP Preparation 12 | | 20,000 | 1,400 | 21,400 |
| Total (6 requ | ests) | | 232,500 | 16,275 | 248,775 | |

Requests for preparation funding for HFC Investment projects

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

| Country | Туре | Title | Duration (months) | Amount | Agency Fee | Total |
|----------------|--|---|-------------------|--------|---------------|--------|
| Indonesia | PRP | Conversion of HFC-134a in the manufacturing of domestic refrigerators | | 30,000 | 2,100 | 32,100 |
| Lebanon | Conversion of R-404A in the commercial refrigeration units for supermarkets at Leon Industries S.A.R.L., Lebanon | | 12 | 30,000 | 2,100 | 32,100 |
| Pakistan | Conversion from HFC-134a to R-600a/R-290 as refrigerant in manufacturing of deep freezers | | 12 | 30,000 | 2,100 | 32,100 |
| Total (3 reque | ests) | | 90,000 | 6,300 | 96,300 | |

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

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

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

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

III. SUMMARY OF FUNDING REQUESTS (WORK PROGRAMME AMENDMENT)

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

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

ANNEX 1

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

| No | Country | Туре | Description | Funding Red | quest for the 8 (US\$) | 33rd ExCom |
|------|------------------------|--------|--|-------------|---------------------------|------------|
| | J | -J F - | | Amount | Agency Fee | Total |
| 1 | Bangladesh | INS | Institutional Strengthening Renewal (Phase IX) | 166,400 | 11,648 | 178,048 |
| 2 | Cambodia | INV | Stage I HPMP - 2019 tranche | 150,000 | 11,250 | 161,250 |
| 3 | Chile | INS | Institutional Strengthening Renewal (Phase XIII) | 238,784 | 16,715 | 255,499 |
| 4 | China | INV | Stage II HPMP - 3rd tranche (ICR) | 12,000,000 | 840,000 | 12,840,000 |
| 5 | China | INV | Stage II HPMP - 3rd tranche (Solvents) | 5,549,492 | 388,464 | 5,937,956 |
| 6 | Colombia | INS | Institutional Strengthening Renewal (Phase XII) | 352,768 | 24,694 | 377,462 |
| 7 | Costa Rica | INV | Stage I HPMP - 2019 tranche | 56,000 | 4,200 | 60,200 |
| 8 | Cuba | INS | Institutional Strengthening Renewal (Phase XI) | 190,804 | 13,356 | 204,160 |
| 9 | Dominican Republic | PRP | Stage III HPMP Preparation | 60,000 | 4,200 | 64,200 |
| 10 | Eswatini | PRP | Stage II HPMP Preparation | 10,000 | 700 | 10,700 |
| 11 | Guyana | INV | Stage II HPMP - 2018 tranche | 66,750 | 4,673 | 71,423 |
| 12 | Indonesia | PRP | Conversion of HFC-134a in the manufacturing of domestic refrigerators | 30,000 | 2,100 | 32,100 |
| 13 | Iran | INV | Stage II HPMP - 2018 tranche | 1,593,980 | 111,579 | 1,705,559 |
| 14 | Lebanon | PRP | Conversion of R-404A in the commercial refrigeration units for supermarkets at Leon Industries S.A.R.L., Lebanon | 30,000 | 2,100 | 32,100 |
| 15 | Nigeria | PRP | Stage III HPMP Preparation | 22,500 | 1,575 | 24,075 |
| 16 | Pakistan | PRP | Conversion from HFC-134a to R-600a/R-290 as refrigerant in manufacturing of deep freezers, household refrigerators and water dispenser at PAK Elektron Limited, Lahore, Pakistan | 30,000 | 2,100 | 32,100 |
| 17 | Panama | PRP | Stage III HPMP Preparation | 60,000 | 4,200 | 64,200 |
| 18 | Trinidad and Tobago | INS | Institutional Strengthening Renewal (Phase X) | 85,000 | 5,950 | 90,950 |
| 19 | Uruguay | PRP | Stage III HPMP Preparation | 60,000 | 4,200 | 64,200 |
| 20 | Zimbabwe | PRP | Stage II HPMP Preparation | 20,000 | 1,400 | 21,400 |
| Tota | d (20 requests) | | | 20,772,478 | 1,455,103 | 22,227,581 |

Notes:

- a. All amounts in are in US dollars.
- b. Special reports due (delays, balances, status reports, etc.) as well as other projects not part of the WPA will be submitted separately.
- c. HPMP Tranches for Armenia and Mali were submitted separately but not reflected in this table since there is no funding for UNDP.

ANNEX 2

Preparation funding requests for HPMP stages in:

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

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

HCFC PHASE-OUT MANAGEMENT PLAN (OVERARCHING STRATEGY)

Part I: Project Information

| 16. | Pro | ject title: | 17. Request for Project Preparation Proposal for the Third Stage of the HPMP of the Dominican Republic | | | | | | |
|----------------------|-----|------------------|--|------------------|---------|----------|----------------------------|---------|--|
| 18. | Cor | intry: | 19. | The Dominican R | epublic | | | | |
| 20. agen | | d implementing | 21. | UNDP | | | | | |
| 22. (1): | Coo | perating agency | 23. | UNEP | 24. | Click or | tap here to enter text. | | |
| 25. (2): | Coo | perating agency | 26. | (select) | 27. | Click or | tap here to enter text. | | |
| 28. (3): | Coo | perating agency | 29. | (select) | 30. | Click or | tap here to enter text. | | |
| 31. perio | | plementation | 32. | July 2019 – June | 2021 | | | | |
| 33. | Fur | nding requested: | | | | | | | |
| | 34. | Agency | 35. | Sector | | 36. I | Funding requested (US \$)* | | |
| | 37. | UNDP | 38. | Overarching | | | 39. 6 | 0,000 | |
| | 40. | (select) | 41. | (select) | | 42. | Click or tap here to ente | r text. | |
| | 43. | (select) | 44. | (select) | | 45. | Click or tap here to ente | r text. | |
| | 46. | (select) | 47. | (select) | | 48. | Click or tap here to ente | r text. | |

Part II: Prerequisites for submission

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

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

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

^{*}Details should be consistent with information provided in the relevant sections below.

2. Brief background on previous stage of the HPMP

Please provide a brief background on the previous stage of the HPMP, when it was approved, a brief
description of the progress in implementation of the previous stage of the HPMP to demonstrate that
substantial progress had been made.

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

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

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

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

| 4. Overview of current | 4. Overview of current HCFC consumption in metric tonnes by substance (last three years) | | | | |
|---|--|-------|--------|--------|--|
| Substance | Sector | 2015 | 2016 | 2017 | |
| HCFC-22 | RAC servicing | 720.1 | 759.72 | 806.55 | |
| HCFC-123 | RAC servicing | 0.4 | 15.00 | 2.61 | |
| HCFC-141b | RAC servicing | 34.4 | 1.36 | - | |
| HCFC-141b in imported pre-blended polyols | Manufacturing- Foam PU | 100.0 | 40.00 | - | |
| (select) | (select) | | | | |
| (select) | (select) | | | | |
| (select) | (select) | | | | |
| (select) | (select) | | | | |

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)

The consumption of HCFC in the Dominican Republic is focused on the service and maintenance of refrigeration and air conditioning sector. In the last couple of years the consumption of HCFC-22 has increased, they may be related to the increase of inventories by the importers considering the entry into force of initiatives conducted by the NOU to curb the demand of HCFC. One is to charge the imports of HCFC with an additional fee of 9% from January 2019, which will increase by 9% every year after, the second is the banning of the imports of HCFC-based RAC equipment, which is in place since beginning of 2017.

Description of information that needs to be gathered and updated. Explain why this has not been

Description

Agency

UNDP

undertaken during preparation for the previous stage of the HPMP.

Information needed

Data analysis, Institutional

updating of overall strategy for Stage 2, as well as specific strategy for the

coordination, etc.)

Technical support and

Updated data on HCFC The Dominican Republic only has HCFC UNDP consumption in consumption in its servicing sector, and manufacturing/servicing sector HCFC-22 is the main HCFC consumed. The national survey for Stage 3 will thus focus on further analysing the consumption and trends in the servicing sector and the main actors involved. New information on ODS UNDP It will review the status of ODS regulations regulations and the need to adapt them. UNDP Others, specify. An analysis of the specific phase-out targets by substance and/or subsector will be conducted, in order to meet upcoming obligations. Others, specify. UNDP Assessment of the HPMP strategy and amend it based on the outcome of Stage 2. (select) Click or tap here to enter text. (select) 7. Activities to be undertaken for project preparation and funding **Indicative funding (US \$)** Activity Agency UNDP Assessment of current 30,000 situation and needs of stakeholders (Survey update,

15,000

| Servicing sector | | | | |
|---|---|-----------------------|--|--|
| (International Consultant). | | | | |
| Stakeholders' meetings (2) | 10,000 | UNDP | | |
| Reporting and monitoring | 5,000 | UNDP | | |
| Click or tap here to enter text. | | (select) | | |
| TOTAL | 60,000 | | | |
| 8. How will activities related to implementation of the Kigali Amendment to phase down HFCs be | | | | |
| considered during project pre | paration for stage III of the HPMP? | | | |
| The surveys will strive to collect the | information on HFC when possible. The stage III prepare | ration will also take | | |
| into account how imports of HFC-based equipment will impact the strategy for the servicing sector for the | | | | |
| HPMP, being cognizance of similar activities for the servicing sector whether equipment uses HFC or HCFC | | | | |
| | | | | |
| | | | | |

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

| 1. Agency: | | | (select) | | |
|--|-----------------|--------------------|--------------------|---------------------|--------------------|
| 2. Sector: | | | (select) | | |
| 3. HCFC cons | umption in it | em #2 reported | ☐ Yes, plea | ise specify reporte | d amount and year: |
| under Country Programme (CP) data? | | | | | |
| | | | \square No | | |
| 4. Information | on remaining e | ligible consumptio | n | | |
| | Substance | | Remaining e | ligible consumptio | n (ODP tonnes) |
| | (select) | | | | |
| | (select) | | | | |
| | (select) | | | | |
| 5. Information on enterprise(s) for which fundin | | | g is being sought | | |
| Enterprise | Year | HCFC consumpt | ion (ODP tonnes) | (last three years) | HCFC phase-out |
| | established | 2016 | 2017 | 2018 | to be achieved |
| | | | | | |
| | | | | | |
| | | | | | |
| 6. Activities to | be undertaken : | for preparation of | the investment pro | oject and funding 1 | requestedi |
| | Activity | | | Indicative funding | (US \$) |
| Click or tap here t | o enter text. | | | | |
| Click or tap here to enter text. | | | | | |
| Click or tap here to enter text. | | | | | |
| Click or tap here to enter text. | | | | | |
| Click or tap here t | o enter text. | | | | |
| Click or tap here t | o enter text. | | | | |
| TOTAL | | | | | |

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

Part I: Project Information

| 49. | Project title: | 50. | 50. PRP for the Third Stage of the HPMP of Nigeria | | | | |
|----------------------|--------------------|-----|--|-----|----------------------------|-------|--------|
| 51. | Countwre | 52. | Nigeria | | | | |
| 31. | Country: | 32. | Nigeria | | | | |
| 53. | Lead implementing | 54. | UNDP | | | | |
| ageno | ey: | | | | | | |
| 55. (1): | Cooperating agency | 56. | UNIDO | 57. | Click or tap here to enter | text. | |
| (1)• | | | | | | | |
| 58. (2): | Cooperating agency | 59. | (select) | 60. | Click or tap here to enter | text. | |
| | | | | | | | |
| 61. (3): | Cooperating agency | 62. | (select) | 63. | Click or tap here to enter | text. | |
| (3). | | | | | | | |
| 64. | Implementation | 65. | 2019-2020 | • | | | |
| perio | d: | | | | | | |
| 66. | Funding requested: | | | | | | |
| | 67. Agency | 68. | Sector | | 69. Funding request | ed (U | S \$)* |
| | 70. UNDP | 71. | Overarching | | 7 | 2. | 22,500 |
| | 73. UNIDO | 74. | Overarching | | 7 | 5. | 22,500 |
| | 76. UNIDO | 77. | INV - REF | | 7 | 8. | 25,000 |
| | 79. UNIDO | 80. | INV - AC | | 8 | 1. | 25,000 |

Part II: Prerequisites for submission

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

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

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

^{*}Details should be consistent with information provided in the relevant sections below.

Please provide a brief background on the previous stage of the HPMP, when it was approved, a brief
description of the progress in implementation of the previous stage of the HPMP to demonstrate that
substantial progress had been made.

11. Phase-out activities in the manufacturing sector

UNDP component:

82. Foam Sector Programme

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

83. UNIDO component:

84. Refrigeration and A/C Manufacturing Sector

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

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

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

Phase-out activities in the refrigeration servicing sector

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

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

| 12. Current progress in implementation of previous stage of the HPMP (please see section A.3 above) | | | | |
|---|----------------------------------|--------------|--|--|
| Activity | Description | Implementing | | |
| | | agency | | |
| (select) | Click or tap here to enter text. | (select) | | |
| (select) | Click or tap here to enter text. | (select) | | |
| (select) | Click or tap here to enter text. | (select) | | |
| (select) | Click or tap here to enter text. | (select) | | |
| (select) | Click or tap here to enter text. | (select) | | |
| (select) | Click or tap here to enter text. | (select) | | |
| (select) | Click or tap here to enter text. | (select) | | |

| 13. Overview of current | 13. Overview of current HCFC consumption in metric tonnes by substance (last three years) | | | | | |
|-------------------------|---|-------|-------|-----------------|--|--|
| Substance | Sector | 2016 | 2017 | 2018 (estimates | | |
| | | | | are to be | | |
| | | | | confirmed) | | |
| HCFC-22 | (select) | 3,554 | 3,262 | | | |
| HCFC-141b | (select) | 311 | 718 | | | |
| HCFC-141b in imported | (select) | 523 | 230 | | | |
| pre-blended polyols | | | | | | |
| HCFC-123 | (select) | 0 | 0 | | | |
| HCFC-124 | (select) | 201 | 338 | | | |
| HCFC-142b | (select) | 9 | 0 | | | |

| (select) | (select) | | |
|----------|----------|--|--|
| (select) | (select) | | |
| (select) | (select) | | |

^{14.} Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

Stage II – PRP for Overarching strategy

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

HCFC consumption - Article 7 data (ODP tonnes)

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

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

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

- Consumption of HCFC141b will be completely phased out at the end of Stage 2.
- It is anticipated the following consumption would remain for HCFC22:

Manufacturing sector:

Commercial Refrigeration: ODP T11.46

AC Manufacturing: ODP T 2.87

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

ODP T 153.48

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

(2) A description of the information that needs to be gathered and updated

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

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

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

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

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

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

The following activities will need to be conducted under this PRP:

| Activity | Indicative funding (in USD) |
|--|-----------------------------|
| Survey work (National consultants) – update and | 20,000 |
| confirmation of data | |
| Technical support and updating of overall strategy | 10,000 |
| for Stage 3, as well as specific strategy for the | |
| Servicing sector (International Consultant). | |
| Stakeholders' meetings (Final) | 10,000 |
| Reporting and monitoring | 5,000 |
| Total | USD 45,000 |

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

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

undertaken during preparation for the previous stage of the HPMP.

15. Description of information that needs to be gathered and updated. Explain why this has not been

 Information needed
 Description
 Agency

 Updated data on HCFC consumption in manufacturing/servicing sector
 Click or tap here to enter text.
 UNDP

 Updated sectoral consumption information
 Click or tap here to enter text.
 UNIDO

 Others, specify.
 Stakeholders' meeting, reporting and monitoring
 UNIDO

Others, specify.Stakeholders' meeting, reporting and monitoringUNIDOOthers, specify.Stakeholders' meeting, reporting and monitoringUNDP(select)Click or tap here to enter text.(select)

16. Activities to be undertaken for project preparation and funding Activity **Indicative funding (US \$)** Agency Survey work, technical support, 22,500 **UNDP** stakeholders' meeting and reporting Survey work, technical support, 22,500 UNIDO stakeholders' meeting and reporting Click or tap here to enter text. (select) Click or tap here to enter text. (select) Click or tap here to enter text. (select)

| TOTAL | 45,000 |
|--|--------|
| 17. How will activities related to implementation of the Kigali Amendment to phase down HFCs be | ! |
| considered during project preparation for stage II of the HPMP? | |
| It will be central part of the preparatory work. The Kigali Amendment was approved at the end of 2018 in | |
| Nigeria. | |
| | |
| | |

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

| 7. Agency: | | | UNIDO | | | |
|--|-----------------|---------------------|---|---|----------------|--|
| 8. Sector: | | | Air-conditioning | | | |
| 9. HCFC consumption in item #2 reported | | | ✓ Yes , please specify reported amount and year: _52.3 | | | |
| under Country Programme (CP) data? | | | MT in 2015/2 | 2016 | | |
| | | | □ No | | | |
| 10. Information | on remaining e | eligible consumptio | n | | | |
| | Substance | | Remaining e | Remaining eligible consumption (ODP tonnes) | | |
| | HCFC-22 | | 2.9 | | | |
| | (select) | | | | | |
| | (select) | | | | | |
| 11. Information | on enterprise(s |) for which fundin | | | | |
| Enterprise | Year | HCFC consumpt | tion (ODP tonnes) | <u> </u> | HCFC phase-out | |
| | established | 2016 | 2017 | 2018 | to be achieved | |
| HPZ | 2001 | 2.9 (2015-2016) | TBC | TBC | 2.9 ODP T | |
| | | | | | | |
| | | | | | | |
| 12. Activities to | be undertaken | for preparation of | the investment pro | oject and funding 1 | | |
| | Activity | | | Indicative funding | , , | |
| Confirmation of data and presentation/analysis of | | | | | 25,000 | |
| technology option | | | | | | |
| Click or tap here t | | | | | | |
| Click or tap here t | | | | | | |
| Click or tap here t | | | | | | |
| Click or tap here t | | | | | | |
| Click or tap here t | o enter text. | | | | •= ••• | |
| TOTAL | | | | | 25,000 | |
| | | | | | | |
| 13. Agency: | | | UNIDO | | | |
| 14. Sector: | | | Refrigeration | | | |
| 15. HCFC consumption in item #2 reported | | | ✓ Yes, please specify reported amount and year: | | | |
| | try Programme | | | sumption to be | | |
| | | | PRP | | | |
| | | | □ No | | | |
| 16. Information | on remaining e | eligible consumptio | n | | | |
| Substance Remaining eligible consumption (ODP tonner | | | | n (ODP tonnes) | | |

| HCFC-22 | | | | IBC | |
|----------------------|-----------------------------------|--------------------|---|------|----------------|
| (select) | | | | | |
| | (select) | | | | |
| 17. Information | on enterprise(s |) for which fundin | g is being sought | | |
| Enterprise | Year | HCFC consumpt | nption (ODP tonnes) (last three years) HCFC pha | | |
| | established | 2016 | 2017 | 2018 | to be achieved |
| Group of entreprises | Specifics will be provided in PRP | ТВС | TBC | TBC | 11.46 ODP T |
| | | | | | |
| | | | | | |
| | • | • | | • | |

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

Annex: Stage III - PRP for the Manufacturing sector

RACM Sector Programme (UNIDO)

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

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

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

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

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

Part I: Project Information

| 86. Project title: | 87. Request for Project HPMP of Panama | ect Preparation Proposal for the Third Stage of the |
|-------------------------------|--|---|
| 88. Country: | 89. Panama | |
| 90. Lead implementing agency: | 91. UNDP | |
| 92. Implementation period: | 93. July 2019 – June 2 | 2021 |
| 94. Funding requested: | | |
| 95. Agency | 96. Sector | 97. Funding requested (US \$)* |
| 98. UNDP | 99. Overarching | 100. 60,000 |

Part II: Prerequisites for submission

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

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

| 18. Montreal Protocol compliance target to be met in □ stage II / ☒ stage III of the HPMP | | | | |
|---|-------------|-----------------|-----------------|--|
| Phase-out commitment | 67.5 | Year of | 2025 | |
| (%) | | commitment | | |
| ⊠ Servicing only | | ☐ Manufacturing | ☐ Servicing and | |
| | | only | manufacturing | |
| 10 D ' Cl l l | · 4 C4 HDMD | | | |

19. Brief background on previous stage of the HPMP

Please provide a brief background on the previous stage of the HPMP, when it was approved, a brief
description of the progress in implementation of the previous stage of the HPMP to demonstrate that
substantial progress had been made.

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

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

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

^{*}Details should be consistent with information provided in the relevant sections below.

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

| 20. Current progress in implementation of previous stage of the HPMP | | | | | | |
|--|---------------|-----------|--|----------------------------|--------|--------------|
| Activity | | | Descrip | tion | | Implementing |
| | | | | | | agency |
| Legal/regulatory framewor | rk | | | ion to ban the use of HC | | UNDP |
| | | | | of the use of HCFC-22 | | |
| | | | | ystyrene foam, and the | | |
| | | | | ols containing HCFC-1 | | |
| | | | meetings with ministries and stakeholders have been | | | |
| | | | to present the new re | | | |
| Refrigeration servicing sec | ctor | | | gs with the Ministry | | UNDP |
| | | | | on of Human Developm | | |
| | | | | ical University of Pan | | |
| | | | | d refrigeration classro | | |
| | | | | e (1) train-the-trainer co | | |
| | | | ral refrigerants as alternatives to ODS and onal safety standards in the developed RAC sector, | | | |
| | | | enty five (25) instructors were trained. | | | |
| Manufacturing-Foam PU | | | | ves to HCFC in the for | oam | UNDP |
| | | | | international expert. A | | ONDI |
| | | | | elected to participate in | | |
| | | | | version of Manufactu | | |
| | | | ave signed the contract | | | |
| | | | ation of HCFC-141b. | | | |
| 21. Overview of current | HCFC co | nsumption | in metric tonnes by | substance (last three | years) |) |
| Substance | | ctor | 2015 | 2016 | | 2017 |
| HCFC-22 | RAC servicing | | 318.13 | 332.04 | | 300.27 |
| HCFC-123 | RAC servicing | | 1.46 | 4.50 | | 0.53 |
| HCFC-124 | RAC servicing | | 0.071 | 0.00 | | 0.00 |
| HCFC-141b | RAC servicing | | 0.00 | 0.00 | | 0.00 |
| HCFC-142b | RAC s | servicing | 0.043 | 0.00 | | 0.00 |
| HCFC-141b in imported | | acturing- | 79.38 | 41.35 | | 60.62 |
| pre-blended polyols | Foam PU | | | | | |

^{22.} 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)

Panama's consumption of HCFCs has experienced a progressive decrease in the consumption of HCFC-22, which has allowed the country to easily remain in compliance with its Montreal Protocol obligations as regards HCFCs. Consumption in the foam sector, as HCFC-141b in fully formulated polyols, has increased due its increasing use in the construction sector.

23. Description of information that needs to be gathered and updated. Explain why this has not been

| consumption in manufacturing/servicing sector True for a movement of the segulations and the segulations are consumption on ODS are cons | Panama will only have HCFC consumption its servicing sector after the Stage 2, and HCFC-22 is the main HCFC consumed. The national survey for Stage 3 will thus | Agency UNDP |
|--|---|----------------|
| consumption in manufacturing/servicing sector True for a movement of the segulations of the specify. Others, specify. Others, specify. Others, specify. Activities to be undertaken for process. Activity Assessment of current | n its servicing sector after the Stage 2, and ICFC-22 is the main HCFC consumed. | UNDP |
| nanufacturing/servicing sector True for a movement of the section | HCFC-22 is the main HCFC consumed. | |
| New information on ODS regulations Others, specify. Others, specify. Others, specify. Activities to be undertaken for processor of current | | |
| New information on ODS regulations Others, specify. Others, specify. Others, specify. Activities to be undertaken for processor of current | The national survey for Stage 3 will thus | |
| New information on ODS regulations Others, specify. Dthers, specify. Others, specify. Activities to be undertaken for part of current | | |
| n New information on ODS regulations a Dthers, specify. Others, specify. Others, specify. Others, specify. Activities to be undertaken for process. Activity Assessment of current | ocus on further analyzing the consumption | |
| New information on ODS regulations Others, specify. Others, specify. Others, specify. Activities to be undertaken for process. Activity Assessment of current | nd trends in the servicing sector and the | |
| regulations Others, specify. Others, specify. Others, specify. Activities to be undertaken for p Activity Assessment of current | nain actors involved. | |
| Descriptions Descriptions Descriptions Descriptions Descriptions Descriptions Descriptions Descriptions Activities to be undertaken for particular to | t will review the status of ODS regulations | UNDP |
| Others, specify. Description: Others, specify. Others, specify. Activities to be undertaken for process. Activity Assessment of current | nd the need to adapt them. | |
| b c c o Others, specify. A a 24. Activities to be undertaken for p Activity Assessment of current | An analysis of the specific phase-out targets | UNDP |
| Others, specify. Activities to be undertaken for p Activity Assessment of current | by substance and/or subsector will be | |
| Others, specify. Activities to be undertaken for participative. Assessment of current | onducted, in order to meet upcoming | |
| Others, specify. A 24. Activities to be undertaken for p Activity Assessment of current | bligations. | |
| 24. Activities to be undertaken for p Activity Assessment of current | Assessment of the HPMP strategy and | UNDP |
| 24. Activities to be undertaken for p Activity Assessment of current | mend it based on the outcome of Stage 2. | |
| Activity Assessment of current | <u> </u> | |
| | Indicative funding (US \$) | Agency |
| situation and needs of | 30,000 | UNDP |
| | | |
| stakeholders (Survey update, | | |
| Data analysis, Institutional | | |
| coordination, etc.) | | |
| Fechnical support and | 15,000 | UNDP |
| apdating of overall strategy | | |
| for Stage 2, as well as | | |
| specific strategy for the | | |
| Servicing sector | | |
| (International Consultant). | | |
| Stakeholders' meetings (2) | 10,000 | UNDP |
| Reporting and monitoring | 5,000 | UNDP |
| TOTAL | 60,000 | |
| | olementation of the Kigali Amendment to phase doveration for stage III of the HPMP? | vn HFCs be |

considered during project preparation for stage III of the HPMP?

The surveys will strive to collect the information on HFC when possible. The stage III preparation will also take into account how imports of HFC-based equipment will impact the strategy for the servicing sector for the HPMP, being cognizance of similar activities for the servicing sector whether equipment uses HFC or HCFC.

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

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

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

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

HCFC PHASE-OUT MANAGEMENT PLAN (OVERARCHING STRATEGY)

Part I: Project Information

| 101. | Project title: | 102. Request for Project Preparation Proposal for the Third Stage of the HPMP of Uruguay | | | | | | |
|------------------------------|----------------------|--|-------------------------|--|--|--|--|--|
| 103. | Country: | 104. Uruguay | | | | | | |
| 105. agency | Lead implementing y: | 106. UNDP | | | | | | |
| 107. (1): | Cooperating agency | 108. (select) 109. Click or tap here to e | nter text. | | | | | |
| 110. (2): | Cooperating agency | 111. (select) 112. Click or tap here to e | nter text. | | | | | |
| 113. Cooperating agency (3): | | 114. (select) 115. Click or tap here to e | nter text. | | | | | |
| 116. period | | 117. July 2019 – June 2021 | | | | | | |
| 118. | Funding requested: | | | | | | | |
| | 119. Agency | 120. Sector 121. Funding requ | uested (US \$)* | | | | | |
| | 122. UNDP | 123. Overarching | 124. 60,000 | | | | | |
| | 125. (select) | 126. (select) 127. Click or | tap here to enter text. | | | | | |
| | 128. (select) | 129. (select) 130. Click or | tap here to enter text. | | | | | |
| | 131. (select) | 132. (select) 133. Click or | tap here to enter text. | | | | | |

Part II: Prerequisites for submission

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

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

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

^{*}Details should be consistent with information provided in the relevant sections below.

27. Brief background on previous stage of the HPMP

Please provide a brief background on the previous stage of the HPMP, when it was approved, a brief
description of the progress in implementation of the previous stage of the HPMP to demonstrate that
substantial progress had been made.

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

| Activity | Description | Implementing |
|--------------------------------|--|--------------|
| | | agency |
| Legal/regulatory framework | An international consultant was hired to review the HCFC | UNDP |
| | control system and to train the customs officials on import | |
| | procedures and measures to control illegal trade of ODS. | |
| | One (1) workshop conducted and 18 officials trained. | |
| Refrigeration servicing sector | Several activities have been done on good refrigeration | UNDP |
| | practices and promotion of alternative technologies to the | |
| | HCFCs such as specialized workshops on CO2, on use of | |
| | HC-based refrigerants; more than 240 technicians have | |
| | been trained on good refrigeration practices through six (6) | |
| | training sessions around the country. | |
| (select) | Click or tap here to enter text. | (select) |
| (select) | Click or tap here to enter text. | (select) |
| (select) | Click or tap here to enter text. | (select) |
| (select) | Click or tap here to enter text. | (select) |
| (select) | Click or tap here to enter text. | (select) |

| 29. Overview of currer | Substance Sector 2015 2016 2017 HCFC-22 RAC servicing 254.23 295.35 273.04 HCFC-123 RAC servicing 1.60 2.02 1.30 HCFC-124 RAC servicing 3.36 2.42 5.45 HCFC-141b RAC servicing 14.81 12.07 13.42 HCFC-142b RAC servicing 0.98 1.35 0.84 (select) (select) (select) (select) (select) (select) (select) (select) | | | | | | | | |
|------------------------|---|--------|-----------|--------|--|--|--|--|--|
| Substance | Sector | 2015 | 2015 2016 | | | | | | |
| HCFC-22 | RAC servicing | 254.23 | 295.35 | 273.04 | | | | | |
| HCFC-123 | RAC servicing | 1.60 | 2.02 | 1.30 | | | | | |
| HCFC-124 | RAC servicing | 3.36 | 2.42 | 5.45 | | | | | |
| HCFC-141b | RAC servicing | 14.81 | 12.07 | 13.42 | | | | | |
| HCFC-142b | RAC servicing | 0.98 | 1.35 | 0.84 | | | | | |
| (select) | (select) | | | | | | | | |
| (select) | (select) | | | | | | | | |
| (select) | (select) | | | | | | | | |
| (select) | (select) | | | | | | | | |

30. 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)

As can be seen in the table above, Uruguay's consumption of HCFCs has experienced a progressive decrease in the consumption of HCFC-22, which has allowed the country to easily remain in compliance with its Montreal Protocol obligations as regards HCFCs. Consumption in the foam sector, as HCFC-141b in fully formulated polyols, has increased due its increasing use in the construction sector, especially the use spray foam.

31. Description of information that needs to be gathered and updated. Explain why this has not been

undertaken during preparation for the previous stage of the HPMP.

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

Click or tap here to enter text.

TOTAL 60,000

for Stage 2, as well as specific strategy for the

(International Consultant).

Stakeholders' meetings (2)

Reporting and monitoring

Servicing sector

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

The surveys will strive to collect the information on HFC when possible. The stage III preparation will also take into account how imports of HFC-based equipment will impact the strategy for the servicing sector for the HPMP, being cognizance of similar activities for the servicing sector whether equipment uses HFC or HCFC

10,000

5.000

UNDP

UNDP

(select)

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

| 25. Agency: | (select) |
|-------------|----------|
|-------------|----------|

| 26. Sector: | | | (select) | | | |
|--|----------------|--------------------|----------------------------|---------------------|--------------------|--|
| 27. HCFC cons | umption in it | em #2 reported | ☐ Yes, plea | ase specify reporte | d amount and year: | |
| under Count | ry Programme | (CP) data? | • | | • | |
| | | | □ No | | | |
| 28. Information | on remaining e | ligible consumptio | n | | | |
| | Substance | | Remaining of | eligible consumptio | n (ODP tonnes) | |
| | (select) | | | | | |
| | (select) | | | | | |
| (select) | | | | | | |
| 29. Information on enterprise(s) for which funding | | | g is being sought | | | |
| Enterprise | Year | HCFC consumpt | ion (ODP tonnes) | (last three years) | HCFC phase-out | |
| | established | 2016 | 2017 | 2018 | to be achieved | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 30. Activities to | be undertaken | for preparation of | the investment pr | oject and funding 1 | requestedi | |
| | Activity | | Indicative funding (US \$) | | | |
| Click or tap here t | o enter text. | | | | | |
| Click or tap here t | o enter text. | | | | | |
| Click or tap here t | o enter text. | | | | | |
| Click or tap here t | o enter text. | · | | · | · | |
| Click or tap here t | o enter text. | | | | | |
| Click or tap here t | o enter text. | | | | | |
| TOTAL. | | | | | • | |

ANNEX 2

<u>Preparation funding requests for HFC Investment projects in:</u>

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

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

COUNTRY: INDONESIA

PROJECT TITLE: Conversion of HFC-134a in the manufacturing of domestic refrigerators

LEAD IMPLEMENTING AGENCY: UNDP

COOPERATING AGENCY: n/a

NATIONAL COORDINATION AGENCY: Ministry of Environment & Forestry (KLHK)

PROJECT INCLUDED IN CURRENT BUSSINESS PLAN: No

ELIGIBLE CONSUMPTION: n/a (HFCs)

AREA: Manufacturing

SECTOR: Refrigeration and Air Conditioning

SUB-SECTOR: Domestic Refrigeration **NUMBER OF ENTERPRISES**: one (1)

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

Project Summary

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

The preparation of the stand-alone investment project will:

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

INTRODUCTION

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

OBJECTIVE OF THIS FUNDING REQUEST

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

COMPANY PROFILE

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

POTENTIAL IMPACT OF THE PROJECT

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

<u>Table 1 – HFCs Consumption per Sector (2012 metric tonnes)</u>

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

Source: HFCs Alternatives Survey (2014)

PROJECT ACTIVITIES

- (a) Obtain technical information (and confirmation) on consumption of HFCs, number of production lines, description of production process, outputs and profile of appliances produced;
- (b) evaluate the potential alternative technologies to HFCs, consultation process with Government and Company on reconversion process and technology choice and estimation of the environmental benefits to be achieved by the investment stand-alone project; and
- (c) Draft of the full standalone project proposal, peer review and submit the final proposal to the ExCom.

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

Implementation Timeframe

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

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

COUNTRY: LEBANON

PROJECT TITLE: Conversion of R-404A in the commercial refrigeration units for supermarkets

LEAD IMPLEMENTING AGENCY: UNDP

COOPERATING AGENCY: N/A

NATIONAL COORDINATION AGENCY: Ministry of Environment PROJECT INCLUDED IN CURRENT BUSSINESS PLAN: No

ELIGIBLE CONSUMPTION: N/A (HFCs) **AREA**: Manufacturing

SECTOR: Refrigeration and Air Conditioning

SUB-SECTOR: Commercial Refrigeration

NUMBER OF ENTERPRISES: One (1)

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

Project Summary

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

The preparation of the stand-alone investment project will:

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

INTRODUCTION

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

OBJECTIVE OF THIS FUNDING REQUEST

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

COMPANY PROFILE

| Name of Company: | Leon Industries S.A.R.L |
|-------------------------------|---|
| Sector | Refrigeration and Air-conditioning |
| Ownership: | 100% Article 5 (Lebanon) |
| R-404A Consumption: | To be confirmed during the project preparation. |
| | Preliminary survey indicates: |
| | 2016: 11.84 metric tonnes |
| | 2017: 10.68 metric tonnes |
| | 2018: 12.8 metric tonnes |
| Description of product | Detailed manufacturing profile to be confirmed during |
| manufacturing (quantity | the project preparation |
| produced per year, quantity | |
| export to non-A-5, type of | Company manufactures stand-alone and plug in |
| products) | refrigerators, cabinets and condensing units for use in |
| | supermarkets and commercial stores. |
| Alternative technology | Natural Refrigerant |
| proposed | CO ₂ (R-744) super-critical |

POTENTIAL IMPACT OF THE PROJECT

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

Table 1: Estimated Total Quantity Imported/Consumed by Individual Substance (2012-2015)

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

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

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

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

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

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

Source: HFCs Alternatives Survey (2015 and 2018)

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

PROJECT ACTIVITIES

- 21. The proposed project will carry out the following activities to gain experience in terms of cost and technical elements:
 - (a) Obtain technical information (and confirmation) on consumption of HFCs, number of lines, description of production process, outputs and profile of appliances produced;
 - (b) evaluate the potential alternative technologies to HFCs, consultation process with Government and Company on reconversion process and technology choice and estimation of the environmental benefits to be achieved by the investment stand-alone project; and
 - (c) Draft of the full stand-alone project proposal, peer review and submit the final proposal to the ExCom.
- 22. A Project Preparation grant in the amount of US\$ 30,000, plus 7% agency support costs are requested for the preparation of a stand-alone investment project:

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

23. Proposed Implementation Timeframe:

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

FUNDING REQUEST FOR THE PREPARATION OF HFC-RELATED STANDALONE INVESTMENTS PROJECT

Country: PAKISTAN PROJECT TITLE:

Conversion from HFC-134a to R-600a/R-290 as refrigerant in manufacturing of deep freezers, household refrigerators and water dispenser at PAK Elektron Limited, Lahore, Pakistan

INTERNATIONAL IMPLEMENTING AGENCY: UNDP

PROJECT DURATION : 12 months
PROJECT COSTS : US\$ 30,000
IMPLEMENTING AGENCY SUPPORT COST : US\$ 2,100 (7%) – UNDP
TOTAL COST OF PROJECT TO MLF : US\$ 32,100

NATIONAL COORDINATING AGENCY : Ministry of Climate Change, Pakistan

Project Summary:

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

A. Background

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

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

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

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

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

B. PROJECT OBJECTIVE

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

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

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

C. SECTOR/SUB-SECTOR

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

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

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

D. TECHNOLOGY

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

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

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

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

E. COMPANY PROFILE

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

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

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

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

NAME OF THE ENTERPRISE AND ADDRESS

M/s. PAK ELEKTRON LIMITED, H.O. 14-Km, Ferozpur Road, LAHORE-54760, Pakistan

Tel: +92 42 35920151-9

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

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

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

G. TOTAL PROJECT DURATION

The stand-alone investment project will be submitted to 84th ExCom.

H. BUDGET

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

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

I. SCHEDULE

| Activities | 2019 |
|------------|------|
|------------|------|

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