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COMITÉ EJECUTIVO DEL FONDO MULTILATERAL
PARA LA APLICACIÓN DEL
PROTOCOLO DE MONTREAL
Nonagésima novena reunión
Montreal, 7-11 de diciembre de 2026
Punto 9 c) del orden del día provisional[1]

ENMIENDAS AL PROGRAMA DE TRABAJO DEL PNUD PARA 2026

[1] UNEP/OzL.Pro/ExCom/99/1

Los documentos previos al período de sesiones del Comité Ejecutivo del Fondo Multilateral para la Aplicación del Protocolo de Montreal no van en perjuicio de las decisiones que el Comité pudiera adoptar después de la emisión de los mismos.

OBSERVACIONES Y RECOMENDACIÓN DE LA SECRETARÍA DEL FONDO

1. El PNUD solicita al Comité Ejecutivo la aprobación de USD 4.246.314, más gastos de apoyo al organismo de USD 297.242, para las enmiendas a su programa de trabajo para 2026 que figuran en el cuadro 1. La propuesta se adjunta al presente documento.

Cuadro 1: Enmiendas al programa de trabajo del PNUD para 2026

País	Actividad/Proyecto	Monto solicitado (USD)	Monto recomendado (USD)
SECCIÓN A: ACTIVIDADES RECOMENDADAS PARA APROBACIÓN GENERAL			
A1: Renovación de proyectos de fortalecimiento institucional			
Colombia	Renovación del proyecto de fortalecimiento institucional (fase XV)	730.230	730.230
Costa Rica	Renovación del proyecto de fortalecimiento institucional (fase XVI)	372.304	372.304
Georgia	Renovación del proyecto de fortalecimiento institucional (fase XIII)	180.000	180.000
India	Renovación del proyecto de fortalecimiento institucional (fase XV)	988.909	988.909
Malasia	Renovación del proyecto de fortalecimiento institucional (fase XVI)	740.563	740.563
Pakistán	Renovación del proyecto de fortalecimiento institucional (fase XIII)	594.748	594.748
Uruguay	Renovación del proyecto de fortalecimiento institucional (fase XVI)	399.560	399.560
	Subtotal para A1	4.006.314	4.006.314
	Gastos de apoyo al organismo	280.442	280.442
	Total para A1	4.286.756	4.286.756
A2: Preparación de proyectos para los planes de aplicación de la Enmienda de Kigali relativa a los HFC (PAK)			
Arabia Saudita [a]	Preparación de un PAK (etapa I)	180.000	180.000
	Subtotal para A2	180.000	180.000
	Gastos de apoyo al organismo	12.600	12.600
	Total para A2	192.600	192.600
A3: Preparación de un proyecto piloto para mantener y/o mejorar la eficiencia energética de las tecnologías y equipos de sustitución en el contexto de la reducción de los HFC de conformidad con la decisión 91/65[2]			
Botswana	A3.1: Preparación de un proyecto para mejorar la eficiencia energética	30.000	30.000
Türkiye	A3.2: Preparación de un proyecto para mejorar la eficiencia energética	30.000	30.000
	Subtotal para A3	60.000	60.000
	Gastos de apoyo al organismo	4.200	4.200
	Total para A3	64.200	64.200
	Total para A1, A2, A3	4.246.314	4.246.314
	Gastos de apoyo al organismo para A1, A2, A3	297.242	297.242
	Total general	4.543.556	4.543.556

[a] Con la ONUDI y el PNUMA como organismos de ejecución cooperantes

[2] En adelante, denominada “preparación de un proyecto piloto para mantener y/o mejorar la eficiencia energética”.

SECCIÓN A: ACTIVIDADES RECOMENDADAS PARA APROBACIÓN GENERAL

A1: Renovación de proyectos de fortalecimiento institucional

Descripción del proyecto

2. El PNUD ha presentado solicitudes de renovación de proyectos de fortalecimiento institucional para los países que figuran en la sección A1 del cuadro 1. Las descripciones de estos proyectos figuran en el anexo I del presente documento.

Observaciones de la Secretaría

3. La Secretaría examinó las solicitudes de renovación de siete proyectos de fortalecimiento institucional presentadas por el PNUD en nombre de los Gobiernos interesados, a la luz de las directrices[3] y las decisiones pertinentes en materia de admisibilidad y niveles de financiamiento. Las solicitudes se cotejaron con los planes de trabajo originales de las fases anteriores, los datos del programa de país y del artículo 7, los informes más recientes sobre la ejecución de sus planes de gestión para la eliminación de los HCFC (PGEH), el informe sobre la marcha de las actividades del organismo y, en su caso, las decisiones pertinentes de las Reuniones de las Partes. Se observó que los siete países han presentado sus datos de 2025 del programa de país y del artículo 7 y cumplen las metas de control del Protocolo de Montreal, y que el consumo anual de HCFC y HFC notificado no supera el consumo máximo anual permitido que se indica en sus Acuerdos de PGEH y de PAK con el Comité Ejecutivo. Asimismo, todas las solicitudes presentadas incluían una evaluación de los indicadores de gestión, del riesgo y la sostenibilidad del proyecto y del logro de los objetivos de fortalecimiento institucional, de conformidad con la decisión 91/63 b).

Recomendaciones de la Secretaría

4. La Secretaría recomienda la aprobación general de las solicitudes de renovación de proyectos de fortalecimiento institucional para Colombia, Costa Rica, Georgia, la India, Malasia, el Pakistán y el Uruguay con los niveles de financiamiento indicados en la sección A1 del cuadro 1 del presente documento. El Comité Ejecutivo puede estimar oportuno comunicar a los Gobiernos mencionados las observaciones formuladas en el anexo II del presente documento.

A2: Preparación de proyectos para los planes de aplicación de la Enmienda de Kigali relativa a los HFC

Descripción del proyecto

5. El PNUD, en calidad de organismo de ejecución principal, con el PNUMA y la ONUDI como organismos de ejecución cooperantes, ha presentado una solicitud para la preparación de la etapa I del PAK para un país, como se indica en la sección A2 del cuadro 1.

6. El PNUMA, en calidad de organismo cooperante para la Arabia Saudita, ha solicitado en sus enmiendas al programa de trabajo USD 50.000 para la preparación de proyectos.[4] La ONUDI, en calidad de organismo de ejecución cooperante para la Arabia Saudita, ha solicitado en sus enmiendas al programa de

[3] Decisión 91/63: b) aprobar el formato actualizado de los informes finales y de las solicitudes de prórroga del financiamiento para fortalecimiento institucional, así como los indicadores de gestión correspondientes; y c) pedir a los países acogidos al artículo 5 que, por mediación de los organismos bilaterales y de ejecución, utilicen el formato actualizado mencionado en el inciso b) anterior para todas las solicitudes de renovación de proyectos de fortalecimiento institucional a partir de la primera reunión del Comité Ejecutivo de 2023.

[4] UNEP/OzL.Pro/ExCom/99/33

trabajo USD 300.000[5] para la preparación de proyectos de inversión del PAK en los sectores de fabricación de equipos de aire acondicionado y refrigeración, espumas y extinción de incendios.[6]

7. El PNUD, en calidad de organismo de ejecución principal, ha facilitado una descripción de las actividades necesarias para la preparación de la etapa I del PAK y de los costos correspondientes de cada actividad, utilizando el formato de las solicitudes de preparación de proyectos para el PAK.

Observaciones de la Secretaría

8. Al examinar esta solicitud de preparación de la etapa I del PAK para la Arabia Saudita, la Secretaría tuvo en cuenta las directrices para la preparación de los PAK que figuran en la decisión 87/50, así como las actividades propuestas para la preparación del proyecto y su vinculación con las actividades de apoyo y otros proyectos relativos a los HFC en el país. La presentación incluía datos sobre el consumo de HFC y mezclas de HFC de 2024 y 2025. El PNUD señaló que, al tratarse de un país acogido al artículo 5, grupo 2, el período oficial de notificación de HFC de la Arabia Saudita había comenzado en 2024. Las actividades de preparación del proyecto comprenden un estudio nacional y la recopilación de datos sobre el consumo de HFC, el análisis del uso de HFC y de alternativas, un examen de las iniciativas, políticas y reglamentaciones nacionales pertinentes relativas a la reducción de los HFC, una evaluación de necesidades en el sector de servicio técnico de equipos de refrigeración y aire acondicionado, la preparación de planes de comunicación y actividades de sensibilización, y la elaboración de una estrategia general de reducción de los HFC.

9. La presentación también incluía actividades de preparación de proyectos de inversión en los sectores de fabricación de equipos de aire acondicionado y refrigeración, espumas y extinción de incendios (que preparará la ONUDI). Se incluían tres empresas de refrigeración, ocho de aire acondicionado, ocho de espuma de poliuretano y dos de extinción de incendios. En el sector de espumas, la evaluación determinará los HFC contenidos en los polioles premezclados de importación y aplicará la decisión 96/52, cuando proceda. En cuanto al consumo de HFC por sectores y otros datos de empresas fabricantes de la Arabia Saudita, se indicó que por el momento no se dispone de ellos. No obstante, esta información se completará durante la preparación del proyecto. Las actividades de preparación del proyecto correspondientes al componente de inversión comprenden la recopilación de datos en cada empresa, consultas con partes interesadas y expertos, el diseño y la validación del proyecto, consultas nacionales y la elaboración de la propuesta final.

10. La Secretaría señaló que el país había ratificado la Enmienda de Kigali,[7] que el Gobierno había presentado una carta de acuerdo en apoyo a la preparación del proyecto y que el financiamiento solicitado se ajustaba a lo dispuesto en la decisión 87/50 c) y f). El PNUD indicó que la preparación del proyecto para el PAK se basaría en la labor realizada en el marco de las actividades de apoyo para la reducción de los HFC, que había contribuido a la ratificación de la Enmienda de Kigali en el país.

Recomendaciones de la Secretaría

11. La Secretaría recomienda la aprobación general de la preparación del proyecto para la etapa I del plan de aplicación de la Enmienda de Kigali relativa a los HFC para la Arabia Saudita, con los niveles de financiamiento indicados en la sección A2 del cuadro 1.

[5] La presentación original incluía USD 170.000 para el componente de inversión del PAK para la ONUDI; durante el análisis del proyecto, la cifra se revisó y quedó fijada en USD 300.000 de conformidad con la decisión 87/50 f).
[6] UNEP/OzL.Pro/ExCom/99/34
[7] La Arabia Saudita aceptó la Enmienda de Kigali el 10 de septiembre de 2025.

A3: Preparación de un proyecto piloto para mantener y/o mejorar la eficiencia energética de las tecnologías y equipos de sustitución en el contexto de la reducción de los HFC de conformidad con la decisión 91/65

Descripción del proyecto

12. El PNUD, en calidad de organismo de ejecución designado, ha presentado dos solicitudes[8] para la preparación de proyectos piloto destinados a mantener y/o mejorar la eficiencia energética de las tecnologías y equipos de sustitución en el contexto de la reducción de los HFC, como se indica en la sección A3 del cuadro 1. Las propuestas se presentaron de conformidad con la decisión 91/65. La Secretaría examinó las propuestas de proyecto conforme a los criterios establecidos en la decisión 91/65. El PNUD confirmó que ambos proyectos se presentarán en la 100ª reunión.

A3.1 Preparación de un proyecto para mejorar la eficiencia energética en el sector de refrigeración comercial de Botswana

Descripción del proyecto

13. El proyecto que se preparará en el sector de refrigeración comercial de Botswana demostrará el uso de sistemas de refrigeración con R-290 y R-290/R-744 en instalaciones piloto seleccionadas, a saber, una cámara frigorífica y un supermercado. Las actividades de preparación comprenderán: la selección de los emplazamientos piloto y la evaluación de los sistemas de refrigeración existentes, el uso de HFC, las prácticas de servicio técnico, las necesidades de refrigeración y el consumo eléctrico mediante la recopilación de datos y evaluaciones sobre el terreno; la prestación de apoyo técnico para la selección de tecnologías alternativas de alta eficiencia energética y bajo potencial de calentamiento atmosférico (PCA), incluidas evaluaciones preliminares de factibilidad, seguridad y compatibilidad, el diseño del sistema y estimaciones indicativas de costos; la consulta a las partes interesadas pertinentes para confirmar los requisitos de ejecución; y la elaboración de la propuesta de proyecto piloto de conformidad con la decisión 91/65, que incluirá las actividades de ahorro energético, los costos asociados, los efectos previstos, las disposiciones de ejecución y un método simplificado de seguimiento y verificación.

Observaciones de la Secretaría

14. La Secretaría señaló que, dado que la 100ª reunión es la última en la que pueden presentarse proyectos de conformidad con la decisión 91/65, solo quedarían tres meses entre la aprobación del financiamiento para la preparación del proyecto y el plazo de presentación. Por consiguiente, pidió al PNUD que confirmara si podría prepararse una propuesta de proyecto de alta calidad en ese plazo, de acuerdo con lo indicado en el párrafo 91 del informe de la 98ª reunión,[9] habida cuenta de que aún no se habían finalizado las opciones tecnológicas, los datos de referencia, las configuraciones de los sistemas ni las estimaciones de costos. El PNUD confirmó que el proyecto podría prepararse y presentarse en el plazo de tres meses sobre la base de los datos de mercado y de uso de refrigerantes ya obtenidos en el marco de la etapa I del PAK de Botswana, aprobada recientemente, de la experiencia regional con sistemas similares de refrigeración para el comercio minorista y de consultas con posibles beneficiarios. El PNUD también presentó un calendario detallado de preparación de 12 semanas, en el que se confirmaba que la propuesta estaría lista para su presentación en la 100ª reunión. En cuanto a las normas mínimas de eficiencia energética, el PNUD indicó que actualmente solo se aplican a pequeños electrodomésticos y no abarcan los sistemas de refrigeración comercial ni las instalaciones de cámaras frigoríficas. El PNUD señaló asimismo que el proyecto apoyaría la mejora de las prácticas de eficiencia energética mediante actividades de sensibilización, capacitación y la

[8] La presentación también incluía una solicitud de financiamiento para la preparación de proyectos de conformidad con la decisión 94/60 para Kirguistán. No obstante, tras las negociaciones, dicha solicitud se retiró y se revisó el programa de trabajo.

[9] UNEP/OzL.Pro/ExCom/98/64

introducción de tecnologías de alta eficiencia energética y bajo PCA, lo que ayudaría a fundamentar la futura formulación de políticas.

15. En cuanto a la replicabilidad, el PNUD afirmó que esta se promovería mediante programas de sensibilización específicos, capacitación para técnicos de refrigeración y aire acondicionado y operadores de supermercados, la difusión de las enseñanzas extraídas en los emplazamientos piloto y la colaboración con otros minoristas interesados en adoptar sistemas de refrigeración de alta eficiencia energética y bajo PCA. El proyecto también documentaría los resultados de rendimiento y las consideraciones de costos para favorecer una adopción más amplia en el mercado.

A3.2 Preparación de un proyecto para mejorar la eficiencia energética en el sector de refrigeración comercial de Türkiye

Descripción del proyecto

16. El proyecto que se preparará en el sector de refrigeración comercial de Türkiye demostrará tecnologías de refrigeración de alta eficiencia energética y bajo PCA, viables desde el punto de vista técnico y económico, en dos o tres emplazamientos piloto seleccionados del comercio minorista de alimentos, con especial atención a los sistemas de refrigeración centralizados de mayor capacidad y a las instalaciones de almacenamiento en frío asociadas. Las actividades de preparación comprenderán la selección de emplazamientos piloto representativos y las evaluaciones de referencia de estos; la evaluación y el diseño de opciones tecnológicas adecuadas de alta eficiencia energética y bajo PCA, con análisis de factibilidad técnica y económica; la consulta a las partes interesadas; y la preparación de la propuesta completa de proyecto piloto de conformidad con la decisión 91/65, que incluya las mejoras previstas de eficiencia energética, las reducciones del consumo de HFC, los costos, las disposiciones de ejecución y seguimiento y la replicabilidad, evitando toda duplicación con las actividades financiadas en el marco del PAK de Türkiye.

Observaciones de la Secretaría

17. La Secretaría pidió que se confirmara que el proyecto podría presentarse en la 100ª reunión. El PNUD confirmó que se prepararía y presentaría una propuesta de proyecto de alta calidad en un plazo aproximado de tres meses a partir de la aprobación del financiamiento preparatorio, sobre la base de la información ya disponible del PAK de Türkiye y de otras fuentes pertinentes. La preparación se centraría en la determinación de los emplazamientos piloto, la evaluación de las opciones tecnológicas y la elaboración de los aspectos técnicos, económicos, ambientales y financieros de la propuesta, en coordinación con la Oficina Nacional del Ozono. El PNUD también presentó un calendario semanal en el que se mostraba que el proyecto estaría listo para su presentación en la 100ª reunión.

18. La Secretaría pidió aclaraciones sobre las diferencias entre el proyecto propuesto y el proyecto de demostración ya aprobado para el sector de refrigeración comercial en el marco de la etapa I del PAK de Türkiye, y sobre la forma de evitar la duplicación con este. El PNUD explicó que ambos proyectos son complementarios: la actividad del PAK favorece la adopción de equipos de refrigeración a base de CO_2 en el sector HoReCa[10], en el que los usos de refrigeración suelen estar asociados a establecimientos individuales, como la refrigeración de cocinas, cámaras frigoríficas, congeladores y otros equipos de refrigeración distribuidos, mientras que el proyecto propuesto se dirigiría a determinados supermercados de tamaño mediano y a usos asociados al comercio minorista de alimentos o al almacenamiento en frío, que presentan capacidades, configuraciones, perfiles operativos y características de consumo energético distintos. Los usos concretos y los emplazamientos piloto se confirmarían durante la preparación del proyecto.

19. El PNUD explicó además que el proyecto propuesto aprovecharía el entorno propicio creado en el marco del PAK, si bien se dirigiría a un segmento distinto de usuarios finales. En la selección de los

[10] Hoteles, restaurantes y cafeterías

emplazamientos piloto se daría prioridad a marcas nacionales de distribución alimentaria con gran replicabilidad en sus redes de establecimientos comerciales, lo que complementaría la intervención del PAK en lugar de duplicarla.

20. En cuanto al cofinanciamiento por parte de los beneficiarios, que formaba parte del proyecto de demostración de la etapa I del PAK, el PNUD afirmó que el enfoque de financiamiento seguiría el principio establecido en el PAK, según el cual los beneficiarios contribuyen a los costos de inversión. Durante la fase de preparación se determinarían el nivel y la estructura apropiados del apoyo financiero en función de los sobrecostos de cada emplazamiento y de los obstáculos a la adopción, y se garantizaría una contribución adecuada de los beneficiarios.

21. En cuanto a las normas mínimas de eficiencia energética, el PNUD explicó que Türkiye cuenta con requisitos obligatorios de eficiencia energética y diseño ecológico armonizados con los de la UE para los equipos de refrigeración pertinentes, en particular las vitrinas refrigeradas de supermercados. No obstante, estos requisitos se aplican principalmente a equipos individuales que funcionan en condiciones normalizadas y no establecen normas mínimas de eficiencia energética para los sistemas integrados de refrigeración de supermercados. Por consiguiente, el proyecto propuesto complementaría el marco reglamentario vigente mediante la evaluación del rendimiento de las tecnologías de bajo PCA integradas en sistemas de refrigeración completos en condiciones operativas reales del comercio minorista.

22. El PNUD solicitó inicialmente USD 50.000 para esta preparación. Tras las negociaciones, la cifra se revisó y quedó fijada en USD 30.000, más gastos de apoyo al organismo.

Recomendaciones de la Secretaría

23. La Secretaría recomienda la aprobación general de la preparación de proyectos piloto para mejorar la eficiencia energética en el sector de refrigeración comercial de Botswana y Türkiye en el contexto de la reducción de los HFC, con los niveles de financiamiento indicados en la sección A3 del cuadro 1.

Annex I

INSTITUTIONAL STRENGTHENING PROJECT PROPOSALS

Colombia: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US $):			
	Phase I:	Mar-94	317,790
	Phase II:	Mar-98	212,000
	Phase III:	Mar-00	212,000
	Phase IV:	Nov-02	275,596
	Phase V:	Apr-05	275,586
	Phase VI:	Jul-07	275,283
	Phase VII:	Jul-09	275,587
	Phase VIII:	Jul-11	275,600
	Phase IX:	Jul-13	275,444
	Phase X:	May-15	275,592
	Phase XI:	Jul-17	352,768
	Phase XII:	May-19	352,768
	Phase XIII:	Nov-21	352,768
	Phase XIV	Dec-23	730,230
		Total:	4,459,012
Amount requested for renewal (phase XV) (US $):			730,230
Amount recommended for approval for phase XV (US $):			730,230
Agency support costs (US $):			51,116
Total cost of institutional strengthening phase XV to the Multilateral Fund (US $):			781,346
Date of approval of country programme:			1994
Date of approval of HCFC phase-out management plan:			2010
Date of approval of Kigali HFC implementation plan:			2024
Baseline consumption of controlled substances (ODP tonnes for ODS/CO_2-eq tonnes for HFCs):			
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)			0.6
(b) Annex C, Group I (HCFCs) (average 2009-2010)			225.6
(c) Annex E, (methyl bromide) (average 1995-1998)			110.1
(d) Annex F (HFCs) (average 2020-2022 plus 65% of HCFC baseline)			8,652,982
Latest reported ODS consumption (2025) (ODP tonnes) as per Article 7:			
(a) Annex B, Group III (methyl chloroform)			0.00
(b) Annex C, Group I (HCFCs)			9.67
(c) Annex E, (methyl bromide)			0.00
		Total:	9.67
(d) Annex F (HFCs) (CO_2-eq tonnes) as per Article 7			6,346,065
Year of reported country programme implementation data:			2025
Amount approved for projects (as at June 2026) (US $):			55,141,857
Amount disbursed (as at December 2025) (US $):			40,960,177
ODS to be phased out (as at June 2026) (ODP tonnes):			2,070.6
ODS phased out (as at December 2025) (ODP tonnes):			2,027.0
HFCs to be phased out (as at June 2026) (CO_2-eq tonnes):			950,367.4
HFCs phased out (as at December 2025) (CO_2-eq tonnes):			0

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

Summary of activities	Funds approved (US $)
(a) Investment projects:	31,732,946
(b) Institutional strengthening:	4,459,012

(c) Project preparation, technical assistance, training, and other non-investment projects:	18,949,899
Total:	55,141,857
(d) HFC activities funded from additional voluntary contributions	250,000

Progress report

2. During phase XIV of its institutional strengthening project, Colombia continued implementation of the Montreal Protocol and activities to control ozone-depleting substances and HFCs; successfully implemented its HFC licensing and quota system; sustained control over HCFCs, achieving a 93.4 per cent reduction in consumption against the baseline; coordinated with government and private-sector stakeholders; and strengthened the capacities of over 800 enforcement officers to prevent illegal trade. Colombia also continued South-South cooperation activities. The country fully achieved seven performance indicators during the current phase.

Plan of action

3. In the upcoming phase, Colombia will work towards achieving and maintaining the Montreal Protocol reduction targets for the 2027–2029 period, including a 94 per cent reduction in HCFC consumption and an 18.3 per cent reduction in HFC consumption. Colombia will maintain and strengthen the regulatory and enforcement framework; reinforce inter-institutional coordination to combat illegal trade; oversee the implementation of the HPMP and KIP; and continue integrating the gender policy into relevant activities. These efforts will support the continued alignment of Colombia's national strategy with its commitments under the Montreal Protocol and its long-term climate policy.

Sustainability and risk assessment

4. The sustainability of the results achieved by the project will be supported by the mainstreaming of Montreal Protocol policies into Colombia's relevant national plans and strategies, including the NDC and the Long-Term Climate Strategy (E2050), and by continued inter-institutional coordination. The main identified risks, namely exchange rate volatility and staff turnover within government institutions, will be mitigated through close budget monitoring and the continued application of established coordination mechanisms.

Costa Rica: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US $):			
	Phase I:	Oct-92	213,160
	Phase II:	Feb-97	108,087
	Phase III:	Mar-99	105,568
	Phase IV:	Dec-01	104,224
	Phase V:	Dec-03	139,737
	Phase VI:	Nov-05	138,068
	Phase VII:	Nov-07	127,917
	Phase VIII:	Nov-09	140,502
	Phase IX:	Nov-11	140,513
	Phase X:	Dec-13	140,513
	Phase XI:	Nov-15	179,659
	Phase XII:	Nov-17	174,459
	Phase XIII:	Dec-19	179,857
	Phase XIV:	Nov-21	179,857
	Phase XV	Dec-23	372,304
		Total:	2,444,425
Amount requested for renewal (phase XVI) (US $):			372,304
Amount recommended for approval for phase XVI (US $):			372,304
Agency support costs (US $):			26,061
Total cost of institutional strengthening phase XVI to the Multilateral Fund (US $):			398,365
Date of approval of country programme:			1992
Date of approval of HCFC phase-out management plan:			2011
Date of approval of Kigali HFC implementation plan:			2024
Baseline consumption of controlled substances (ODP tonnes for ODS/CO_2-eq tonnes for HFCs):			
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)			0.0
(b) Annex C, Group I (HCFCs) (average 2009-2010)			14.1
(c) Annex E (methyl bromide) (average 1995-1998)			342.5
(d) Annex F (HFCs) (average 2020-2022 plus 65% of HCFC baseline)			1,450,799
Latest reported ODS consumption (2025) (ODP tonnes) as per Article 7:			
(a) Annex B, Group III (methyl chloroform)			0.00
(b) Annex C, Group I (HCFCs)			2.63
(c) Annex E (methyl bromide)			0.00
		Total:	2.63
(d) Annex F (HFCs) (CO_2-eq tonnes) as per Article 7			1,349,032
Year of reported country programme implementation data:			2025
Amount approved for projects (as at June 2026) (US $):			16,119,242
Amount disbursed (as at December 2025) (US $):			14,281,916
ODS to be phased out (as at June 2026) (ODP tonnes):			814.7
ODS phased out (as at December 2025) (ODP tonnes):			810.1
HFCs to be phased out (as at June 2026) (CO_2-eq tonnes):			126,839.4
HFCs phased out (as at December 2025) (CO_2-eq tonnes):			0

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

Summary of activities	**Funds approved (US $)**
(a) Investment projects:	9,584,424
(b) Institutional strengthening:	2,444,425
(c) Project preparation, technical assistance, training, and other non-investment projects:	4,090,393
Total:	16,119,242
(d) HFC activities funded from additional voluntary contributions	150,000

Progress report

6. During phase XV of its institutional strengthening project, Costa Rica continued implementation of the Montreal Protocol; maintained its licensing and quota systems for HCFCs and HFCs, ensuring that imports remained within established limits; continued the phase-out of HCFCs, achieving a reduction of nearly 80 per cent in consumption compared with the baseline; implemented the HFC quota mechanism in accordance with the Kigali Amendment timeline; strengthened trade controls and inter-institutional coordination; supported the recovery and environmentally sound disposal of obsolete refrigerants and refrigeration and air-conditioning (RAC) equipment; and conducted training, awareness-raising and institutional strengthening activities. The country fully achieved five performance indicators and partially achieved two during the current phase.

Plan of action

7. In the upcoming phase, Costa Rica will continue to strengthen the implementation of the Montreal Protocol and the Kigali Amendment through the control and monitoring of HCFC and HFC consumption. Costa Rica will monitor the implementation of national projects; strengthen institutional and technical capacities; update and implement the Efficient and Sustainable Refrigeration and Air Conditioning Plan; promote the recovery and environmentally sound disposal of refrigerants and RAC equipment; and carry out awareness-raising and training activities for key stakeholders. Costa Rica will also reinforce coordination with the RAC sector and national institutions and continue to mainstream gender equality and social inclusion in the implementation of project activities.

Sustainability and risk assessment

8. The sustainability of the project's results will be supported by strengthening the institutional capacity of the National Ozone Agency, maintaining the licensing and quota systems for HCFCs and HFCs, enhancing the technical capacities of key stakeholders, and consolidating inter-institutional coordination and collaboration with the RAC sector. The main identified risk is the limited operational capacity to manage the increasing volume of activities resulting from the Montreal Protocol and the Kigali Amendment. Phase XVI will address this risk by strengthening the planning, coordination, and institutional capacity of the National Ozone Agency to ensure the continuity and sustainability of the actions implemented.

Georgia: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US $):			
	Phase I:	Nov-97	70,000
	Phase II:	Dec-00	46,700
	Phase III:	Apr-03	60,667
	Phase IV:	Apr-05	60,667
	Phase V:	Jul-07	60,667
	Phase VI:	Apr-09	60,667
	Phase VII:	Apr-11	60,667
	Phase VIII:	Apr-13	60,667
	Phase IX:	May-15	60,667
	Phase X:	Jun-18	85,000
	Phase XI:	Jun-20	85,000
	Phase XII	Jun-23	180,000
		Total:	891,369*
Amount requested for renewal (phase XIII) (US $):			180,000
Amount recommended for approval for phase XIII (US $):			180,000
Agency support costs (US $):			12,600
Total cost of institutional strengthening phase XIII to the Multilateral Fund (US $):			192,600
Date of approval of country programme:			1997
Date of approval of HCFC phase-out management plan:			2011
Date of approval of Kigali HFC implementation plan:			2025
Baseline consumption of controlled substances (ODP tonnes):			
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)			0.0
(b) Annex C, Group I (HCFCs) (average 2009-2010)			5.3
(c) Annex E (methyl bromide) (average 1995-1998)			13.7
(d) Annex F (HFCs) (average 2020-2022 plus 65% of HCFC baseline)			813,152
Latest reported ODS consumption (2025) (ODP tonnes) as per Article 7:			
(a) Annex B, Group III (methyl chloroform)			0.00
(b) Annex C, Group I (HCFCs)			0.45
(c) Annex E (methyl bromide)			0.00
		Total:	0.45
(d) Annex F (HFCs) (CO_2-eq tonnes) as per Article 7			477,552
Year of reported country programme implementation data:			2025
Amount approved for projects (as at June 2026) (US $):			4,744,065
Amount disbursed (as at December 2025) (US $):			3,565,770
ODS to be phased out (as at June 2026) (ODP tonnes):			90.9
ODS phased out (as at December 2025) (ODP tonnes):			90.3
HFCs to be phased out (as at June 2026) (CO_2-eq tonnes):			95,792.0
HFCs phased out (as at December 2025) (CO_2-eq tonnes):			0

*Including funding approved for phase V at the 51st meeting

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

Summary of activities	**Funds approved (US $)**
(a) Investment projects:	1,659,569
(b) Institutional strengthening:	891,369
(c) Project preparation, technical assistance, training and other non-investment projects:	2,193,127
Total:	4,744,065
(d) HFC activities funded from additional voluntary contributions	95,000

Progress report

10. During phase XII of its institutional strengthening project, Georgia continued implementation of the Montreal Protocol; updated its national import quota framework to cover all Montreal Protocol-controlled substances; further developed its Electronic Refrigerant Management System; reported Article 7 and Country Programme data; strengthened customs and enforcement capacities through targeted training; and coordinated with government institutions and relevant stakeholders. Georgia also conducted awareness-raising activities, including World Ozone Day events, continued participation in regional network and international Montreal Protocol meetings, and incorporated gender considerations into project implementation through sex-disaggregated participation data and targeted capacity-building activities. The country fully achieved seven performance indicators during the current phase.

Plan of action

11. In the upcoming phase, Georgia will continue to strengthen the implementation of the Montreal Protocol and the Kigali Amendment. Georgia will strengthen the legislative and regulatory framework; enhance the implementation of the licensing and quota system; improve the Electronic Refrigerant Management System (ERMS); and ensure the timely preparation and submission of Article 7 and Country Programme data. Georgia will also strengthen the capacities of customs officers, environmental inspectors and other relevant stakeholders; reinforce institutional coordination and stakeholder engagement; conduct awareness-raising activities, including World Ozone Day events; and continue to integrate gender considerations into project implementation. The national ozone unit (NOU) will continue active participation in regional and international meetings of the Montreal Protocol. Phase XIII of the institutional strengthening project will be implemented under the National Implementation Modality, with MEPA serving as the implementing partner.

Sustainability and risk assessment

12. The sustainability of the project's results will be supported by continued institutional support for the NOU, strengthened inter-agency coordination through established governance mechanisms, targeted technical assistance and capacity building, and the institutionalization of knowledge and procedures through the ERMS and other relevant tools. The main identified risks relate to staff turnover and institutional capacity constraints, delays in the development and adoption of regulatory measures, competing priorities among partner institutions, and changes in the broader political and economic environment. These risks will be mitigated through continued coordination and regular engagement with relevant government agencies, enforcement authorities, the refrigeration and air-conditioning sector, and other key stakeholders.

India: Renewal of institutional strengthening

Summary of the project and country profile		
Implementing agency:		UNDP
Amounts previously approved for institutional strengthening (US $):		
	Phase I: Oct-92	428,929
	Phase II: Oct-96	287,100
	Phase III: Mar-99	287,100
	Phase IV: Jul-01	285,796
	Phase V: Dec-03	370,310
	Phase VI: Nov-05	373,230
	Phase VII Apr-08	373,230
	Phase VIII: Apr-10 & Nov-11	373,230
	Phase IX: Apr-12	373,230
	Phase X: May-14	236,392
	Phase XI: May-16	477,682
	Phase XII: Dec-19	477,734
	Phase XIII: Nov-21	477,734
	Phase XIV: Dec-23	988,909
	Total:	5,810,606
Amount requested for renewal (phase XV) (US $):		988,909
Amount recommended for approval for phase XV (US $):		988,909
Agency support costs (US $):		69,224
Total cost of institutional strengthening phase XV to the Multilateral Fund (US $):		1,058,133
Date of approval of country programme:		1993
Date of approval of HCFC phase-out management plan:		2012
Baseline consumption of controlled substances (ODP tonnes for ODS/CO_2-eq tonnes for HFCs):		
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)		122.2
(b) Annex C, Group I (HCFCs) (average 2009-2010)		1,608.2
(c) Annex E (methyl bromide) (average 1995-1998)		0.0
(d) Annex F (HFCs) (average 2024-2026 plus 65% of HCFC baseline)		Not available
Latest reported ODS consumption (2025) (ODP tonnes) as per Article 7:		
(a) Annex B, Group III (methyl chloroform)		0.0
(b) Annex C, Group I (HCFCs)		45.51
(c) Annex E (methyl bromide)		0.0
	Total:	45.51
(d) Annex F (HFCs) (CO_2-eq tonnes) as per Article 7		80,921,183
Year of reported country programme implementation data:		2025
Amount approved for projects (as at June 2026) (US $):		257,687,308
Amount disbursed (as at December 2025) (US $):		233,004,460
ODS to be phased out (as at June 2026) (ODP tonnes):		24,805.2
ODS phased out (as at December 2025) (ODP tonnes):		29,570.7

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

Summary of activities		**Funds approved (US $)**
(a) Investment projects:		229,886,451
(b) Institutional strengthening:		5,810,606
(c) Project preparation, technical assistance, training, and other non-investment projects:		21,990,251
	Total:	257,687,308
(d) HFC activities funded from additional voluntary contributions		0

Progress report

14. During phase XIV of its institutional strengthening project, India continued implementation of the Montreal Protocol and ODS phase-out activities; met its obligations under the accelerated HCFC phase-out schedule; supported the transition of 158 foam manufacturing enterprises to low-GWP, zero-ODP technologies, resulting in an annual emission reduction of 7.8 million metric tonnes of CO_2 equivalent; strengthened ODS trade monitoring and enforcement capacities through training for Customs and enforcement officers; coordinated the completion of stage II of its HCFC phase-out management plan (HPMP) and initiated stage III of the HPMP; and conducted awareness-raising activities, including state-level campaigns and World Ozone Day celebrations. India also developed technical resources and publications and continued participation in Executive Committee, Open-ended Working Group and Meeting of the Parties meetings. The country fully achieved all seven performance indicators during the current phase.

Plan of action

15. In the upcoming phase, India will continue to consolidate its achievements under the Montreal Protocol and advance the implementation of stage III of the HPMP and preparation of stage I of its Kigali HFC implementation plan (KIP). India will strengthen regulatory enforcement; monitor HCFC-22 production quotas for permissible uses; enforce the ODS (Regulation and Control) Rules; and reinforce coordination with Customs to prevent illegal trade. The Ozone Cell will oversee HPMP implementation and support capacity-building and technical assistance for the refrigeration and air-conditioning (RAC) sector towards the complete phase-out of HCFC consumption by 2030. India will also strengthen stakeholder coordination, support the preparation and implementation of stage I of the KIP, and continue integrating gender considerations into technician training and national ozone unit operations.

Sustainability and risk assessment

16. Phase XV will continue to be implemented under UNDP's National Implementation Modality (NIM), ensuring continued Government ownership and accountability for the project's strategic outcomes and intended results. A Project Steering Committee (PSC)/Project Board, co-chaired by MoEF&CC and UNDP, will provide high-level oversight, strategic guidance, quality assurance, and oversight of risk management. Project risks will be systematically identified, assessed, monitored, and updated throughout implementation in accordance with UNDP procedures. Risk management will incorporate relevant UNDP institutional tools and frameworks, including the Harmonized Approach to Cash Transfers (HACT) micro-assessments, Social and Environmental Screening Procedures (SESP), Private Sector Due Diligence for technology transfer to Micro, Small and Medium Enterprises (MSMEs), and the Enterprise Risk Management (ERM) framework. The project is categorized as Moderate Risk, reflecting the need to pursue innovative technical solutions while maintaining appropriate measures to address potential compliance and implementation risks. Risks will be reviewed periodically by the PSC and updated, as necessary, during project implementation to address emerging regulatory, technology, market, or enforcement challenges.

Malaysia: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US $):			
	Phase I:	Mar-93	306,817
	Phase II:	Oct-96	209,477
	Phase III:	Nov-98	178,116
	Phase IV:	Dec-00	204,006
	Phase V:	Nov-02	262,367
	Phase VI:	Dec-04	279,500
	Phase VII:	Nov-07	277,499
	Phase VIII:	Jul-09	279,268
	Phase IX:	Jul-11	279,500
	Phase X:	Jul-13	279,500
	Phase XI:	Nov-15	357,760
	Phase XII:	Nov-17	357,760
	Phase XIII:	Dec-19	357,760
	Phase XIV:	Nov-21	357,760
	Phase XV	Dec-23	740,563
		Total:	4,727,653
Amount requested for renewal (phase XVI) (US $):			740,563
Amount recommended for approval for phase XVI (US $):			740,563
Agency support costs (US $):			51,839
Total cost of institutional strengthening phase XVI to the Multilateral Fund (US $):			792,402
Date of approval of country programme:			1992
Date of approval of HCFC phase-out management plan:			2011
Date of approval of Kigali HFC implementation plan:			2023
Baseline consumption of controlled substances (ODP tonnes for ODS/CO_2-eq tonnes for HFCs):			
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)			49.5
(b) Annex C, Group I (HCFCs) (average 2009-2010)			515.8
(c) Annex E (methyl bromide) (average 1995-1998)			14.6
(d) Annex F (HFCs) (average 2020-2022 plus 65% of HCFC baseline)			26,703,074
Latest reported ODS consumption (2025) (ODP tonnes) as per Article 7:			
(a) Annex B, Group III (methyl chloroform)			0.00
(b) Annex C, Group I (HCFCs)			115.15
(c) Annex E (methyl bromide)			0.00
		Total:	115.15
(d) Annex F (HFCs) (CO2-eq tonnes) as per Article 7			14,603,658
Year of reported country programme implementation data:			2025
Amount approved for projects (as at June 2026) (US $):			81,579,334
Amount disbursed (as at December 2025) (US $):			70,414,570
ODS to be phased out (as at June 2026) (ODP tonnes):			7,135.8
ODS phased out (as at December 2025) (ODP tonnes):			6,920.6
HFCs to be phased out (as at June 2026) (CO_2-eq tonnes):			921,738.5
HFCs phased out (as at December 2025) (CO_2-eq tonnes):			0

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

Summary of activities	**Funds approved (US $)**
(a) Investment projects:	65,502,655
(b) Institutional strengthening:	4,727,653
(c) Project preparation, technical assistance, training, and other non-investment projects:	11,349,026
Total:	81,579,334
(d) HFC activities funded from additional voluntary contributions	250,000

Progress report

18. During phase XV of its institutional strengthening project, Malaysia continued implementation of the Montreal Protocol and ODS phase-out activities and advanced implementation of the Kigali Amendment; monitored ODS and HFC consumption; continued implementation of its HCFC phase-out management plan (HPMP) and Kigali HFC implementation plan (KIP); coordinated with national institutions and relevant stakeholders; supported enforcement of control measures; and conducted gender-sensitive and gender-responsive awareness-raising and training activities. The country fully achieved seven performance indicators during the current phase.

Plan of action

19. In the upcoming phase, Malaysia will continue to strengthen the implementation of the Montreal Protocol and the Kigali Amendment and sustain its ODS phase-out and HFC phase-down efforts. Malaysia will strengthen the management, monitoring and enforcement of controlled substances; reinforce institutional capacity and inter-agency coordination; and continue the implementation and enforcement of the national regulatory framework. Malaysia will also conduct awareness-raising and capacity-building activities to strengthen stakeholder engagement and support energy efficiency in the cooling sector.

Sustainability and risk assessment

20. Phase XVI will continue to be implemented under UNDP's National Implementation Modality (NIM), supporting strong national ownership by the Government of Malaysia, with the Department of Environment serving as the Implementing Partner and co-chairing the Project Board. UNDP will provide implementation support, including financial, procurement, and operational oversight, in accordance with its applicable rules and procedures. Project risks will be systematically identified, assessed, monitored, and managed in accordance with UNDP's Enterprise Risk Management (ERM) framework and relevant institutional tools and procedures, including the Harmonized Approach to Cash Transfers (HACT), Social and Environmental Screening Procedures (SESP), and applicable procurement and due diligence mechanisms. Risks will be continuously monitored and updated in the project Risk Log under the oversight of the Project Board. Overall, the project is assessed as presenting low to moderate risks, with appropriate mitigation measures in place to support effective implementation and the sustainability of ODS phase-out and HFC phase-down activities.

Pakistan: Renewal of institutional strengthening

Summary of the project and country profile		
Implementing agency:		UNDP
Amounts previously approved for institutional strengthening (US $):		
	Phase I: Sept-94	254,958
	Phase II: Dec-01	172,564
	Phase III: Dec-03	221,991
	Phase IV: Mar-07 and Nov-07	112,233
	Phase V: Apr-09	94,663
	Phase VI: Dec-10	224,467
	Phase VII: Dec-12	224,467
	Phase VIII: Nov-14	224,467
	Phase IX: Dec-16	224,467
	Phase X: Dec-18	286,749
	Phase XI: Jul-21	287,318
	Phase XII Dec-23	594,748
	Total:	2,923,092
Amount requested for renewal (phase XIII) (US $):		594,748
Amount recommended for approval for phase XIII (US $):		594,748
Agency support costs (US $):		41,632
Total cost of institutional strengthening phase XIII to the Multilateral Fund (US $):		636,380
Date of approval of country programme:		1996
Date of approval of HCFC phase-out management plan:		2010
Baseline consumption of controlled substances (ODP tonnes for ODS/CO_2-eq tonnes for HFCs):		
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)		2.30
(b) Annex C, Group I (HCFCs) (average 2009-2010)		248.11
(c) Annex E, (methyl bromide) (average 1995-1998)		14.00
(d) Annex F (HFCs) (average 2024-2026 plus 65% of HCFC baseline)		Not available
Latest reported ODS consumption (2025) (ODP tonnes) as per Article 7:		
(a) Annex B, Group III (methyl chloroform)		0.00
(b) Annex C, Group I (HCFCs)		76.40
(c) Annex E, (methyl bromide)		0.00
	Total:	76.40
(d) Annex F (HFCs) (CO_2-eq tonnes) as per Article 7		12,486,840
Year of reported country programme implementation data:		2025
Amount approved for projects (as at June 2026) (US $):		40,818,700
Amount disbursed (as at December 2025) (US $):		35,919,653
ODS to be phased out (as at June 2026) (ODP tonnes):		2,647.9
ODS phased out (as at December 2025) (ODP tonnes):		2,623.9

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

Summary of activities	**Funds approved (US $)**
(a) Investment projects:	30,708,237
(b) Institutional strengthening:	2,923,092
(c) Project preparation, technical assistance, training, and other non-investment projects:	7,187,371
Total:	40,818,700
(d) HFC activities funded from additional voluntary contributions	0

Progress report

22. During phase XII of its institutional strengthening project, Pakistan continued implementation of the Montreal Protocol; maintained the 67.5 per cent HCFC reduction target under stage III of its HCFC phase-out management plan (HPMP); ratified the Kigali Amendment and strengthened its HFC licensing and monitoring framework; reinforced HCFC import controls and measures to prevent illegal trade; reported Article 7 and Country Programme data; and conducted customs training and awareness-raising activities. Pakistan also completed stage II of its HPMP, continued implementation of stage III, and advanced preparation of stage I of its Kigali HFC implementation plan (KIP). Gender considerations were incorporated into capacity-building and stakeholder consultations. The country fully achieved seven performance indicators during the current phase.

Plan of action

23. In the upcoming phase, Pakistan will continue to strengthen the implementation of the Montreal Protocol and the Kigali Amendment, while advancing stage III of the HPMP towards the complete phase-out of HCFCs by 2030 and preparation of stage I of its KIP. Pakistan will establish its HFC baseline, implement the HFC import freeze from 1 January 2028, administer licensing and quota systems for HCFC-22 and controlled HFCs, and strengthen customs enforcement to prevent illegal trade. The National Ozone Unit will oversee HPMP implementation and KIP preparation and implementation; ensure timely Article 7 and Country Programme data reporting; strengthen institutional and technical capacities, including safety training for low-GWP alternatives; and promote coordination between refrigerant transitions and energy-efficiency standards. Pakistan will also continue to integrate gender considerations into training, certification and project monitoring.

Sustainability and risk assessment

24. Project risks will be systematically identified, monitored, and updated throughout implementation in accordance with UNDP procedures. Risk management will apply relevant UNDP institutional tools, including Harmonized Approach to Cash Transfers (HACT) micro-assessments, Social and Environmental Screening Procedures (SESP), and Private Sector Due Diligence for technology transfer to MSMEs. In line with UNDP's Enterprise Risk Management (ERM) framework, the project is classified as Moderate Risk, reflecting its approach to pursuing innovative technical solutions, including the development of indigenous low-GWP alternatives and the piloting of a single-window system for HFC trade tracking, while maintaining appropriate controls to address potential compliance and implementation risks. Project risks will be regularly reviewed during PSC meetings and updated, as necessary, throughout implementation to address emerging regulatory, technology and market, or enforcement-related challenges.

Uruguay: Renewal of institutional strengthening

Summary of the project and country profile			
Implementing agency:			UNDP
Amounts previously approved for institutional strengthening (US $):			
	Phase I:	Jun-93 & May-96	202,800
	Phase II:	Oct-96	116,000
	Phase III:	Jul-98	115,981
	Phase IV:	Jul-00	115,804
	Phase V:	Jul-02	150,800
	Phase VI:	Jul-04	150,800
	Phase VII:	Jul-06	150,800
	Phase VIII:	Nov-08	150,800
	Phase IX:	Nov-11	150,797
	Phase X:	Dec-13	150,800
	Phase XI:	Nov-15	193,024
	Phase XII:	Nov-17	192,729
	Phase XIII:	Dec-19	193,024
	Phase XIV:	Nov-21	193,024
	Phase XV	Dec-23	399,560
		Total:	2,626,743
Amount requested for renewal (phase XVI) (US $):			399,560
Amount recommended for approval for phase XVI (US $):			399,560
Agency support costs (US $):			27,969
Total cost of institutional strengthening phase XVI to the Multilateral Fund (US $):			427,529
Date of approval of country programme:			1993
Date of approval of HCFC phase-out management plan:			2011
Date of approval of Kigali HFC implementation plan:			2024
Baseline consumption of controlled substances (ODP tonnes for ODS/CO_2-eq tonnes for HFCs):			
(a) Annex B, Group III (methyl chloroform) (average 1998-2000)			0.0
(b) Annex C, Group I (HCFCs) (average 2009-2010)			23.4
(c) Annex E (methyl bromide) (average 1995-1998)			11.2
(d) Annex F (HFCs) (average 2020-2022 plus 65% of HCFC baseline)			1,012,431
Latest reported ODS consumption (2025) (ODP tonnes) as per Article 7:			
(a) Annex B, Group III (methyl chloroform)			0.00
(b) Annex C, Group I (HCFCs)			6.12
(c) Annex E (methyl bromide)			0.00
		Total:	6.12
(d) Annex F (HFCs) (CO_2-eq tonnes) as per Article 7			618,047
Year of reported country programme implementation data:			2025
Amount approved for projects (as at June 2026) (US $):			11,685,185
Amount disbursed (as at December 2025) (US $):			10,002,239
ODS to be phased out (as at June 2026) (ODP tonnes):			545.2
ODS phased out (as at December 2025) (ODP tonnes):			529.9
HFCs to be phased out (as at June 2026) (CO_2-eq tonnes):			55,072.1
HFCs phased out (as at December 2025) (CO_2-eq tonnes):			0

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

Summary of activities	**Funds approved (US $)**
(a) Investment projects:	4,991,226
(b) Institutional strengthening:	2,626,743
(c) Project preparation, technical assistance, training, and other non-investment projects:	4,067,216
Total:	11,685,185
(d) HFC activities funded from additional voluntary contributions	150,000

Progress report

26. During phase XV of its institutional strengthening project, Uruguay continued implementation of the Montreal Protocol; implemented stage III of its HCFC phase-out management plan (HPMP) and stage I of its Kigali HFC implementation plan (KIP); maintained controls on the import, export and transit of HCFCs and HFCs; coordinated with government institutions and private-sector stakeholders; and supported training for refrigeration and air-conditioning technicians on low-GWP alternatives and good refrigeration practices. Uruguay also continued participation in regional and international Montreal Protocol meetings. The country fully achieved six performance indicators and partially achieved one during the current phase.

Plan of action

27. In the upcoming phase, Uruguay will continue to strengthen the implementation of the Montreal Protocol and the Kigali Amendment, maintaining the ban on CFCs, halons and other banned substances and sustaining reductions in HCFC consumption. Uruguay will regulate HFC consumption in line with the Kigali Amendment; promote the transition to low-GWP technologies; and strengthen coordination with public and private stakeholders to enforce HCFC and HFC control measures. The national ozone unit (NOU) will continue to oversee the implementation of stage III of the HPMP and stage I of the KIP, including training on good refrigeration practices and awareness-raising activities. Uruguay will also continue active participation in regional and international meetings of the Montreal Protocol.

Sustainability and risk assessment

28. The sustainability of the project's results will be supported by the integration of the NOU within the National Directorate for Climate Change of the Ministry of Environment, as well as by continued coordination with relevant public- and private-sector stakeholders. This institutional framework supports the alignment of project activities with national priorities and strategies and contributes to the continuity and long-term sustainability of the interventions. While the change in government in 2025 represented a potential implementation risk, Uruguay's strong institutional framework and political stability helped maintain continuity, and no significant impact on project implementation was observed.

Anexo II

CONSIDERACIONES PRELIMINARES DEL COMITÉ EJECUTIVO EN CUANTO A LA RENOVACIÓN DE LOS PROYECTOS DE FORTALECIMIENTO INSTITUCIONAL PRESENTADOS EN LA 99ª REUNIÓN

Colombia

1. El Comité Ejecutivo examinó el informe presentado con la solicitud de renovación del proyecto de fortalecimiento institucional para Colombia (fase XV) y tomó nota de que el Gobierno había notificado los datos de 2023, 2024 y 2025 del artículo 7 a la Secretaría del Ozono y los datos del programa de país a la Secretaría del Fondo, lo que indica que el país cumple el Protocolo de Montreal. El Comité constató que Colombia ha adoptado medidas para eliminar el consumo de SAO, en particular la aplicación de controles a la importación de HCFC y HFC mediante el sistema de licencias y cupos, y la capacitación de funcionarios de aduanas y técnicos de refrigeración. El Comité tomó nota asimismo de las actividades realizadas para facilitar la aplicación de la Enmienda de Kigali. El Comité reconoció los esfuerzos del Gobierno de Colombia y, por consiguiente, confía en que, en los próximos tres años, el país continúe con éxito la ejecución del plan de gestión para la eliminación de los HCFC, del plan de aplicación de la Enmienda de Kigali relativa a los HFC, incluidas la preparación y presentación de su segunda etapa, y de las actividades del proyecto de fortalecimiento institucional, a fin de lograr y mantener las reducciones necesarias del consumo de HCFC y HFC.

Costa Rica

2. El Comité Ejecutivo examinó el informe final y la solicitud de renovación del proyecto de fortalecimiento institucional de Costa Rica. El Comité valoró positivamente los esfuerzos realizados por el Gobierno de Costa Rica para cumplir sus obligaciones en virtud del Protocolo de Montreal y de la Enmienda de Kigali, en particular el mantenimiento y fortalecimiento de los sistemas de control de importaciones y exportaciones de sustancias controladas, la presentación de los informes requeridos y la ejecución de actividades de creación de capacidad dirigidas a las principales partes interesadas nacionales. El Comité Ejecutivo tomó nota además de los avances logrados por Costa Rica en la aplicación de medidas reglamentarias relativas a los HFC y expresó su confianza en que el país siga llevando a cabo sus actividades de manera eficaz durante la próxima fase del proyecto de fortalecimiento institucional.

Georgia

3. El Comité Ejecutivo examinó el informe presentado con la solicitud de renovación del proyecto de fortalecimiento institucional para Georgia (fase XIII) y tomó nota con satisfacción de que el país había notificado los datos del programa de país y del artículo 7 a la Secretaría del Fondo y a la Secretaría del Ozono, respectivamente. El Comité también valoró positivamente que Georgia hubiera ratificado la Enmienda de Kigali el 11 de julio de 2023. El Comité tomó nota de que Georgia ha seguido reforzando su capacidad para aplicar el Protocolo de Montreal, en particular mediante actualizaciones del marco nacional de cupos de importación a fin de ampliar la cobertura reglamentaria a todas las sustancias controladas en virtud del Protocolo de Montreal, un mayor desarrollo del Sistema Electrónico de Manejo de Refrigerantes, y actividades de capacitación para mejorar las capacidades aduaneras y de fiscalización. El Comité tomó nota asimismo de la coordinación permanente entre las instituciones gubernamentales y las partes interesadas pertinentes, las actividades de sensibilización —entre ellas, los actos del Día Mundial del Ozono— y la participación activa en las reuniones de la red regional y en las reuniones internacionales del Protocolo de Montreal. El Comité también tomó nota de la incorporación de consideraciones de género en la ejecución del proyecto, en particular la recopilación de datos de participación desglosados por sexo y la realización de actividades específicas de creación de capacidad. El Comité reconoció los esfuerzos del Gobierno de Georgia y, por consiguiente, confía en que, en los próximos tres años, el país siga reforzando su marco reglamentario e institucional y ejecute con éxito las actividades del proyecto de fortalecimiento institucional a fin de mantener el cumplimiento del Protocolo de Montreal.

India

4. El Comité Ejecutivo examinó el informe presentado con la solicitud de renovación del proyecto de fortalecimiento institucional para la India (fase XV) y tomó nota de los continuos esfuerzos del país por lograr las reducciones previstas y mantener el cumplimiento de sus obligaciones en virtud del Protocolo de Montreal, incluida la fiscalización efectiva de los sistemas de licencias y cupos para controlar el consumo de HCFC de conformidad con su Acuerdo con el Fondo Multilateral. El Comité observó que la India ha adoptado medidas para eliminar el consumo de SAO, en particular la transición del HCFC-141b a alternativas libres de HCFC y de bajo PCA en 158 pequeñas y medianas empresas fabricantes de espumas, así como amplios programas de creación de capacidad y mejora de competencias para funcionarios y fiscalizadores aduaneros. El Comité también tomó nota de las actividades realizadas para facilitar la aplicación de la Enmienda de Kigali, en particular el establecimiento de un sistema de licencias y el control del consumo de HFC y la presentación de informes al respecto durante el período de notificación. El Comité reconoció los esfuerzos del Gobierno de la India y, por consiguiente, confía en que, en los próximos tres años, el país continúe con éxito la ejecución del plan de gestión para la eliminación de los HCFC, la preparación de la etapa I del plan de aplicación de la Enmienda de Kigali relativa a los HFC y la ejecución de las actividades del proyecto de fortalecimiento institucional, además de promover la eficiencia energética en el sector de la refrigeración, a fin de lograr y mantener las reducciones necesarias del consumo de HCFC y HFC y el cumplimiento del Protocolo de Montreal.

Malasia

5. El Comité Ejecutivo examinó el informe presentado con la solicitud de renovación del proyecto de fortalecimiento institucional para Malasia (fase XVI) y tomó nota de que el Gobierno había notificado los datos de 2023, 2024 y 2025 del artículo 7 a la Secretaría del Ozono y los datos del programa de país a la Secretaría del Fondo, lo que indica que el país cumple el Protocolo de Montreal. El Comité observó que Malasia ha adoptado medidas para eliminar el consumo de SAO y reducir el consumo de HFC, entre las que se encuentran la aplicación y fiscalización de los sistemas de licencias y cupos, el fortalecimiento de la coordinación interinstitucional, actividades de creación de capacidad y sensibilización, y la finalización de la etapa II del plan de gestión para la eliminación de los HCFC. El Comité también tomó nota de las actividades realizadas para facilitar la aplicación de la Enmienda de Kigali, en particular la introducción de controles a la importación de HFC en enero de 2024 y los continuos esfuerzos por fortalecer la capacidad nacional de seguimiento y control del consumo de SAO y HFC. El Comité tomó nota asimismo de los esfuerzos del Gobierno por integrar las consideraciones de género en las actividades del Protocolo de Montreal. El Comité reconoció los esfuerzos del Gobierno de Malasia y, por consiguiente, confía en que, en los próximos tres años, el país continúe con éxito las actividades destinadas a la eliminación de los HCFC y la reducción de los HFC, así como las actividades del proyecto de fortalecimiento institucional, a fin de lograr y mantener las reducciones necesarias del consumo de HCFC y HFC y el cumplimiento del Protocolo de Montreal.

Pakistán

6. El Comité Ejecutivo examinó el informe presentado con la solicitud de renovación del proyecto de fortalecimiento institucional para el Pakistán (fase XIII) y tomó nota de los continuos esfuerzos del país por lograr y mantener el cumplimiento de sus obligaciones en virtud del Protocolo de Montreal, en particular la consecución de la meta de reducción del 67,5 por ciento del consumo de HCFC en el marco de la etapa III del plan de gestión para la eliminación de los HCFC y la fiscalización del sistema nacional de licencias y cupos mediante la plataforma electrónica aduanera Web-Based One Customs (WeBOC). El Comité observó que el Pakistán ha adoptado medidas para eliminar el consumo de SAO, entre ellas la finalización de la etapa II y la ejecución en curso de la etapa III del plan de gestión para la eliminación de los HCFC. El Comité también tomó nota de las actividades realizadas para facilitar la aplicación de la Enmienda de Kigali, en particular la ratificación de la Enmienda el 22 de octubre de 2025, la promulgación de modificaciones reglamentarias en virtud de la orden S.R.O. 332(I)/2025 y la notificación de códigos arancelarios detallados

para el seguimiento de las importaciones de HFC. El Comité tomó nota asimismo de la presentación oportuna de los datos del artículo 7 y del programa de país, y de los esfuerzos del Gobierno por integrar criterios con dimensión de género en las actividades del proyecto y en los programas de capacitación aduanera. El Comité reconoció los esfuerzos del Gobierno del Pakistán y, por consiguiente, confía en que, en los próximos tres años, el país siga ejecutando la etapa III del plan de gestión para la eliminación de los HCFC, prepare y presente la etapa I del plan de aplicación de la Enmienda de Kigali relativa a los HFC, establezca su nivel básico nacional de HFC, adopte medidas para la congelación del consumo de HFC en 2028, se coordine con las autoridades de eficiencia energética y ejecute con éxito las actividades del proyecto de fortalecimiento institucional a fin de lograr y mantener el cumplimiento del Protocolo de Montreal.

Uruguay

7. El Comité Ejecutivo examinó el informe presentado con la solicitud de renovación del proyecto de fortalecimiento institucional para el Uruguay (fase XVI) y tomó nota de que el Gobierno había notificado los datos de 2023, 2024 y 2025 del artículo 7 a la Secretaría del Ozono y los datos del programa de país a la Secretaría del Fondo, lo que indica que el país cumple el Protocolo de Montreal. El Comité observó que el Uruguay ha adoptado medidas para eliminar el consumo de SAO y reducir el consumo de HFC, en particular la aplicación de controles a la importación de HCFC y HFC mediante el sistema de licencias y cupos, y la capacitación de funcionarios de aduanas y técnicos de refrigeración. El Comité también tomó nota de las actividades realizadas para facilitar la aplicación de la Enmienda de Kigali, en particular la elaboración del plan de aplicación de la Enmienda de Kigali relativa a los HFC. El Comité reconoció los esfuerzos del Gobierno del Uruguay y, por consiguiente, confía en que, en los próximos tres años, el país continúe con éxito la ejecución del plan de gestión para la eliminación de los HCFC, del plan de aplicación de la Enmienda de Kigali relativa a los HFC y de las actividades del proyecto de fortalecimiento institucional, a fin de lograr y mantener las reducciones necesarias del consumo de HCFC y HFC y el cumplimiento del Protocolo de Montreal.

99th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

(7-11 December 2026)

UNDP
2026 WORK PROGRAMME AMENDMENTS

I. EXECUTIVE SUMMARY

This document constitutes UNDP's 2026 Work Programme (WP) and is being submitted for consideration by the Executive Committee (ExCom) at its 99th Meeting.

Consistent with UNDP's Business Plan for 2026–2028, this document includes only non-investment and proposals submissions, detailed in section II:

- Submission of Institutional Strengthening Extensions
- Preparation of Stage I Kigali Implementation Plans (KIP).
- Preparation funding requests for Energy Efficiency Project Preparation under decisions 91/65 and 94/60

Project documentation such as tranche requests under multi-year agreements (MYA), investment and demonstration project proposals and other individual proposals are not included in this document and are submitted separately as per normal practice.

Annex I includes Preparation funding requests.

II. SUMMARY OF FUNDING REQUESTS (WORK PROGRAMME)

The tables below summarize the funding requests for non-investment activities and proposals submitted to the 99th ExCom Meeting as part of UNDP's Work Programme Amendment for 2026:

Institutional Strengthening Extensions

UNDP is submitting the requests for funding the extension of institutional strengthening projects to the 99h ExCom Meeting as tabulated below. Relevant terminal reports and requests for extension of funding are being submitted separately.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Colombia	INS	Several Ozone unit support	36	730,230	51,116	781,346
Costa Rica	INS	Several Ozone unit support	36	372,304	26,061	398,365
Georgia	INS	Several Ozone unit support	36	180,000	12,600	192,600
Malaysia	INS	Several Ozone unit support	36	740,563	51,839	792,402
Pakistan	INS	Several Ozone unit support	36	594,748	41,632	636,380
Uruguay	INS	Several Ozone unit support	36	399,560	27,969	427,529
India	INS	Several Ozone unit support	36	988,909	69,224	1,058,133
Total (7 requests)				**4,006,314**	**280,442**	**4,286,756**

Preparation funding requests for Stage I Kigali Implementation Plans (KIP).

UNDP is submitting the following funding requests for the preparation of the Stage I KIP to the 98h ExCom meeting.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Saudi Arabia	PRP	HFC Phase-down Plan preparation	12	180,000	12,600	192,600
Total (1 request)				**180,000**	**12,600**	**192,600**

Project preparation (PRP) requests for pilot projects to maintain and/or enhance energy efficiency of replacement technologies and equipment in the context of HFC phase-down

Pursuant to the ExCom decisions 91/65, UNDP is submitting the following requests for the preparation of pilot projects to maintain and/or enhance energy efficiency of replacement technologies and equipment in the context of HFC phase-down. Annex I contains the PRP Request submissions.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total
Türkiye	PRP	Pilot Project for EE (91/65) - Preparation	12	30,000	2,100	32,100
Botswana	PRP	Pilot Project for EE (91/65) - Preparation	12	30,000	2,100	32,100
Total (2 requests)				**60,000**	**4,200**	**64,200**

III. SUMMARY OF FUNDING REQUESTS (WORK PROGRAMME)

The table below summarizes the funding requests for non-investment activities and proposals submitted to the 99th ExCom Meeting as part of UNDP's Work Programme Amendment for 2026:

No.	Country	Type	Title	Duration (months)	Funding Request to the 99th ExCom (US$)		
					Amount	Agency Fee	Total
1	Colombia	INS	Several Ozone unit support	36	730,230	51,116	781,346
2	Costa Rica	INS	Several Ozone unit support	36	372,304	26,061	398,365
3	Georgia	INS	Several Ozone unit support	36	180,000	12,600	192,600
4	Malaysia	INS	Several Ozone unit support	36	740,563	51,839	792,402
5	Pakistan	INS	Several Ozone unit support	36	594,748	41,632	636,380
6	Uruguay	INS	Several Ozone unit support	36	399,560	27,969	427,529
7	India	INS	Several Ozone unit support	36	988,909	69,224	1,058,133
8	Türkiye	PRP	Pilot Project for EE (91/65) - Preparation	12	30,000	2,100	32,100
9	Botswana	PRP	Pilot Project for EE (91/65) - Preparation	12	30,000	2,100	32,100
10	Saudi Arabia	PRP	HFC Phase-down Plan preparation	12	180,000	12,600	192,600
Total (10 requests)					**4,246,314**	**297,242**	**4,543,556**

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 are submitted separately.

ANNEX I

Multilateral Fund FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
HFC PHASE-DOWN PROJECT PREPARATION REQUEST FORM
HCFC PHASE-DOWN MANAGEMENT PLAN (OVERARCHING STRATEGY)

Part I: Project Information

Project title:	HFCs Phase-down Management Plan Preparation – KIP-I PRP	
Country:	Saudi Arabia	
Lead implementing agency:	UNDP	
Cooperating agency (1):	UNIDO	UNEP
Implementation period:	January 2027 – December 2028 (24 months)	
Funding requested:		

Agency	Sector	Funding requested (US $)*
UNDP	Overarching	180,000
UNEP	Overarching	50,000
UNIDO	INV - REF	80,000
UNIDO	INV - AC	80,000
UNIDO	INV - Foam PU	80,000
UNIDO	INV - Others	60,000
Total		530,000

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

Part II: Prerequisites for submission

Item	Yes	No
1. Official endorsement letter from Government specifying roles of respective agencies (where more than one IA is involved)	☒	☐
2. Country has ratified the Kigali Amendment?	☒	☐

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

1. Montreal Protocol compliance target to the HFCs Phase-down; to be determined

Phase-out commitment (%)	**TBD**	**Year of commitment**	**TBD**
☐ Servicing only	☐ Manufacturing only		☒ Servicing and manufacturing

2. Brief background

1. **Saudi Arabia accepted the Kigali Amendment** to the Montreal Protocol on **10 September 2025**, with the Amendment entering into force for Saudi Arabia on **9 December 2025**.

2. As a Party operating under Group 2 of Article 5 for the Kigali Amendment, Saudi Arabia will freeze its HFC consumption in 2028 at the applicable baseline level and progressively reduce its consumption, thereafter, reaching an 85% reduction from the baseline by 2047.

3. Saudi Arabia has established an HFC licensing system, integrated into its national electronic licensing platform, which is operational and supports the monitoring and control of HFC imports and exports, in line with the implementation of the Kigali Amendment.

3. Current progress in implementation of Enabling Activities for HFC phase-down

4. The Enabling Activities for Saudi Arabia under the Kigali Amendment was approved at the 81st Meeting of the Executive Committee (ExCom) of the Multilateral Fund. The EA project was designed to support Saudi Arabia in facilitating the ratification of the Kigali Amendment and meeting its initial obligations under the Amendment. These activities included:

   a) Institutional strengthening to support HFC data collection and reporting.
   b) Development of ratification strategy for Kigali Amendment Ratification and the placing of early actions for compliance.

5. Legal and regulatory framework development to control, monitor and report HFCs.Saudi Arabia was put in process under the Enabling Activities. The country ratified the Kigali Amendment on 10 September 2025 and has a functioning HFC licensing system.

6. The licensing system was thoroughly evaluated during the implementation of the Enabling Activity, and it was concluded that it adequately captures imports and exports of HFCs in the country. Moreover, Saudi Arabia conducted an initial analysis on the use of HFCs in the country (no official consumption).

7. Finally, there has been a strong public awareness campaign around the Kigali Amendment and several activities for awareness-raising among different governmental and non-governmental stakeholders have been carried out in the country.

4. Overview of estimated use of ODS alternatives 2024–2025:

8. The entire domestic demand is met through imports. Controlled substances and their alternatives are imported by either importer/distributor, local manufacturers and, to a lesser extent, directly by large users. Local retailers/distributors are usually responsible for the local supply chain.

9. The major HFCs and HFC blends used in Saudi Arabia included HFC-134a, R-410A, R-404A and R-407C, which have been introduced into commercial use largely as effective substitutes for HCFCs in refrigeration and air-conditioning applications.

10. The use of HFCs has increased as a result of the transition away from HCFCs, the expansion of refrigeration and air-conditioning applications, and the high cooling needs of Saudi Arabia. HFCs are widely used in different applications in the refrigeration and air-conditioning sectors, including manufacturing and servicing. Other applications, including fire protection systems, may also contribute to HFC use.

11. Given that was no official control not reporting requirements over HFCs on the period 2012/2015, no specific data was possible to be generated. The EA concluded that sectoral uses of these chemicals will be further investigated and updated during the preparation of the KIP.

(b) Overview of current HFC consumption in metric tonnes by substance, as per A7 2024–2025

Substance	2024 (mt)			2025 (mt)		
	Importation	Exportation	Consomption	Importation	Exportation	Consomption
HFC-32 (CH2F2)	88.825	0	88.83	693.38	0	693.38
HFC-41 (CH3F)	0	0	0.00	0	0	0
HFC-125 (CHF2CF3)	45.0125	0	45.01	69.9	0	69.9
HFC-134	0	0	0	0	0	0
HFC-134a	7908.08	21.792	7886.28	6028.94	20.26	6008.68
HFC-143	0	0	0.00	0	0	0
HFC-143a	29.31	0	29.31	135	0	135
HFC-152	0	0	0.00	0	0	0
HFC-152a	1157.32	0	1157.32	1109.5	0	1109.5
HFC-227ea	1744.96	4.48	1740.48	1733.94	0	1733.94
HFC-236cb	0	0	0.00	0	0	0
HFC-236ea	0	0	0.00	0	0	0
HFC-236fa	3.2375	0.14	3.10	0.07	0.14	-0.07
HFC-245ca	0	0	0.00	0	0	0
HFC-245fa	82.72	0	82.72	172.04	0	172.04
HFC-365mfc	26.4	0	26.40	0	0	0
HFC-43-10mee	0	0	0.00	0	0	0
HFC-23 (CHF3)	0.5125	0	0.51	7.68	0	7.68
R-404A	1045.5	0.73	1044.77	1025.77	2.19	1023.58
R-407A	1.8	0	1.80	12.72	0	12.72
R-407C	393.4375	2.25	391.19	296.91	2.25	294.66
R-410A	6313.27	0.864	6312.41	4465.22	0.61	4464.61
R-507A	127.1125	0	127.11	26.02	0	26.02
R-437A	0.42	0	0.42	6.81	0	6.81
R-417A	11.69	0	11.69	16.25	0	16.25
R-452A	3.76	0	3.76	5.68	0.7	4.98
R-454C	22.76	0	22.76	1.71	0	1.71
R-454B	23.96	0	23.96	9.78	0.3	9.48
R-513A	35.3	0	35.30	3.98	0	3.98
R-449A	1.29	0	1.29	1.71	0	1.71
R-152A	1735.59	0	1735.59	1815.62	0	1815.62
R-407F	0	0	0.00	0.12	0	0.12
Total	**20802.2675**	**30.256**	**20772.0115**	**17638.75**	**26.45**	**17612.3**

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

12. In general, HFCs are mostly consumed in the refrigeration and AC sectors, and the majority in servicing of MAC, Domestic Refrigeration (HFC-134a) and AC equipment (R-

410A). Saudi Arabia also has relevant manufacturing and assembling sectors. According to Article 7 reporting for 2025, total HFC imports were 17,638.75 mt and exports 26.45 mt, resulting in a net consumption of 17,612.30 mt. The main imported HFCs were HFC-134a (6 008.68 mt), R-410A (4,465.22 mt), R-152A (1,815.62 mt), HFC-227ea (1,729.46 mt), HFC-152a (1,109.50 mt), R-404A (1,025.77 mt), HFC-32 (693.38 mt), and R-407C (296.91 mt).

13. Two important trends are noted in the controlled year: a growth of consumption of HFC-32 possibly attributed to a fast market shift towards R-32 room and light commercial AC trend observed in global markets (coupled with a reduction in consumption of HFC-410A), and reduction of HFC-134a consumption possibly attributed to early conversion of domestic refrigeration manufacturers. There was also a decrease in consumption of R-407C, possibly given reduction in demand of new units and also reduced demand for retrofit o air-cooled chillers based on R-22.

14. It is important to note that, though Saudi Arabia's HFC imports decreased in 2025, despite its sustained demand in cooling sector, it is needed to be cautious about attributing that decline to a reduction in cooling demand. One important factor that may have contributed to this is the temporary reduction of constructions activities of the Projects under Vision 2030 along the year 2025. Hence, more time is needed to observe the consumption trends in the country, however, it is also important to consider that 2026 could see an atypical consumption year as reflection of the trade impacts from the regional conflict in the Middle East and the temporary closure of the Straight of Ormuz.

15. Further, demand of R-134a for MAC would continue since Saudi Arabia is yet to see introduction of alternatives in this sector. This is aggravated by the fact that the country allows imports of second-hand vehicles, which are usually run with HFC-134a.

16. There are also HFC-based chillers operating in central air conditioning systems. Since R-134a is a proven technology for this sector, the old R-22 chillers are being replaced with either R-134a or R-410A mainly because the new refrigerant-based chillers are commercially available and energy efficient in operation. This means that an increasing trend of getting more HFC-based AC systems for servicing in the future.

17. Generally, Saudi Arabia has seen a steady economic growth in the last decade, the hot climate and the safety parameters of HFC-based cooling equipment, leads to the increasing demand of HFCs and HFCs-based equipment for the real estate growing sector (apartments), Project Vision 2030, hospitals, hotels, shopping malls and leisure industries.

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

18. The most commonly used alternatives to HFCs available in the local market are listed in the table below:

Application	Baseline Refrigerant	Alternative refrigerant
MAC	R-134a	R-1234yf
Domestic Refrigerators	R-134a	R-600a
Commercial Refrigerators	R-134a	R-134a

Condensing Units	R-134a	R-448A, R-449A
Process Chillers	R-134a, R-410A	HFOs
Room ACs	R-410A	R-32
Light Commercial ACs	R-410A	R-32, R-454b
Other Commercial ACs	R-410A, R407C	n/a
Chillers	R-134a R-410A, R407C	HFOs

19. Today, most of the ODS alternatives are HFCs, and they are used mainly in the different RAC sectors. However, HCFCs are gradually being phased-out, and the demand for HFCs is expected to increase in the short term to satisfy the expected growth in the country due to the work that has been done in the context of the HPMP activities.

14. Description of information that needs to be gathered and updated.

Information needed	Description	Agency
Updated data on HFC consumption in manufacturing/servicing during the baseline formation years	Conducting interviews, organizing workshops and stakeholders' consultations for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control until 2026.	UNDP
Updated sectoral consumption information	Assessment of country level needs for trainings and certification in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions; including assessments of the needs for enhancing training programs on recovery, recycling and destruction	UNDP
Analysis of types of equipment using HFCs (Manufactured locally and imported)	Update current market profile and trends of use of HFCs-based equipment and Data collection by sector/sub-sector/	UNDP
New information on ODS regulations	Further review current regulatory framework and carry on a holistic assessment on their effectiveness to better identify potential remaining barriers to be removed.	UNDP
Others, specify.	Carry on proper consultations with stakeholders, validate results of the surveys and the PRP process, draft the updated over-arching strategy and the cooling servicing sector plan, endorse strategies with stakeholders, obtain approvals from institutions responsible for the MP framework in country, translate documents, submit document to ExCom.	UNDP
Policy and regulatory measures, training and capacity-building, and other non-investment components for the servicing sector	Review and assess the policy and regulatory framework for the servicing sector; identify gaps and barriers; propose measures to support HFC phase-down and the safe use of flammable refrigerants. Assess training and certification needs for technicians; develop a training plan and materials; organize workshops with main stakeholders and training institutions. Support institutional strengthening, stakeholder engagement and development of the servicing sector plan.	UNEP

15. Project preparation funding

Activity	Indicative funding (US $)	Agency
Breakdown and assess HFCs top-down data (consultants, missions/consultations)	25,000	UNDP
Assess country level needs (consultants)	25,000	UNDP

Collect by sector/sub-sector (consultants, surveys, travel costs)	95,000	UNDP
Carry on Stakeholders Meetings (including missions)	35,000	UNDP
Policy and regulatory measures, training and capacity-building, and other non-investment components for the servicing sector.	50,000	UNEP
TOTAL	**230,000 ……**	**…….**

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

The HPMP for Saudi Arabia is delivering activities focused on the sustainable phase-out in the use of HCFCs and, to the extent possible, promote the safe use of non-ODS alternatives.

It is expected that there will be synergies among the HPMP and the KIP-I, particularly in regard to capacity building for technicians, which can be to a certain extent integrated for alternatives to HCFCs and HFCs. However, it is important to note that HCFC phase-out can be achieved by applying currently available non-flammable /non-toxic technologies, mainly the HFCs.

Also, differently from Article 5 Group 1 countries, the overlapping time between the HPMP and KIP-I will be reduced to roughly 2 years of implementation (2027-2028), and HFCs phase-down is a much more complex task as it requires inevitably the full-scale introduction of flammable and/or toxic refrigerants in Saudi Arabia. The safe handling of these substances by ALL technicians in the country is a task of a completely different magnitude compared to what has been seen before. This includes not only the training of technicians, but an associated update / introduction of standards, safety guidelines, regulation, etc. for the safe handling of refrigerants.

The NOU considers the main synergy is being achieved by coordinating all the activities by the same governmental entity for both the HPMPs and the HFC phase down.

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

During the project preparation, gender considerations and actions on gender mainstreaming will be assessed and a proper Gender Management Plan is to be included in the Over-arching strategy. This is in line with the Multilateral Fund gender policy (Decisions 84/92, 90/48 and 92/51)**.** The following actions are expected to be carried in the preparation phase:

a) To collect data to produce gender-disaggregated indicators
b) Look into introduction of gender considerations when designing components and activities o (presentation of sex-disaggregated data and visuals of women and men where applicable);

c) To establish a baseline of women technicians in R&AC sector and compare it with the number of women involved in NOU R&AC activities.
d) To incorporate gender aspects in the recruitment of staff for the PRP (emphasizing that female candidates are welcome and encouraged to apply)
e) Assurance that consultants and project personnel have the required gender competence to reflect on progress and challenges related to gender.
f) Draft a Gender Management Plan to be supported as part of the over-arching strategy

Existing data from HPMP Stage II/III will be used as a preliminary reference for this assessment.

MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
KIGALI-HFC IMPLEMENTATION PLAN (KIP) PROJECT PREPARATION (PRP)
KIP (INV - REF)**KIP (INV - A/C)**
KIP (INV - FOAM)
KIP (INV-OTHER)

Part I: Project information

Project title:	HFC Phase Down Management Plan (KIP Stage-I)
Country:	Saudi Arabia
Lead implementing agency:	UNIDO
Implementation period for stage I of the KIP:	January 2028 – December 2031
Duration of PRP implementation (i.e., time (in months) from the approval of PRP to submission of the KIP (please specify): January 2027 – December 2028 (24 months)	
Funding requested:	

Agency	**Sector**	**Funding requested (US $)***
UNIDO	INV - REF	80,000
UNIDO	INV - AC	80,000
UNIDO	INV - Foam	80,000
UNIDO	INV - Others	60,000

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

Part II: Prerequisites for submission

Item	**Yes**	**No**
Official endorsement letter from Government, indicating the specifying roles of respective agencies (where more than one IA is involved)	☒	☐

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

1. Agency:	UNIDO
2. Sector:	Refrigeration
	Air-conditioning
	Foam
	Others
3. HFC consumption in item #2 reported under country programme data?	☒ **Yes**, please specify reported amount and year: 2025, and consumption was shown in Session A ☐ **No**
4. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?	☐ **Yes**, please provide support letter ☒ **No**

5. If the project preparation is requested in advance of the KIP, did the Government provide a written commitment that the consumption associated with these investment projects, once approved, will be deducted from the country's starting point, once established?	☐ **Yes** ☒ **No**
6. Please explain briefly how the investment project would relate to the overarching strategy for the country, and when the final KIP will be submitted (decision 87/50(e))	The proposed preparation activities will support investment projects/sector plans in the air-conditioning/refrigeration manufacturing, foam and firefighting sectors and will form part of the overarching strategy for Stage I of Saudi Arabia's KIP. The PRP will identify eligible enterprises, establish verified baseline HFC consumption, assess low-GWP technologies and incremental costs, and define the HFC reductions to be achieved. The resulting projects will be submitted together with, or incorporated into, Stage I of the KIP in accordance with decision 87/50 and the current MLF submission requirements. Reductions from assisted manufacturing enterprises will be accounted for against the country's starting point in accordance with decision 96/50.

7. Information on sector consumption (specify previous year HFC consumption)

Substance	Consumption (metric tonnes)
HFC-32 (CH_2F_2)	693.38
HFC-134a (CH2FCF3)	6028.94
HFC-152a (CH3CHF2)	1109.50
HFC-227EA (CF_3CHFCF_3)	1733.94
HFC-245fa (CHF2CH2CF3)	172.04
HFC-404A	1025.77
HFC-407C	296.91
HFC-507A	26.02
HFC-410A	4465.22
HFC-152A	1815.62

8. Information on enterprise(s) for which funding is being sought

The HFC-consuming manufacturing sector in Saudi Arabia covers main subsectors: domestic refrigeration, commercial refrigeration, residential air-conditioning, commercial air-conditioning and chillers, foam and firefighting sector.

Residential and commercial air conditioning are expected to represent the largest HFC-consuming manufacturing subsectors, with major manufacturers including Zamil Air Conditioners, Alessa/ARAC, LG-Shaker and Midea-Shaker. Potential refrigerants include mainly R-410A and R-32, as well as R-134a and R-407C in certain commercial equipment.

Local manufacturing also exists in domestic and commercial refrigeration, potentially using R-134a, R-404A and R-507A, although the extent of current HFC-based production needs verification. The foam sector, including rigid PU/PIR insulation, sandwich panels and spray foam, may consume HFC-245fa and HFC-365mfc/227ea, including through imported pre-blended polyols. In Saudi Arabia, HFCs, particularly HFC-227ea (FM-200), are used in fire

suppression systems in data centres, telecommunications facilities, industrial installations, and commercial buildings.

An initial list of 20 manufacturers has been provided by the Government. It covers air-conditioning/refrigeration manufacturers and foam/insulation enterprises. The list is indicative and does not establish MLF eligibility. During the PRP, UNIDO and the Government will verify enterprise ownership, establishment date, manufacturing activity and lines, baseline HFC use, consumption history, prior MLF assistance, exports where relevant, and eligibility under applicable Executive Committee decisions. For the foam sector, the assessment will also identify HFCs contained in imported pre-blended polyols and apply decision 96/52 where relevant.

1. LG- Shaker Co. Ltd.
2. Zamil Central Air conditioners
3. Zamil Consumer Products factory
4. Saudi Air conditioning
5. SKM Air conditioning Co.
6. CGS For refrigeration and cold stores manufacturing
7. Al Salem York Manufacturing - Jeddah
8. Petra Engineering Industries Co.
9. Hamad Abdulla Alessa
10. Trane technologies
11. Saudi Factory for Fire Equipment Co. - SFFECO
12. Saudi Arabia Firefighting Systems Company - NAFFCO
13. Arabian Chemical Co.(Polystyrene) LTD.
14. SAPTEX Insulation Products Factory
15. Bitumat Saudi Arabia
16. Gulf Polystyrene Panels Factory Co.
17. FABCO Plastic Factory Co. Ltd.
18. Al Ghandoura Industrial Group Co. Ltd.
19. Ebtekar Arabia Thermal Insulation Systems Co.
20. SABIT - -Saudi Bitumen Industries Co. LTD

9. Activities to be undertaken for preparation of the investment project and funding requested

Activity	Indicative funding (US $)	Bilateral/implementing agency
Stakeholder Consultation	60,000	UNIDO
National Consultant's Visit to Industries, data collection and analysis	90,000	UNIDO
Field work of international consultant: visit to the company and interview with different stakeholders	50,000	UNIDO
International consultant for technology review, assessment of manufacturing processes, design of necessary interventions and associated costs, climate co-benefit and review of final project document.	75,000	UNIDO
Inception and Validation	25,000	UNIDO
TOTAL	**300,000**	

Company	Refrigeration	AC	PU foam	Fire suppressions
Lg- shaker co. Ltd		X		
Zamil central air conditioners		X		
Zamil consumer products factory	X	X		
Saudi air conditioning		X		
Skm air conditioning co.		X		
Cgs for refrigeration and cold stores mfg	X		X	
Al salem york manufacturing - jeddah		X		
Petra engineering industries co.		X		
hamad abdulla alessa	X	X		
Saudi factory for fire equipment co. - sffeco				X
Saudi arabia firefighting systems - naffco				X
Arabian chemical co.(polystyrene) ltd.			X	
Saptex insulation products factory			X	
Bitumat saudi arabia				
Gulf polystyrene panels factory co.			X	
Fabco plastic factory co. Ltd.			X	
Al ghandoura industrial group co. Ltd.			X	
Ebtekar arabia thermal insulation systems co.			X	
Sabit - -saudi bitumen industries co. Ltd			X	
TOTAL QTY of COMPANIES	**3**	**8**	**8**	**2**
PRP FUNDING USD	**80,000**	**80,000**	**80,000**	**60,000**
TOTAL PRP REQUESTED USD	**300,000**			

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL
FUNDING REQUEST FOR THE PREPARATION OF ENERGY EFFICIENCY PILOT PROJECT UNDER DECISION 91/65

Part I: Project information

Project title:	Preparatory Activities for a Pilot Project on Energy-Efficient, Low-GWP Refrigeration Systems in Cold rooms and supermarkets in Botswana.	
Country:	Botswana	
Lead implementing agency:	UNDP	
Implementation period for the energy efficiency project:	36 months	
Duration of PRP implementation (i.e., time (in months) from the approval of PRP to submission of the project proposal (please specify): 4 months		
Funding requested:		
Agency	**Sector**	**Funding requested (US $)***
UNDP	Servicing	30,000 USD

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

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating the specifying roles of respective agencies (where more than one IA is involved)	☒	☐

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

10. Agency:	UNDP
11. Sector:	Refrigeration
12. HFC consumption in item #2 reported under country programme data?	☒ **Yes**, please specify reported amount and year: 2025: 136.63 MT ☐ **No**
13. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?	☐ **Yes**, please provide support letter ☐ **No** ☒ **N/A**
14. If the project preparation is requested in advance of the KIP, did the Government provide a written commitment that the consumption associated with these investment projects, once approved, will be deducted from the country's starting point, once established?	☐ **Yes** ☐ **No** ☒ **N/A**
15. Please explain briefly how the investment project would relate to the overarching strategy for the country, and when the final KIP will be submitted (decision 87/50(e))	The first stage of KIP for Botswana was approved in the 97th ExCom meeting in December 2025, for the reduction of 10% of baseline. This project will contribute to conduct the technology substitution in the commercial refrigeration sector, particularly in the cold rooms used in different markets and installations, promoting the reduction mainly of R-404A .and R-507A

16. Project Description

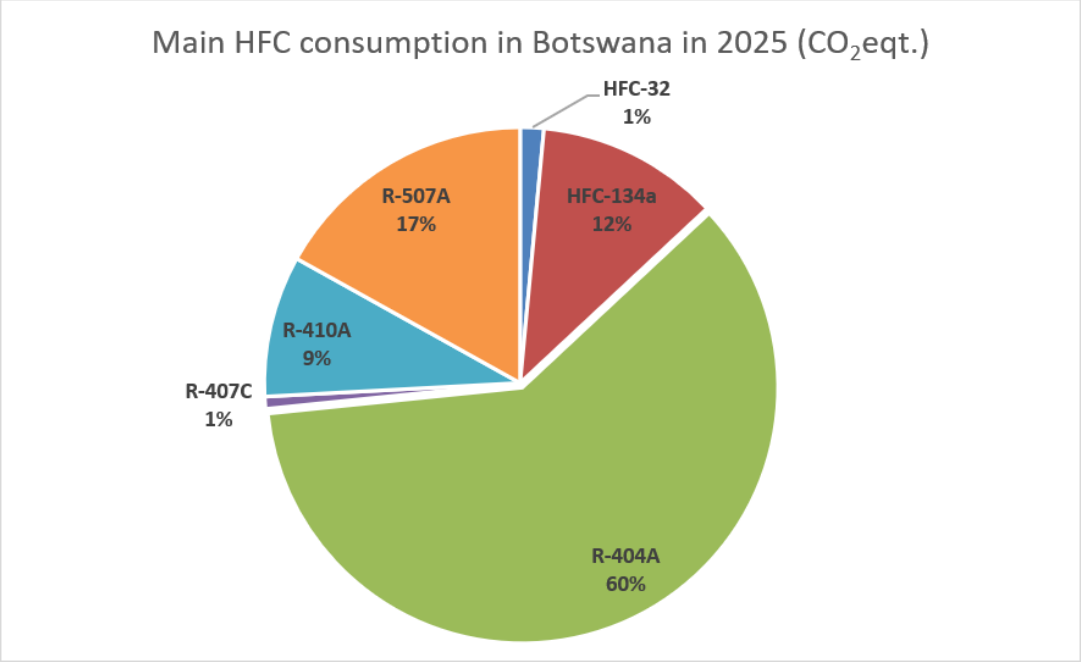
Background information

Botswana ratified the Kigali Amendment in 2020 and is implementing Stage I of its Kigali HFC Implementation Plan (KIP), approved at the 97th Meeting of the Executive Committee. Under Stage I, the Government is prioritizing actions in the refrigeration servicing sector, where high-GWP refrigerants such as R-404A and R-507A are commonly used in commercial applications.

Supermarkets typically operate ageing condensing units and cold rooms with high refrigerant leakage and elevated electricity consumption. These facilities represent a suitable entry point for demonstrating modern, energy-efficient, low-GWP refrigeration technologies. The PRP will therefore focus on preparatory activities required to design and implement a pilot demonstration project introducing HC-290 and HC-290/R-744 systems in selected retail sites.

Commercial refrigeration represents one of the main uses of HFCs in Botswana, particularly R-134a, R-404A and R-507A, which are widely used in condensing units, plug-in freezers and cold rooms. These refrigerants account for a significant share of the country's reported HFC consumption and associated CO_2-equivalent emissions, underscoring the relevance of focusing the PRP on this subsector.

The figure below illustrates the distribution of HFC consumption by refrigerant in Botswana, as reported in Stage I of the Kigali HFC Implementation Plan. This information provides useful context on the predominant refrigerants used in commercial refrigeration applications, supporting the selection of pilot sites and the choice of low-GWP alternatives to be demonstrated under this project.



Challenges and Opportunities

Botswana's retail food sector comprises a diverse mix of small and medium-scale establishments that rely heavily on refrigeration to preserve chilled and frozen products. Minimarkets typically operate a limited number of refrigerated display cases and in few cases, one or two cold rooms, while small/medium supermarkets may operate several cold rooms and multiple remote condensing units. Across these facilities, refrigeration systems are often ageing, inefficient, and charged with high-GWP refrigerants such as R-404A and R-507A, resulting in elevated electricity consumption and higher servicing needs.

An indicative estimate suggests that Botswana has approximately 350-400 small groceries or minimarkets, and about 100–120 medium-size supermarkets nationwide. The main medium-sized retail chains include Choppies, Sefalana, SPAR Family, Pick n Pay Family, among others.

These conditions present an opportunity to introduce modern, energy-efficient, low-GWP refrigeration technologies in selected retail sites. For the purposes of the PRP, the retail sector is considered across three representative categories: minimarket, medium supermarket, and large supermarket, corresponding to the pilot sites targeted for the demonstration project.

A range of HC-290 and HC-290/R-744 technologies are commercially available in many countries of the world and could be suitable for Botswana's climatic conditions and retail configurations. These include HC-290 systems with glycol or water loops, and HC-290/R-744 cascade systems for larger facilities. The PRP will assess the preliminary feasibility of these options for the selected pilot sites, including basic safety and compatibility considerations relevant to their installation.

Project Scope

The objective of the preparatory project is to generate the essential technical inputs required to design a pilot demonstration project for energy-efficient, low-GWP refrigeration systems in selected retail facilities in Botswana. Specifically, the PRP will cover the following scope:

1. Confirm and document the candidate pilot sites (one cold room, one supermarket).
2. Assess existing refrigeration systems at each site, including equipment type, approximate capacity, refrigerant used, and general operating conditions.
3. Collect basic operational data (electricity bills, usage patterns, cooling needs) required for preliminary sizing of alternative systems.
4. Screen feasible low-GWP technology options (HC-290 self-contained units, HC-290 glycol loop, HC-290 water loop, HC-290/R-744 cascade).
5. Develop preliminary system configurations and indicative CAPEX estimates for each site.
6. Prepare the pilot project proposal in line with Decision 91/65, including refrigerant conversion and energy saving activities and associated costs, expected impacts, implementation arrangements, and a simplified M&V approach.

These preparatory activities will culminate in a concise project document for submission to the Multilateral Fund Secretariat.

Expected Outcomes

The preparatory phase will establish the technical, economic, and institutional foundation for the implementation of a pilot demonstration project on low-GWP, energy-efficient refrigeration technologies in Botswana's retail sector. It will generate the evidence and stakeholder consensus needed to support informed technology selection, site confirmation, and implementation planning in accordance with Decision 91/65.

The PRP is expected to identify viable and replicable refrigeration solutions suited to Botswana's climatic and operational conditions, while clarifying key safety, capacity-building, and investment requirements for their successful deployment. It will also provide a clear pathway for a pilot intervention capable of delivering energy savings, strengthening local technical capacity, enhancing food safety, and supporting broader market transformation towards sustainable refrigeration technologies in Botswana.

Project Activities

Activity 1: Project Inception, Coordination, and Desk Review

Objective: Establish governance, confirm scope, and compile existing information.

Activities:

- Kick-off with the National Ozone Unit and relevant stakeholders.
- Discussion and confirmation of pilot sites and the requirement on data collection .
- Development of the work plan and field mission schedule.
- Recruitment of local and international consultants.

Activity 2: Field Assessments

Objective: Document existing conditions and collect project data.

Activities:

Pilot site visits to assess:

- Business operational status of the potential beneficiaries
- Refrigerant types, approximate charge, and servicing practices

- Equipment condition and insulation quality
- Collection of operational and energy data: electricity use (bills, estimates)
- Cooling demand profiles and usage patterns
- Identification of key inefficiencies, losses, and constraints.
- Identification of measures to reduce refrigerant leakage and improve energy efficiency.
- Technical and financial capacity of end users to conduct the pilot projects, implementation barriers

Activity 3: Stakeholder engagement to enhance necessary coordination
Activities:

- Consultations with associations for major challenges of the sector in terms of technology development and market transformation.
- Consultation with the NOU, Energy institution and other relevant stakeholders for their inputs for the demo projects

Activity 4: Technology Screening and Preliminary Design
Objective: Identify feasible low-GWP options and develop preliminary configurations.
Activities**:**

- Screening of HC-290 with glycol or water loop and HC-290/R-744 technology options.
- Preliminary sizing and configuration of systems for each site.
- Collection of indicative supplier quotations for the cost caculation

Activity 5: Project proposal Finalization
Objective: Finalize the pilot demonstration project proposal for MLF submission.
Activities:

- Development of project components, outputs, and expected impacts based on the guidance of the Executive Committee in Decision 94/60.
- Development of project implementation modality, including monitoring, verification, and reporting (M&V) framework
- UNDP internal review
- Validation workshop with stakeholders and finalization for submission to the Multilateral Fund Secretariat.

17. Activities to be undertaken for preparation of the investment project and funding requested

Activity	Indicative funding (USD)	Bilateral/ Implementing Agency
Project Inception, Stakeholder Coordination, and field assessment	2,000	UNDP
Data collection and assessment of pilot facilities (local consultants)	12,000	UNDP
Travel expenses	6,000	UNDP
International consultant	10,000	UNDP
TOTAL	**30,000**	

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL

FUNDING REQUEST FOR THE PREPARATION OF ENERGY EFFICIENCY PILOT PROJECT UNDER DECISION 91/65

Part I: Project information

Project title:	Preparation for a pilot project to maintain and/or improve the energy efficiency of replacement technologies and equipment in the context of HFC phase-down: demonstration project for the use of low-GWP refrigerant in the retail/servicing sector.	
Country:	Türkiye	
Lead implementing agency:	UNDP	
Implementation period for the energy efficiency project:	36 months	
Duration of PRP implementation (i.e., time (in months) from the approval of PRP to submission of the project proposal (please specify): 4 months		
Funding requested:		
Agency	**Sector**	**Funding requested (US $)***
UNDP	Servicing	30,000

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

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating the specifying roles of respective agencies (where more than one IA is involved)	☒	☐

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

18. Agency:	UNDP
19. Sector:	Refrigeration
20. HFC consumption in item #2 reported under country programme data?	☒ **Yes**, please specify reported amount and year: 2025 4,801.40 MT ☐ **No**
21. Does the enterprise commit to phase out the HFC consumption associated with the proposed investment project, if approved by the Executive Committee?	☐ **Yes**, please provide support letter ☐ **No** ☒ **N/A**
22. If the project preparation is requested in advance of the KIP, did the Government provide a written commitment that the consumption associated with these investment projects, once approved, will be deducted from the country's starting point, once established?	☐ **Yes** ☐ **No** ☒ **N/A**
23. Please explain briefly how the investment project would relate to the overarching strategy for the country, and when the final KIP will be submitted (decision 87/50(e))	The project will directly contribute to Türkiye's strategy to integrate HFC phase-down with national energy efficiency objectives and transition to alternative technology in the retail sector. The KIP for Türkiye has been approved at the 95th meeting of the MLF.

24. Project Description

Background and Rationale

1. Türkiye is experiencing rapid growth in its refrigeration and air-conditioning (RAC) sector, driven by increasing demand for food preservation, cold-chain services, and refrigerated logistics for domestic consumption and export markets. As cooling demand rises, the sector is expected to contribute increasingly to national energy consumption and greenhouse-gas emissions.

2. Energy efficiency has therefore become a national priority. Türkiye's National Cooling Action Plan (NCAP) identifies improving energy performance in the cooling sector as a key measure for reducing indirect emissions and managing future electricity demand.

3. Commercial refrigeration is one of the most important sectors for HFC phase-down and energy-efficiency improvement. Supermarkets, discount markets, mini-markets, cold-storage facilities, and food-distribution centres continue to rely heavily on high-GWP refrigerants, particularly R-404A and R-134a. The sector is a major driver of servicing demand, with these refrigerants estimated to account for approximately 55 per cent of commercial refrigeration servicing requirements.

4. The retail sector is a key target for market transformation, the proposed project will prioritise larger-capacity, centralised refrigeration systems used by major retailers, as well as their associated cold storage facilities. This focus will enable the assessment of energy performance and refrigerant use in larger-scale applications, generate evidence on energy-saving potential and refrigerant leakage reduction, and support the development of replicable investment solutions across Türkiye's retail and cold-chain sectors. (Annex 2 – Brief Overview of the Food Retail Sector in Türkiye)

5. Türkiye's F-gas regulation will prohibit the placing on the market of commercial refrigeration equipment using refrigerants with a GWP above 2,500 from 2027 and above 150 from 2031. These requirements create an urgent need to support retailers and cold-chain operators in transitioning to compliant, energy-efficient alternatives.

6. The transition from ageing, energy-intensive refrigeration systems to modern low-GWP technologies represents a significant opportunity to reduce both direct refrigerant emissions and indirect emissions from electricity consumption. However, challenges remain, including limited pilot projects in the retail sector for transition in terms of technology options, associated costs and energy performance in the context of Turkyie's market and climate ozone.

7. Economic challenges are deepened by the inflation, exchange rate volatility, and high borrowing costs that limitthe affordability of retailers on the installation of advanced refrigeration system. . This results in every low-awareness of the economic benefits of Efficient low-GWP cooling systems.

8. The proposed project will support the objective of the Türkiye's Kigali Implementation Plan (KIP) by developing and implementing representative pilot projects in the commercial refrigeration in the food retail sector. Consistent with Executive Committee Decision 91/65, the project will generate practical information on low-GWP, energy-efficient refrigeration technologies, including their energy performance, and replication opportunities, thereby supporting broader market transformation in the retail cold-chain sector.

Status of implementation of energy efficiency-related activities funded by the Multilateral Fund

9. Türkiye ratified the Kigali Amendment on 10 November 2021 and established an HFC licensing system and an import quota system in 2024. The first tranche of Stage I of Türkiye's Kigali Implementation Plan (KIP) was approved at the 95th meeting of the Executive Committee of the Multilateral Fund.

10. Energy-efficiency considerations have been integrated into Stage I of Türkiye's Kigali Implementation Plan (KIP), including demonstration investment projects in the commercial refrigeration sector for big refregiration capacities.

11. Under Component 1 (regulatory framework and control mechanisms) of the Stage I of Türkiye's KIP, UNDP supports the alignment of RAC refrigerant-charge standards with EU requirements and the integration of updated HFC phase-down measures into Türkiye's National Cooling Action Plan (NCAP). The component also strengthens enforcement through training of customs officers and brokers, support to specialized

customs directorates, and enhanced capacity to prevent illegal trade of HFCs. Additional resources were allocated to regulatory updates, awareness raising, and customs-related capacity building.

12. The proposed EE PRP will complement interventions by addressing a specific gap in the transition towards energy-efficient, low-GWP commercial refrigeration technologies: the preparation of investment-ready projects supported by site-specific energy-performance data, technical and financial assessments, and a structured approach to replication. The proposed PRP will build on the enabling environment and technical capacity supported through the KIP, while generating additional evidence on the energy performance and financial feasibility of low-GWP refrigeration solutions under actual retail operating conditions. Particular attention will be given to distinguishing the proposed retail-focused interventions from the HORECA demonstration activities under Component 4 of KIP, ensuring that the PRP does not duplicate activities already approved for funding.

13. The preparation process will identify potential synergies with the KIP's existing regulatory, laboratory and capacity-building activities, while defining the specific additional outputs, investment needs and monitoring arrangements required for the proposed retail-sector project.

Objective

14. The objective of the project is to demonstrate technologically and economically feasible transitions to the low-GWP and energy efficient cooling technologies in the food retail sector to support the implementation of the Kigali Amendment. The project will identify 2-3 pilot sites in the food retail sector, to establish a baseline energy and refrigerant data, assess suitable technology options, and prepare a full pilot proposal, including expected energy-efficiency improvements, HFC-consumption reductions, and cost-benefit analysis.

Scope of Activities for the selected pilots

15. Identify potential participating installations and select representative demonstration sites based on refrigeration capacity, refrigerant charge, energy-saving potential, leakage-reduction potential, replication potential, and willingness to participate. Priority will be given to domestic food retail brands that intend to replicate the piloting transition in their retail network.

16. Collect baseline information required for project design, including equipment type and status, electricity consumption, refrigeration capacity, refrigerant charge, servicing practices, and leakage-related data.

17. Assess suitable low-GWP and energy-efficient technology options and prepare technical designs, cost estimates, implementation arrangements, and expected environmental and energy-efficiency benefits.

Expected results

A full investment demo project proposal in accordance with Executive Committee Decision 91/65 is submitted to the 100th meeting of the MLF for consideration. If approved, implementation will take two years to generate data for broader actions in the sector.

25. Activities to be undertaken for preparation of the investment project and funding requested

Activity	Indicative funding (US $)	Bilateral/implementing agency
International/national technical consultancies to conduct site visits, data collection and e analysis, technical feasibility assessment, financial analysis and prepare the full proposal	20,000	UNDP
Stakeholder consultations for beneficiary selection, technology exchange, and validation of the proposal.	5,000	UNDP
Missions to the sites	5,000	UNDP
TOTAL	30,000	

Annex 1 - MEPS

Product category	Regulation name	EU Regulation basis	Last update
Domestic fridges and freezers	Communique on Eco-Design Requirements for Refrigeration Devices (2019/2019/EU) (SGM:2021/7)	(EU) 2019/2019	2019
Professional refrigerators	Communique on Eco-design Requirements for Space Heaters (SGM: 2022/32) ((EU) 2015/1188)	(EU) 2015/1094	2015
Refrigerators with a direct sales function	Communique on Eco-Design Requirements for Refrigeration Devices with Direct Sales Function (2019/2024/EU) (SGM:2021/9)	(EU) 2019/2024	2019
Air heating and cooling products, high temperature process chillers and fan coil units	Communique on Eco-Design Requirements for Air Heating Products, Cooling Products, High Temperature Process Chillers, and Fan Coil Units (SGM: 2021/20) ((EU) 2016/2281)	(EU) 2016/2281	2016
Air conditioners and comfort fans	Communique on Eco-Design Requirements for Air Conditioners and Ventilation Fans ((EC) 206/2012) (SGM-2012/13)	(EU) No 206/2012	2012

Additional communiqués for EE measures relevant for the cooling sector are listed below:

- Communiqué on Eco-Design Requirements for Household Cooling Appliances (SGM-2011/17) (23.09.2011 – 28063).
- Communiqué on Eco-Design Requirements for Air Conditioners and Fans (SGM-2012/13) (19.07.2013 – 28712).
- Communiqué on Eco-Design Requirements for Electric Motors (SGM-2012/2) (07.02.2012 – 28197)
- Communiqué on Eco-Design Requirements Regarding No-Load Energy Consumption and Average Active Efficiency of External Power Sources (SGM-2011/11) (27.08.2011 – 28038)
- Communiqué on Energy Labelling of Household Cooling Devices (SGM-2012/4) (22.06.2012 – 28331).
- Communiqué on Energy Labelling of Air Conditioners (SGM/2013-11) (24.12.2013 – 28861)
- Communiqué on Energy Labelling of Space Heaters, Combined Heaters, Space Heater, Temperature Control and Solar Device Packages and Combined Heater, Temperature Control and Solar Energy Device Packages (SGM: 2018/1) (28.03.2018 – 30374)

Annex 2- Brief Overview of the Food Retail Sector in Türkiye

Türkiye's grocery retail sector comprises more than 200 chains with more than five outlets nationwide. Retailers are generally classified as either organized (modern) or traditional. The organized segment includes supermarket and hypermarket chains, discount retailers, regional grocery chains, and fuel-station convenience stores, all of which are significant users of commercial refrigeration equipment.

The major food retail chains in Türkiye and their respective market shares are presented below[1]. Among these, **Migros**, **FİLE**, and **CarrefourSA** operate primarily in the large supermarket and hypermarket segments.

#	Grocery Chain	Chain Type	Number of Stores (2024)	Number of Stores (2025)	New Stores in 2025
1	BIM	National Discount	13,583	14,576	993
2	Şok	National Discount	11,465	11,797	332
3	A101	National Discount	13,158	13,550	392
4	Migros (M, MM, MMM, 5M, M-Jet)	National	3,569	3,895	326
5	Seç	National Convenience	2,844	3,748	904
6	Ekomini	National Convenience	2,305	2,346	41
7	Hakmar	Regional (Istanbul & vicinity)	800	812	12
8	CarrefourSA (CarrefourSA, Carrefour Express)	National	691	705	14
9	File	National	287	329	42
10	Onur	Regional (Istanbul & vicinity)	159	158	-1
Total			**48,861**	**51,916**	**3,055**

#	Grocery Chain	Chain Type	Market Share (%) 2025	Sales (million USD) 2025
1	BIM	National Discount	18.4	21,714
2	Migros (M, MM, MMM, 5M, M-Jet)	National Discount	9.2	10,848
3	A101	National Discount	7.8	9,128
4	Şok	National Discount	6.0	7,586
5	CarrefourSA (CarrefourSA, Carrefour Express)	National (Internationally Owned)	1.8	2,140
6	Seç	National Convenience	1.0	1,138
7	Ekomini	Regional (Istanbul & Vicinity)	0.5	583
8	File	National Convenience	0.5	567
9	Hakmar	National Convenience	0.5	557
10	Macrocenter	Regional (Western Türkiye, Premium)	0.3	368
Total			**46.0**	**54,630**

*The market share is in the organized grocery retail category; traditional grocers are not included

* BIM and FILE are owned by the same company; ŞOK and See markets are owned by Yildiz holding; Migors and Ekomini markets are owned by Anadolu Holding

[1] Source: https://www.fas.usda.gov/data/gain-report/2026/06/Retail%20Foods%20Annual_Ankara_Turkiye_TU2026-0018.pdf