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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 7 a) v) del orden del día provisional[1]

INFORME SOBRE LA MARCHA DE LAS ACTIVIDADES DE LA ONUDI AL 31 DE DICIEMBRE DE 2025

Introducción

1. El presente documento expone el informe sobre la marcha de las actividades de la ONUDI al 31 de diciembre de 2025.[2]

2. El informe sobre la marcha de las actividades de la ONUDI incluye el estado de ejecución de cada proyecto en curso, que la Secretaría ha examinado país por país, teniendo en cuenta las demoras en la ejecución respecto de las fechas de terminación previstas comunicadas en 2025, sus posibles efectos sobre la eliminación de las sustancias controladas y la tasa de desembolsos prevista. El análisis que figura en el presente documento se basa en toneladas PAO para todas las sustancias controladas, excepto los HFC, que se miden en toneladas (t) y toneladas de CO_2 equivalente.[3]

3. El presente documento resume los avances en la ejecución de proyectos durante 2025 y los acumulados desde 1993[4] respecto de todas las sustancias controladas por el Protocolo de Montreal, incluidas las sustancias del anexo F (HFC), para todos los proyectos aprobados con cargo a la financiación ordinaria y a las contribuciones voluntarias adicionales.[5] También examina el estado de ejecución de cada proyecto en

[1] UNEP/OzL.Pro/ExCom/99/1
[2] El informe sobre la marcha de las actividades se adjunta al presente documento. Los datos se han incorporado a la base de datos del informe consolidado sobre la marcha de las actividades, disponible en formato de hoja de cálculo Microsoft Excel en el portal de la 99ª reunión del sitio web del Fondo Multilateral.
[3] De conformidad con la decisión 84/12 a) iv), los informes sobre la marcha de las actividades presentados a la 99ª reunión incluyen la medición de los HFC en toneladas de CO_2 equivalente.
[4] La ONUDI pasó a ser organismo de ejecución en 1993.
[5] Financiados por 17 Partes que no operan al amparo del artículo 5 para prestar apoyo de inicio rápido a la aplicación de la Enmienda de Kigali.

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.

curso[6] en cada país. Señala los proyectos con demoras en la ejecución y sus posibles efectos sobre la eliminación de las sustancias controladas, así como los proyectos con cuestiones pendientes que deben someterse a la consideración del Comité Ejecutivo. Dado que todos los proyectos aprobados con cargo a las contribuciones voluntarias adicionales han terminado y que los saldos restantes se devolverán a la Secretaría, esta dejará de informar por separado sobre dichos proyectos.

Avances en la ejecución de proyectos durante 2025 y acumulados desde 1993

4. Al 31 de diciembre de 2025, el Comité Ejecutivo había aprobado proyectos para la ONUDI por un total de USD 1.170 millones, de los cuales USD 1.040 millones correspondían a la ejecución de proyectos de inversión y sin inversión y USD 135,53 millones a gastos de apoyo a los organismos (excluidos los proyectos cancelados y transferidos). En el cuadro 1 se resume la ejecución de proyectos desde el inicio hasta finales de 2025.

Cuadro 1. Resumen de los proyectos de la ONUDI desde la creación del Fondo Multilateral

Conceptos	Acumulado desde 1993*
Número de aprobaciones	2.336
Número de proyectos terminados	1.970
Total de fondos aprobados (excluidos los gastos de apoyo) (USD)	1.036.830.515
Total de fondos desembolsados (excluidos los gastos de apoyo) (USD)	895.262.429
Eliminación total aprobada (toneladas PAO)**	86.379,4
Eliminación total efectiva (toneladas PAO)**	83.565,9
Eliminación total aprobada (t)***	6.490,7
Eliminación total efectiva (t)***	1.158,3
Eliminación total aprobada (toneladas de CO_2 equivalente)***	13.570.921
Eliminación total efectiva (toneladas de CO_2 equivalente)***	2.285.325

* Excluidos los proyectos cancelados y transferidos.
** Incluidos el consumo y la producción.
*** Solo para los proyectos relativos a los HFC (incluye únicamente el consumo).

5. En 2025 se aprobaron 117 nuevos proyectos y actividades. Se prevé que este nivel de financiación permita eliminar 86.379 toneladas PAO de consumo y producción de SAO y 6.491 t (13.570.921 toneladas de CO_2 equivalente) de consumo de HFC. En el anexo I se muestra el estado de ejecución de los proyectos por país en 2025.

6. En el cuadro 2 se muestra el estado de ejecución de los proyectos, incluidos los desembolsos, por grupo de proyectos al 31 de diciembre de 2025. En el anexo II se presenta información analítica por año desde 1993.

Cuadro 2. Estado de ejecución por grupo de proyectos al 31 de diciembre de 2025*

Grupos de proyectos	Número de proyectos			Financiación (USD)**			
	Aprob.	Term.	% term.	Aprobada	Desemb.	Saldo	% desemb.
Programa del organismo	24	23	96	0	0	0	0
Proyectos individuales relativos a los CFC	696	696	100	248.861.816	248.861.819	-3	100
Planes de eliminación de los CFC	87	87	100	51.560.736	51.560.737	-1	100
Planes de eliminación de la producción de CFC	4	4	100	31.849.298	31.849.298	0	100
Eliminación de desechos	13	13	100	3.791.983	3.791.984	-1	100

[6] Los proyectos en curso son todos los que estaban en ejecución al 31 de diciembre de 2025. Los principales indicadores de avance incluyen el porcentaje de fondos desembolsados y el porcentaje de proyectos en los que se ha comenzado a desembolsar fondos; la financiación que se prevé desembolsar al cierre del año como porcentaje de la financiación aprobada; la duración media de la demora prevista en la ejecución; y la información facilitada en la columna de observaciones de la base de datos de los informes sobre la marcha de las actividades.

Grupos de proyectos	Número de proyectos			Financiación (USD)**			
	Aprob.	Term.	% term.	Aprobada	Desemb.	Saldo	% desemb.
Control de emisiones 1	6	2	33	3.082.494	2.690.248	392.246	87
Eficiencia energética	32	2	6	24.739.295	820.879	23.918.416	3
Apoyo a los gobiernos	120	99	82	23.983.246	18.863.291	5.119.955	79
Proyectos individuales relativos a los HCFC	260	243	93	23.409.236	22.974.296	434.940	98
Plan de gestión para la eliminación de los HCFC (PGEH), etapa I	273	258	95	218.272.599	213.421.278	4.851.321	98
PGEH, etapa II	198	77	39	171.535.530	119.898.356	51.637.174	70
PGEH, etapa III	30	2	7	26.164.893	3.639.977	22.524.916	14
Proyectos individuales relativos a los HFC	173	113	65	26.595.198	19.455.252	7.139.946	73
Plan de aplicación de la Enmienda de Kigali relativa a los HFC (PAK), etapa I	72	3	4	27.816.150	2.529.147	25.287.003	9
Proyectos individuales relativos a otras SAO	234	234	100	60.539.415	60.539.411	4	100
Planes de eliminación de la producción de otras SAO	12	12	100	18.724.810	18.724.810	0	100
Planes sectoriales relativos a otras SAO	102	102	100	75.903.816	75.641.646	262.170	100
Total	**2.336**	**1.970**	**84**	**1.036.830.515**	**895.262.429**	**141.568.086**	**86**

* Excluidos los proyectos cancelados y transferidos.

** Excluidos los gastos de apoyo a los organismos.

7. La ejecución de proyectos y actividades por la ONUDI durante 2025 y acumulada desde 1993 hasta el 31 de diciembre de 2025 se resume a continuación:

a) **Eliminación:**[7] En 2025 se eliminaron 1.529,1 toneladas PAO de consumo de SAO y 143,8 t (261.324 toneladas de CO_2 equivalente) de consumo de HFC, y se aprobó la eliminación de otras 466,3 toneladas PAO de consumo de SAO y 2.169,3 t (4.497.089 toneladas de CO_2 equivalente) de consumo de HFC. Desde 1993 se habían eliminado 65.838 toneladas PAO de consumo de SAO y 17.728 toneladas PAO de producción de SAO, de un total previsto de 86.379 toneladas PAO de consumo y producción de SAO, así como 1.158 t (2.285.325 toneladas de CO_2 equivalente) de consumo de HFC, de un total previsto de 6.491 t (13.570.921 toneladas de CO_2 equivalente) de consumo de HFC en los proyectos aprobados (excluidos los cancelados y transferidos). Además, en 2025 se destruyeron 50 t (739.303 toneladas de CO_2 equivalente) del subproducto HFC-23. Desde 2022 se habían destruido 364,1 t (5.388.241 toneladas de CO_2 equivalente) de un total previsto de 1.274,3 t (18.858.948 toneladas de CO_2 equivalente) del subproducto HFC-23 en los proyectos aprobados;

b) **Desembolsos y aprobaciones:** En 2025 se desembolsaron USD 33,6 millones, frente a los USD 18,78 millones previstos sobre la base del informe sobre la marcha de las actividades de 2024, lo que representa una tasa de desembolso del 179 por ciento de lo previsto. En términos acumulados, se habían desembolsado USD 895,26 millones de un total de USD 1.040 millones aprobados para desembolso (excluidos los gastos de apoyo a los organismos), lo que representa una tasa de desembolso del 86 por ciento. En 2025 se aprobaron USD 68,48 millones para la ejecución de proyectos;

c) **Relación costo-eficacia (en PAO):**[8] Desde 1993, la relación costo-eficacia media de los proyectos de inversión aprobados que dan lugar a una reducción permanente del consumo

[7] La eliminación de las SAO se expresa en toneladas PAO y la de los HFC en t y toneladas de CO_2 equivalente.

[8] Incluidas 6.491 t correspondientes a proyectos relacionados con los HFC. No se incluye la relación costo-eficacia en CO_2 equivalente debido al reducido número de proyectos aprobados.

fue de USD 12,19/kg, y la de todas las actividades del sector de producción (CFC y bromuro de metilo (MB)) fue de USD 1,73/kg. La relación costo-eficacia media de los proyectos de inversión por tonelada PAO fue de USD 9,06/kg para los proyectos terminados y de USD 17,61/kg para los proyectos en curso;[9]

d) **Número de proyectos terminados:** En 2025 se terminaron 47 proyectos. Desde 1993 se habían terminado 1.970 de los 2.336 proyectos aprobados (excluidos los cerrados o transferidos), lo que representa una tasa de terminación del 84 por ciento;

e) **Plazos de ejecución de los proyectos de inversión:** Los proyectos terminados en 2025 concluyeron, en promedio, 80 meses después de su aprobación. Desde 1993, el plazo medio de terminación de los proyectos de inversión ha sido de 42 meses a partir de su aprobación. Los primeros desembolsos de estos proyectos se realizaron, en promedio, nueve meses después de su aprobación;

f) **Plazos de ejecución de los proyectos sin inversión:** Los proyectos terminados en 2025 concluyeron, en promedio, 35 meses después de su aprobación. Desde 1993, el plazo medio de terminación de los proyectos sin inversión ha sido de 37 meses a partir de su aprobación. Los primeros desembolsos de estos proyectos se realizaron, en promedio, nueve meses después de su aprobación;

g) **Preparación de proyectos:** De las 692 actividades de preparación de proyectos aprobadas hasta finales de 2025, se han terminado 616 y quedan 76 en curso. En 2025 se terminaron 20 actividades de preparación de proyectos;

h) **Demoras en la ejecución:** Al final de 2025 había 366 proyectos en ejecución, con una demora media de tres meses. Sesenta y ocho de estos proyectos se clasifican como "proyectos con demoras en la ejecución"[10] y están sujetos a los procedimientos de cancelación de proyectos (los proyectos de demostración, las actividades de preparación de proyectos y el fortalecimiento institucional no están sujetos a dichos procedimientos); y

i) **Acuerdos plurianuales:** En 2025 se estaban ejecutando dos acuerdos plurianuales para el control y la eliminación de las emisiones de HFC-23, 77 acuerdos plurianuales relativos a los PGEH y 42 acuerdos plurianuales relativos a los PAK. Desde 1993 se habían aprobado 268 acuerdos plurianuales y se habían terminado 147, lo que representa una tasa de terminación del 55 por ciento.

8. En el cuadro 3 se resumen los avances de la ONUDI desde 1993.

Cuadro 3. Avances de la ONUDI desde 1993

Eliminación lograda		Subprod. HFC-23 destruido	Desembolso (USD)	Relación costo-eficacia media (USD/kg)			Número de proyectos		Plazo de terminación (meses)		Demora media de proy. (meses)	Número de acuerdos plurianuales	
t PAO*	t de CO_2 eq**	t de CO_2 eq***		Cons.	Prod.	Emis. de HFC-23	Aprob.	Term.	Con inv.	Sin inv.		Aprob.	Term.
83.566	2.285.325	5.388.241	895.262.429	12,19	1,73	8,47	2.336	1.970	42	37	3	268	147

* Consumo y producción de SAO.
** Proyectos relativos a los HFC.
*** Subproducto HFC-23 destruido según lo indicado en los documentos de las propuestas de proyecto.

[9] El valor más elevado de la relación costo-eficacia de los proyectos en curso se debe en gran medida a los menores valores PAO de los HCFC, pero también al método utilizado por los organismos para asignar la eliminación.
[10] Proyectos aprobados hace más de 18 meses con desembolsos inferiores al 1 por ciento, o proyectos que no se habían terminado 12 meses después de la fecha de terminación propuesta en el informe sobre la marcha de las actividades (decisión 22/61).

Proyectos relativos a los HFC

9. Al 31 de diciembre de 2025, el Comité Ejecutivo había aprobado 245 proyectos relativos a los HFC (cinco proyectos de inversión, 108 actividades de preparación, 60 proyectos de asistencia técnica y 72 proyectos relativos a la etapa I de los PAK), por un total de USD 54.411.348 (excluidos los gastos de apoyo a los organismos). En el cuadro 4 se resume el estado de estos proyectos, cuyos datos ya se han incluido en los párrafos 4 a 8.

Cuadro 4. Proyectos relativos a los HFC aprobados*

Grupos de proyectos	Número de proyectos			Financiación (USD)**			
	Aprob.	Term.	% term.	Aprobada	Desemb.	Saldo	% desemb.
Proyectos individuales relativos a los HFC: inversión	5	4	80	11.025.784	7.562.857	3.462.927	69
Proyectos individuales relativos a los HFC: preparación de proyectos	108	52	48	9.333.889	5.817.289	3.516.600	62
Proyectos individuales relativos a los HFC: asistencia técnica	60	57	95	6.235.525	6.075.106	160.419	97
PAK, etapa I	72	3	4	27.816.150	2.529.147	25.287.003	9
Total	**245**	**116**	**47**	**54.411.348**	**21.984.399**	**32.426.949**	**40**

* Excluidos los proyectos cancelados y transferidos.
** Excluidos los gastos de apoyo a los organismos.
Nota: Se aprobó la eliminación de 6.491 t (13.570.921 toneladas de CO_2 equivalente) de HFC.

10. Al final de 2025, de los 245 proyectos se habían terminado cuatro proyectos de inversión, 52 actividades de preparación, 57 proyectos de asistencia técnica y tres proyectos relativos a la etapa I de los PAK, por lo que quedaban 129 proyectos en curso. Estos se encuentran en diversas fases de ejecución.

11. Del total acumulado de financiación aprobada de USD 54.411.348 (excluidos los gastos de apoyo a los organismos), se han desembolsado USD 21.984.399, lo que representa una tasa de desembolso del 40 por ciento.

Proyectos de eficiencia energética

12. Al 31 de diciembre de 2025, el Comité Ejecutivo había aprobado 32 proyectos de eficiencia energética (tres actividades de preparación y 19 proyectos piloto de asistencia técnica con cargo a la ventana de financiación prevista en la decisión 91/65, y seis actividades de preparación y cuatro proyectos de inversión con cargo a la ventana de financiación prevista en la decisión 94/60), por un total de USD 24.739.295 (excluidos los gastos de apoyo a los organismos). En el cuadro 5 se resume el estado de estos proyectos, cuyos datos ya se han incluido en los párrafos 4 a 8.

Cuadro 5. Proyectos de eficiencia energética aprobados*

Tipo	Número de proyectos			Financiación (USD)**			
	Aprob.	Term.	% term.	Aprobada	Desemb.	Saldo	% desemb.
Proyectos piloto (decisión 91/65): preparación de proyectos	3	0	0	90.000	12.658	77.342	14
Proyectos piloto (decisión 91/65): asistencia técnica	19	1	5	4.507.649	691.648	3.816.001	15
Fabricación (decisión 94/60): preparación de proyectos	6	1	17	300.000	116.573	183.427	39
Fabricación (decisión 94/60): inversión	4	0	0	19.841.646	0	19.841.646	0
Total	**32**	**2**	**6**	**24.739.295**	**820.879**	**23.918.416**	**3**

* Excluidos los proyectos cancelados.
** Excluidos los gastos de apoyo a los organismos.

13. Al final de 2025, de los 32 proyectos se habían terminado un proyecto de asistencia técnica conforme a la decisión 91/65 y una actividad de preparación conforme a la decisión 94/60, por lo que quedaban 30 proyectos en curso. Estos se encuentran en diversas fases de ejecución.

14. Del total acumulado de financiación aprobada de USD 24.739.295 (excluidos los gastos de apoyo a los organismos), se han desembolsado USD 820.879, lo que representa una tasa de desembolso del 3 por ciento.

Cuestiones identificadas en la ejecución de proyectos en 2025

15. Tras el proceso de examen, se debatieron y resolvieron satisfactoriamente diversas cuestiones, salvo las relativas a 68 proyectos clasificados como proyectos con demoras en la ejecución (entre ellos, 67 proyectos relacionados con componentes de acuerdos plurianuales sujetos a los procedimientos de cancelación de proyectos, de conformidad con la decisión 84/45 c), y un proyecto de asistencia técnica). En el anexo III del presente documento figuran los proyectos clasificados como proyectos con demoras en la ejecución y las recomendaciones de la Secretaría de solicitar la presentación de un informe a la 100ª reunión.

16. Además, se han identificado cuestiones relativas a proyectos o tramos de acuerdos plurianuales para la eliminación de los HCFC y a la preparación de un inventario nacional de bancos de sustancias controladas de desecho y la elaboración de un plan nacional para la gestión de esas sustancias (decisión 91/66). Estas cuestiones también figuran en el anexo III. Para cada uno de estos proyectos, se presenta una breve descripción del estado de ejecución y de las cuestiones pendientes, así como una recomendación para que la examine el Comité Ejecutivo.

17. Se han presentado a la 99ª reunión detalles sobre los avances en la ejecución de los proyectos relacionados con los PGEH de China (sectores de fabricación de equipos de aire acondicionado para habitaciones y calentadores de agua con bomba de calor, y de espumas de poliestireno extruido),[11] Etiopía,[12] el Gabón,[13] Granada,[14] el Iraq,[15] Macedonia del Norte,[16] Qatar,[17] la Arabia Saudita,[18] Serbia[19] y la República Unida de Tanzanía,[20] con los PAK del Camerún,[21] el Congo,[22] la República Dominicana[23] y Macedonia del Norte,[24] e informes sobre proyectos con requisitos específicos de presentación de informes[25] relacionados con la Argentina (PGEH), Nigeria (PGEH) y el Senegal (PGEH). Las recomendaciones sobre las cuestiones pendientes de estos proyectos, incluida la aprobación de las solicitudes de prórroga, de haberlas, se abordan en las secciones pertinentes de esos documentos. A continuación se examinan las cuestiones pendientes de los demás proyectos en curso no incluidos en el anexo III del presente documento y las solicitudes de prórroga de las fechas de terminación.

[11] UNEP/OzL.Pro/ExCom/99/45
[12] UNEP/OzL.Pro/ExCom/99/52
[13] UNEP/OzL.Pro/ExCom/99/53
[14] UNEP/OzL.Pro/ExCom/99/54
[15] UNEP/OzL.Pro/ExCom/99/57
[16] UNEP/OzL.Pro/ExCom/99/65
[17] UNEP/OzL.Pro/ExCom/99/68
[18] UNEP/OzL.Pro/Excom/99/70
[19] UNEP/OzL.Pro/ExCom/99/71
[20] UNEP/OzL.Pro/ExCom/99/76
[21] UNEP/OzL.Pro/Excom/99/44
[22] UNEP/OzL.Pro/Excom/99/47
[23] UNEP/OzL.Pro/Excom/99/50
[24] UNEP/OzL.Pro/ExCom/99/65
[25] UNEP/OzL.Pro/ExCom/99/19 o UNEP/OzL.Pro/ExCom/99/20

18. De los 269 proyectos en curso, excluidos los de fortalecimiento institucional y preparación de proyectos, en 159 se han revisado las fechas previstas de terminación desde el informe sobre la marcha de las actividades de 2024.

19. De conformidad con la decisión 95/12 b), la ONUDI informó de que el proyecto de fortalecimiento institucional de Serbia se había retrasado debido a la inestabilidad política; se prevé presentar la solicitud de renovación a la 101ª reunión.

20. De conformidad con la decisión 82/11 b),[26] la ONUDI ha solicitado una prórroga de la duración de tres proyectos en virtud de la decisión 91/66, como se indica en el cuadro 6.

Cuadro 6. Proyectos en virtud de la decisión 91/66 para los que se ha solicitado una prórroga de la fecha de terminación

País/código del proyecto	Desemb. (%)	Actividades que requieren más tiempo	Fecha de terminación original (mmm-aa)	Fecha de terminación solicitada (mmm-aa)
Preparación de un inventario nacional de bancos de sustancias controladas de desecho y elaboración de un plan nacional para la gestión de esas sustancias (decisión 91/66)				
Bangladesh BGD/HFCIND/66/UNIDO/PRP/DES/95	0	Validación y aprobación del proyecto de plan de acción nacional por la dependencia nacional del ozono (DNO); finalización de las actividades de creación de capacidad y capacitación	dic-26	dic-27
Irán (República Islámica del) IRN/HFCIND/273/UNIDO/PRP/DES/94	30	Finalización del análisis de datos, la elaboración de escenarios y el taller de validación con las partes interesadas nacionales	jun-26*	mar-28
Níger NER/HFCIND/55/UNIDO/PRP/DES/94	7	Finalización de la contratación de una persona consultora nacional para realizar un estudio sobre el terreno; finalización del análisis de datos y de la preparación del informe	jun-26*	dic-27

* La fecha de terminación ya se había prorrogado hasta marzo de 2027 para la República Islámica del Irán y hasta diciembre de 2026 para el Níger (decisión 97/13 b) ii) y iii)).

21. Además, de conformidad con la decisión 82/11 b), la ONUDI ha solicitado una prórroga de la duración de cuatro proyectos de eficiencia energética en virtud de la decisión 91/65 y de 12 proyectos relacionados con los PGEH, como se indica en el cuadro 7.

[26] Cualquier solicitud de prórroga deberá someterse a la aprobación del Comité Ejecutivo antes de la fecha de terminación del proyecto, teniendo presente que no deberán asumirse nuevos compromisos antes de que se haya aprobado la prórroga.

Cuadro 7. Proyectos para los que se ha solicitado una prórroga de la fecha de terminación

País/código del proyecto	Desemb. (%)	Actividades que requieren más tiempo	Fecha de terminación original (mmm-aa)	Fecha de terminación solicitada (mmm-aa)
Estrategia de eficiencia energética para el plan de aplicación de la Enmienda de Kigali relativa a los HFC (decisión 91/65)				
México MEX/EE/220/UNIDO/TAS/SRV/93	27	Realización de los diagnósticos del consumo de energía y las evaluaciones conexas; examen y actualización de las normas de refrigeración y aire acondicionado (RAC) y elaboración de nuevas normas para sistemas de refrigeración centralizada y sistemas de agua enfriada	dic-26	dic-27
Sudáfrica ZAF/EE/18/UNIDO/TAS/SRV/93	4	Adquisición de equipos tras la aprobación de la dirección del hospital beneficiario; ejecución de las actividades de capacitación	dic-26	jun-27
Proyecto piloto para mantener y/o mejorar la eficiencia energética de las tecnologías y los equipos de sustitución en el contexto de la reducción de los HFC (actividades sin inversión) (decisión 91/65)				
Montenegro MNE/EE/25/UNIDO/TAS/SRV/95	4	Seguimiento del rendimiento energético de los equipos que utilizan alternativas	dic-26	dic-27
Nigeria NGA/EE/169/UNIDO/TAS/SRV/93	49	Actualización y aplicación de las normas mínimas de eficiencia energética para refrigeradores y de otras reglamentaciones pertinentes	dic-26	jun-27
Planes de gestión para la eliminación de los HCFC				
Mauritania (etapa I, primer tramo) MRT/HPMP1/29/UNIDO/INV/SRV/88	46	Distribución de herramientas, equipos e identificadores a los beneficiarios	dic-24	dic-27
Mauritania (etapa I, segundo tramo) MRT/HPMP1/30/UNIDO/INV/SRV/91	34	Finalización de la capacitación de técnicos de RAC en tecnologías que utilizan hidrocarburos y adquisición y distribución de equipos de recuperación y reciclaje	dic-25	dic-27
Montenegro (etapa II, primer tramo) MNE/HPMP2/17/UNIDO/INV/SRV/85	83	Distribución de equipos que utilizan R-290 al centro de formación profesional y a los beneficiarios; finalización y difusión de los materiales de capacitación; y finalización de las actividades de presentación de informes	jun-23	dic-27
Montenegro (etapa II, tercer tramo) MNE/HPMP2/26/UNIDO/INV/SRV/97	0		dic-26	dic-27
Montenegro (etapa II, segundo tramo) MNE/HPMP2/20/UNIDO/INV/SRV/91	32	Ejecución del programa nacional de certificación mejorado, en coordinación con la DNO, las instituciones de formación profesional y el personal nacional de capacitación	dic-25	dic-27
Nigeria (etapa III, primer tramo) (sector de fabricación de equipos de RAC) NGA/HPMP3/164/UNIDO/INV/REF/91	68	Adquisición y distribución de equipos, creación de capacidad y establecimiento de un grupo técnico sobre refrigerantes de bajo potencial de calentamiento atmosférico	dic-25	dic-27
Nigeria (etapa III, segundo tramo) (sector de fabricación de equipos de RAC) NGA/HPMP3/170/UNIDO/INV/REF/94	6		dic-26	dic-27

País/código del proyecto	Desemb. (%)	Actividades que requieren más tiempo	Fecha de terminación original (mmm-aa)	Fecha de terminación solicitada (mmm-aa)
Sudán (etapa II, primer tramo) (sector de espumas) SDN/HPMP2/38/UNIDO/INV/FOA/75	38	Finalización de un informe de evaluación sobre el terreno para determinar la viabilidad de reanudar y terminar las actividades pendientes; presentación por la ONUDI a la Secretaría de un informe de evaluación y recomendaciones que exponga las opciones para reanudar la ejecución, teniendo en cuenta la situación actual de conflicto	dic-20	dic-27
República Árabe Siria (etapa I, primer tramo) SYR/HPMP1/108/UNIDO/INV/SRV/86	23	Adquisición y entrega de equipos a los usuarios finales, incluidas universidades e instituciones de gobierno local, y ejecución de las actividades de capacitación	dic-23	dic-27
República Árabe Siria (etapa I, segundo tramo) (sector de fabricación de equipos de aire acondicionado) SYR/HPMP1/112/UNIDO/INV/AC/91	16		dic-25	dic-27
República Árabe Siria (etapa I, segundo tramo) (unidad de gestión del proyecto para el componente de inversión) SYR/HPMP1/114/UNIDO/TAS/PMU/91	105		dic-25	dic-27
República Árabe Siria (etapa I, segundo tramo) (sector de espumas de poliuretano) SYR/HPMP1/113/UNIDO/INV/FOA/91	0	Adquisición y entrega de equipos a los fabricantes de espumas y ejecución de las actividades de conversión	dic-25	dic-27

Integración de la perspectiva de género[27]

22. La ONUDI aplica su marco interno (por ejemplo, listas de verificación e indicadores) conjuntamente con la política del Fondo Multilateral en esta materia. Todas las etapas y los tramos de acuerdos plurianuales presentados desde la 94ª reunión, que abarcan aproximadamente 30 países, han incluido el componente obligatorio de la política. Aunque el impacto global es modesto, los resultados comunicados son tangibles y muestran una tendencia positiva con el tiempo. Por ejemplo, en el Níger, 20 de los 100 técnicos y 50 funcionarios de aduanas que recibieron capacitación eran mujeres; en Túnez, 16 de los 95 formadores certificados eran mujeres; en el programa de capacitación del Ecuador "Mujeres en RAC", ocho de los 40 técnicos capacitados eran mujeres. Además, los programas de becas en apoyo de las mujeres en los sectores de fabricación de equipos de RAC y de aire acondicionado móvil en países como Nigeria y Sudáfrica dieron lugar a una mayor participación de las mujeres en diversas actividades relacionadas con el Protocolo de Montreal. La ONUDI también ha observado que la asignación de recursos específicos puede contribuir a impulsar la participación de las mujeres, especialmente en los países de bajo consumo.

Gestión de riesgos

23. La ONUDI aborda sistemáticamente los riesgos y las demoras en la ejecución de los proyectos y elabora planes de acción para hacerles frente. Cada categoría de demora se describe en función de su causa fundamental, las medidas adoptadas y las medidas preventivas. Entre las prácticas habituales figuran el inicio anticipado de los procesos de adquisición, con plazos realistas para obtener las autorizaciones; la

[27] El Comité Ejecutivo solicitó a los organismos bilaterales y de ejecución que incluyeran en sus informes anuales sobre la marcha de las actividades, a partir de 2023, un breve informe sobre los principales resultados logrados en la integración de la perspectiva de género, sobre la base de la información de que dispusieran (decisión 90/48 d)).

selección cuidadosa de los beneficiarios, combinada con una participación temprana y sostenida del sector industrial; el recurso a unidades de gestión de proyectos en los países y a misiones cuando la capacidad de la DNO es limitada; el establecimiento de relaciones entre instituciones, y no entre personas, para resistir las transiciones políticas; la promoción del diálogo regional para abordar cuestiones relacionadas con los bloques comerciales; el recurso a opciones de abastecimiento local (por ejemplo, proveedores de sistemas) para sortear las sanciones; y, en casos excepcionales, la remisión del asunto al servicio jurídico de la ONUDI y a la Secretaría para encontrar soluciones viables.

Recomendación

24. El Comité Ejecutivo podría considerar:

a) Tomar nota del informe sobre la marcha de las actividades de la ONUDI al 31 de diciembre de 2025 que figura en el documento UNEP/OzL.Pro/ExCom/99/17;

b) Aprobar la prórroga de las fechas de terminación de la preparación de un inventario nacional de bancos de sustancias controladas de desecho y la elaboración de un plan nacional para la gestión de esas sustancias (decisión 91/66) para los países que se enumeran a continuación, a fin de permitir la terminación de las actividades pendientes en curso, como se indica en el cuadro 6 del documento UNEP/OzL.Pro/ExCom/99/17:

i) Bangladesh (BGD/HFCIND/66/UNIDO/PRP/DES/95) y el Níger (NER/HFCIND/55/UNIDO/PRP/DES/94), hasta diciembre de 2027;

ii) Irán (República Islámica del) (IRN/HFCIND/273/UNIDO/PRP/DES/94), hasta marzo de 2028;

c) Aprobar también la prórroga de las fechas de terminación de los proyectos que se enumeran a continuación, a fin de permitir la terminación de las actividades pendientes en curso, como se indica en el cuadro 7 del documento UNEP/OzL.Pro/ExCom/99/17:

i) Estrategias de eficiencia energética para los planes de aplicación de la Enmienda de Kigali relativa a los HFC (decisión 91/65) para:

a. México (MEX/EE/220/UNIDO/TAS/SRV/93), hasta diciembre de 2027;

b. Sudáfrica (ZAF/EE/18/UNIDO/TAS/SRV/93), hasta junio de 2027;

ii) Proyectos piloto para mantener y/o mejorar la eficiencia energética de las tecnologías y los equipos de sustitución en el contexto de la reducción de los HFC (actividades sin inversión) (decisión 91/65) para:

a. Montenegro (MNE/EE/25/UNIDO/TAS/SRV/95), hasta diciembre de 2027;

b. Nigeria (NGA/EE/169/UNIDO/TAS/SRV/93), hasta junio de 2027;

iii) Proyectos relacionados con los planes de gestión para la eliminación de los HCFC, hasta diciembre de 2027, para:

a. Mauritania (etapa I, primer tramo (MRT/HPMP1/29/UNIDO/INV/SRV/88) y etapa I, segundo tramo (MRT/HPMP1/30/UNIDO/INV/SRV/91));

b. Montenegro (etapa II, primer tramo (MNE/HPMP2/17/UNIDO/INV/SRV/85), etapa II, segundo tramo (MNE/HPMP2/20/UNIDO/INV/SRV/91) y etapa II, tercer tramo (MNE/HPMP2/26/UNIDO/INV/SRV/97));

c. Nigeria (etapa III, primer tramo (sector de fabricación de equipos de RAC) (NGA/HPMP3/164/UNIDO/INV/REF/91) y etapa III, segundo tramo (sector de fabricación de equipos de RAC) (NGA/HPMP3/170/UNIDO/INV/REF/94));

d. Sudán (etapa II, primer tramo (sector de espumas) (SDN/HPMP2/38/UNIDO/INV/FOA/75));

e. República Árabe Siria (etapa I, primer tramo (SYR/HPMP1/108/UNIDO/INV/SRV/86), etapa I, segundo tramo (sector de fabricación de equipos de aire acondicionado) (SYR/HPMP1/112/UNIDO/INV/AC/91), etapa I, segundo tramo (unidad de gestión del proyecto para el componente de inversión) (SYR/HPMP1/114/UNIDO/TAS/PMU/91) y etapa I, segundo tramo (sector de espumas de poliuretano) (SYR/HPMP1/113/UNIDO/INV/FOA/91)); y

d) Aprobar también las recomendaciones relativas a los proyectos en curso con cuestiones específicas que figuran en el anexo III del presente documento.

Anexo I

PANORAMA GENERAL DEL ESTADO DE EJECUCIÓN DE LOS PROYECTOS DE LA ONUDI POR PAÍS EN 2025

1. En el cuadro 1 del anexo I se presenta el estado de ejecución de los proyectos por país en 2025, en lo relativo a la eliminación lograda, los desembolsos previstos y efectuados y la terminación de proyectos.

Cuadro 1. Estado de ejecución de los proyectos de la ONUDI en 2025

País	Eliminación en 2025 (t PAO)	Eliminación en 2025 (t de CO_2 eq)*	Desembolsos previstos en 2025 (USD)	Desembolsos en 2025 (USD)	Desembolsos respecto de lo previsto en 2025 (%)	Proyectos terminados respecto de los previstos en 2025 (%)**
Afganistán			7	21.727	310.386	
Albania			125.001	166.238	133	
Argelia	11,1	0	185.003	623.792	337	100
Argentina	11,1	0	982.002	3.318.858	338	33
Armenia	0,0	0	116.000	131.819	114	100
Bahamas			59.000	25.632	43	
Bahrein	9,0	0	20.002	31.917	160	100
Bangladesh			10.000	0	0	
Benin			195.001	77.918	40	
Bolivia (Estado Plurina-cional de)			225.000	184.474	82	
Bosnia y Herzegovina	0,6	0	147.000	221.016	150	100
Botswana	0,0	0	62.000	35.016	56	50
Brasil	0,0	0	232.700	259.496	112	100
Brunei Darussalam	0,9	0	6.000	4.409	73	100
Burkina Faso			70.700	206	0	
Burundi			78.000	76.383	98	0
Camerún			276.700	315.247	114	0
Chad	0,0	0	120.000	2.421	2	100
Chile	3,4	0	1	7.631	763.100	100
China			2.350.002	12.556.740	534	0
Congo			148.000	122.261	83	
Côte d'Ivoire			88.000	60.133	68	
República Popular Demo-crática de Corea			2	0	0	
Dominica			10.000	1.172	12	
República Dominicana			25.000	39.435	158	
Ecuador			401.500	471.945	118	
Egipto	25,2	0	3.206.002	3.743.707	117	40
Eritrea			60.000	65.827	110	0
Etiopía			36.000	14.950	42	0
Gabón			56.000	18.451	33	0
Gambia			89.001	23.859	27	0
Granada	0,1	0	51.000	39.986	78	100
Guatemala			210.100	148.627	71	
Guinea	0,0	0	41.201	6.016	15	100
Guinea-Bissau	0,0	0	22.000	37.269	169	100
Honduras			215.000	100.982	47	
Irán (República Islámica del)	0,0	0	125.000	94.639	76	33
Iraq	1.455,4	0	90.001	33.754	38	100
Jordania	0,0	211.513	437.005	213.511	49	50

País	Eliminación en 2025 (t PAO)	Eliminación en 2025 (t de CO_2 eq)*	Desembolsos previstos en 2025 (USD)	Desembolsos en 2025 (USD)	Desembolsos respecto de lo previsto en 2025 (%)	Proyectos terminados respecto de los previstos en 2025 (%)**
Kuwait			50.000	10.106	20	
Líbano			1	0	0	
Lesotho	0,0	0	16.000	14.603	91	100
Liberia			56.000	19.458	35	0
Libia			150.901	258.036	171	0
Madagascar			130.000	104.524	80	0
Malawi			65.000	8.863	14	
Mauritania			27.000	64.642	239	0
México	0,0	0	1.106.102	2.323.137	210	50
Mongolia	0,0	0	20.000	12.284	61	100
Montenegro			128.000	137.467	107	0
Marruecos	0,0	0	297.000	401.140	135	
Mozambique			2.001	0	0	
Namibia			10.000	11.461	115	0
Nicaragua	1,4	28.498	9.503	10.017	105	
Níger			154.003	83.195	54	0
Nigeria			500.001	491.744	98	0
Macedonia del Norte	0,5	0	250.000	282.904	113	100
Omán			90.000	127.759	142	0
Pakistán	8,2	0	730.005	811.827	111	33
Filipinas			24.200	3.882	16	
Qatar			50.000	24.816	50	
Rwanda			46.000	47.765	104	
Santa Lucía	0,0	0	85.500	46.931	55	100
San Vicente y las Granadinas			20.000	14.000	70	0
Arabia Saudita			72.000	125.868	175	
Senegal			23.901	15.201	64	0
Serbia	0,0	0	41.000	83.537	204	100
Sierra Leona			43.001	19.953	46	
Somalia			155.501	170.185	109	
Sudáfrica	0,0	0	2.111.000	2.660.114	126	50
Sudán			2	2.342	117.100	
Suriname			29.000	40.647	140	
República Árabe Siria			85.001	30.630	36	
Togo			89.000	79.082	89	
Túnez	0,0	0	407.000	378.566	93	100
Türkiye	0,0	0	680.000	778.915	115	50
Turkmenistán	2,2	21.313	283.002	374.821	132	100
Uganda			20.000	29.423	147	
República Unida de Tanzanía			39.000	23.697	61	0
Uruguay			10.000	3.805	38	
Venezuela (República Bolivariana de)			80.002	141.320	177	0
Zambia			22.002	30.958	141	0
Total general	**1.529,1**	**261.324**	**18.778.560**	**33.597.089**	**179**	**45**

* 143,8 t (261.324 toneladas de CO_2 equivalente) en 2025 en proyectos relacionados con los HFC. Además, en 2025 se destruyeron 50 t (739.303 toneladas de CO_2 equivalente) de HFC-23 generado como subproducto.

** Para los proyectos cuya terminación estaba prevista en 2025.

Anexo II

PANORAMA GENERAL DEL ESTADO DE EJECUCIÓN DE LOS PROYECTOS DE LA ONUDI POR AÑO AL 31 DE DICIEMBRE DE 2025

1. En el cuadro 1 del anexo II se presenta un panorama general del estado de ejecución de los proyectos por año.[1] Ya se han terminado todos los proyectos y actividades aprobados entre 1993 y 2013.

Cuadro 1. Estado de ejecución de los proyectos por año*

Año	Número de proyectos			Financiación (USD)**			
	Aprob.	Term.	% term.	Aprobada	Desemb.	Saldo	% desemb.
1993	22	22	100	11.815.540	11.815.540	0	100
1994	52	52	100	30.645.899	30.645.899	0	100
1995	59	59	100	24.813.052	24.813.052	-1	100
1996	46	46	100	19.290.681	19.290.681	0	100
1997	130	130	100	41.563.710	41.563.711	-1	100
1998	88	88	100	22.721.130	22.721.130	0	100
1999	123	123	100	33.648.962	33.648.962	0	100
2000	96	96	100	30.072.456	30.072.456	0	100
2001	119	119	100	24.691.911	24.691.912	-1	100
2002	76	76	100	35.981.235	35.981.235	0	100
2003	49	49	100	29.985.308	29.985.308	0	100
2004	44	44	100	33.105.459	33.105.460	-1	100
2005	74	74	100	52.000.040	52.000.038	2	100
2006	45	45	100	19.740.544	19.740.544	0	100
2007	42	42	100	24.186.740	24.186.740	0	100
2008	77	77	100	32.280.826	32.280.829	-3	100
2009	70	70	100	15.343.761	15.081.588	262.173	98
2010	69	69	100	45.012.452	45.012.451	1	100
2011	71	71	100	76.523.376	76.523.379	-3	100
2012	52	52	100	32.492.767	32.418.247	74.520	100
2013	37	37	100	31.089.943	31.089.943	0	100
2014	55	54	98	27.133.459	27.089.736	43.723	100
2015	83	80	96	34.672.752	32.463.003	2.209.749	94
2016	58	56	97	34.934.826	34.716.653	218.173	99
2017	49	47	96	18.491.629	18.058.499	433.130	98
2018	75	73	97	32.032.573	29.772.051	2.260.522	93
2019	67	59	88	19.073.008	15.879.287	3.193.721	83
2020	58	50	86	15.225.774	14.628.960	596.814	96
2021	73	53	73	22.900.535	20.205.232	2.695.303	88
2022	66	33	50	20.314.505	14.708.257	5.606.248	72
2023	101	20	20	30.655.606	11.789.483	18.866.123	38
2024	93	4	4	45.908.747	8.710.013	37.198.734	19
2025	117	0	0	68.481.310	572.150	67.909.160	1
Total	**2.336**	**1.970**	**84**	**1.036.830.515**	**895.262.429**	**141.568.086**	**86**

* No se incluyen los proyectos cerrados ni transferidos.
** No se incluyen los gastos de apoyo a los organismos.

[1] Los datos se presentan según el año en que el Comité Ejecutivo aprobó el proyecto. Todas las aprobaciones (proyectos de inversión y sin inversión) se consideran por igual (es decir, un proyecto de inversión o un tramo de financiación de un acuerdo plurianual por USD 1 millón se considera un proyecto, al igual que la preparación de un programa de país por USD 30.000). Los principales indicadores del resumen anual son el porcentaje de proyectos terminados, las toneladas PAO o de CO_2 equivalente eliminadas y el porcentaje de fondos desembolsados. Existen tres tipos de desembolsos: durante la ejecución, después de la ejecución y para proyectos financiados retroactivamente.

Anexo III

PROYECTOS EN CURSO CON CUESTIONES PENDIENTES EN EL INFORME SOBRE LA MARCHA DE LAS ACTIVIDADES DE LA ONUDI

País	Código del proyecto	Título del proyecto	Desembolso (%)	Estado/Cuestiones pendientes	Recomendación
Albania	ALB/KIP1/57/UNIDO/INV/SRV/93	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo)	21	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Argentina	ARG/HPMP2/189/UNIDO/INV/FOA/84	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo) (sector de espumas: gestión y supervisión)	93	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Argentina	ARG/HPMP2/191/UNIDO/TAS/PMU/84	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo) (supervisión y presentación de informes sobre la producción de HCFC-22)	6	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Argentina	ARG/HPMP2/192/UNIDO/INV/FOA/84	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo) (sector de espumas)	37	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Argentina	ARG/HPMP2/193/UNIDO/TAS/SRV/84	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo) (sector de servicio y mantenimiento de equipos de refrigeración)	72	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Argentina	ARG/EC1/198/UNIDO/INV/EMS/87	Control y eliminación de las emisiones de HFC-23 en la producción de HCFC-22 en FIASA (primer tramo)	86	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Argentina	ARG/HPMP2/200/UNIDO/INV/FOA/92	Plan de gestión para la eliminación de los HCFC (etapa II, tercer tramo) (sector de fabricación de espumas de poliuretano)	27	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Argentina	ARG/HPMP2/201/UNIDO/TAS/PMU/92	Plan de gestión para la eliminación de los HCFC (etapa II, tercer tramo) (unidad de gestión del proyecto)	41	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución

País	Código del proyecto	Título del proyecto	Desembolso (%)	Estado/Cuestiones pendientes	Recomendación
Argentina	ARG/HPMP2/202/UNIDO/INV/SRV/92	Plan de gestión para la eliminación de los HCFC (etapa II, tercer tramo) (sector de servicio y mantenimiento de equipos de refrigeración)	10	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Bahamas	BHS/HPMP2/32/UNIDO/INV/SRV/90	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	19	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Benin	BEN/HPMP2/45/UNIDO/INV/SRV/90	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	39	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Benin	BEN/HPMP2/49/UNIDO/TAS/SRVEE/93	Plan de gestión para la eliminación de los HCFC (etapa II) (actividades adicionales para mantener y/o mejorar la eficiencia energética en virtud de la decisión 89/6 b))	20	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Bolivia (Estado Plurinacional de)	BOL/HPMP2/63/UNIDO/TAS/SRVEE/93	Plan de gestión para la eliminación de los HCFC (etapa II) (actividades adicionales para mantener la eficiencia energética en el sector de servicio y mantenimiento de equipos de refrigeración (decisión 89/6))	59	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Bolivia (Estado Plurinacional de)	BOL/KIP1/65/UNIDO/INV/SRV/93	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo)	36	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Botswana	BWA/HPMP2/28/UNIDO/INV/SRV/86	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	42	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Brasil	BRA/HPMP3/337/UNIDO/INV/SRV/94	Plan de gestión para la eliminación de los HCFC (etapa III, primer tramo)	1	Demora de 18 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución

País	Código del proyecto	Título del proyecto	Desembolso (%)	Estado/Cuestiones pendientes	Recomendación
Camerún	CMR/HPMP2/48/UNIDO/INV/SRV/88	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo)	56	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Camerún	CMR/EE/55/UNIDO/TAS/SRV/94	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 (actividades sin inversión) (decisión 91/65)	0	Demora de 18 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Chad	TCD/HPMP2/40/UNIDO/INV/SRV/90	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	6	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Egipto	EGY/HPMP2/131/UNIDO/INV/FOA/79	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo) (sector de espumas de poliuretano)	92	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Egipto	EGY/HPMP2/149/UNIDO/INV/AC/88	Plan de gestión para la eliminación de los HCFC (etapa II, tercer tramo) (sector de fabricación de equipos de aire acondicionado residencial)	90	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Egipto	EGY/HPMP2/151/UNIDO/INV/SRV/88	Plan de gestión para la eliminación de los HCFC (etapa II, tercer tramo) (sector de servicio y mantenimiento de equipos de refrigeración y unidad de gestión del proyecto)	90	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Gambia	GMB/HPMP2/50/UNIDO/INV/SRV/93	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo)	24	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Gambia	GMB/HPMP2/52/UNIDO/TAS/SRVEE/93	Plan de gestión para la eliminación de los HCFC (etapa II) (actividades adicionales para mantener la eficiencia energética en el sector de servicio y mantenimiento de equipos de refrigeración (decisión 89/6))	0	Demoras de 12 y 18 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución

País	Código del proyecto	Título del proyecto	Desembolso (%)	Estado/Cuestiones pendientes	Recomendación
Guinea	GIN/HPMP2/45/UNIDO/INV/SRV/93	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	0	Demora de 18 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Irán (República Islámica del)	IRN/HPMP2/226/UNIDO/INV/FOA/77	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo) (sector de espumas)	65	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Irán (República Islámica del)	IRN/HPMP2/237/UNIDO/INV/FOA/84	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo) (sector de espumas)	7	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Irán (República Islámica del)	IRN/HPMP2/238/UNIDO/TAS/SRV/84	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo) (sector de servicio y mantenimiento de equipos de refrigeración)	18	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Irán (República Islámica del)	IRN/HPMP2/244/UNIDO/INV/FOA/86	Plan de gestión para la eliminación de los HCFC (etapa II, tercer tramo) (sector de espumas)	94	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Irán (República Islámica del)	IRN/HFCIND/273/UNIDO/PRP/DES/94	Preparación de un inventario nacional de bancos de sustancias controladas de desecho y elaboración de un plan nacional para la gestión de esas sustancias (decisión 91/66)	30	Avance lento en la ejecución	Pedir a la ONUDI que presente a la 100ª reunión un informe de situación sobre los avances en la ejecución
Irán (República Islámica del)	IRN/HPMP3/276/UNIDO/INV/SRV/96	Plan de gestión para la eliminación de los HCFC (etapa III, primer tramo)	0	Avance lento en la ejecución	Pedir a la ONUDI que presente a la 100ª reunión un informe de situación sobre los avances en la ejecución y los niveles de desembolso
Jordania	JOR/KIP1/117/UNIDO/INV/AC/93	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo) (aire acondicionado residencial)	2	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Jordania	JOR/KIP1/118/UNIDO/INV/REF/93	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo) (refrigeración doméstica)	1	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución

País	Código del proyecto	Título del proyecto	Desembolso (%)	Estado/Cuestiones pendientes	Recomendación
Jordania	JOR/KIP1/119/UNIDO/INV/REF/93	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo) (refrigeración comercial)	2	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Jordania	JOR/KIP1/120/UNIDO/INV/SRV/93	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo) (servicio y mantenimiento de equipos de refrigeración y asistencia técnica)	3	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Jordania	JOR/KIP1/121/UNIDO/TAS/PMU/93	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo) (unidad de gestión del proyecto)	77	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Jordania	JOR/KIP1/125/UNIDO/INV/REF/93	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo) (asistencia técnica para la adopción de tecnología de bajo PCA)	44	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Kuwait	KWT/HPMP2/43/UNIDO/INV/SRV/88	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	19	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Libia	LBY/HPMP2/46/UNIDO/TAS/PMU/90	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo) (unidad de gestión del proyecto)	68	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Libia	LBY/HPMP2/47/UNIDO/INV/SRV/90	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo) (sector de servicio y mantenimiento)	54	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Madagascar	MDG/HPMP2/37/UNIDO/INV/SRV/90	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	50	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Malawi	MWI/HPMP2/56/UNIDO/INV/SRV/92	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo)	26	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución

País	Código del proyecto	Título del proyecto	Desembolso (%)	Estado/Cuestiones pendientes	Recomendación
Mauritania	MRT/HPMP1/29/UNIDO/INV/SRV/88	Plan de gestión para la eliminación de los HCFC (etapa I, primer tramo)	46	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Mauritania	MRT/HPMP1/30/UNIDO/INV/SRV/91	Plan de gestión para la eliminación de los HCFC (etapa I, segundo tramo)	34	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
México	MEX/KIP1/221/UNIDO/INV/SRV/93	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo) (sector de servicio y mantenimiento)	19	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Montenegro	MNE/HPMP2/17/UNIDO/INV/SRV/85	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	83	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Montenegro	MNE/HPMP2/20/UNIDO/INV/SRV/91	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo)	32	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Marruecos	MAR/HPMP2/77/UNIDO/INV/SRV/88	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	86	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Marruecos	MAR/HPMP2/79/UNIDO/INV/FOA/91	Plan de gestión para la eliminación de los HCFC (etapa II): proyecto general para eliminar el HCFC-141b contenido en los polioles premezclados importados en el sector de espumas de poliuretano	41	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Níger	NER/HPMP2/46/UNIDO/TAS/SRV/90	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	48	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución

País	Código del proyecto	Título del proyecto	Desembolso (%)	Estado/Cuestiones pendientes	Recomendación
Nigeria	NGA/HPMP3/164/UNIDO/INV/REF/91	Plan de gestión para la eliminación de los HCFC (etapa III, primer tramo) (sector de fabricación de equipos de refrigeración y aire acondicionado)	68	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Omán	OMN/HPMP3/44/UNIDO/INV/SRV/88	Plan de gestión para la eliminación de los HCFC (etapa III, primer tramo)	60	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Omán	OMN/HPMP3/49/UNIDO/INV/SRV/93	Plan de gestión para la eliminación de los HCFC (etapa III, segundo tramo)	61	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Pakistán	PAK/HPMP3/111/UNIDO/TAS/PMU/90	Plan de gestión para la eliminación de los HCFC (etapa III, primer tramo) (unidad de gestión del proyecto)	38	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Pakistán	PAK/HPMP3/112/UNIDO/INV/SRV/90	Plan de gestión para la eliminación de los HCFC (etapa III, primer tramo) (sector de servicio y mantenimiento de equipos de refrigeración)	51	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Filipinas	PHL/HPMP3/112/UNIDO/INV/SRV/93	Plan de gestión para la eliminación de los HCFC (etapa III, primer tramo)	5	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Santa Lucía	LCA/HPMP2/45/UNIDO/TAS/SRVEE/94	Plan de gestión para la eliminación de los HCFC (etapa II) (actividades adicionales para mantener la eficiencia energética en el sector de servicio y mantenimiento de equipos de refrigeración (decisión 89/6))	0	Demora de 18 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Santa Lucía	LCA/KIP1/47/UNIDO/INV/SRV/94	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo)	0	Demora de 18 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución

País	Código del proyecto	Título del proyecto	Desembolso (%)	Estado/Cuestiones pendientes	Recomendación
Senegal	SEN/HPMP2/49/UNIDO/INV/SRV/88	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	75	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Sudán	SDN/HPMP2/38/UNIDO/INV/FOA/75	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo) (sector de espumas)	38	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Sudán	SDN/HPMP3/50/UNIDO/INV/SRV/88	Plan de gestión para la eliminación de los HCFC (etapa III, primer tramo)	3	Avance lento en la ejecución	Pedir a la ONUDI que presente a la 100ª reunión un informe de situación sobre los avances en la ejecución y los niveles de desembolso
Suriname	SUR/HPMP2/36/UNIDO/INV/SRV/93	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo)	54	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
República Árabe Siria	SYR/HPMP1/108/UNIDO/INV/SRV/86	Plan de gestión para la eliminación de los HCFC (etapa I, primer tramo)	23	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
República Árabe Siria	SYR/HPMP1/112/UNIDO/INV/AC/91	Plan de gestión para la eliminación de los HCFC (etapa I, segundo tramo) (sector de fabricación de equipos de aire acondicionado)	16	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
República Árabe Siria	SYR/HPMP1/113/UNIDO/INV/FOA/91	Plan de gestión para la eliminación de los HCFC (etapa I, segundo tramo) (sector de espumas de poliuretano)	0	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
República Árabe Siria	SYR/HPMP1/114/UNIDO/TAS/PMU/91	Plan de gestión para la eliminación de los HCFC (etapa I, segundo tramo) (unidad de gestión del proyecto para el componente de inversión)	105	Demora de 12 meses	Tomando nota de la decisión 77/8 j), pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Túnez	TUN/HPMP2/76/UNIDO/INV/SRV/84	Plan de gestión para la eliminación de los HCFC (etapa II, primer tramo) (sector de servicio y mantenimiento de equipos de refrigeración)	95	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución

País	Código del proyecto	Título del proyecto	Desembolso (%)	Estado/Cuestiones pendientes	Recomendación
Túnez	TUN/HPMP2/85/UNIDO/INV/SRV/92	Plan de gestión para la eliminación de los HCFC (etapa II, segundo tramo)	36	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Túnez	TUN/KIP1/87/UNIDO/INV/AC/94	Plan de aplicación de la Enmienda de Kigali relativa a los HFC (etapa I, primer tramo) (sector de fabricación de equipos de refrigeración y aire acondicionado residenciales)	0	Demora de 18 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Türkiye	TUR/HPMP1/111/UNIDO/INV/SRV/84	Plan de gestión para la eliminación de los HCFC (etapa I, tercer tramo) (servicio y mantenimiento de equipos de refrigeración y supervisión)	68	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución
Venezuela (República Bolivariana de)	VEN/HPMP2/141/UNIDO/INV/SRV/93	Plan de gestión para la eliminación de los HCFC (etapa II, tercer tramo)	72	Demora de 12 meses	Pedir a la ONUDI que informe a la 100ª reunión sobre este proyecto con demoras en la ejecución

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO Annual Progress Report 2025

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I. Project summary since the inception of the Multilateral Fund

I.1 Summary data

Since the inception of the Multilateral Fund, UNIDO has been entrusted with the implementation of 2,336 projects across 119 Article 5 countries (excluding cancelled and transferred projects). Of these, 1,970 projects have been completed and 366 remain under implementation as of 31 December 2025. Cumulative approved funding amounts to US$1,036,830,515, of which US$895,262,428 has been disbursed. Through these activities, UNIDO has contributed to the phase-out of 83,218.9 ODP tonnes of controlled substances.

Items	Cumulative since 1991*
Total number of projects approved	2,336
Total number of projects completed	1,970
Total funds approved (US$)	1,036,830,515
Total funds disbursed (US$)	895,262,429
Total approved phase-out (ODP)**	86,379.4
Total actual phase-out (ODP)**	83,565.9
Total approved phase-out (MT)***	6,490.7
Total actual phase-out (MT)***	1,158.2
Total approved phase-out (CO_2-eq tonnes)***	13,570,921
Total actual phase-out (CO_2-eq tonnes)***	2,285,325

*Excluding cancelled and transferred projects.
**Including consumption and production.
***For HFC related projects only (including consumption and production).

I.2 Summary data by cluster

The table below summarizes all approved projects by cluster since the Fund's inception (excluding cancelled and transferred projects). The largest clusters by approved funding are the phase-out of CFCs and the HCFC phase-out management plans (HPMPs). Clusters approved more recently — notably the Kigali HFC implementation plans (KIPs), HPMP stage III and the energy-efficiency window — show lower completion and disbursement rates, consistent with their early stage of implementation.

Clusters	Number of projects*			Funding (US$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Kigali Implementation Plan Stage 1	72	3	4.0	27,816,150	2,529,147	25,287,003	9.0
HCFC phase-out management plan stage 1	273	258	95.0	218,272,599	213,421,278	4,851,321	98.0
HCFC phase-out management plan stage 2	198	77	39.0	171,535,530	119,898,356	51,637,174	70.0
HCFC phase-out management plan stage 3	30	2	7.0	26,164,893	3,639,977	22,524,916	14.0
HFC Individual	173	113	65.0	26,595,198	19,455,252	7,139,946	73.0
HCFC Individual	260	243	93.0	23,409,236	22,974,296	434,940	98.0
Energy Efficiency	32	2	6.0	24,739,295	820,879	23,918,416	3.0
Disposal	13	13	100.0	3,791,983	3,791,984	-1	100.0
CFC Individual	696	696	100.0	248,861,816	248,861,819	-3	100.0
CFC Phase-out Plans	87	87	100.0	51,560,736	51,560,737	-1	100.0
Other ODS Sector Plans	102	102	100.0	75,903,816	75,641,646	262,170	100.0
CFC Production Phase out Plans	4	4	100.0	31,849,298	31,849,298	0	100.0
Other ODS Production	12	12	100.0	18,724,810	18,724,810	0	100.0

Clusters	Number of projects*			Funding (US$)*			
	Approved	Completed	% completed	Approved	Disbursed	Balance	% disbursed
Phase out Plans							
Other ODS Individual	234	234	100.0	60,539,415	60,539,411	4	100.0
Government Support	120	99	82.0	23,983,246	18,863,291	5,119,955	79.0
Agency Programme	24	23	96.0	0	0	0	0.0
Emission Control 1	6	2	33.0	3,082,494	2,690,248	392,246	87.0
Total	**2,336**	**1,970**	**84.0**	**1,036,830,515**	**895,262,429**	**141,568,086**	**86.0**

*Excluding cancelled and transferred projects

II. Project progress in the reporting year

II.1 Activities related to HCFC phase-out

During the reporting year, UNIDO continued to support Article 5 countries in phasing out hydrochlorofluorocarbons (HCFCs) through HCFC phase-out management plans (HPMPs) at stages I, II and III, complemented by stand-alone HCFC investment and non-investment projects and by preparation activities for subsequent stages and tranches. UNIDO's HCFC portfolio is entirely on the consumption side and did not include any HCFC production phase-out management plans (HPPMPs) during the period; accordingly, no HPPMPs were approved or ongoing in 2025. In 2025, 45 HCFC-related activities were approved, of which 38 were HPMP tranches and projects (25 under stage II, 12 under stage III and 1 under stage I) and 7 were stand-alone HCFC verification and preparation activities. During 2025, 18 HCFC-related activities were completed, of which 16 were HPMP tranches and projects (11 under stage II, 3 under stage I and 2 under stage III) and 2 were HCFC preparation activities. These figures fall within UNIDO's cumulative consumption-side HCFC portfolio of 771 approved activities (279 under HPMP stage I, 198 under stage II, 30 under stage III and 264 stand-alone HCFC individual and preparation activities).

At the close of the reporting period, 181 HCFC-related activities remained under implementation: 121 under HPMP stage II, 28 under stage III, 15 under stage I and 17 HCFC verification and preparation activities. Of these, 134 were investment activities, 35 were non-investment (largely servicing-sector technical assistance) and 12 were preparation activities.

Implementation of the HPMPs progressed well overall during the reporting period. Across the portfolio, investment components continued to advance in the foam, refrigeration and air-conditioning manufacturing sectors, while servicing-sector activities continued across a broad range of countries: technician training and certification, the establishment of training and recovery infrastructure, and the supply of tools and refrigerant identifiers. In the manufacturing sectors, enterprise conversions moved through equipment installation, commissioning, testing and validation towards the decommissioning of HCFC-based systems; a representative milestone was the completed conversion of a polyurethane foam producer to hydrocarbon (pentane) technology, including installation of pentane-based equipment with company co-financing, regulatory approval and full decommissioning of the previous systems, while in other countries foam-conversion equipment was installed across beneficiary enterprises with some final payments outstanding at year-end.

Servicing-sector work featured prominently across the portfolio, reflecting its central role in meeting the remaining HCFC control targets. Countries advanced technician training, certification and the roll-out of good-servicing practices, supported training and vocational centres, and strengthened border and enforcement capacity through the supply of refrigerant identifiers and joint training for customs and

inspection authorities. Illustrative of this work were training events on the F-gas regulation, an associated online database and RAC-sector best practices that reached several hundred participants across several provinces, and an enforcement workshop for environmental inspectors and customs authorities addressing newly adopted ODS/F-gas regulations, mandatory leak checks and equipment registration. Recurring across servicing components were the slow pace of training when delivered through public institutions, mainly owing to administrative and contracting procedures, and the difficulty of establishing technician certification schemes in some countries, which depend on agreements with other ministries.

A growing number of countries were implementing successive HPMP stages in parallel, combining completion of remaining stage II activities with the start-up of stage III, which shaped the pace of delivery across much of the portfolio. Typical of this pattern were programmes in which stage II investment and servicing activities continued, equipment delivery to beneficiary enterprises, installation, commissioning and associated training, the equipping of vocational training centres and the provision of refrigerant identifiers to customs, while stage III start-up followed first-tranche approval with preparation of work plans and the upgrading of training facilities to meet the safety requirements for A2L and A3 (lower-GWP, flammable) refrigerants. Start-up of new stages was frequently gated by administrative and institutional steps, including Government authorizations, tax-exemption procedures for imported equipment, and the re-establishment of functioning NOU structures following institutional changes.

Parts of the portfolio were implemented under particularly difficult operating conditions, where procurement, logistical and institutional constraints compounded one another. In such settings, delivered training and manufacturing equipment awaited final distribution or installation pending replacement of missing components and completion of training arrangements, and foam-sector procurement was complicated by offers exceeding available budgets, and re-tendering; governmental restructuring and the absence of a functioning NOU further slowed decision-making and follow-up. UNIDO maintained engagement with national counterparts and suppliers to keep activities moving as institutional arrangements were clarified.

Across the portfolio, the principal challenges reported were administrative and institutional rather than technology-related. They included delays in the procurement and customs clearance of imported equipment; delays in reaching agreement with national counterparts in some countries; currency and payment constraints; and political and administrative transitions affecting authorizations, including cabinet reshuffles and the need to re-establish NOU structures following governmental changes.

On the technology side, the main issues concerned the market acceptability of lower-GWP alternatives and associated price variation (for example, the transition from R-410A to R-32), where progress has been gradual; the availability of new technologies and requests for local production; and scepticism among technicians regarding the use of flammable hydrocarbon refrigerants. In low-volume-consuming countries in particular, limited budgets constrain the adequate training of technicians. Recent ODS inventory work across the portfolio also identified a higher-than-expected number of R-22 installations among end users, confirming that significant work remains ahead of the 2030 control targets, particularly in relation to recovery, reclamation and recycling (RRR) centres and end-user installations.

II.2 Activities related to HFC phase-down

Activities related to the phase-down of hydrofluorocarbons (HFCs) comprise the Kigali HFC implementation plans (KIPs), stand-alone HFC investment and technical-assistance projects, and

preparation activities. In 2025, 30 KIP- and HFC-related activities were approved, of which 25 were under KIPs and 5 were stand-alone HFC preparation and verification activities, comprising 20 investment activities, 8 technical-assistance activities and 2 preparation activities. Based on the actual date of completion, 16 activities were completed during the year, of which 2 were KIP activities and 14 were stand-alone HFC individual activities.

At the close of the reporting period, 91 HFC-related activities remained under implementation across 54 countries in all four regions (49 in Africa, 18 in Latin America and the Caribbean, 14 in Europe and 10 in Asia and the Pacific). These comprised 69 activities under KIPs and 22 stand-alone HFC individual and preparation activities, and were split by type into 56 investment activities, 18 preparation activities and 17 non-investment (technical-assistance) activities. Ongoing work concentrated on establishing the enabling environment for phase-down: strengthening licensing and quota systems, updating servicing-sector competency and certification frameworks, conducting surveys and technical trials of low-GWP alternatives, and procuring tools and training equipment ahead of enterprise conversions.

Building the servicing sector's capacity to work safely with low-GWP and flammable refrigerants was a core, portfolio-wide element of KIP implementation, applicable across all countries. Training programmes delivered under the KIPs cover the safe handling of low-GWP alternatives, good servicing and containment practices, and energy-efficient technologies, so that technicians can also act as prescribers of low-GWP, energy-efficient equipment for their clients. During the reporting year, countries delivered technician and train-the-trainer courses and moved to place these on a certified, standards-based footing: competency and skills standards for the RAC/MAC servicing sector were updated and training curricula and assessment instruments developed; national trainers and technicians were trained and certified, with certificates authorizing them to work legally with low-GWP refrigerants and technician training was rolled out with explicit attention to the participation of women technicians. Advanced and international training on the handling of low-GWP refrigerants and on reclamation was also used to build a core of highly skilled national trainers.

In parallel with curricula and certification, KIPs equipped training and vocational centres and, in several cases, servicing companies, with the tools and equipment needed to train and work with sustainable alternatives, again as a portfolio-wide activity. This included the supply of specialized RAC and MAC training tools and equipment to vocational schools and training centres, building on equipment provided under earlier tranches, and the procurement of toolkits for training centres together with equipment kits issued to certified technicians to support good servicing and containment practice. Deliveries of training tools and equipment continued through the year, in some cases arriving late and awaiting customs clearance, and procurement of equipment and tools for servicing companies was initiated alongside the establishment of training programmes. This infrastructure is intended to make the training sustainable and to give technicians hands-on experience with flammable and other low-GWP refrigerants under safe conditions.

Establishing recovery, recycling and reclamation (RRR) infrastructure and, critically, sustainable business models to keep it operating, was a recurring priority across the portfolio, since RRR reduces the demand for virgin refrigerant and supports compliance as consumption limits tighten. Countries advanced on several fronts: operationalizing RRR centres to build nationwide recovery infrastructure; developing systems and draft frameworks for the recovery, recycling, reclamation and destruction of ODS and HFCs; and organizing refrigerant collection and recovery during servicing through technician associations and importers. Particular emphasis was placed on the economics of RRR. Work to establish self-sustained RRR operations included evaluating the socio-economic context of the RRR network to

define business-model requirements and needs by region, structuring a business plan for self-sustainability, and designing an incentive mechanism that enables RRR operators to go beyond simple recovery. Identifying and engaging suitable operators and beneficiaries, and aligning RRR with national regulatory measures, remained the main challenges.

Conversion activities under the KIPs began to take shape during the reporting year, mostly still in preparation but with the first manufacturing conversions defined and, in some cases, integrated from earlier stand-alone approvals. In the domestic refrigeration manufacturing sector, a conversion project for the phase-out of HFC-134a in the manufacture of domestic refrigerators was integrated into KIP stage I, complemented by an energy-efficiency pilot supporting the transition to refrigerators meeting or exceeding the highest national energy-labelling class and including the upgrade of a national laboratory to test equipment operating with flammable refrigerants. In another country, KIP stage I provides for the conversion of production lines manufacturing water dispensers operating with HFC-134a and air conditioners operating with R-410A, which will enable a ban on the import, assembly and manufacture of HFC-based equipment from 1 January 2027. Across the portfolio, the selected conversion technologies are low-GWP, predominantly hydrocarbons and lower-GWP HFCs such as R-32, and their introduction depends on beneficiary readiness, the availability of components and system-house support, and the safety upgrades required for flammable refrigerants.

Establishing and operating the regulatory framework for phase-down was a central theme across the portfolio. Countries continued to introduce and apply HFC import licensing and quota systems, which are gradually improving but are still creating adjustment difficulties for some companies as the market adapts. Regional trade rules also constrained the policy instruments available in some cases.

For KIPs approved in the reporting period, work focused mainly on establishing the institutional and contractual arrangements required for implementation. In a representative case, implementation initially awaited the Government authorization received in June 2025 and was subsequently affected by changes within the ministry of environment and the absence of a fully functioning NOU structure; in parallel, preparatory work for the manufacturing component continued, including the preparation of contracts for the five beneficiary enterprises. Because conversion activities had not yet substantially started, no significant technical challenges related to the introduction of HC-600a, HC-290 or HFC-32 were encountered as the main challenge was securing the institutional arrangements and national coordination required to begin implementation.

The principal challenges during the reporting year were related to procurement and customs clearance of imported equipment and institutional transitions and the need to establish or re-establish functioning NOU structures slowed decision-making in some countries. The identification of beneficiaries, the ongoing adjustment to new quota systems, and the wide variation across sectors in the cost of alternatives and in readiness to adopt low-GWP technologies also shaped the pace of delivery.

On the technology side, the main issues concerned the market acceptability of lower-GWP alternatives and the associated price variation (for example, the transition from R-410A to R-32), where progress has been gradual; the availability of new technologies and requests for local production; and scepticism among technicians regarding the use of flammable hydrocarbon refrigerants. Conversions also depend on components suppliers and on the nature of the contracts and agreements between appliance manufacturers or assemblers and their suppliers, which can constrain the pace of enterprise conversions. In low-volume-consuming countries in particular, limited budgets continue to constrain the adequate training of technicians in the safe handling of the new alternatives.

II.3 Activities related to energy efficiency

Energy-efficiency activities in UNIDO's portfolio are pursued in the context of HCFC phase-out and HFC phase-down, recognizing that the transition to low-GWP refrigerants offers an opportunity to maintain or improve the energy performance of refrigeration and air-conditioning (RAC) equipment. During the reporting period, the main energy-efficiency work delivered through the HPMPs concerned the additional components to maintain energy efficiency in the servicing sector of low-volume-consuming (LVC) countries, funded pursuant to decision 89/6(b). Energy-efficiency elements were also embedded in HFC phase-down activities and in the dedicated pilot projects submitted under decisions 91/65 and 94/60, which are reported under the relevant HPMP and KIP sections.

(a) Additional activities to be included under the HPMPs for low-volume-consuming countries to maintain energy efficiency for the servicing sector (decision 89/6(b));

Additional energy-efficiency components under decision 89/6(b) were incorporated into the HPMP stage II agreements of 12 low-volume-consuming countries, spanning Latin America and the Caribbean, Africa and Europe. At the close of the reporting period, 11 of these components were under implementation and 1 had been completed. The components are servicing-sector-focused and aim to maintain the energy efficiency of RAC equipment as the sector transitions to lower-GWP alternatives; they combine regulatory support, technician training and capacity-building, energy-performance monitoring, the equipping of training centres, and awareness-raising.

Several components strengthened the regulatory basis for energy efficiency in the RAC sector. Countries revised existing regulations on energy efficiency, energy-labelling and minimum energy performance standards (MEPS) and convened relevant institutions, energy-efficiency agencies, standards bodies, ministries, RAC associations and technical universities, to align efforts with national priorities. Guidance was prepared for importers and customs agents covering conformity-assessment procedures, energy-efficiency labelling and MEPS for refrigerators and air conditioners, including risk-analysis tools to help identify counterfeit or falsely marked products. A green public procurement policy was also drafted and promoted with procurement authorities and municipalities to encourage the uptake of energy-efficient, low-GWP equipment, an initiative that requires cross-ministerial coordination to adopt at national level.

Training of RAC-sector stakeholders on energy efficiency was a central element across the components. Countries updated vocational training curricula and delivered seminars and workshops for trainers and technicians on improving energy efficiency during the installation, maintenance and servicing of RAC equipment, including refrigerant-charge optimization, preventive and corrective maintenance, heat recovery and the use of digital monitoring tools. Training also covered the installation and maintenance of R-290-based air conditioners and broader energy-management topics, including ISO 50001 internal-auditor training and courses on energy efficiency in buildings and in refrigeration systems delivered to technicians, students and end users. Attention was given throughout to the participation of women among the trainees.

Components supported the measurement and demonstration of energy performance in real operating conditions. Specialized monitoring and data-logging equipment was procured

to record temperature, pressure, electrical and thermodynamic variables, in some cases with cloud-based storage for continuous and remote monitoring, and deployed in end-user energy-efficiency and "zero-leakage". Energy assessments of end-user facilities identified concrete efficiency measures, such as correcting power factors and rehabilitating equipment operating below nominal capacity, and an energy-efficiency pilot in a food-processing facility installed a parallel hydrocarbon sub-cooling system on an ice-making machine, increasing ice-production capacity by about 20 per cent while reducing HFC refrigerant demand. These activities generate practical evidence linking good servicing practice and low-GWP technologies to measurable energy savings.

To sustain the training effort, components provided for the establishment of refrigeration training centres and the upgrading of specialized energy-efficiency centres, created in partnership with vocational institutes, production centres and universities and equipped with the tools needed to assess RAC-system performance and energy efficiency. Awareness-raising accompanied these activities, including the preparation and distribution of brochures, leaflets, infographics and digital materials, public events and expert panels, for example, on the low environmental impact and high energy efficiency of R-290 and, on World Refrigeration Day, a demonstration of an energy-efficient geothermal heating and cooling system, and the preparation of awareness materials in other countries.

Overall, the decision 89/6(b) components advanced steadily where national institutional arrangements were in place, delivering regulatory, training, monitoring and awareness outputs across the servicing sector. The principal issues were administrative rather than technical: several components were still at the consultant-recruitment or contract-preparation stage at year-end; the low budgets characteristic of LVC servicing-sector components constrain the scale of training and equipment that can be provided; and initiatives such as national green procurement require cross-ministerial coordination to be adopted.

(b) Pilot projects for energy efficiency (decision 91/65).

Under decision 91/65, the Executive Committee approved pilot projects to maintain and/or enhance the energy efficiency of replacement technologies and equipment in the context of HFC phase-down (non-investment activities). UNIDO's pilot projects concentrate on the enabling environment for energy efficiency in the refrigeration, air-conditioning and heat-pump (RACHP) sector, including minimum energy performance standards (MEPS) and labelling, testing and enforcement capacity, and end-user demonstrations of low-GWP technologies, laying the institutional and regulatory groundwork on which subsequent energy-efficiency investment (for example under decision 94/60) can build. Pilot projects were approved and are under implementation in several countries, including a pilot to enhance the energy efficiency of replacement technologies and equipment and a pilot to maintain and/or enhance energy efficiency by removing barriers to MEPS enforcement, complemented by demonstrations of low-GWP technologies in commercial and supermarket refrigeration. Additional pilot concepts are being developed with several other countries.

The pilots have helped strengthen institutional coordination between national ozone units

(NOUs) and national energy-efficiency authorities, bringing ozone and energy mandates together around a common agenda. Coordination advanced most smoothly where arrangements allowed the implementing agency to engage the energy authorities and standards bodies directly, for example through cooperation with national standards and testing institutions and regulatory authorities to establish and enforce labelling and MEPS. Where such direct channels were still being established, implementation naturally progressed at a more measured pace, reflecting the time needed to align mandates and build working relationships across institutions that had not previously collaborated. Because ozone and energy efficiency have traditionally sat under separate mandates, clarifying complementary roles takes time, and sustaining a clear, cooperative division of responsibilities between the NOUs and the energy authorities remains important to the impact of the pilots.

The pilots made a direct contribution to strengthening MEPS for RACHP equipment, and MEPS revision and development progressed without major technical issues. Activities included establishing or upgrading energy-labelling standards and MEPS to incorporate low-GWP and zero-ODP refrigerant requirements, establishing market-surveillance programmes to collect appliance energy-performance data for regular MEPS updates, upgrading national testing laboratories to test equipment operating with flammable refrigerants (including the necessary ventilation and fire-safety systems) and training laboratory staff on verification testing, and training customs officers to enforce energy-labelling requirements. A recurring point is that Multilateral Fund support is often the essential enabler of this work: in many countries MEPS development and implementation would not be prioritized without donor funding, so the pilots have been instrumental in initiating and accelerating MEPS reform.

By creating or reinforcing awareness of energy efficiency, introducing alternative technologies and encouraging sector-wide thinking, the pilot projects have played a particularly important role in educating end users and prompting a technology shift towards low-GWP alternatives. Demonstrations of low-GWP options in real operating conditions, for example ammonia (NH_3) and CO_2 cascade and secondary-loop systems for supermarket refrigeration, provide practical evidence to support replication, and complementary low-GWP demonstration and MEPS-development activities in the servicing and manufacturing sectors reinforce the same objectives. Demand for this instrument is growing, with several additional countries seeking to submit 91/65 concepts. At the same time, the transition is uneven: much end-user equipment is still operating with R-22, underlining the scale of the technology shift that remains.

The principal implementation challenges were administrative and beneficiary-related rather than technical. Securing beneficiaries for energy-management-system and technology demonstrations proved difficult, particularly where co-financing is required: not all companies are willing to invest while they can continue using HFCs. In one case, it was difficult to identify end users willing to test NH_3 and CO_2 cascade or secondary-loop systems because of their higher system cost compared with propane (R-290)-based options, prompting a search for beneficiaries in other sectors. These factors, together with the institutional-coordination constraints noted above, were the primary influences on the timeliness of pilot implementation during the reporting period.

(c) Projects under the energy efficiency operational framework (decision 94/60); and

Investment projects under the energy-efficiency operational framework established by decision 94/60 were approved and initiated during the reporting period, supporting the transition to energy-efficient, low-GWP refrigeration and air-conditioning (RAC) equipment in the context of HFC phase-down. Most of these projects were approved at the 96th or 97th meetings and were therefore in start-up at year-end, with contracting, scoping and first disbursements taking place around the turn of the year. Investment projects included a residential air-conditioning project and a domestic-refrigeration manufacturing project, together with a set of energy-efficiency projects and preparation activities in Egypt.

The framework's investment projects target the conversion of manufacturing enterprises to energy-efficient, low-GWP RAC equipment. In the domestic-refrigeration manufacturing sector, a project approved at the 97th meeting supports the sole national manufacturer of domestic refrigerators and freezers in transitioning to models meeting or exceeding the highest national energy-labelling class. In the residential air-conditioning sector, an investment project was likewise approved at the 97th meeting under decision 94/60, and two projects to enhance energy efficiency in the context of HFC phase-down were approved at the same meeting, with contracts issued to the beneficiary companies, including the enterprise Fresh. Because several of these conversions take place at the same enterprises undertaking KIP refrigerant conversions, the energy-efficiency and refrigerant-conversion activities are being sequenced to avoid disrupting production, for example, deferring the start of the conversion contract until after the seasonal production peak and completion of the KIP conversion.

A common thread across the countries is the strengthening of national testing and metrological capacity, which underpins both enterprise conversion and MEPS enforcement. Activities included contracting the upgrade of national testing laboratories, two of three national laboratories under contract, together with a major contract with the national standardization body, and contractors mobilized on site, the assessment and flammable-gas-detection safety design of national testing laboratories to prepare their refurbishment, and the planned upgrading of the national laboratory to test equipment operating with flammable refrigerants as part of the investment project. This capacity provides the basis for verification testing of refrigerators and air conditioners against MEPS and energy-labelling requirements.

As most projects were approved at the 96th or 97th meetings, progress took the form of issuing contracts to beneficiary enterprises and effecting first disbursements in the first half of 2026, continuing enterprise scoping and preparing terms of reference ahead of contract signature and first disbursement expected later in 2026, and finalizing arrangements to begin the conversion contract towards year-end once production and sequencing constraints allowed.

Preparation of projects under the framework rests on enterprise surveys and data collection, beneficiary identification and selection, the engagement of national and international consultants, and the development of full project proposals. This work proved demanding, principally because of the difficulty of collecting enterprise data: companies

are protective of their business information and tend to lose interest when extensive commercial data are requested. The scale of funding mobilized is typically a key determinant of, and incentive for, industry participation in conversion or energy-efficiency projects, while the enforcement of MEPS is important in providing a level playing field that encourages enterprises to invest.

(d) Status of implementation of the minimum energy performance standards including domestic refrigeration and residential air-conditioning particularly in countries that are supported through projects relating to energy efficiency

Work on minimum energy performance standards (MEPS) for domestic refrigeration and residential air-conditioning advanced in several of the countries supported through energy-efficiency projects, since operational and enforceable MEPS are a prerequisite for locking in the energy savings associated with the shift to low-GWP equipment. Reported progress included the resolution of a testing-laboratory software issue and the training of laboratory staff at the Standards Organization of Nigeria (SON), alongside the drafting of a green public procurement policy and the strengthening of MEPS for refrigerators; SON has domesticated the regional ECOSTAND labelling standard and issued a mandatory standard for air conditioners, and is progressively tightening MEPS for refrigerators and air conditioners and reinforcing market surveillance through a national product database. Other countries prepared and proposed for adoption MEPS for household air-conditioners and refrigeration appliances, and advanced the review and update of national RAC energy-efficiency standards, including standards for air-conditioning equipment. Testing-laboratory upgrades under the investment and pilot projects, including capacity to test equipment operating with flammable refrigerants, provide the metrological basis for enforcing these standards.

MEPS processes are at different levels of maturity across the portfolio, some are completed while others are still in development, and countries remain largely in the preparatory phase for the standards linked to the energy-efficiency pilots. Reaching agreement on MEPS levels has been difficult, because enterprises differ in their technical capacity and cost structures and smaller companies face higher unit costs owing to the lack of economies of scale. A structural challenge is that, in many countries, MEPS fall outside the mandate of the NOU: the standards and their enforcement are the responsibility of national energy or standards authorities, so MEPS processes cannot be led by the NOU alone. These authorities frequently need support not only to develop MEPS but, critically, to enforce them, and there is a clear need for regional and sub-regional cooperation to support the successful development and implementation of MEPS.

II.4 Activities related to national inventories of banks of waste-controlled substances

Pursuant to decision 91/66, UNIDO implemented preparation and technical-assistance projects for the preparation of national inventories of banks of used or unwanted controlled substances and the development of national plans for their collection, transport and disposal. At the portfolio level, these comprised 42 preparation projects across 42 countries in all four regions (23 in Africa, 8 in Latin America and the Caribbean, 6 in Asia and the Pacific and 5 in Europe). Eighteen of the projects were

approved in 2025, mostly at the 97th meeting in December 2025, adding to those approved in 2023 (15) and 2024 (9); four projects were completed during the reporting year.

The preparation projects follow a common sequence, a national survey of used or unwanted controlled substances, the compilation of a draft inventory, and the development of a national action or management plan for their collection, transport and disposal. Projects approved in earlier years progressed well through this sequence, with surveys completed, draft inventories submitted, international consultants recruited to review the inventories and guide action-plan development, and online training workshops on inventory and data collection delivered; most of these inventories and action plans are now close to completion. The projects approved at the 97th meeting were in start-up, with early milestones including sub-contracts with the national ozone units (NOUs), agreed work plans, the tendering and recruitment of consultancy firms to draft the inventories, and NOU endorsement of terms of reference. In several countries this start-up work advanced within weeks of approval, while in others it awaited formal NOU alignment and endorsement.

As part of developing the national management plans, several projects assessed options for the environmentally sound collection, transport and disposal of the identified ODS banks, including destruction through co-processing in cement kilns. With the support of international consultants, technical visits were conducted to national cement producers to identify and assess possible destruction mechanisms, and draft protocols for destruction testing were prepared. This element of the preparation work experienced significant delays, mainly because of the lengthy process required to reach agreement with the cement companies: negotiations took longer than expected, and aligning the technical, financial and operational conditions proved challenging.

Implementation of one national inventory project progressed during the year. Implementation in some cases was affected by military confrontation of June 2025, which disrupted travel, stakeholder consultations and field activities, and the schedule was adjusted to take account of the safety of project personnel and national counterparts.

Several cross-cutting issues shaped delivery. Identifying suitably qualified experts for this specialized field was difficult, and data collection took longer than expected owing to conflicts of interest and the time required to align the data gathered by experts with government endorsement. The negotiation of destruction arrangements with cement companies was a particular source of delay. A further pressure relates to timing: with most projects due for completion close to the 99th and 100th meeting when further discussions and decision on the lifecycle refrigerant management should take place, the schedules converge closely, placing considerable pressure on implementing agencies and countries to deliver on time the national inventories and action plans and to the required quality.

III. Project completion in the reporting year

During 2025, UNIDO completed 47 projects, including preparatory funding activities. The associated phase-out and the distribution across clusters are summarized in the table below. Completions were concentrated in the HFC individual and HCFC phase-out management plan clusters.

Cluster	Number of projects completed	Phase-out		
		ODP	MT*	CO_2-eq tonnes*
Kigali Implementation Plan Stage 1	2	0.0	25.1	49,810.8
HCFC phase-out management plan stage 1	3	15.0	0.0	0.0
HCFC phase-out	11	51.0	0.0	0.0

Cluster	Number of projects completed	Phase-out		
		ODP	MT*	CO_2-eq tonnes*
management plan stage 2				
HCFC phase-out management plan stage 3	2	11.6	0.0	0.0
HFC Individual	18	0.0	118.7	211,513.0
HCFC Individual	3	0.0	0.0	0.0
Energy Efficiency	2	0.0	0.0	0.0
CFC Individual	1	193.6	0.0	0.0
Other ODS Sector Plans	1	1,257.9	0.0	0.0
Government Support	3	0.0	0.0	0.0
Agency Programme	1	0.0	0.0	0.0
Total	47	1,529.1	143.8	261,323.8

*For HFC related projects only.

IV. Gender mainstreaming

During 2025, UNIDO continued to implement the Multilateral Fund Gender Policy across its Montreal Protocol portfolio, applying it to all projects approved from the 85th meeting. When preparing and submitting project proposals, UNIDO includes, to the extent possible, activities that address gender equality and women's empowerment, using the checklists and potential indicators contained in the project guides for that purpose. By the end of the reporting period, the Gender Policy was being applied in 86 countries as part of projects approved from the 85th meeting, an increase from 79 countries reported for 2024.

Following the strengthening of the policy, new stages and tranches of multi-year agreements submitted since the 94th meeting incorporate mandatory gender requirements and associated performance indicators. During the reporting period, new multi-year-agreement stages and tranches were submitted for some 30 countries, each presenting the mandatory requirements in a dedicated section on consideration of the Multilateral Fund gender policy.

UNIDO, as an organization, acknowledges the substantial positive impact of gender equality and women's empowerment on sustained economic growth and the promotion of sustainable industrial development, which are instrumental in driving poverty reduction and fostering social integration. Accordingly, it maintains its own policy and strategy for gender mainstreaming with the goal of achieving tangible outcomes. The integration of gender mainstreaming into project implementation encompasses several key facets:

- Project teams are composed to ensure a balanced representation of male and female members;
- the recruitment process is monitored to track the proportion of applications received from men and women;
- vacancy announcements include provisions that actively encourage women to apply;
- recruitment panels are constituted with a gender-balanced composition;
- participation rates of male and female beneficiaries in capacity-building and awareness-raising activities are monitored;
- all documents generated under the project, policies, strategies, training materials and knowledge products are made gender-responsive;
- online platforms, events, trainings, workshops, discussions, roundtables and side events are designed to be gender-responsive;

- capacity-building initiatives are structured to be sensitive to gender-related nuances;
- public awareness campaigns incorporate gender perspectives, aiming to increase female involvement in ozone protection; and
- monitoring and evaluation activities include dedicated reporting on gender-related issues.

In many countries the technical workforce in the refrigeration and air-conditioning (RAC) sector remains predominantly male. UNIDO is actively engaged in identifying potential female technicians and engineers who could pursue careers in the sector and in offering tailored training programmes, with success varying from country to country. While technical training and certification in the RAC sector continue to be male-dominated, there are notable examples of targeted interventions, inclusive meetings and gender-focused awareness activities across the portfolio.

Gender mainstreaming was pursued through consultation and engagement with RAC associations, standardization and training institutions, academia and civil society throughout project planning and implementation. Stakeholder meetings and sectoral workshops were used to broaden the participation of women in national discussions on the sector's transition, and dedicated events raised the visibility of women professionals, for example, awareness activities explicitly framed around women in the RAC sector and women and climate action, and a World Refrigeration Day programme featuring a session on the role of female professionals in the RAC sector. Consultations on certification-system development brought together national ozone units, standardization institutes, vocational-training offices and RAC associations, with women's participation tracked and, in some cases, reaching around 30 per cent of participants.

From the implementing agency's perspective, gender considerations are embedded in the project cycle through the professional engagement of women and the systematic monitoring of participation. Female national consultants and experts were engaged in stakeholder consultations, data analysis and legislative work, ensuring female representation in decision-support roles and technical meetings, and the participation of women was tracked across training, certification and awareness activities. Targeted instruments were used to build a future female workforce, including scholarships for women in the RAC and mobile-air-conditioning (MAC) manufacturing sectors and introductory and train-the-trainer sessions designed to encourage women's entry into the profession. Provisions to encourage female applicants, gender-balanced recruitment panels and gender-responsive training materials further strengthened the capacity of both UNIDO and national counterparts to integrate the gender policy into implementation.

Concrete results were recorded across the portfolio, generally showing modest but growing female participation in a traditionally male sector. In one country's KIP, technician training targeted 100 RAC technicians including 20 women, and 50 of the customs officers trained were women. Elsewhere, national RAC trainers and technicians trained and certified to work with low-GWP refrigerants included women. Servicing-sector seminars and workshops on energy efficiency and good practices recorded female participation ranging from a handful of women to near parity in individual sessions, for example, workshops with 26, 56 and 121 participants each including a small number of women, and an end-user activity with balanced attendance. Awareness and training events specifically promoting women in the sector were held, including a "Women in Refrigeration and Air Conditioning" training with 40 participants (32 men and 8 women) and an introductory session for 10 women, alongside broader courses with female participation.

In the manufacturing and certification streams, a train-the-trainer programme reached 54 RAC trainers

and further certification activities certified 29 trainers, with women tracked as a share of participants, and gender was addressed explicitly at a World Refrigeration Day event. A pilot technician-certification scheme based on EU Regulation 2067/2015 trained and certified 95 RAC trainers including 16 women, and enforcement-officer training included five women. Gender activities centred on scholarships for women in the RAC/MAC manufacturing sector, with the first year of implementation completed and the second under preparation, complemented by conversion projects and upcoming training that create further openings for female engineers. Scholarships for women and awareness campaigns targeting women likewise featured in servicing-sector activity, with gender participation recorded in regional training events. Sectoral and awareness workshops recorded rising female presence in national discussions on the RAC transition.

UNIDO applied its guide for gender mainstreaming in Multilateral Fund-supported projects, using its checklists and potential indicators to identify gender-responsive activities at the design stage and to monitor them during implementation, including the sex-disaggregated reporting of participation in training and awareness activities. Experience during the year confirmed that there is immense potential for advancing gender mainstreaming within the Montreal Protocol portfolio: the combination of targeted scholarships, the recruitment of female consultants, female-focused sessions and deliberate inclusion in meetings reflects a growing commitment to gender mainstreaming in RAC-sector activities, and engaging girls and women in ozone and climate protection has the potential to double the human capacity available in each country for these efforts. At the same time, sustained investment is needed in several regions to increase the number of female technicians and engineers, and in low-volume-consuming countries budget constraints mean that gender mainstreaming competes with other priorities. Adequate funding for gender mainstreaming activities, beyond mere participant attendance monitoring, holds the promise of enduring results; the TEAP replenishment report[1] recognized that "without a requirement to earmark funding for those activities, not all countries will be able to properly respond to gender required actions and will not prioritise it." UNIDO stands ready to continue implementing the Multilateral Fund Gender Policy within existing budgetary constraints, while also being prepared to develop more comprehensive gender programmes within the stages of multi-year agreement projects, such as HCFC phase-out management plans and Kigali HFC implementation plans

V. Risk assessment

During the reporting period, the delays were concentrated in projects under implementation and were, in the large majority of cases, administrative, institutional and logistical rather than technical: across the ongoing portfolio the issues most frequently reflected in project reporting related to procurement, beneficiary engagement, institutional change and customs clearance. UNIDO manages these risks systematically through regular progress reporting, mission-based follow-up, and early and continuous engagement with national ozone units (NOUs) and government counterparts to anticipate and mitigate recurrence. The principal categories of delay, with root causes, actions taken and preventive measures, are set out below.

The most frequently reported cause of delay was the procurement and customs clearance of imported equipment, including tools, training equipment and refrigerant identifiers. The root causes are the lead

[1]TEAP report assessing the funding requirement for the replenishment of the Multilateral Fund for 2024–2026, which analysed the funding for gender mainstreaming of other global funds.

times of international procurement, the time required to complete tax-exemption and customs-clearance formalities, and, for equipment using flammable refrigerants, additional safety and handling requirements. UNIDO's actions included early preparation of tender documents, initiating procurement in parallel with other start-up steps, and close coordination with national authorities on tax-exemption and clearance procedures. To avoid recurrence, procurement is being front-loaded and realistic clearance timelines are built into project work plans from the outset.

A second major cause of delay was the difficulty of securing the participation of beneficiary enterprises, particularly for conversion and energy-efficiency activities. Root causes include the reluctance of enterprises to invest, especially where co-financing is required or where they can continue using HFCs; the protectiveness of companies towards their business and downstream-user data; and, in some cases, beneficiary processes that are not cooperative. In the foam sector, for example, consolidating information on downstream users proved difficult, and identifying end users willing to test higher-cost low-GWP options was challenging in others. UNIDO is addressing this by strengthening communication and outreach to industry, increasing its presence at relevant industry events, and conducting additional engagement to build confidence. The key preventive lesson is the importance of careful beneficiary selection and of early, sustained industry engagement, since the cooperativeness of the selected enterprises is decisive for timely delivery.

Delays also arose from initial difficulties in reaching agreement with NOUs and from gaps in communication. The root cause is typically limited counterpart availability or capacity and the time needed to align on work plans and terms of reference. UNIDO increased follow-up and direct engagement to re-establish work plans, and, depending on the situation, drew on a project management unit (PMU) in the country where one exists or undertook missions to meet the NOU and stakeholders directly. Continuous engagement from the earliest stage of implementation, and clear division of roles with the NOU, are applied to prevent such delays from recurring.

Political and administrative transitions were a recurrent source of delay, including cabinet reshuffles and elections that affected previously obtained authorizations, and institutional restructuring or the absence of a fully functioning NOU that slowed decision-making. The root cause is the dependence of implementation on government authorizations and on stable institutional arrangements. UNIDO's actions included seeking renewed government clearances, maintaining engagement with national counterparts while institutional arrangements were clarified, and proceeding with preparatory work where possible. Anticipating transitions, building relationships across the relevant institutions rather than with individuals alone, and incorporating authorization lead times into schedules are the measures used to limit recurrence.

In some cases, delays or limitations arose from regulatory and regional trade arrangements. The root cause is that certain policy instruments cannot be applied unilaterally within a trade bloc. UNIDO addressed this through regional dialogue, and the broader lesson is the need for regional and sub-regional cooperation to develop and implement compatible licensing, quota and standards measures. However, this can be challenging in trade blocks comprised of countries with different statuses under the Montreal Protocol (countries in transition and Article 5 countries).

A number of projects were affected by country-specific operating conditions beyond the agency's control. Security and conflict disrupted travel, stakeholder consultations and field activities, requiring the implementation schedule to be adjusted with the safety of project personnel and national counterparts as the priority, and international sanctions affected supply chains, which UNIDO mitigated

by engaging local system houses to source required inputs. In one especially difficult operating environment, guidance was requested from the UNIDO Legal department and the Multilateral Fund Secretariat on how to proceed, and a number of the affected projects were subsequently cancelled at the 98th meeting. In such settings UNIDO applies risk-adjusted scheduling and contingency sourcing and maintains engagement with counterparts and suppliers as conditions allow.

Taken together, these measures constitute UNIDO's systematic approach to identifying, monitoring and mitigating the risk of project delay: continuous progress monitoring and reporting, mission-based follow-up, early and sustained engagement with NOUs and government counterparts, the use of in-country PMUs where beneficial, careful beneficiary selection and early industry engagement, and realistic scheduling that anticipates procurement, authorization and institutional lead times. This approach is intended both to resolve delays as they arise and to reduce the likelihood of their recurrence across the portfolio.

VI. Performance indicators

The targets and achievements for the year 2025 performance indicators approved during the 95th Meeting of the ExCom are indicated below.

Planning – Approvals

Tranches approved: Number of tranches approved vs. those planned

In 2025, 42 tranches were approved in total against the updated target of 45. The original target was 63, however, the following projects were not approved, for reasons beyond UNIDO's control:

- UNIDO was ready for submission of the following tranches from HPMPs Stage I for Syria, HPMP Stage II: Bahamas, Grenada, Kuwait, Equatorial Guinea, Sao Tome and Principe; and KIP Stage I for Brazil, Burundi, Cote d'Ivoire, Gabon, Namibia, Saint Vincent and the Grenadines and Zambia, but the lead agencies were not ready for submission;
- The tranche request for Algeria was not submitted since based on decision 95/40 the funding associated with the third and fourth tranches of the HPMP Stage I for Algeria were removed from the agreement;
- The tranche request under the HPMP Stage II for Qatar was prepared and submitted, but following MLFS review was advised to be withdrawn as the ExCom decision conditions for the cooperating IA component, were not fulfilled;
- The tranche request under the KIP Stage I for Mexico was prepared and submitted, but approval was deferred to the 98th meeting;
- The tranche request for Iraq could not be submitted due to Executive Committee decision related to other project in Iraq;
- The tranche request under HPMP Stage III for Bahrain was not submitted with UNIDO.

In addition to the approvals from the Business Plan, additional projects that were not part of the Business Plan for 2025, were prepared, submitted and approved by the Executive Committee. These are first tranches from 2 newly approved HPMPS for Cameroon and Egypt and second tranche under the KIP

Stage I for Turkmenistan. That brings the total number of additional tranches approved to 3, leading to total of 45 tranches approved compared to the updated target of 45 tranches.

Projects/activities approved: Number of projects/activities approved vs. those planned (including project preparation activities)

During 2025, 17 individual projects were approved against the originally agreed target of 46. However, the target should be updated to 19 taking into account the projects not approved for reasons beyond UNIDO's control:

- The Project preparation for KIP in the foam sector in North Macedonia could not be submitted as consumption in the foam sector could not be identified;
- UNEP submitted the preparatory funding for HPMP Stage III for Iraq and Kuwait, energy efficiency projects under decision 89/6 for Botswana, Chad, Eritrea, Ethiopia and Guinea-Bissau and ODS inventories projects for Ethiopia and Serbia for UNEP implementation only.
- UNDP submitted the preparatory funding for KIP Stage I for Bahrain for UNDP implementation only.
- Funding for preparation of Kigali HFC implementation plans (KIPs) for Algeria and Qatar could not be submitted due to the fact that the countries did not ratify the Kigali Amendment. UNIDO could have submitted these requests, but then they would have to be withdrawn due to the fact that ratification process was not completed in the respective countries;
- UNIDO was ready for requesting energy efficiency projects under decision 89/6 for Bahamas, Burundi, Equatorial Guinea, Sao Tome and Principe and Suriname, but lead agency was not;
- UNIDO was ready for requesting the preparatory funding for HPMP Stage II for Mauritania; for HPMP Stage III for Senegal, and for KIP Stage I for Equatorial Guinea, Iraq, Madagascar and South Sudan, but lead agency was not;
- Based on country decision, energy efficiency project was requested by UNIDO for Bosnia and Herzegovina, North Macedonia and Serbia under decision 91/65, instead of 89/6.

In addition to the approvals from the Business Plan, additional 34 projects that were not part of the Business Plan for 2025, were prepared, submitted and approved by the Executive Committee. These are five project preparations for energy efficiency pilot projects, six pilot projects on energy efficiency (decision 91/65), two pilot projects on energy efficiency (decision 94/60), one HFC investment project for compressors, five verification reports, 13 projects for preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances (decision 91/66), two institutional strengthening projects, one tranche under approved KIP Stage II and two tranches from new HPMPs Stage III. That brings the total number of additional projects/activities approved to 34, leading to total of 51 projects/activities approved; 32 more compared to the updated target of 19. This number is quite high mainly due to the newly opened funding windows.

Implementation

Funds disbursed: Based on estimated disbursement in Progress Report

During 2025 the funds disbursed as per IPSAS were US$ 33,575,288 against the estimated disbursements for year 2025 established in the Progress Report for year 2024 of US$ 18,778,557.

ODS phased-out: ODS phase-out for HCFC related projects

1,529 ODP tonnes can be recorded as achievements for all MYA projects reported as completed in 2025 against the target of 259 ODP tonnes.

HFC phased-down: HFC phase-down for HFC-related projects

261,324 CO2-eq tonnes can be recorded as achievements for all MYA projects reported as completed in 2025 against the target of 291,086 CO2-eq tonnes.

Project completion for activities: Project completion vs. planned in progress reports for all activities (excluding project preparation)

During 2025, UNIDO completed 27 projects against the target of 53.

Type of indicator	Short title	Calculation	Targets	Achievements	Additional achievements in 2025
Planning-Approval	Tranches approved	Number of tranches approved vs. those planned*	45[2]	42	3[3]
Planning-Approval	Individual projects/ activities approved	Number of projects/activities approved vs. those planned (including project preparation activities)	19[4]	17	34[5]
Implementation	Funds disbursed	Based on estimated disbursement in progress reports	US$ 18,778,557	US$ 33,575,288	
Implementation	ODS phase-out for	ODS phase-out for HCFC-related projects	259 ODP	1,529 ODP	

[2] The original target was 63, however, the below projects were not approved beyond UNIDO's control: (1) UNIDO was ready for submission of the following tranches from HPMPs Stage I for Syria, HPMP Stage II: Bahamas, Grenada, Kuwait, Equatorial Guinea, Sao Tome and Principe; and KIP Stage I for Brazil, Burundi, Cote d'Ivoire, Gabon, Namibia, Saint Vincent and the Grenadines and Zambia, but the lead agencies were not ready for submission; (2) The tranche request for Algeria was not submitted since based on decision 95/40 the funding associated with the third and fourth tranches of the HPMP Stage I for Algeria were removed from the agreement; (3) The tranche request under the HPMP Stage II for Qatar was prepared and submitted, but following MLFS review was advised to be withdrawn as the ExCom decision conditions for the cooperating IA component, were not fulfilled; (4) The tranche request under the KIP Stage I for Mexico was prepared and submitted, but approval was deferred to the 98th meeting; (5) The tranche request for Iraq could not be submitted due to Executive Committee decision related to other project in Iraq; (5) The tranche request under HPMP Stage III for Bahrain was not submitted with UNIDO.

[3] In addition to the approvals from the Business Plan, additional project that were not part of the Business Plan for 2025, were prepared, submitted and approved by the Executive Committee. These are first tranches from 2 newly approved HPMPS for Cameroon and Egypt and second tranche under the KIP Stage I for Turkmenistan.

[4] During 2025, 17 individual projects were approved against the originally agreed target of 46. However the target should be updated to 19 taking into account the projects not approved for reasons beyond UNIDO's control: (1) The Project preparation for KIP in the foam sector in North Macedonia could not be submitted as consumption in the foam 2sector could not be identified; (2) UNEP submitted the preparatory funding for HPMP Stage III for Iraq and Kuwait, energy efficiency projects under decision 89/6 for Botswana, Chad, Eritrea, Ethiopia and Guinea-Bissau and ODS inventories projects for Ethiopia and Serbia for UNEP implementation only. (3) UNDP submitted the preparatory funding for KIP Stage I for Bahrain for UNDP implementation only. (4) Funding for preparation of Kigali HFC implementation plans (KIPs) for Algeria and Qatar could not be submitted due to the fact that the countries did not ratify the Kigali Amendment. UNIDO could have submitted these requests, but then they would have to be withdrawn due to the fact that ratification process was not completed in the respective countries; (5) UNIDO was ready for requesting energy efficiency projects under decision 89/6 for Bahamas, Burundi, Equatorial Guinea, Sao Tome and Principe and Suriname, but lead agency was not; (6) UNIDO was ready for requesting the preparatory funding for HPMP Stage II for Mauritania; for HPMP Stage III for Senegal, and for KIP Stage I for Equatorial Guinea, Iraq, Madagascar and South Sudan, but lead agency was not; (7) Based on country decision, energy efficiency project was requested by UNIDO for Bosnia and Herzegovina, North Macedonia and Serbia under decision 91/65, instead of 89/6.

[5] In addition to the approvals from the Business Plan, additional 34 projects that were not part of the Business Plan for 2025, were prepared, submitted and approved by the Executive Committee. These are five project preparations for energy efficiency pilot projects, six pilot projects on energy efficiency (decision 91/65), two pilot project on energy efficiency (decision 94/60), one HFC investment project for compressors, five verification reports, 13 projects for preparation of national inventory of banks of waste controlled substances and development of a national plan for management of these substances (decision 91/66), two institutional strengthening projects, one tranche under approved KIP Stage II and two tranches from new HPMPs Stage III.

Type of indicator	Short title	Calculation	Targets	Achievements	Additional achievements in 2025
	HCFC-related projects	in ODP tonnes vs. those planned per progress reports	tonnes	tonnes	
Implementation	HFC phase-down for HFC-related projects	HFC phase-down for HFC-related projects in CO_2-eq tonnes vs. those planned per progress reports	291,086 CO2-eq tonnes	261,324 CO2-eq tonnes	
Implementation	Project operational completion	Project operational completion vs. planned in progress reports for all activities (excluding project preparation)**	53	27	
Implementation	Gender mainstreaming	Operational policy on gender mainstreaming applied to all approved projects	10	10	
Administrative	Speed of financial completion	The extent to which projects are financially completed within 12 months after project operational completion	12 months after operational	12 months	
Administrative	Timely submission of project completion reports	Timely submission of project completion reports based on the progress report	On time	On time	
Administrative	Timely submission of progress reports and business plans	Timely submission of progress reports and business plans and responses unless otherwise agreed	On time	On time or as agreed	

* The targets of an agency will be reduced if it cannot submit a tranche owing to another cooperating agency or lead agency or if the HCFC phase-out management plan or Kigali HFC implementation plan submitted for consideration by the Executive Committee is not approved as a result of factors beyond the control of the national ozone unit and agency.
** The targets of an agency will be reduced if an extension of the completion date has been approved by the Executive Committee.

VII. Country highlights

The following country highlights illustrate significant performance in the implementation of projects, policies and other measures during the reporting year. The three countries selected are Tunisia, Mexico and Ecuador, however, the number of countries with significant progress is of course much higher.

Tunisia is implementing a broad Montreal Protocol portfolio. During the reporting year the country demonstrated broad-based progress across the whole portfolio. Under HPMP stage II it completed the conversion of two polyurethane foam manufacturing enterprises, phasing out the HCFC-141b contained in pre-blended polyols, and continued its refrigeration servicing-sector activities. For HFC phase-down, it is implementing Kigali HFC implementation plan (KIP) stage I, which provides for the conversion of production lines for water dispensers (from HFC-134a) and air conditioners (from R-410A), enabling a planned ban on HFC-based equipment from 1 January 2027. Servicing-sector capacity was strengthened through a pilot technician-certification scheme based on EU Regulation 2067/2015, which trained and certified 95 RAC trainers, including 16 women, and the country is building nationwide recovery infrastructure through the establishment of two recovery, recycling and reclamation (RRR) centres. These results are underpinned by a proactive regulatory agenda, import licensing and quotas for HCFCs and HFCs and draft decrees on RAC technician certification, refrigerant life-cycle management including RRR, and end-of-life handling. On energy efficiency, Tunisia is advancing a residential air-conditioning manufacturing investment project under the operational framework (decision 94/60) and a pilot upgrading the CETIME testing laboratories under decision 91/65, sequencing these with its refrigerant-conversion activities at the same enterprises.

Mexico has one of UNIDO's largest and most mature Montreal Protocol portfolios. It is currently implementing HPMP stage III for the remaining HCFC phase-out and Kigali HFC implementation plan (KIP) stage I for HFC phase-down. Under the KIP, activities span the conversion of the polyurethane foam sector, the establishment of self-sustained recovery, recycling and reclamation (RRR) operations built around region-specific business models, the training and certification of technicians, and a demonstration project introducing ammonia (NH_3) in supermarket refrigeration, all operating within a robust HFC import licensing and quota system. The country has shown particular leadership in regulation: new minimum energy performance standards (MEPS) were developed for centralized commercial refrigeration systems and for chilled-water chillers, and the MEPS for self-contained commercial refrigeration now incorporate an ecological label promoting equipment with a GWP below 150. On energy efficiency, and building on this regulatory framework, the first co-financed demonstration project under decision 91/65 is supporting the installation of a propane (R-290) chiller in the food-processing cold chain (thermal demand 2,154,000 BTU), with local manufacturing expected to begin shortly, complemented by demonstrations of low-GWP refrigerants in cascade and secondary-loop supermarket systems, together showing how standards development and practical demonstration jointly catalyze HFC phase-down.

Ecuador is implementing a servicing-focused Montreal Protocol portfolio. It is now implementing Kigali HFC implementation plan (KIP) stage I for HFC phase-down and a preparatory project for the national inventory of banks of waste-controlled substances and the development of a national management plan (decision 91/66). During the reporting year the country delivered strong results across its servicing-sector programme: technician training and certification advanced, awareness activities were expanded, including dedicated training to promote the participation of women in the RAC sector and regulatory capacity was strengthened through guidance for importers and customs agents on conformity assessment, energy-efficiency labelling and MEPS. On energy efficiency, its flagship "Zero Leaks" programme under decision 89/6 provided technical assistance to seven large end users to identify and reduce refrigerant leaks and improve the efficiency of HCFC-22 systems, and identified two potential beneficiaries interested in replacing their HCFC-22-based equipment with hydrocarbon-based systems; a further pilot in a food-processing facility installed a parallel hydrocarbon sub-cooling system on an ice-making machine, raising ice-production capacity by about 20 per cent while reducing HFC demand. Ecuador's experience shows how servicing-sector and energy-efficiency support translate into measurable savings and an accelerated shift to low-GWP technologies at end-user level.

VIII. Administrative matters and other issues

VIII.1 Meetings attended

UNIDO attended/participated in the following meetings in 2025:

#	Meeting	Location	Dates
1.	Sub-Regional Technical workshop for GCC countries on the suitable long-term alternative technologies for the air conditioning sector and assessment of penetration of such technologies into the GCC markets	Manama, The Kingdom of Bahrain	16-17 February 2025
2.	Inter – agency coordination meeting	Montreal, Canada	4-5 March 2025
3.	Network Meeting for Southeast Asia National Ozone Officers – Options for Technically and Commercially Viable Low-GWP and Energy-Efficient Alternatives to HCFCs/HFCs	Penang, Malaysia	22 April 2025
4.	96th meeting of the Executive Committee	Montreal, Canada	26 - 30 May 2025
5.	Joint ECA-WA Meeting of Montreal Protocol Officers and Environmental Inspectors & CCAC Workshop on Life-cycle Refrigerant Management	Batumi, Georgia	17-20 June 2025
6.	Regional Network Meeting for National Ozone Officers of Latin America	San Jose, Costa Rica	17 June 2025
7.	Network Meeting of South Asia National Ozone Officers	Bangkok, Thailand	3 July 2025
8.	74th Implementation Committee Meeting	Bangkok, Thailand	5-6 July 2025
9.	47th Open-Ended Working Group Meeting	Bangkok, Thailand	7 – 11 July 2025
10.	Inter – agency coordination meeting	Montreal, Canada	9-11 September 2025
11.	Joint Network Meeting of 54 African National Ozone Officers, Back-to-Back with the Climate and Clean Air Coalition Workshop for African National Ozone	Dakar, Senegal	22 September 2025
12.	ECA network meeting of Montreal Protocol Officers	Yerevan, Armenia	7 October 2025
13.	75th Implementation Committee Meeting	Nairobi, Kenya	31 October – 1 November 2025
14.	37th Meeting of the Parties	Nairobi, Kenya	3-7 November 2025
15.	Thematic Network Meeting for Latin America National Ozone Officers	Quito, Ecuador	18 November 2025
16.	Thematic Meeting of South Asia National Ozone Officers on Inventory of ODS Banks	Khet Pranakorn, Bangkok, Thailand	18-20 November 2025
17.	97th meeting of the Executive Committee	Montreal, Canada	1 - 5 December 2025

18.	Network Meeting of Southeast Asia National Ozone Officers (NOOs) and Twinning NOOs-Customs workshop on Strengthening Enforcement of Trade Control of Controlled Substances under the Montreal Protocol	Luang Prabang, Laos	16-19 December 2025

VIII.2 Implementing agency and other co-operation

Cooperation with UNDP and the World Bank:

Several ongoing HPMP activities in different countries and regions are being implemented or completed together with UNDP and/or the World Bank, among others the following Stage II HPMP in Egypt, Iran, Jordan and Nigeria, Stage III HPMP in Brazil, Chile and Nigeria and KIP Stage I in Türkiye and Uruguay.

Cooperation with UNEP: UNIDO shares most of the projects based on multi-year agreements with UNEP. In 2025, three new stages of HPMPs were approved for UNIDO with UNEP as lead or cooperating implementing agency in Antigua and Barbuda, Egypt and Iran. Furthermore, 9 new stages of KIPs were approved for UNIDO with UNEP as lead or cooperating implementing agency in Botswana, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Mongolia, Somalia, Serbia and United Republic of Tanzania.

Participation in inter-agency meetings: During 2025, UNIDO attended the two inter-agency meetings that were organized in preparation for the 96th and for the 97th Executive Committee meetings. UNIDO also attended the two Executive Committee meetings.

Cooperation with Bilateral Agencies: During 2025, UNIDO continued implementation of the ongoing bilateral projects.

Those bilateral projects under UNIDO's implementation, which have been ongoing or have been completed in 2025 are listed in the below table. The list is sorted in alphabetical order of the bilateral agencies.

#	Bilateral Agency	Project Title	Country	Impact	Approved Funding (US$)	Status
1.	Austria	HCFC phase-out management plan (stage II, third tranche) (room air-conditioning manufacturing and heat pump water heaters sector plan)	China	27.3	350,000	ONG
2.	Austria	HCFC phase-out management plan (stage II, fourth tranche) (room air-conditioning manufacturing and heat pump water heaters sector plan)	China	15.6	700,000	ONG
3.	Italy	HCFC phase-out management plan (Stage II, first tranche)(RAC sector)	China	10.3	891,892	ONG

4.	Italy	HCFC phase-out management plan (stage II, first tranche) (foam sector)	Iran (Islamic Republic of)	7.1	403,203	ONG
5.	Italy	HCFC phase-out management plan (stage II, second tranche) (foam sector)	Iran (Islamic Republic of)	8.9	504,004	ONG
6.	Italy	HCFC phase-out management plan (stage II, first tranche) (refrigeration servicing sector)	Argentina	2.9	250,000	ONG

VIII.3 Other issues

The status of ongoing projects is described in Annex II. The success and timely implementation of these activities are crucial in the current compliance period. In order to ensure timely project completion of projects approved so far, and to facilitate compliance of the recipient countries with their MP obligations, in 2025, UNIDO has continued to practice the following initiatives, which supported successful project implementation:

- Regular follow up of the implementation process is being done by the staff of the ozone office together with UNIDO's national and international consultants and project managers. This ensures that effective actions on critical issues such as resolving bottlenecks in site preparation, customs clearance, installation, commissioning and safety certification, monitoring of HCFC-related equipment are taken.
- Following the approval of the cost-guidelines for preparation of HFC phase-down plans, UNIDO has intensified the work with countries related to the support and service that UNIDO can offer in implementation of the Kigali Amendment.
- Following the approval of the additional funding windows related to energy efficiency and preparation of ODS inventories, UNIDO has followed up with national ozone officers, identified potential projects and submitted them for approval to the Executive Committee;
- Communication and interaction between regional and country offices about the implementation process has ensured the smooth flow of project plans. As in previous years, directors of UNIDO regional and country offices are regularly briefed on ongoing and possible future activities. They are involved in the implementation process and are following up the progress of the programmes. In turn, the representatives brief headquarter staff working in a specific country on the regular activities in the field and problems faced, if any.
- Due to security and/or political issues, UNIDO experienced delays in project implementation during 2025 in several countries. Due to the global lack of identifiers, delivery of the tools was delayed. The lack of identifiers delayed the on time completion of project activities, closing of grants and submitting PCRs, which in return creates delays with the requests of new tranches under consecutive stages. However, in 2025, there has been improvement with the identifiers market availability.

UNIDO is regularly attending Regional Network Meetings and respective workshops, organized online and in-person during 2025, providing additional support to our counterpart countries.

UNIDO also provides, when requested, support such as policy assistance, putting in place relevant legislation etc.

At the 47th meeting of the Open-Ended Working Group (OEWG) of the Parties to the Montreal Protocol that took place in Bangkok, Thailand in July 2025, UNIDO organized three side events with the titles: “Sustainable Cooling Technologies and Future Opportunities for Cooling Transformation”, “Application of Natural Refrigerants and Alternative Technologies in Key Industrial Sectors: Case Studies in China”, and “Recovery, Recycling, and Reclamation of Refrigerants in Article 5 Countries: Achievements and Challenges”.

At the 37th Meeting of the Parties (MOP) to the Montreal Protocol on Substances that Deplete the Ozone Layer that took place in Nairobi, Kenya in November 2025, UNIDO organized three side events on the topics: “From Global Tools to Regional and National Action: Harmonizing Energy-Efficient Cooling Regulations in Africa and Beyond”, “Turning Waste into Opportunities: Preparing National Inventories and Management Plans for Banks of Controlled Substances”, “Holistic approach to enhancing energy efficiency of cooling equipment ”.

Annex I: Summary Tables

Annual summary data

The table below presents, by year of approval, the number of approvals and completions, the completion rate, and the approved funding, disbursement and balance (excluding cancelled and transferred projects). Completion and disbursement rates decline for the most recent approval years, reflecting projects still under implementation.

Year approved	Number of approvals	Number completed	% completed	Approved funding plus adjustment (US$)	Funds disbursed (US$)	Balance (US$)	% of funds disbursed
1993	22	22	100.0	11,815,540	11,815,540	0	100.0
1994	52	52	100.0	30,645,899	30,645,899	0	100.0
1995	59	59	100.0	24,813,052	24,813,052	-1	100.0
1996	46	46	100.0	19,290,681	19,290,681	0	100.0
1997	130	130	100.0	41,563,710	41,563,711	-1	100.0
1998	88	88	100.0	22,721,130	22,721,130	0	100.0
1999	123	123	100.0	33,648,962	33,648,962	0	100.0
2000	96	96	100.0	30,072,456	30,072,456	0	100.0
2001	119	119	100.0	24,691,911	24,691,912	-1	100.0
2002	76	76	100.0	35,981,235	35,981,235	0	100.0
2003	49	49	100.0	29,985,308	29,985,308	0	100.0
2004	44	44	100.0	33,105,459	33,105,460	-1	100.0
2005	74	74	100.0	52,000,040	52,000,038	2	100.0
2006	45	45	100.0	19,740,544	19,740,544	0	100.0
2007	42	42	100.0	24,186,740	24,186,740	0	100.0
2008	77	77	100.0	32,280,826	32,280,829	-3	100.0
2009	70	70	100.0	15,343,761	15,081,588	262,173	98.3
2010	69	69	100.0	45,012,452	45,012,451	1	100.0
2011	71	71	100.0	76,523,376	76,523,379	-2	100.0
2012	52	52	100.0	32,492,767	32,418,247	74,520	99.8
2013	37	37	100.0	31,089,943	31,089,943	0	100.0
2014	55	54	98.2	27,133,459	27,089,736	43,723	99.8
2015	83	80	96.4	34,672,752	32,463,003	2,209,749	93.6
2016	58	56	96.6	34,934,826	34,716,653	218,173	99.4
2017	49	47	95.9	18,491,629	18,058,499	433,130	97.7
2018	75	73	97.3	32,032,573	29,772,051	2,260,522	92.9
2019	67	59	88.1	19,073,008	15,879,287	3,193,721	83.3
2020	58	50	86.2	15,225,774	14,628,960	596,814	96.1
2021	73	53	72.6	22,900,535	20,205,232	2,695,303	88.2
2022	66	33	50.0	20,314,505	14,708,257	5,606,248	72.4
2023	101	20	19.8	30,655,606	11,789,483	18,866,123	38.5

Year approved	Number of approvals	Number completed	% completed	Approved funding plus adjustment (US$)	Funds disbursed (US$)	Balance (US$)	% of funds disbursed
2024	93	4	4.3	45,908,747	8,710,013	37,198,734	19.0
2025	117	0	0.0	68,481,310	572,150	67,909,160	0.8
Total	**2,336**	**1,970**	**84.3**	**1,036,830,515**	**895,262,429**	**141,568,086**	**86.3**

Cumulative completed investment projects

Item	Number of projects	Approved funds plus adjustment (US$)	Per cent of funds disbursed (%)	Consumption phased out (ODP)	Production phased out (ODP)	Consumption phased out (MT)*	Production phased out (MT)*	Consumption phased out (CO2-eq)*	Production phased out (CO2-eq)*	Avg months approval to first disbursement	Avg months approval to completion	Overall cost-effectiveness (US$/kg)**
Total (all regions & sectors)	**948**	**724,632,430**	**99.7**	**61,834.3**	**17,728.0**	**440.2**	**0.0**	**784,811.0**	**0.0**	**9.2**	**41.6**	**9.06**
Region												
Africa	271	107,969,790	99.6	8,538.3	0.0	0.0	0.0	0.0	0.0	10.3	44.6	12.65
Asia and Pacific	377	435,203,141	99.8	39,551.7	5,198.0	231.2	0.0	457,373.0	0.0	9.4	41.7	9.68
Europe	117	43,443,806	99.8	4,339.9	175.0	11.4	0.0	21,313.0	0.0	8.4	37.2	9.60
Latin America and the Caribbean	183	138,015,693	99.4	9,404.4	12,355.0	197.6	0.0	306,125.0	0.0	7.7	39.6	6.29
Global	0	0		0.0	0.0	0.0	0.0	0.0	0.0			
Sector												
Aerosol	49	35,656,558	100.0	4,273.4	0.0	0.0	0.0	0.0	0.0	10.0	35.1	8.34
Air-Conditioning	18	90,684,707	99.8	383.7	0.0	0.0	0.0	0.0	0.0	9.4	76.0	236.34
Emissions	1	387,561	100.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	12.0	0.00
Firefighting	1	496,000	100.0	1,480.0	0.0	0.0	0.0	0.0	0.0	10.0	24.0	0.34
Foam	184	201,259,484	99.7	16,625.8	0.0	0.0	0.0	0.0	0.0	9.1	42.4	12.11
Fumigant	73	66,333,168	100.0	5,384.2	0.0	0.0	0.0	0.0	0.0	7.0	48.6	12.32
National Ozone Unit	1	26,000	100.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	8.0	0.00
Process agent	13	5,135,388	100.0	907.7	0.0	0.0	0.0	0.0	0.0	10.5	33.9	5.66
Production	16	50,932,486	100.0	0.0	17,381.0	0.0	0.0	0.0	0.0	5.9	32.6	2.93
Refrigeration	212	151,981,500	99.8	13,773.9	0.0	415.1	0.0	735,000.0	0.0	8.6	37.1	10.71
Servicing	298	73,281,124	98.8	12,603.7	0.0	25.1	0.0	49,811.0	0.0	9.7	45.0	5.80
Solvent	76	37,458,454	100.0	5,231.9	347.0	0.0	0.0	0.0	0.0	11.8	34.2	6.71
Tobacco Fluffing	6	11,000,000	100.0	1,170.0	0.0	0.0	0.0	0.0	0.0	6.0	13.5	9.40

Table excludes cancelled projects.
*For HFC related projects only.

Cumulative completed non-investment projects

Item	Number of projects	Approved funds plus adjustment (US$)	Per cent of funds disbursed (%)	Avg months approval to first disbursement	Avg months approval to completion
Total (all regions & sectors)	**406**	**67,415,008**	**99.3**	**9.0**	**37.0**
Region					
Africa	99	17,533,934	100.0	9.4	40.8
Asia and Pacific	92	22,046,588	98.7	11.7	44.2
Europe	108	13,467,226	99.8	8.0	35.6
Latin America and the Caribbean	79	12,643,736	99.0	6.7	32.3
Global	28	1,723,524	100.0	9.0	18.1
Sector					
Air-Conditioning	6	6,160,067	100.0	6.7	52.0
Core Unit	23	0			12.6
Disposal	6	3,341,506	100.0	11.2	66.5
Enabling activities	31	4,213,772	98.0	5.3	39.2
Firefighting	10	1,131,265	100.0	7.7	41.0
Foam	5	1,536,861	100.0	9.8	37.6
Fumigant	47	9,756,356	100.0	7.9	38.4
National Ozone Unit	99	16,561,324	99.7	8.8	40.0
Project monitoring and coordination	6	675,139	94.7	19.2	68.5
Refrigeration	64	14,306,039	100.0	11.2	40.2
SERVCEE-89/6	1	49,000	52.2	2.0	31.0
Servicing	39	6,421,613	96.2	8.4	45.5
Solvent	11	413,581	100.0	9.9	24.6
Survey	26	1,946,753	100.0	11.1	25.3
Tobacco Fluffing	1	76,499	100.0	7.0	38.0
Verification	31	825,235	100.0	7.7	21.1

Table excludes cancelled projects.

Cumulative completed project preparation activities

Item	Number of projects	Approved funds plus adjustment (US$)	Per cent of funds disbursed (%)	Average number of months from approval to first disbursement	Average number of months from approval to completion
Total	**616**	**28,049,738**	**99.3**	**7.1**	**27.3**
Region					
Africa	195	8,305,865	98.8	8.7	30.6
Asia and the Pacific	200	9,375,768	99.8	7.0	28.6
Europe	92	4,020,419	98.8	6.6	24.7
Global	9	430,985	100.0	4.4	17.2
Latin America and the Caribbean	120	5,916,700	99.5	5.5	22.7
Sector					
Aerosol	19	493,813	100.0	6.2	18.3
Air-Conditioning	14	1,127,008	97.6	10.0	32.7
Disposal	11	727,633	98.0	5.9	34.1
Emissions	2	129,510	100.0	2.0	14.5
Firefighting	6	122,939	100.0	5.5	15.3
Foam	101	4,194,666	99.7	6.8	27.2
Fumigant	79	2,010,066	100.0	4.6	18.4
Process agent	4	182,203	100.0	4.0	23.0
Production	2	58,866	100.0	4.5	7.5
Refrigeration	158	6,339,344	100.0	6.9	25.6
Servicing	176	10,765,274	98.6	9.1	34.3
Solvent	30	863,156	100.0	5.7	28.4
Technical Assistance	12	794,514	100.0	6.1	19.3
Tobacco Fluffing	2	240,747	100.0	11.0	34.5

Table excludes cancelled projects.

Cumulative ongoing investment projects

Item	Number of projects	Approved funds plus adjustment (US$)	Funds disbursed (US$)	Per cent of funds disbursed (%)	Number of projects disbursing	Per cent of projects disbursing (%)	Average number of months from approval to first disbursement	Average number of months from approval to planned completion	Average length of delay in project planned completion	Overall cost-effectiveness to the Fund (US$/kg)
Total	**198**	**192,672,965**	**71,028,007**	**36.9**	**142**	**0.7**	**8.0**	**48.7**	**14.2**	**17.61**
Region										
Africa	97	73,378,516	17,809,131	24.3	62	0.6	7.7	45.5	10.6	21.95
Asia and the Pacific	42	77,871,773	40,640,898	52.2	36	0.9	9.1	59.5	24.8	19.18
Europe	23	9,570,714	4,183,217	43.7	16	0.7	7.6	50.0	18.0	12.50
Latin America and the Caribbean	36	31,851,962	8,394,761	26.4	28	0.8	7.6	44.4	9.9	11.50
Sector										
Air-Conditioning	15	68,471,507	40,477,257	59.1	9	0.6	9.2	51.3	16.1	15.41
Emissions	4	2,212,176	1,819,962	82.3	3	0.8	7.3	42.3	5.5	0.00
Firefighting	1	141,000	0	0.0	0	0.0	0.0	36.0	0.0	238.98
Foam	17	23,449,586	10,838,413	46.2	15	0.9	8.9	72.3	38.0	14.68
Refrigeration	13	27,927,784	1,497,323	5.4	6	0.5	7.0	41.8	7.4	51.52
Servicing	148	70,470,912	16,395,052	23.3	109	0.7	7.9	46.9	12.6	16.18

Cumulative ongoing non-investment projects

Item	Number of projects	Approved funds plus adjustment (US $)	Funds disbursed (US$)	Per cent of funds disbursed (%)	Number of projects disbursing	Per cent of projects disbursing (%)	Average number of months from approval to first disbursement	Average number of months from approval to planned completion	Average length of delay in projec planned completion
Total	**92**	**18,367,374**	**5,098,116**	**27.8**	**56**	**0.6**	**6.3**	**39.4**	**5.7**
Region									
Africa	27	5,767,147	1,017,670	17.6	15	0.6	7.7	39.7	5.6
Asia and the Pacific	12	1,965,030	656,357	33.4	8	0.7	5.6	43.3	9.2
Europe	25	4,374,478	1,255,108	28.7	14	0.6	5.0	34.6	2.2
Global	1	0	0	0.0	0	0.0	0.0	12.0	0.0
Latin America and the Caribbean	27	6,260,719	2,168,981	34.6	19	0.7	6.5	42.8	7.8
Sector									
Core Unit	1	0	0	0.0	0	0.0	0.0	12.0	0.0
National Ozone Unit	21	7,421,922	2,354,341	31.7	17	0.8	6.0	39.8	4.6
Project monitoring and coordination	26	3,669,386	953,999	26.0	15	0.6	7.0	42.5	8.4
SERVCEE-89/6	11	865,000	193,246	22.3	6	0.5	4.0	42.6	6.5
Servicing	25	6,186,066	1,514,082	24.5	14	0.6	6.5	40.2	5.8
Verification	8	225,000	82,448	36.6	4	0.5	8.3	24.8	-0.5

Cumulative ongoing project preparation activities

Item	Number of projects	Approved funds plus adjustment (US$)	Funds disbursed (US$)	Per cent of funds disbursed (%)	Average number of months from approval to first disbursement	Average number of months from approval to planned completion	Average length of delay in project planned completion
Total	**76**	**5,693,000**	**1,749,917**	**30.7**	**6.3**	30.0	5.8
Region							
Africa	42	3,169,000	900,499	28.4	6.4	30.6	6.4
Asia and the Pacific	11	808,000	36,184	4.5	7.0	26.1	1.9
Europe	9	580,000	132,696	22.9	6.0	25.6	1.2
Latin America and the Caribbean	14	1,136,000	680,538	59.9	6.1	34.0	9.9
Sector							
Air-Conditioning	5	450,000	42,705	9.5	7.3	24.2	0.0
Disposal	38	3,288,000	549,672	16.7	5.7	27.8	3.6
Refrigeration	2	130,000	91,275	70.2	2.0	21.0	-3.0
Servicing	31	1,825,000	1,066,265	58.4	7.0	34.1	9.9