الأمم المتحدة

EP

برنامج الأمم المتحدة للبيئة

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اللجنة التنفيذية للصندوق المتعدد الأطراف لتنفيذ بروتوكول مونتريال
الاجتماع السادس والثمانون
مونتريال، من 2 إلى 6 نوفمبر/تشرين الثاني 2020
مؤجل: من 8 إلى 12 مارس/ آذار 2021[1]

التقرير المرحلي لبرنامج الأمم المتحدة الإنمائي حتى 31 ديسمبر/ كانون الأول 2019

1- تعرض هذه الوثيقة التقرير المرحلي لبرنامج الأمم المتحدة الإنمائي (اليوئنديبي) حتى 31 ديسمبر/ كانون الأول 2019.[2]

مقدمة

2- يتضمن التقرير المرحلي لليوئنديبي حالة بالمواد الهيدروفلوروكربونية التي تم تمويلها في إطار المساهمات الطوعية الإضافية من 17 طرفا غير أطراف المادة 5 من أجل تقديم دعم للبدء السريع في تنفيذ تعديل كيغالي.

3- استعرضت الأمانة حالة تنفيذ كل مشروع جاري تنفيذه على أساس كل بلد على حدة، مع مراعاة تأخيرات التنفيذ التي حدثت فيما يتعلق بمواعيد الإنجاز المخطط لها المبلغ عنها في عام 2019، والأثر المحتمل لهذه التأخيرات على إزالة المواد الخاضعة للرقابة ومعدل المصروفات المخطط لها. ويستند التحليل الوارد في هذه الوثيقة إلى الطن من قدرات استنفاذ الأوزون لجميع المواد الخاضعة للرقابة (بما في ذلك المواد الهيدروفلوروكربونية التي ينبغي قياسها بالطن المتري من مكافئ ثاني أكسيد الكربون).[3]

[1] بسبب فيروس كورونا (كوفيد-19)

[2] مرفق التقرير المرحلي بهذه الوثيقة. وتم تضمين البيانات في قاعدة بيانات التقرير المرحلي الموحد المتاحة عند الطلب.

[3] وفقا للمقرر 12/84 (أ) (4)، مقياس المواد الهيدروفلوروكربونية هو الطن المتري مكافئ ثاني أكسيد الكربون. وسيتم تضمينه في التقارير المرحلية المقدمة من الاجتماع الثامن والثمانين. وتمت مناقشة هذه المسألة في التقرير المرحلي الموحد (UNEP/OzL.Pro/ExCom/86/15)

نطاق الوثيقة

4- تتكون هذه الوثيقة من الأجزاء التالية:

الجزء الأول: المشروعات المعتمدة في إطار المساهمات العادية للصندوق المتعدد الأطراف. ويقدم ملخصا للتقدم المحرز في تنفيذ المشروعات لعام 2019 وتراكميًا منذ عام 1991 لمعالجة جميع المواد الخاضعة للرقابة بموجب بروتوكول مونتريال، بما في ذلك مواد المرفق واو (المواد الهيدروفلوروكربونية)؛ ويحتوي على استعراض لحالة تنفيذ كل مشروع جاري[4] تنفيذه على الصعيد القطري؛ ويحدد المشروعات المتأخرة في التنفيذ والأثر المحتمل على إزالة المواد الخاضعة للرقابة، والمشروعات ذات القضايا المعلقة لكي تنظر فيها اللجنة التنفيذية.

الجزء الثاني: المشروعات المعتمدة في إطار المساهمات الطوعية الإضافية لدعم البدء السريع للتخفيض التدريجي للمواد الهيدروفلوروكربونية. ويقدم ملخصا عن حالة تنفيذ مشروعات التخفيض التدريجي للمواد الهيدروفلوروكربونية الممولة في إطار المساهمات الطوعية.[5]

التوصية

5- تتضمن الوثيقة المرفقات التالية أيضاً:

المرفق الأول: ملخص للحالة وتوصية لكل مشروع جاري تنفيذه ذي مسائل معلقة لكي تنظر فيهم اللجنة التنفيذية.

المرفق الثاني: تحليل التقرير المرحلي.

الجزء الأول: المشروعات المعتمدة في إطار المساهمات العادية للصندوق المتعدد الأطراف

ملخص التقدم المحرز في تنفيذ المشروعات لعام 2019 والتراكمي

6- فيما يلي تلخيص لتنفيذ المشروعات والأنشطة من قبل اليوئنديبي لعام 2019 والتراكمي منذ عام 1991 حتى 31 ديسمبر/ كانون الأول 2019:

(أ) **الإزالة:**[6] في عام 2019، تمت إزالة 470,9 طن من قدرات استنفاد الأوزون من استهلاك المواد الخاضعة للرقابة وتمت الموافقة على إزالة إضافية قدرها 126,3 طن من قدرات استنفاد الأوزون من استهلاك المواد الخاضعة للرقابة. ومنذ عام 1991، تمت إزالة 67,480 طن من قدرات استنفاد الأوزون من استهلاك المواد الخاضعة للرقابة، من إجمالي متوقع قدره 68,407 طن من قدرات استنفاد الأوزون من المشروعات المعتمدة (باستثناء المشروعات الملغاة والمحولة)؛

[4] المشروعات الجارية هي جميع المشروعات التي كانت قيد التنفيذ حتى 31 ديسمبر/ كانون الأول 2019. وتشمل مؤشرات التقدم الأساسية: النسبة المئوية للأموال المصروفة والنسبة المئوية للمشروعات التي بدأت في صرف الأموال؛ والتمويل المتوقع صرفه بحلول نهاية العام كنسبة مئوية من التمويل المعتمد؛ ومتوسط طول مدة التأخير المتوقع في التنفيذ؛ والمعلومات المقدمة في عمود الملاحظات في قاعدة بيانات التقرير المرحلي.

[5] وفقا للمقرر 12/84 (ب)، تقرير مرحلي مفصل يقدم لمحة عامة عن الأهداف وحالة التنفيذ والنتائج الرئيسية والدروس المستفادة، وكميات المواد الهيدروفلوروكربونية التي تمت إزالتها عند الاقتضاء، ومستوى الأموال المعتمدة والمصروفات وتحديات المحتملة التي قد تواجه إنجاز المشروعات والأنشطة، في التقرير المرحلي الموحد (UNEP/OzL.Pro/ExCom/86/15).

[6] تشمل الإزالة موافقات للمشروعات الاستثمارية المتعلقة بالمواد الهيدروفلوروكربونية قدرها 142,8 طن متري (204,332 طن متري من مكافئ ثاني أكسيد الكربون)

(ب) **والمصروفات / الاعتمادات:** في عام 2019، تم صرف 23,14 مليون دولار أمريكي وكان من المقرر صرف 15,62 مليون دولار أمريكي استنادا إلى التقرير المرحلي لعام 2018، ما يمثل معدل صرف بنسبة 148 في المائة من المخطط له. وتراكميا، تم صرف 768,69 مليون دولار أمريكي من الإجمالي 831,9 مليون دولار أمريكي المعتمد للصرف (باستثناء تكاليف دعم الوكالة)، ما يمثل معدل صرف بنسبة 92 بالمائة. وفي عام 2019، اعتمد المبلغ 10,39 مليون دولار أمريكي للتنفيذ؛

(ج) **وفعالية التكلفة (بالطن من قدرات استنفاذ الأوزون):**[7] منذ عام 1991، بلغ متوسط فعالية تكاليف المشروعات الاستثمارية التي تمت الموافقة عليها والتي أدت إلى خفض دائم في الاستهلاك 10,65 دولار أمريكي/ كجم. وبلغ متوسط فعالية تكلفة المشروعات الاستثمارية لكل طن من قدرات استنفاذ الأوزون 9,38 دولار أمريكي/ كجم للمشروعات المنجزة و 78,78 دولار أمريكي/ كجم للمشروعات الجارية؛[8]

(د) **وعدد المشروعات المنجزة**: في عام 2019، تم إنجاز 56 مشروعًا. ومنذ عام 1991، تم إنجاز 2,345 مشروعا من أصل 2,475 مشروعا تمت الموافقة عليهم (باستثناء المشروعات المغلقة أو المنقولة)، ما يمثل معدل إنجاز بنسبة 95 في المائة؛

(هـ) **وسرعة التسليم - المشروعات الاستثمارية**: أنجزت المشروعات المنجزة في عام 2019 في متوسط 51 شهرًا بعد الموافقة عليها. ومنذ عام 1991، كان متوسط الوقت اللازم لإنجاز المشروعات الاستثمارية 34 شهرًا بعد الموافقة عليها. وحدثت أول مصروفات في إطار هذه المشروعات، في المتوسط، بعد 13 شهرًا من الموافقة عليها؛

(و) **وسرعة التسليم - المشروعات غير الاستثمارية:** أنجزت المشروعات المنجزة في عام 2019 في متوسط 38 شهرًا بعد الموافقة عليها. ومنذ عام 1991، كان متوسط الوقت اللازم لإنجاز المشروعات غير الاستثمارية 39 شهرًا بعد الموافقة عليها. وحدثت أول مصروفات في إطار هذه المشروعات، في المتوسط، بعد 13 شهرًا من الموافقة عليها؛

(ز) و**إعداد المشروع:** من بين 539 نشاطًا لإعداد المشروعات تمت الموافقة عليها بحلول نهاية عام 2019، تم إنجاز 518 نشاطًا، وبقي 21 نشاطًا جاري تنفيذهم. وفي عام 2019، تم إنجاز نشاط إعداد مشروع واحد؛

(ح) **والتأخيرات في التنفيذ**: كان ما مجموعه 130 مشروعًا قيد التنفيذ في نهاية عام 2019، وواجهت، في المتوسط، تأخيرًا مدته 15 شهرًا. وتم تصنيف خمسة من هذه المشروعات على أنها "مشروعات متأخرة في التنفيذ"[9] تخضع لإجراءات إلغاء المشروع (حيث لا تخضع المشروعات الإيضاحية وإعداد المشروع والتعزيز المؤسسي لهذه الإجراءات)؛

(خ) **والاتفاقات متعددة السنوات**: في عام 2019، كان 41 اتفاقًا متعدد السنوات لخطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية قيد التنفيذ. ومنذ عام 1991، تمت الموافقة على 136 اتفاقا متعدد السنوات وتم إنجاز 95 اتفاقا متعدد السنوات، ما يمثل معدل إنجاز بنسبة 70 في المائة.

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[7] تشمل 142,8 طن متري من المشروعات الاستثمارية لمركبات للمواد الهيدروفلوروكربونية.

[8] تعزى القيمة الأعلى لفعالية تكلفة المشروعات الجارية إلى حد كبير إلى انخفاض قيم الطن من قدرات استنفاذ الأوزون للمواد الهيدروكلوروفلوروكربونية ولكن أيضًا بسبب طرق تخصيص الوكالات للإزالة.

[9] تمت الموافقة على المشروعات على مدى 18 شهرًا مع صرف أقل من 1 في المائة، أو المشروعات التي لم تكتمل بعد 12 شهرًا من تاريخ الإنجاز المقترح في التقرير المرحلي (القرار 61/22) (لا تخضع المشروعات الإيضاحية وإعداد المشروع والتعزيز المؤسسي لتلك الإجراءات).

تقدم تنفيذ المشروع في 2019

7- بالإضافة إلى عملية الاستعراض، تمت مناقشة عدد من القضايا ومعالجتها بشكل مرض، باستثناء خمس مشروعات تتعلق بعناصر الاتفاقات المتعددة السنوات المتأخرة في التنفيذ والتي تخضع لإجراءات إلغاء المشروع، وفقا للمقرر 45/84 (ج). ويعرض المرفق الأول بهذه الوثيقة المشروعات المصنفة على أنها متأخرة في التنفيذ، وتوصية الأمانة التي تطلب تقديم تقرير إلى الاجتماع السابع والثمانين.

8- بالإضافة إلى ذلك، تم تحديد عدد من المسائل المتعلقة بمشروعات أو شرائح الاتفاقات متعددة السنوات لإزالة المواد الهيدروكلوروفلوروكربونية. وترد هذه المسائل أيضا في المرفق الأول بهذه الوثيقة. ولكل مشروع من هذه المشاريع، تم تقديم وصف موجز عن حالة التنفيذ والمسائل المعلقة وتقترح توصية لكي تنظر فيها اللجنة التنفيذية.

9- تفاصيل التقدم المحرز في تنفيذ المشروعات المرتبطة بخطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية لأرمينيا[10] والبرازيل[11] وبروني دار السلام[12] وكوبا[13] والجمهورية الدومنيكية[14] والسلفادور[15] وإسواتيني[16] وفيجي[17] والهند[18] وجمهورية إيران الإسلامية[19] وجامايكا[20] ولبنان[21] ونيبال[22] وبنما[23] وباراغواي[24] وجمهورية مولدوفا[25] وسري لانكا[26] وترينيداد وتوباغو[27] وأوروغواي[28]، وقدمت تقارير عن المشروعات ذات متطلبات الإبلاغ المحددة[29] المرتبطة بالبرازيل (التخلص من المواد المستنفدة للأوزون) وغانا (خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية) والمكسيك (خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية) والصين (خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية)[30] إلى الاجتماع السادس والثمانين. و تناول التوصيات المتعلقة بالمسائل المعلقة لهذه المشروعات، بما في ذلك الموافقة على طلبات التمديد، إن وجدت، في الأقسام ذات الصلة من تلك الوثائق. وتم تناول المسائل المتعلقة بخطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية لبنجلاديش ومالي وموريتانيا ونيجيريا وجنوب السودان في الوثيقة المعنية بالتأخيرات في تقديم الشرائح.[31]

10- من بين 86 مشروعًا جاريًا، باستثناء التعزيز المؤسسي وإعداد المشروع، عدل 29 مشروعًا تواريخ الإنجاز المحددة منذ التقرير المرحلي لعام 2018.

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[10] الوثيقة UNEP/OzL.Pro/ExCom/86/38
[11] الوثيقة UNEP/OzL.Pro/ExCom/86/41
[12] الوثيقة UNEP/OzL.Pro/ExCom/86/42
[13] الوثيقة UNEP/OzL.Pro/ExCom/86/45
[14] الوثيقة UNEP/OzL.Pro/ExCom/86/46
[15] الوثيقة UNEP/OzL.Pro/ExCom/86/48
[16] الوثيقة UNEP/OzL.Pro/ExCom/86/49
[17] الوثيقة UNEP/OzL.Pro/ExCom/86/50
[18] الوثيقة UNEP/OzL.Pro/ExCom/86/54
[19] الوثيقة UNEP/OzL.Pro/ExCom/86/55
[20] الوثيقة UNEP/OzL.Pro/ExCom/86/56
[21] الوثيقة UNEP/OzL.Pro/ExCom/86/59
[22] الوثيقة UNEP/OzL.Pro/ExCom/86/63
[23] الوثيقة UNEP/OzL.Pro/ExCom/86/68
[24] الوثيقة UNEP/OzL.Pro/ExCom/86/69
[25] الوثيقة UNEP/OzL.Pro/ExCom/86/71
[26] الوثيقة UNEP/OzL.Pro/ExCom/86/74
[27] الوثيقة UNEP/OzL.Pro/ExCom/86/77
[28] الوثيقة UNEP/OzL.Pro/ExCom/86/80
[29] الوثيقة UNEP/OzL.Pro/ExCom/86/21
[30] الوثيقة UNEP/OzL.Pro/ExCom/86/21/Add.1
[31] الوثيقة UNEP/OzL.Pro/ExCom/86/24

11- وفقا للمقرر 11/82 (ج) (2)، لاحظت الأمانة أن تجديد مشروع التعزيز المؤسسي للبرازيل لم يقدم للعامين الماضيين. وأفاد برنامج الأمم المتحدة الإنمائي بأنه يخطط لتقديم طلب التجديد في عام 2021.

الجزء الثاني: المشروعات المعتمدة في إطار المساهمات الطوعية الإضافية لدعم البدء السريع في التخفيض التدريجي للمواد الهيدروفلوروكربونية

12- حتى 31 ديسمبر/ كانون الأول 2019، وافقت اللجنة التنفيذية على 18 مشروعًا متعلقًا بالمواد الهيدروفلوروكربونية في إطار المساهمات الطوعية الإضافية وقدرها 6,053,676 دولار أمريكي (باستثناء تكاليف دعم الوكالة). ويرد ملخص لحالة هذه المشروعات في الجدول 1.

الجدول 1- حالة المشروعات المعتمدة المتعلقة بالمواد الهيدروفلوروكربونية حتى نهاية عام 2019

النوع	عدد المشروعات			التمويل (دولار أمريكي)*			
	المعتمدة	المنجزة	% المنجزة	المعتمد	المصروف	الرصيد	% المصروف
استثمارية**	2	1	50	4,406,610	4,144,828	261,782	94
إعداد المشروع	5	5	100	124,066	75,911	48,155	61
المساعدة الفنية – الأنشطة التمكينية	11	1	9	1,523,000	712,989	810,011	47
المجموع	**18**	7	**39**	**6,053,676**	**4,933,728**	**1,119,948**	**81**

* باستثناء تكاليف دعم الوكالة.

** ستتم إزالة 480,6 طن متري (587,301 طن متري من مكافئ ثاني أكسيد الكربون) من المواد الهيدروفلوروكربونية.

13- حتى نهاية عام 2019، من بين 18 مشروعًا معتمدا، تم إنجاز سبع مشروعات بما في ذلك مشروع استثماري ونشاط تمكيني واحد وخمس أنشطة تحضيرية، وبقي 11 مشروعًا قيد التنفيذ. وتمت الموافقة على تمديد مواعيد إنجاز الأنشطة التمكينية العشر الجاري تنفيذها في الاجتماع الثالث والثمانين (تسع مشروعات) وفي الاجتماع الرابع والثمانين (مشروع واحد)؛ وهذه الأنشطة في مراحل مختلفة من التنفيذ.

14- ومن المتوقع إنجاز المشروع الاستثماري الجاري المتبقي المعتمد في الاجتماع الثاني والثمانين، مع صرف 80 في المائة من الأموال المعتمدة، في عام 2021.

15- من إجمالي التمويل التراكمي المعتمد وقدره 6,053,676 دولار أمريكي، تم صرف 4,933,728 دولار أمريكي، ما يمثل معدل صرف بنسبة 81 بالمائة.

التوصية

16- قد ترغب اللجنة التنفيذية في:

(أ) الإحاطة علما بالتقرير المرحلي لبرنامج الأمم المتحدة الإنمائي حتى 31 ديسمبر/ كانون الأول 2019 الوارد في الوثيقة UNEP/OzL.Pro/ExCom/86/17؛

(ب) والموافقة على التوصيات المتعلقة بالمشروعات الجارية ذات القضايا المحددة الواردة في المرفق الأول بهذه الوثيقة.

المرفق الأول

المشروعات ذات المسائل العالقة الجاري تنفيذها المذكورة في التقرير المرحلي لبرنامج الأمم المتحدة الإنمائي (اليوئنديبي)

البلد / رمز المشروع	عنوان المشروع	الصرف (%)	الحالة / المشكلات	التوصية
بنغلاديش BGD/PHA/81/INV/51	خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (المرحلة الثانية، الشريحة الأولى) (قطاع تكييف الهواء)	0	لا يوجد صرف، تأخيرات في موافقات إدارات مختلفة لتوقيع اتفاق بسبب كوفيد-19 *وأمور أخرى*	طلب تقديم تقرير الحالة إلى الاجتماع السابع والثمانين عن مستوى صرف الأموال
بنغلاديش BGD/PHA/81/TAS/49	خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (المرحلة الثانية، الشريحة الأولى) (وحدة إدارة المشروع)	0		
كولومبيا COL/PHA/75/INV/98	خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (المرحلة الثانية، الشريحة الأولى) (قطاع الرغوة)	41	تأخير مدته 12 شهرا	مطالبة اليوئنديبي بتقديم تقرير عن هذا المشروع المتأخر في التنفيذ إلى الاجتماع السابع والثمانين
جمهورية الكونغو الديمقراطية DRC/PHA/79/PRP/42	إعداد خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (المرحلة الثانية)	0	لا يوجد صرف بسبب الوضع الأمني السائد في البلد، وقيود السفر بسبب جائحة كوفيد-19 مما أدى إلى صعوبات في الأنشطة الميدانية، وتأخر تقديم المرحبة الثانية	طلب تقديم تقرير حالة إلى الاجتماع السابع والثمانين عن حالة تقديم طلب المرحلة الثانية
هايتي HAI/PHA/76/INV/22	خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (المرحلة الأولى، الشريحة الثانية)	1	انخفاض الصرف، بطء التقدم المحرز في شراء وتسليم المعدات	طلب تقديم تقرير حالة إلى الاجتماع السابع والثمانين عن التقدم المحرز في التنفيذ ومستوى صرف الأموال
إندونيسيا IDS/PHA/71/TAS/200	خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (إدارة وتنسيق المشروع) (المرحلة الأولى، الشريحة الثانية)	21	تأخير مدته 12 شهرا	مطالبة اليوئنديبي بتقديم تقرير إلى الاجتماع السابع والثمانين عن هذا المشروع المتأخر في التنفيذ
إندونيسيا IDS/PHA/76/INV/208	خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (المرحلة الأولى، الشريحة الثالثة) (قطاع التبريد وتكييف الهواء)	27	تأخير مدته 12 شهرا	مطالبة اليوئنديبي بتقديم تقرير إلى الاجتماع السابع والثمانين عن هذا المشروع المتأخر في التنفيذ
إندونيسيا IDS/PHA/76/INV/211	خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (المرحلة الثانية، الشريحة الأولى) (قطاع مكافحة الحريق)	0	تأخير مدته 18 شهرا	مطالبة اليوئنديبي بتقديم تقرير إلى الاجتماع السابع والثمانين عن هذا المشروع المتأخر في التنفيذ
موريتانيا MAU/PHA/80/INV/25	خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (المرحلة الأولى، الشريحة الأولى)	0	تأخير مدته 18 شهرا	مطالبة اليوئنديبي بتقديم تقرير إلى الاجتماع السابع والثمانين عن هذا المشروع المتأخر في التنفيذ

المرفق الثاني

تحليل التقرير المرحلي لبرنامج الأمم المتحدة الإنمائي (اليونديبي) حتى 31 ديسمبر/ كانون الأول 2019

1- يتكون هذا المرفق من الجزأين التاليين:

الجزء الأول: المشروعات المعتمدة في إطار المساهمات العادية للصندوق المتعدد الأطراف.

الجزء الثاني: المشروعات المعتمدة في إطار المساهمات الطوعية الإضافية لدعم البدء السريع في التخفيض التدريجي للمواد الهيدروفلوروكربونية.

الجزء الأول: المشروعات المعتمدة في إطار المساهمات العادية للصندوق المتعدد الأطراف

2- حتى 31 ديسمبر/ كانون الأول 2019، اعتمدت اللجنة التنفيذية المبلغ 945,34 مليون دولار أمريكي، ويتكون من 831,9 مليون دولار أمريكي لتنفيذ المشروعات الاستثمارية وغير الاستثمارية و 113,44 مليون دولار أمريكي لتكاليف دعم الوكالة، على النحو الموضح في الجدول 1. وفي عام 2019، تمت الموافقة على 41 مشروعا ونشاطا جديدا. ومن المتوقع أن يؤدي هذا المستوى من التمويل إلى إزالة 68,407 طن من قدرات استنفاذ الأوزون من استهلاك المواد الخاضعة للرقابة.

الجدول 1- التمويل المعتمد لبرنامج الأمم المتحدة الإنمائي حسب القطاع كما في 31 ديسمبر/ كانون الأول 2019

القطاع	التمويل (دولار أمريكي)
الإيروسول	26,054,837
التدمير	3,606,279
مكافحة الحريق	2,170
الرغوة	173,331,969
الهالون	4,996,973
المبخرات	20,081,241
قطاعات متعددة	0
أخرى	0
خطة الإزالة	333,872,234
عامل التصنيع	1,286,923
الإنتاج	1,056,000
التبريد	139,612,399
متعددة	63,877,595
المذيبات	63,699,997
المعقمات	417,628
المجموع الفرعي	**831,896,245**
تكاليف دعم الوكالة	113,444,224
المجموع	**945,340,469**

3- يرد في الجدول 2 ملخص لحالة المشروعات المنفذة حسب الفئة.

الجدول 2- حالة تنفيذ المشروعات حسب الفئة

النوع	عدد المشروعات*			التمويل (دولار أمريكي)**			
	المعتمدة	المنجزة	% المنجزة	المعتمد	المصروف	الرصيد	% المصروف
البرنامج القطري	22	22	100	1,628,797	1,628,797	0	100
الإيضاحية	42	41	98	21,910,968	21,451,655	459,313	98
التعزيز المؤسسي	249	226	91	53,614,738	48,248,611	5,366,127	90
الاستثمارية	1,275	1,223	96	682,547,982	635,467,983	47,079,999	93
إعداد المشروع	539	518	96	22,365,067	21,645,479	719,588	97
المساعدة الفنية	320	287	90	48,238,204	38,660,157	9,578,047	80
التدريب	28	28	100	1,590,489	1,590,489	0	100
المجموع	**2,475**	**2,345**	**95**	**831,896,245**	**768,693,171**	**63,203,074**	**92**

* باستثناء المشروعات المغلقة والمحولة.
** باستثناء تكاليف دعم الوكالة.

4- يقدم الجدول 3 لمحة عامة عن حالة تنفيذ المشروعات حسب السنة.[1] وتم الآن إنجاز جميع المشروعات والأنشطة الموافق عليها بين عامي 1991 و 2011.

الجدول 3- حالة تنفيذ المشروعات حسب السنة

السنة	عدد المشروعات*			التمويل (دولار أمريكي)**			
	المعتمدة	المنجزة	% المنجزة	المعتمد	المصروف	الرصيد	% المصروف
1991	15	15	100	1,149,032	1,149,032	0	100
1992	67	67	100	8,619,002	8,619,002	0	100
1993	57	57	100	13,204,712	13,204,712	0	100
1994	148	148	100	49,481,581	49,481,581	0	100
1995	117	117	100	29,599,446	29,599,446	0	100
1996	83	83	100	27,838,805	27,838,805	0	100
1997	188	188	100	44,056,257	44,056,257	0	100
1998	172	172	100	31,305,010	31,305,010	0	100
1999	204	204	100	35,896,884	35,896,884	0	100
2000	149	149	100	31,268,361	31,268,361	0	100
2001	179	179	100	35,292,271	35,292,271	0	100
2002	117	117	100	44,316,422	44,316,422	0	100
2003	64	64	100	36,336,530	36,336,530	0	100
2004	69	69	100	24,802,714	24,802,714	0	100
2005	53	53	100	29,124,833	29,124,833	0	100
2006	62	62	100	15,753,459	15,753,461	-2	100
2007	54	54	100	12,142,486	12,142,486	0	100
2008	84	84	100	22,873,866	22,873,866	0	100
2009	92	92	100	13,222,786	13,193,670	29,116	100
2010	43	43	100	19,567,970	19,567,970	0	100
2011	63	63	100	57,446,042	57,421,734	24,308	100
2012	29	28	97	33,889,850	32,979,174	910,676	97
2013	43	42	98	34,567,186	33,721,314	845,872	98
2014	67	65	97	22,714,330	22,292,594	421,736	98
2015	75	74	99	33,523,195	29,056,699	4,466,496	87
2016	52	37	71	42,508,656	33,144,050	9,364,606	78
2017	28	16	57	30,728,346	28,749,500	1,978,846	94

[1] تقديم البيانات وفقًا للسنة التي وافقت فيها اللجنة التنفيذية على المشروع. وهي تتعامل مع جميع الموافقات (المشروعات الاستثمارية وغير الاستثمارية) على قدم المساواة (على سبيل المثال، يعتبر مشروع استثماري أو شريحة تمويل من اتفاق متعدد السنوات بقيمة مليون دولار أمريكي مشروعًا واحدًا، مثل إعداد برنامج قطري بقيمة 30,000 دولار أمريكي). والمؤشرات الرئيسية من الملخص السنوي هي: النسبة المئوية للمشروعات المنجزة، وإزالة المواد المستنفذة للأوزون، والنسبة المئوية للأموال المصروفة. وهناك ثلاثة أنواع من المصروفات: أثناء التنفيذ وبعد التنفيذ وللمشروعات الممولة بأثر رجعي.

السنة	عدد المشروعات*			التمويل (دولار أمريكي)**			
	المعتمدة	المنجزة	% المنجزة	المعتمد	المصروف	الرصيد	% المصروف
2018	60	3	5	40,274,486	5,469,512	34,804,974	14
2019	41	0	0	10,391,727	35,281	10,356,446	0
المجموع	**2,475**	**2,345**	**95**	**831,896,245**	**768,693,171**	**63,203,074**	**92**

* باستثناء المشروعات المغلقة والمحولة.
** باستثناء تكاليف دعم الوكالة.

5- يعرض الجدول 4 تنفيذ المشروعات حسب البلد لعام 2019.

الجدول 4- ملخص تنفيذ المشروعات من قبل برنامج الأمم المتحدة الإنمائي لعام 2019

البلد	الإزالة التي تمت في عام 2019*	نسبة الإزالة التي تحققت في عام 2019	الأموال التقديرية المصروفة في عام 2019 (دولار أمريكي)	الأموال المصروفة في عام 2019 (دولار أمريكي)	نسبة الأموال المصروفة زيادة عن المقدرة لعام 2019	نسبة المشروعات المقررة المنجزة في عام 2019
أنغولا	2.0		75,680	138,812	183	
الأرجنتين	0.0		113,619	110,653	97	
أرمينيا	0.0		7,005	30,339	433	0
بنغلاديش	0.0		475,871	187,628	39	100
باربادوس	0.4		5,802	27,189	469	
بليز	0.0		5,250	0	0	
بوتان	0.1		3,264	15,677	480	
البرازيل	92.4		2,590,760	3,934,029	152	
بروناي دار السلام	0.0		11,520	34,600	300	100
كمبوديا	1.0		10,000	50,000	500	100
شيلي	23.0		348,129	1,009,701	290	
الصين	5.9		1,072,665	5,100,642	476	100
كولومبيا	10.8	0	557,174	677,345	122	50
كوستاريكا	0.0		65,985	185,239	281	
كوبا	1.0		126,041	240,312	191	0
جمهورية الكونغو الديمقراطية	0.0		3,667	0	0	0
الجمهورية الدومنيكية	2.3		149,255	403,053	270	
مصر	24.9	78	698,412	1,173,382	168	60
السلفادور	0.0		34,693	290	1	0
فيجي	1.0		21,809	48,374	222	
جورجيا	0.0		49,231	104,337	212	
غانا	-5.5		75,243	147,057	195	
غيانا	0.2	100	10,242	2,705	26	100
هايتي	0.0		19,424	1,250	6	
الهند	35.0		4,578,702	3,162,037	69	100
إندونيسيا	0.0		847,675	371,366	44	33
‘يران (جمهورية – الإسلامية)	23.8	100	340,013	621,656	183	100
جامايكا	0.0		24,810	28,345	114	
الكويت	0.0		68,600	0	0	0
قيرغستان	0.0		35,035	70,429	201	
لبنان	6.0		268,127	492,085	184	100
ماليزيا	73.6		504,611	1,385,155	274	100
مليديف	0.0		32,933	150,540	457	100
مالي	0.0		2,821	0	0	100
موريتانيا	0.0		21,000	0	0	
المكسيك	131.5		779,300	1,622,125	208	
نيبال	0.1	100	5,337	15,000	281	100
نيجيريا	30.0		692,859	235,227	34	
باكستان	0.0		106,099	192,321	181	100

البلد	الإزالة التي تمت في عام 2019*	نسبة الإزالة التي تحققت في عام 2019	الأموال التقديرية المصروفة في عام 2019 (دولار أمريكي)	الأموال المصروفة في عام 2019 (دولار أمريكي)	نسبة الأموال المصروفة زيادة عن المقدرة لعام 2019	نسبة المشروعات المقررة المنجزة في عام 2019
بنما	2.0		172,912	225,742	131	100
باراغواي	2.1		13,325	43,311	325	
بيرو	0.9		73,495	103,517	141	
جمهورية مولدوفا	0.2		20,590	65,295	317	
سانت كيتس ونيفيس	0.1		8,000	39,942	499	
سري لانكا	1.1	100	50,451	104,604	207	100
تيمور- ليشتي	0.0		14,540	6,050	42	
ترينيداد وتوباغو	4.0		89,436	245,546	275	
أوروغواي	1.0		179,784	250,629	139	100
فنزويلا (جمهورية – متعددة القوميات)	0.0		92,069	82,069	89	100
زمبابوي	0.0		65,391	0	0	
عالمي	0.0		0	0		100
المجموع	**470.9**	**48**	**15,618,656**	**23,135,605**	**148**	**74**

* تمت إزالة 3,.87 طن متري (125,000 طن من مكافئ ثاني أكسيد الكربون) في عام 2019 للمشروعات المتعلقة بالمواد الهيدروفلوروكربونية.

6- يعرض الجدول 5 ملخصا للمشروعات المتعلقة بالمواد الهيدروفلوروكربونية المعتمدة في إطار المساهمات العادية.

الجدول 5- المشروعات المتعلقة بالمواد الهيدروفلوروكربونية المعتمدة في إطار المساهمات العادية

النوع	عدد المشروعات			التمويل (دولار أمريكي)*			
	المعتمدة	المنجزة	% المنجزة	المعتمد	المصروف	الرصيد	% المصروف
الاستثمارية**	3	1	33	2,491,791	1565244	926,547	63
المساعدة الفنية – الأنشطة التمكينية	5	0	0	384,000	50,919	333,081	13
المجموع	**8**	**1**	**13**	**2,875,791**	**1,616,163**	**1,259,628**	**56**

* باستثناء تكاليف دعم الوكالة.

** تمت الموافقة على 142,8 طن متري (204,332 طن متري مكافئ ثاني أكسيد الكربون) للمشروعات الاستثمارية.

7- يوجد حالياً ثمانية مشروعات متعلقة بالمواد الهيدروفلوروكربونية (تشمل ثلاث مشروعات استثمارية وخمس أنشطة تمكينية). ومن بين المشروعات الثمانية، تم إنجاز مشروع استثماري واحد، وبقي سبعة مشروعات قيد التنفيذ. وتمت الموافقة على تمديد مواعيد إنجاز ثلاث أنشطة تمكينية في الاجتماع الرابع والثمانين؛ وهذه الأنشطة الجارية في مراحل مختلفة من التنفيذ.

8- والمشروعان الاستثماريان الجاريان المتبقيان في مراحل مختلفة من التنفيذ ومن المتوقع إنجازهما في عامي 2021 و 2022.

9- من إجمالي التمويل التراكمي المعتمد وقدره 2,875,791 دولار أمريكي (باستثناء تكاليف دعم الوكالة)، تم صرف 1,616,163 دولار أمريكي، ما يمثل معدل صرف بنسبة 56 في المائة.

الجزء الثاني: المشروعات المعتمدة في إطار المساهمات الطوعية الإضافية لدعم البدء السريع في التخفيض التدريجي للمواد الهيدروفلوروكربونية

10- حتى 31 ديسمبر/ كانون الأول 2019 ، وافقت اللجنة التنفيذية على 18 مشروعًا متعلقًا بالمواد الهيدروفلوروكربونية في إطار المساهمات الطوعية الإضافية بقيمة 6,053,676 دولار أمريكي (باستثناء تكاليف دعم الوكالة). ويرد ملخص لحالة هذه المشروعات في الجدول 6.

الجدول 6- حالة المشروعات المعتمدة المتعلقة بالمواد الهيدروفلوروكربونية حتى نهاية عام 2019

النوع	عدد المشروعات			التمويل (دولار أمريكي)*			
	المعتمدة	المنجزة	% المنجزة	المعتمد	المصروف	الرصيد	% المصروف
الاستثمارية**	2	1	50	4,406,610	4,144,828	261,782	94
إعداد المشروع	5	5	100	124,066	75,911	48,155	61
المساعدة الفنية – الأنشطة التمكينية	11	1	9	1,523,000	712,989	810,011	47
المجموع	**18**	**7**	**39**	**6,053,676**	**4,933,728**	**1,119,948**	**81**

* باستثناء تكاليف دعم الوكالة.

** سنتم إزالة 480.6 طن متري (587,301 طن متري من مكافئ ثاني أكسيد الكربون) من المواد الهيدروفلوروكربونية.

11- حتى نهاية عام 2019، من بين 18 مشروعًا معتمدا، تم إنجاز سبع مشروعات تشمل مشروع استثماري ونشاط تمكيني واحد وخمس أنشطة تحضيرية، وبقى 11 مشروعًا قيد التنفيذ. وتمت الموافقة على تمديد مواعيد إنجاز الأنشطة التمكينية العشرة الجارية في الاجتماع الثالث والثمانين (تسع مشروعات) وفي الاجتماع الرابع والثمانين (مشروع واحد)؛ وهذه الأنشطة في مراحل مختلفة من التنفيذ.

12- من المتوقع إنجاز المشروع الاستثماري الجاري المتبقي الذي تمت الموافقة عليه في الاجتماع الثاني والثمانين، مع صرف 80 في المائة من الأموال المعتمدة، في عام 2021.

13- من إجمالي التمويل التراكمي المعتمد وقدره 6,053,676 دولار أمريكي، تم صرف 4,933,728 دولار أمريكي، ما يمثل معدل صرف بنسبة 81 في المائة.

Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

UNDP Annual Progress and Financial Report Narrative: 1991-2019

86th Meeting, 2–6 November 2020, Montreal, Canada

I. INTRODUCTION

The following narrative is based on a database of 2,591 projects funded by the Multilateral Fund, which contains basic information on their status of implementation as of 31 December 2019. However, some updates of activities which took place during 2020 are also included for information purposes. The database results in 11 summary tables which can be found at the end of this report, and which are referred to throughout this narrative.

As can be seen in the following sections, UNDP has disbursed US$ 773,626,899 of the US$ 837,949,926 worth of projects that were approved under the Multilateral Fund since its inception in 1991. These programmes were supposed to eliminate 69,561.0 ODP T/year, of which 68,400.5 (98%) were phased out as of 31 December 2019. This demonstrates UNDP's important role in the success of MLF's assistance towards the elimination of Ozone Depleting Substances.

As of the end of 2019, UNDP was active in 51 countries, of which 24 are low volume consuming (LVCs). The vast majority of ongoing projects are implemented using the National Implementation modality, providing countries with larger country ownership.

A large portion of the current ongoing programmes consist of HCFC phase-out management plans (HPMPs). UNDP is the lead agency in 29 countries, including such key countries for the Montreal Protocol, as Brazil, China, and India. In all countries, UNDP is providing technical support for countries to meet their targets set forth under the Montreal Protocol and these three key countries are progressing towards their targets. UNDP is continuing to support China with the implementation of its ICR and Solvent Sector Plans. With the experience gained in the implementation of the Stage I sector plans, and the cooperation and coordination mechanisms established during this earlier implementation, both sector plans have progressed further and all ExCom conditions have been met. In addition, UNDP also acts as the cooperating agency in 18 countries. There is a surge of workload for UNDP to meet the needs of so many HPMPs that are currently under implementation. This significant workload comes at a time of a key control target year (2020). Despite this challenging situation, UNDP, with its network of country offices, remains fully committed to meet the increased workload and ensure that countries receive the assistance needed to be in compliance with all requirements of the Montreal Protocol.

UNDP has also been at the forefront of technical assessments and demonstration projects for potentially cost-effective alternatives to HCFCs that minimize environmental impacts, particularly for those specific applications where such alternatives are not presently available and applicable. Pursuant to ExCom decision 72/40, UNDP has prepared a number of projects to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling. UNDP has received approval and implemented eight demonstration projects in seven countries. The factsheets on these projects are available at the MLF website. In addition, UNDP is also implementing demonstration projects for cost-effective alternatives to HFCs that minimize environmental impacts. Pursuant to ExCom decision 78/3(g), UNDP is preparing investment/demonstration projects to phase down HFCs and has received approval for five HFC technology demonstration investment projects in Bangladesh, China, Dominican Republic, Mexico and Zimbabwe. The technology demonstration project in Bangladesh has been completed and submitted to the Executive Committee, making it the first HFC demonstration project to have been finalized, thereby providing invaluable information to the Executive Committee for the requirements of the upcoming HFC phasedown. UNDP is also supporting 17 countries to undertake enabling activities for ratification and early implementation of the Kigali Amendment and two countries (Peru and Trinidad and Tobago) have completed these activities.

Furthermore, UNDP continued to organize several activities to assist countries in meeting their Montreal Protocol obligations. For example, in May 2019, UNDP organized a workshop on HFC alternatives in New York City, which provided the opportunity for participants from Article 5 countries and experts to discuss challenges, opportunities and solutions, and identify short-term priority activities and long-term strategies to effectively implement the Kigali Amendment and improve energy efficiency. The workshop brought together 60 participants from 20 countries and included experts that discussed key topics relevant to the implementation of the Kigali Amendment: including institutional arrangements, legislative and regulatory framework; baseline data collection and reporting; licensing system, customs rules and enforcement; alternative technologies; key activities in servicing sector; HFC phase down strategies; linkages with other national efforts (e.g. NDC under the Paris Agreement); and complementary actions to improve energy efficiency. The workshop materials are available here.

During the 41st meeting of the Open-ended Working Group of the Parties to the Montreal Protocol UNDP and Kigali Cooling Efficiency Program (K-CEP) organized a side event "National Cooling Plans: Linking cooling to energy efficiency interventions". The side event featured the perspectives from countries such as Trindad & Tobago, India, and Rwanda on their experience developing the national cooling plans as a blueprint to increase energy efficiency while reducing the consumption of F-gases. These plans can provide a long-term perspective for policies that can simultaneously address national cooling demands and the need to mitigate climate change. Cooling plans cover multiple sectors, such as space cooling in buildings, manufacturing of cooling equipment, cold-chain logistics, and servicing sector.

In the margins of the 31st Meeting of the Parties to the Montreal Protocol UNDP and GIZ had jointly organized a side event "Sound ODS/HFC waste management and disposal". This side event featured presentations on the issues of sustainable disposal of ODS/HFC containing in products, their management and experiences from demonstration projects and the panel discussion on the barriers and potential cost-effective ways of managing the ODS disposal and management. The presentation on global banks of ozone depleting substances stressed that the ODS bank were estimated to equal to 9.2 Gt CO_2eq and that the annual emissions from the global ODS bank were estimated to amount to 1.5 Gt CO_2eq. An overview of End of Life ODS/HFC Waste Management provided information about the current state of management, destruction technologies and experiences, and identified barriers and the ways to overcome them. The panel discussion touched upon the assessment of destruction technologies by the Montreal Protocol, experience of European Union Member States on the management of end-of-life ODS, and experience of Colombia in building the capacity to collect and destroy end-of-life ODS and implementation of the extended producer responsibility system.

Finally, while the COVID-19 pandemic has imposed limitations on project implementation recently, Article 5 countries and UNDP have been able to adapt some of our operations in order to ensure the continuation of the implementation of activities under the Multilateral Fund during the first half of 2020. For example, at the beginning of the year, UNDP organized missions to Cambodia, Cuba, the Dominican Republic, Egypt, India, Indonesia, Malaysia, Mexico and Peru. Although missions were not allowed starting in March 2020, UNDP continued to implement the projects through our country offices, staying in communication with NOUs and providing support remotely (through online meetings) on preparation of annual work plans, review of project-related documents, procurement, clarification of policy and technical issues, submission of tranche requests, drafting of project completion reports, and financial disbursement issues. In April 2020, UNDP organized a teleconference with the Government of China and related associations and universities in the industrial and commercial refrigeration and solvent sectors to discuss the revision of the Stage II HPMP. Recognizing the importance and the need for capacity building for the implementation of the Kigali Amendment, UNDP organized several online webinars on technical topics to exchange information among Article 5 countries and provide training to the NOUs and stakeholders remotely.

II. PROJECT APPROVALS AND DISBURSEMENTS

A. Annual Summary Data (See table 1)

Table 1: "Annual Summary" shows the important summary data on the number of project approvals, corresponding budgets, ODP, and disbursement figures. The table highlights that, cumulatively, as of 31 December 2019, UNDP had a total of 2,591 approved projects under the Multilateral Fund, of which 98 had been canceled or transferred. Of the 2,493 remaining projects, 2,352, or 94% have been completed. They are set to eliminate 68,762 ODP T/year, of which 67,764 ODP T (99%)) have already been eliminated.

As of 31 December 2019, UNDP had received cumulative net project approvals of US$ 837,949,927 (excluding support costs). Of these, UNDP, as of end-2019, had disbursed US$ 773,626,899 excluding all obligations. This translates to 92% of approved funding. Furthermore, an additional US$ 2,675,668.8 of obligations were outstanding as of end-December 2019, representing orders placed but final payments not yet made.

B. Interest and Adjustments

Interest income earned on MLF resources in 2019 is US$ 1,802,751. Once the financial statements are submitted to the MLF Treasurer by the agreed deadline of 30 September, the difference between the provisional and final 2019 interest income can be adjusted against UNDP project approvals at the 86th meeting.

C. Summary Data By Type and Chemical [CPG, DEM, INS, INV, PRP, TAS, TRA] (See table 2)

Table 2: Summary Data by Project Type presents an overview of the approvals by the type of project. It demonstrates that of the total amounts approved, 82% of the budgets were dedicated to investment projects, 6% to technical assistance projects, 6% to institutional strengthening and 3% to project preparation activities. The remaining 3% was dedicated to country programmes and demonstration/training activities.

III. GLOBAL AND REGIONAL PROJECT HIGHLIGHTS

A. **Global Projects:** There is one on-going global programmes under implementation by UNDP:

GLO/SEV/82/TAS/346, the Core unit support (2020) programme approved at the 84th meeting of the Executive Committee, that covers the administrative costs of UNDP's Montreal Protocol Unit; and continuation of Core Unit support at a level that allows UNDP to provide the oversight, reporting and assistance needed to sustain the large programmer is critical.

B. **Regional Projects:** There are no ongoing regional projects at this time.

IV. PERFORMANCE INDICATORS

A. Results in 2019

Decision 41/93 of the Executive Committee approved the following indicators to allow for the evaluation of performance of implementing agencies, with the weightings indicated in the table below. Annex VIII of the

report of the 82nd meeting of the Executive Committee contained UNDP's 2019 targets. One can see from the table below that UNDP fully met 5 out of 9 of its targets and that its score amounts to 94%.

Category of performance indicator	Item	Weight	UNDP's target for 2019	Result achieved in 2019	Score
1. Approval	Number of tranches approved vs. those planned*	10	16	12→ 75% (see annex 1, 1)	7.5
2. Approval	Number of projects/activities approved vs. those planned (including project preparation activities)**	10	15	26 → 100% (see annex 1, 2)	10.0
3. Implementation	Funds disbursed	15	$15,618,655	$23,135,600 →100% (see annex 1, 3)	15.0
4. Implementation	ODS phase-out for the tranche when the next tranche is approved vs. those planned per business plans	25	230	223 → 97% (see annex 1, 4)	24.2
5. Implementation	Project completion vs. planned in progress reports for all activities (excluding project preparation)	20	63	55→ 87% (see annex 1, 5)	17.4
6. Administrative	The extent to which projects are financially completed 12 months after project completion	10	70% of those due (out of 108, so target is 76)	79 finrevs (see annex 1, 7)	10.0
7. Administrative	Timely submission of project completion reports vs. those agreed	5	100% of those due	100% achieved (9 individual PCRs submitted and 7 MYA PCR submitted out of 7 planned	5.0
8. Administrative	Timely submission of progress reports and responses unless otherwise agreed	5	On-time	100% achieved (see annex 1, 9)	5.0
TOTAL		100			94

*The target of an agency would be reduced if it could not submit a tranche owing to another cooperating or lead agency, if agreed by that agency.
** Project preparation should not be assessed if the Executive Committee has not taken a decision on its funding.

Note on performance indicators on MYA tranches and corresponding ODP phaseout:
As per our 2019 Business Plan, UNDP submitted two China HPMP tranches to the 83rd and 84th meetings although these tranches weren't approved. As we submitted these tranches in 2019 as we had planned, the performance target should be reduced.

B. Cumulative completed investment projects (Table 4)

As Table 4: Cumulative completed investment projects shows, a total of 1,224 investment projects have been completed, with a corresponding elimination of 62,518 ODP T. Of the US$ 587,288,917 in their approved budgets in the sectors of Foam, Refrigeration, Phase-out Plan, Aerosol, Solvents, Fumigants, Halon, Process Agents, and Sterilants, 99% has already been disbursed. It took an average of 13 months from approval to first disbursement and 34 months from approval to completion. The overall cost-effectiveness of the projects to the Fund was $9.39 /kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

C. Cumulative completed non-investment projects (Table 5)

As Table 5 shows, UNDP has completed 605 non-investment projects excluding project preparation assistance. Of the US$ 108,877,529 in their approved budgets, 99% has been disbursed. It took an average of 13 months from approval to first disbursement and 39 months from approval to completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

D. **Cumulative ongoing investment projects (Table 6)**

As can be seen in Table 6, UNDP has 53 ongoing investment projects in the sectors of Phase-out Plans, Foam, Aerosol, and Fumigants with corresponding budgets of US$ 93,124,631. Of this amount, 56% has already been disbursed. It takes an average of 11 months from approval to first disbursement and an average of 45 months from approval to the estimated project completion. The overall cost-effectiveness of the projects to the Fund was $65.77/kg. A breakdown of this group of projects is given by region, sector, implementation modality, etc.

E. **Cumulative ongoing non-investment projects (Table 7)**

Table 7 shows that UNDP has 67 ongoing non-investment projects excluding project preparation assistance. Of the US$ 19,156,639 in approved budgets, 20% has been disbursed. It takes an average of 9 months from approval to first disbursement and 33 months from approval to the estimated project completion. A breakdown of this group of projects is given by region, type, sector, implementation modality, etc.

V. STATUS OF AGREEMENTS AND PROJECT PREPARATION BY COUNTRY

A. **Agreements To Be Signed/Executed/Finalized**

Since UNDP has a standard legal agreement in place in each developing country that covers UNDP activities in that country, no additional legal agreement is required. There were no specific issues related to this in 2019.

B. **Project Preparation By Country, Approved Amount And Amount Disbursed (Table 8)**

Table 8: Project Preparation by Country, Approved Amount and Amount Disbursed, indicates active project preparation accounts. Of the ongoing 21 PRP projects listed with US$ 719,643 in associated approvals, 9% has been disbursed.

VI. DESCRIPTION OF KEY ONGOING ACTIVITIES

This section contains a narrative description of the following key ongoing activities:

A. Technology demonstration projects for HCFCs
B. Technology demonstration projects for HFCs
C. ODS destruction demonstration projects
D. Country Highlights

A. **Technology demonstration projects for Stage II HCFCs**

UNDP has been at the forefront of developing and implementing demonstration projects in various regions and sectors to assess relatively new technological developments for which little or no experience or data exists on technical performance and costs since 1996. The major objectives of such types of demonstrations were to find alternative solutions and cost-saving methods to the Multilateral Fund for the Implementation of the Montreal Protocol in order to carry out HCFC-investment activities in the future years, bearing in mind the impact on the climate. The results of the demonstrations of emerging technologies in various industrial processes under local conditions in the following countries are described in greater details below.

Pursuant to ExCom decision 72/40, UNDP has prepared and received approval for eight projects to demonstrate climate-friendly and energy-efficient alternative technologies to HCFCs, and feasibility studies on district cooling for the following seven countries. Please see brief updates on the status of these projects.

Only recent projects have been included but more information on all the Stage II HCFC demonstration projects approved by the ExCom can be found on the MLF website.

- **China**: demonstrating ammonia semi-hermetic frequency convertible screw refrigeration compression unit in the industrial and commercial refrigeration industry.

  In order to produce the small discharge semi-hermetic frequency convertible screw refrigeration compression unit with ammonia as a viable replacement for HCFC-22 technology, the Executive Committee approved a demonstration project at its 76th meeting. Project demonstration activities ongoing in 2017. However, demonstration results will take longer than expected to be completed. As per ExCom Decision 80/26, project completion was extended to June 2018.

  The demonstration project was eventually completed and passed national acceptance in May 2018. The small redesigned demonstration system with lower NH3 charging amount and constructed to fit the small discharge semi-hermetic frequency convertible screw refrigeration compression unit has been built in two locations in China. The one at Xiamen Taiqu cold storage began operation in March 2017 and has been running safely for one and half year. The one at Chengdu Taiqu cold storage began operation in June 2017 and has been running safely for two years.

- **Egypt**: demonstrating low-cost options for the conversion to non-ODS technologies in polyurethane foams at very small users.

  An international bidding including technical specifications of easy-to-use low-cost foam dispensing units for VSU was completed and issued. All received bids for equipment have been analyzed. The purchase order has been issued and three different dispensers purchased and placed for evaluation at the following Egyptian system houses: Tecmac Dispenser at Baalbaki, Pumer Dispenser at Dow-Middle East, Transtecnica Dispenser at Technocom. There are cost savings observed in the project which are useful in planning work with VSUs globally. Final report was submitted to the ExCom and approved in 2019.

- **Maldives**: testing HCFC-free low-global warming potential alternatives in refrigeration in fisheries sector are being tested.

  Demonstration project for HCFC-free low-global warming potential alternatives in refrigeration in fisheries sector was approved at the 76th ExCom. The consulting firm was engaged in 2017. Desk study was completed to find the available alternate refrigerant with low GWP. Due to concerns with flammability, the only refrigerant applicable came in selection in the first round of study was R448A (GWP 1387) and the report was submitted to 80th ExCom. The same was discussed in ExCom and UNDP was asked to continue more research on low GWP alternatives. As per ExCom Decision 80/26, another round of desk study was conducted by the consulting team on the available alternates in the market. In the condition of non-acceptance on A2L refrigerant by the industries, three refrigerants of R450A, R513A and R448A came into the final selection round. The consulting team together with the MIFCO Engineering Team (main fisheries vessels owner) reviewed the options and selected R448A for a demo alternative. By the time an interim report was submitted to the 83rd ExCom only one vessel was retrofitted. Over the summer of 2019 retrofitting of three vessels is completed and result sharing workshops were held in August 2019. The final report was submitted and noted by the ExCom.

B. **HFC investment projects**

Pursuant to ExCom decision 78/3(g), UNDP has prepared investment/demonstration projects to phase down HFCs and, so far, has received approval for five HFC technology demonstration projects listed below.

- **Bangladesh**: Conversion from HFC-134a to isobutane as refrigerant in manufacturing household refrigerator and of reciprocating compressor of HFC-134a to energy efficient compressor (isobutane) in Walton Hi-Tech Industries Limited

Conversion of refrigerators and compressors lines were completed successfully as per scheduled and safety audit took place. The completion report was submitted in April 2020 to the Secretariat of the Multilateral Fund and provided detailed information of conversion activities and costs, environment benefits including refrigerant reduction and energy saving, as well as experiences and lessons learned in the implementation. Walton has started to produce R600a based refrigerators with higher energy efficiency to the market from the beginning of 2020. Its R600a based compressor was exported to Turkey for the first time in 2020.

- **China**: Conversion from C5+HFC-245fa to C5+HFOs in a domestic refrigerator manufacturer (Hisense Kelon)

Project document signed April 2019, contract between FECO and beneficiary signed August 2019. On-site verification of the CD line conversion conducted November 2019. Hisenes-Kelon was in the process of finishing the line conversion and started trial production end 2019. Due to the impact of COVID-19, six months extension might be needed for the completion of the project.

- **Dominican Republic**: Conversion of a commercial refrigerator manufacturing line at Fábrica de Refrigeradores Comerciales, SRL (FARCO) from HFC-134a and R-404A to propane (R-290) as refrigerant

Visit from the international expert to establish workplan and collect preliminary information on February 2019. Technical specification prepared and procurement process for the required equipment launched and completed. All the equipment has been purchased and installed successfully at the plant. International Expert made second visit to conduct the safety audit and the plant can now safely produce Commercial refrigerators with R-290. The only pending activity is the development of the final report.

- **Mexico**: Conversion of domestic refrigeration manufacturing facility from HFC-134a to isobutane as a refrigerant and conversion of compressors manufacturing facility from HFC-134a-based to isobutane-based at Mabe Mexico

The international expert has made two visits to Mexico to support the reconversion process of MABEs plant in Celaya. The final part of the installation was completed in May 2020 and the safety audit was conducted in June 2020. The plant can now safely produce domestic refrigerators with Isobutane. There is still some pending work on the field testing of certain new refrigerator models which has been delayed due to COVID19. This work will continue in the second half of 2020. The reconversion of the compressor manufacturing plant has been completed. Safety audits have been completed.

- **Zimbabwe**: Conversion from HFC-134a to isobutane in the manufacture of domestic refrigerators at Capri (SME Harare)

The project document for UNDP part was endorsed with the government. A legal agreement between France and UNDP progressed in 2019 with involvement of legal and procurement departments and signed in February 2020. Tenders for technology supply are in the process. A mission by international expert was fielded to discuss technology specifications, and factory layout schemes. Due to the impact of COVID-19, an extension was requested to the MFS.

C. **HFC Enabling Activity projects**

As highlighted earlier in the report, UNDP is providing support to 17 countries to undertake their HFC enabling activities for ratifying and early implementation of the Kigali Amendment. For more details on the status of these activities in the countries, please see the table below.

Country	MLF Number	Project Title	Remarks
Bangladesh	BGD/SEV/81/TAS/52	Enabling activities for HFC phase-down	Ratification: The cabinet gave approval to the proposal for ratification of the Kigali Amendment to the Montreal Protocol. The approval came from the cabinet meeting chaired by Prime Minister. After ratification 1 stakeholder meeting will be organized and finalize the report. File is now under the Ministry of Foreign Affairs (MoFA). HFC licensing & quota system: UNEP Component HFC data collection and monitoring: Data collection survey is completed and final report expected for beginning of April. Demonstrations: On-going
Chile	CHI/SEV/80/TAS/03+	Enabling activities for HFC phase-down	Ratification: Yes, ratified on 2017,09,19. HFC licensing & quota system: Customs has a registry of authorized importers and exporters. HFC data collection and monitoring: Yes, Chile has specific tariff codes for HFCs. Demonstrations: Yes. They conducted workshops on CO2 as alternative to HFC.
China	CPR/SEV/80/TAS/04+	Enabling activities for HFC phase-down	Ratification: MEE is working closely with line ministries of the National Leading Group for the Protection of the Ozone Layer on promoting ratification of the Kigali Amendment based on updated situation. HFC licensing & quota system: MEE is finalizing the impact analysis of ratification of the Kigali Amendment in China based on updated situation. For the establishment of HFCs licensing and quota system, MEE and the Import/Export Office are working with the General Administration of Customs on preparation of HS code for HFCs. It is very important for customs to establish HS code for each HFCs to identify specific HFC import and export . HFC data collection and monitoring: FECO is coordinating with industrial associations including automobile association to establish HFCs data reporting system. A preliminary HFC data collection system has now been established and data collected are being analyzed. FECO will work with MEE to improve the data collection system including the HFC-23 emission reporting and the monitoring system.

Colombia	COL/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratification: Kigali Amendment approved by congress, under review of the Constitutional Court; Participation in a regional workshop in Costa Rica to discuss the implementation of the Kigali Amendment.
Costa Rica	COS/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratification: December 20, 2017 through law 9522 HFC licensing & quota system: The licensing system for HFCs is in place. The quota system has not yet been developed. HFC data collection and monitoring: The country has a good system to monitor the imports. More work is needed for the specific use of each of the substances (pure and blends) Demonstrations: Costa Rica has previously implemented a demonstration project on NH3-CO2 in Commercial Ref. This is important for the Kigali Amendment. Costa Rica organized the first international fair of Green technologies in the RAC sector.
Cuba	CUB/SEV/81/TAS/57	Enabling activities for HFC phase-down	Ratification: Kigali Amendment ratified on 2019.06.20. HFC licensing & quota system: Meetings with the Customs Authority has been conducted to review current HFC controls and tariff codes. HFC data collection and monitoring: Current tariff codes for HFC identify. Demonstrations: Workshops conducted on alternatives to HFC in conjuction with the HPMP Stage I.
El Salvador	ELS/SEV/81/TAS/37	Enabling activities for HFC phase-down	Ratification: Ratification of the Kigali Amendment is under discussion on Congress. HFC licensing & quota system: Hiring of international expert to assess current control to HFC imports. Meetings with the customs authorities have been conducted. HFC data collection and monitoring: Tariff codes for HFCs review by the international expert. Demonstrations: ToR for expert on alternative technologies were prepared and process launched.
Fiji	FIJ/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratification: is under process and at an advanced stage. HFC licensing & quota system: Regulation for licensing is under development. HFC data collection and monitoring: Fiji currently provides consent letters for the importation of HFC refrigerants and equipment containing HFCs and does monitoring through Customs Department. HFC data collection is in final stage. Consultants (Legal and technical) are on board. Pre-consultative workshops for the review of the ODS legislations has been conducted. A draft regulation has been submitted by the legal consultant. Meetings held by technical consultant with Stakeholders and NOU. The EA report is under development.
Haiti	HAI/SEV/84/TAS/23	Enabling activities for HFC phase-down	Ratification: Included in the workplan HFC licensing & quota system: Included in the workplan HFC data collection and monitoring: Included in the workplan Demonstrations: Included in the workplan

Iran	IRA/SEV/82/TAS/232	Enabling activities for HFC phase-down	Ratification: NOU is supporting Parliament Officials in the ratification process (meetings, clarifications, legal support and studies) HFC licensing & quota system: UNEP Component HFC data collection and monitoring: COVID-19 outbreak has obliged this activity to be on hold. Demonstrations: not applicable
Jamaica	JAM/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratification: Report for Ratification finalized in 2019. Due to legal restrictions, Jamaica will ratify when licensing & quota system will be in place. HFC licensing & quota system: Due to legal restrictions, Jamaica will ratify when licensing & quota system will be in place. HFC data collection and monitoring: Report finalized in 2019 Demonstrations: Participation on Regional Trainings for HFC phasedown and technical training of technicians on low GWP alternatives performed.
Lebanon	LEB/SEV/80/TAS/02+	Enabling activities for HFC phase-down	Ratification: Lebanon ratified the Kigali Amendment in February 2020. HFC licensing & quota system: The NOU is working on the inclusion of the HFCs in the quotas and licensing system HFC data collection and monitoring: The NOU started since 2019 the collection of HFC data from importers Demonstrations: not applicable, no demonstration project planned under the EA.
Panama	PAN/SEV/81/TAS/46	Enabling activities for HFC phase-down	Ratification: Ratified on 2018-09-28. HFC licensing & quota system: HFC importers ask for license and quota, but it is not supported by a decree. Meetings have been conducted with customs authorities. HFC data collection and monitoring: NOU collects information on imports and quantities of HFC. Demonstrations: Workshops about alternatives technologies have been conducted in conjunction with the HPMP 2.
Paraguay	PAR/SEV/81/TAS/01+	Enabling activities for HFC phase-down	Ratification: Ratified on 2018-11-01. HFC licensing & quota system: UNEP component. HFC data collection and monitoring: UNEP component. Demonstrations: ToR prepared for workshops on alternatives to HFC, consultants hired. Activity postponed due COVID-19 outbreak.
Peru	PER/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratification: Peru ratified the Kigali Amendment. HFC licensing & quota system: Performed report and guidance for new Reporting requirements. Legal instrument for licensing system under evaluation – will be approved shortly. HFC data collection and monitoring: Customs controls for HFC management and training for Customs performed. Demonstrations: Performed trainings on good practices for HFC management as well as low-GWP alternatives.

Trinidad and Tobago	TRI/SEV/80/TAS/01+	Enabling activities for HFC phase-down	Ratification: Trinidad and Tobago ratified the Kigali Amendment. HFC licensing & quota system: Recruitment of a Legal Consultant to assist in the development of a Framework to support Licensing and Certification of Refrigeration & Air-Conditioning Technicians in Trinidad & Tobago under the Kigali Amendment (ongoing). HFC data collection and monitoring: Performed in 2019. Including costs associated to HFC phaseout, per sector, particularly those associated to the handling of alternatives Demonstrations: District cooling projects under implementation. Exchange missions and study tours on low-GWP alternatives.
Uruguay	URU/SEV/80/TAS/02+	Enabling activities for HFC phase-down	Ratification: Kigali Amendment ratified on 2018-09-12. HFC licensing & quota system: Meetings with customs have been conducted. International consultant hired to assess current system. HFC data collection and monitoring: NOU collects information on HFC imports, exports and transit through VUCE. Demonstrations: Technology workshops have been conducted in conjunction with the HPMP Stage 2 to promote natural refrigerants.

D. **ODS destruction demonstration projects**

The UNDP Montreal Protocol & Chemicals Unit has been supporting countries to take steps to manage their stocks of ODS, which cannot be reused in a sound way. The potential for recovery, proper management and final disposal of such unwanted ODS and ODS containing appliances/equipment banked, have been proven as being possible in developed countries if the proper legislation and price incentives, as well as business opportunities, exist. However, the applicability of banks management schemes in developed countries needs to also be demonstrated in Article 5 countries. The Executive Committee has approved preparation activities for Brazil, Colombia, Cuba, Georgia, Ghana and India, to address ODS waste management leading to ODS destruction. Five such projects (Brazil, Colombia, Cuba, Georgia, and Ghana) have been submitted and approved by the Executive Committee in prior years.

The project in **Brazil** is advancing in both directions: strengthening of the collection center network (reclaim centers) and testing of the destruction facility. Cylinders, equipment and tools were delivered to reclaim centers and the procurement process of lab equipment was prepared and launched. The laboratory equipment was delivered at Reclaim Centers in December 2018, including the Gas Chromatography System (GC). The GC installation and training has already been stared and it is expected to be completed by 2020. The staff from four Reclaim Centers were trained on AHRI 700 tests and lab routines. The company for destruction (Essencis) was identified and the contract has been signed. Essencis' incinerator has already completed the installation of equipment according to requirements. Laboratory equipment was installed in 3 reclaim centers. GC was also installed in 3 reclaim centers. The same centers trained by recognized experts. Essensics performed the process adjustments in September and the actual test burns were conducted in October. The results will come in early 2020.

The project in **Colombia** was completed in the beginning of 2018. A review of legal framework for the management of ODS waste was conducted and comments to proposed waste management regulations were made. Support was provided for the implementation of "Red Verde" for the collection of old

refrigerators. One destruction test was conducted. The final report has been completed and was submitted to ExCom 81. It is important to note that additional tests would be needed for HFCs, as this will be a challenge for the future under the Kigali Amendment. The recollection scheme and dismantling of old refrigerators at a reasonable cost an important factor for the sustainability of the operation. The future of the recollection and disposal scheme is being financed via an Extended Producer Responsibility programme. "Red Verde" continues the collection of ODS-containing refrigerators in 6 cities nation-wide.

D. Country Highlights (January – December 2019)

UNDP has been at the forefront of innovative solutions for countries to address their Montreal Protocol compliance obligations. UNDP's work has resulted in market transformation for the introduction of environment-friendly products and corresponding policy and technological advances and has bought to countries access to emerging technologies, reduced energy bills for consumers, fostered innovation, and created a more equitable market for greener products, allowing indigenous manufacturers to maintain competitiveness.

The next section showcases several prominent examples showing the impact of UNDP's support at the country level.

Bangladesh

ExCom Decision 80/42(a) approved the first HFC phase-down investment project in support of the Kigali Amendment, assisting Walton Hitech Industries Limited, Bangladesh, to convert the refrigerant used by this domestic refrigerator manufacturing facility from HFC-134a to isobutane (R-600a), including the conversion of its compressor manufacturing facility. Walton has an installed capacity of 3 million units of domestic refrigerators and of 4 million compressors (the final Report on Walton´s conversion is expected to be considered at the 86th ExCom).

UNDP supported the project implementation, which started in January 2018 and was operationally completed in December 2019, spanning 24 months of implementation, and meeting the original timeframe agreed under the project. The project included a final safety audit on the installation. The conversion has successfully phased-out 197.30 metric tonnes of HFC-134a at Walton, with additional reduction of 33.30 metric tonnes of HFC-134a per annum in the servicing sector as an additional early phase-down commitment from the Government of the Bangladesh. In terms of accumulated direct emissions, following the IPCC Methodology, the conversion from HFC-134a to HC-600a at Walton will avoid the direct emission of 7,978,873 tons of CO2-equivalent of HFC-134a from 2020 to 2050.

A complementary K-CEP project also supported the development of improved design of the fixed-speed compressors to increase the energy efficiency performance of domestic refrigerators. The re-design of refrigerator and the compressor has resulted in 10 to 30% energy savings from baseline induction-based compressors. As result, based on the minimum increased energy efficiency of 10%, the new refrigerators are estimated to avoid the indirect emissions of, at least, 35,025,8090,980 CO2-equivalent tonnes from 2020 to 2050.

Brazil

By the end of 2019, the stage I HPMP in Brazil was successfully completed and well over 200 companies in the foam sector Brazil had been reconverted to low GWP alternatives. One important achievement was the development of a flexible mechanism in the implementation that allowed clients to choose freely the System House and alternative that they wanted to adopt. The closure of the stage I HPMP was accompanied by a ban on the use of HCFC 141b in the foam sector by December 31st, 2019. The

government of Brazil has provided strong support in the reconversion of the foam sector in Brazil and has actively been promoting the safe adoption of low GWP alternatives.

China

China completed implementation of the Solvent and ICR Sector Plans of Stage I of the HPMP. Starting in 2011, the sector plans were completed in 2017 and 2019 respectively. The Solvent and ICR Sector Plans for the Stage II of the HPMP were approved in 2016 and are under active implementation and progressing well despite late approval of the third (2018) tranche.

Under the Stage I Solvent Sector Plan, 152 production lines in 9 enterprises in the medical devices, metal and electronic industries were converted to three main zero-ODP, low-GWP alternative solvents, namely KC-6, hydrocarbon and water-based solvents. Together with two production lines converted under a demonstration project with separate MLF funding, a total of 154 production lines were converted, phased out 638.112 MT of HCFC-141b, contributing to a direct GHG emission reduction of 442,211 tons of CO2 equivalent.

With the completion of the Stage I of the ICR Sector Plan, 34 manufacturing lines in 18 enterprises were converted to zero-DOP, low-GWP alternative technologies. Including three demonstration projects (Yantai Moon, Qinghua Tongfang and Fujian Snowman) that were approved with separate MLF funding and phase-out by non-A5 owned enterprises with their own resources, a total of 8,721.47 MT of HCFC-22 were phased out, exceeding the Stage I of the HPMP target of 8.450 MT, contributing to China's achieving consumption freeze in 2013 and the 10% reduction in 2015. Stage II ICR Sector Plan was approved in 2016 with annual tranche for 2016-2021. While implementation has been progressing well despite of pending approval of the third (2018) tranche for more than one year. By ExCom decision 84/69, funding for the Stage II ICR Sector Plan would be extended to 2026 with the revised action plan to be submitted to the 86th ExCom meeting for review and approval.

The ICR sector in China has a wide range of products used in various applications. Under the Stage I and Stage II ICR Sector Plan, zero ODP and low GWP alternatives have been emphasized in the alternative technology selection for conversion projects, alternatives selected includes HFC-32, CO2/NH3, HFOs and its blends, HFC-134a, R-410A and RHC-290. Low-GWP alternatives including CO2, NH3, HFOs and its blend and HFC-32 will continue to be vigorously promoted during the implementation of Stage II ICR Sector Plan. R&D will be conducted and testing and assessment of potential low-GWP alternative technologies will be carried out to support the sector phase-out, and the best climate friendly alternative technology will be selected for all phase-out activities.

In response to ExCom decisions, UNDP as the lead implementing agency for the HPMP, submitted, on behalf of the Government of China, a report "Review of China's Current Monitoring, Reporting, Verification and Enforcement Systems in accordance with HCFC Consumption and Production Phase-out Management Plan Agreements," and the progress report regarding actions taken with a view to strengthening of legislation on ODS and implementation.

Ghana

Ghana is successfully proceeding to complete the successful implementation of its first stage of the HPMP. One of the striking lessons is the benefits drawn from an integrated response through several projects, both related to the HPOMP and to projects such as the Enabling Activity (conducted by UNEP), the CCAC HFC survey 9shich now provides a solid basis for estimating the HFCs to be reported now under Article 7 by Ghana) and the KCEP projects. For example, in terms of promotion of low-GWP refrigerants alternatives, the HPMP is now promoting the testing (and more specifically the capacity

building that is required to support it) of the R290 new AC units, which is a step forward in the right direction, after the successful implementation of the R290 retrofits of HCFC AC units. The support of the KCEP programme will also complement this, by promoting the selection of the most energy efficient alternatives in addition to low-GWP refrigerants. The coordination and cooperation with the GIZ ProKlima activities (in addition to the MLF-funded programmes) ensures a comprehensive approach is taken, for example through the promotion of the ODS disposal dimension, even including ODS-containing foam from disposed refrigerators. A refrigerant technicians' formal certification system is in preparation, in close cooperation between the Ghana EPA, UNDP and GIZ. The integration of activities related to the RAC sector, from various funding sources, has been a remarkable, long-lasting success in Ghana. This will also contribute to the implementation of the National Cooling Plan, which was developed with the support of KCEP.

Guyana

A 3 days seminar on Energy Efficiency and Alternative Refrigerants for the Cooling Sector in Guyana was organized by the National Ozone Unit, Hydrometeorological Service, Ministry of Agriculture, Guyana in partnership with UNDP, with support from the Government of New Zealand on December 3-5, 2019 in Georgetown, Guyana. There was participation from RAC technicians from Guyana and 13 countries in the Caribbean in the seminar. Day 1 provided a complete overview to both the Technicians as well as local policymakers about the linkages between Development (2030 Agenda/NDCs) and sustainable cooling. Days 2 and 3 were designed to offer participating Technicians the opportunity to receive exposure and technical training to state of the art low-GWP alternatives to cooling, that is: Hydrocarbons, Ammonia and CO2 Systems. Moreover, an expert on EE and refrigerant fluids, was also present during the discussions.

India

India has successfully banned the imports and use of HCFC-141b as a blowing agent (in form of pure substance or mixed in polyols/fully formulated systems), on 31 December, 2019, in the manufacturing of polyurethane (PU) foams. India has consciously chosen a path for environment friendly and energy efficient technologies while phasing out Ozone Depleting Substances (ODS), adopting low-GWP alternatives such as pentanes (hydrocarbons), HFOs and Methyl Formate (Ecomate®), being one among the few Article 5 countries globally to establish early bans on the use of this chemical. The Ministry of Environment, Forest and Climate Change (MoEFCC) brought out a notification in the Gazette of India through which the issuance of import license for HCFC-141b is prohibited from 1st January, 2020 under Ozone Depleting Substances (Regulation and Control) Amendment Rules, 2019 issued under the Environment (Protection) Act, 1986.

HCFC-141b is not produced in the country and all the domestic requirements were met through imports, nearly 50% of the consumption of ozone depleting chemicals in the country was attributable to HCFC-141b in the PU foam sector 8 (as per 2009/2010 baseline). The Ministry adopted a structured approach to engage with foam manufacturing enterprises for providing technical and financial assistance in order to transition to non-ODS and low-GWP technologies under the Stage II of the HCFCs Phase-out Management Plan (HPMP-II). Around 175 foam manufacturing enterprises are being assisted by the HPMP-II.

The polyurethane foam sector in India has links with important economic sectors related to buildings, cold storages and cold chain infrastructure, automobiles, commercial refrigeration, domestic appliances such as refrigerators, water geysers, thermoware products, office and domestic furniture applications, specific high value niche applications etc. In India, the foam manufacturing sector consists of large, medium and small enterprises having varying capacities, with preponderance of MSMEs.

In this regards, the implementation of HPMP-II focused on a mixed and complex approach through regulatory and policy actions, implementation of technology conversion projects and high level technical assistance that is ensuring minimal dislocation in the sector and for enhancing the capacities of Micro, Small, and Medium Enterprises (MSMEs) in converting to low-GWP non-ODS technologies, training and awareness programmes on non-ODS and low-GWP alternatives to HCFCs, in close collaboration with Industry and MSMEs also facilitated for adequate tie-ups with system houses and independent laboratories for getting their material tested, study tours, field visits, and exchange of experiences provided by experts from other developing countries, such as Brazil, all for stabilizing alternative technologies that have been able to move towards adoption of alternatives at commercial scale.

Noting the challenges, the Ozone Cell, MoEF&CC, entered into a Memorandum of Agreement with the Central Institute of Plastics Engineering & Technology (CIPET), of Department of Chemicals & Petrochemicals to guide foam manufacturing enterprises. As part of the assistance provided to the enterprises technology workshops, field trials, on-site demonstration and support, practical hands on training and product validation are being provided.

Indonesia

Indonesia has successfully completed the implementation of the Stage I of its HPMP in 2018, and one of the key results achieved under the RAC servicing sector plan, with bilateral support from the Government of Australia and technical assistance provided by UNDP, was the launch and the piloting of its first RAC Technicians Certification Scheme. In 2019, the Government of Indonesia has successfully started the operationalization of this Certification program, by partnering with key training centers to improve the level of qualification of the technicians, while the skill-based certification scheme has certified the first 150 technicians in the maintenance of RAC systems in the country. Indonesia has phased out R22 in their domestic and commercial refrigeration and air conditioning manufacturing industries by 2020. The industries who received the support from the MLF have converted to R32 or Hydrocarbon technologies.

Lebanon

The development of the efforts of the Lebanon HPMP as regards the servicing sector is to be specifically underlined in 2019. This is particularly remarkable as the political situation of the country has been particularly unstable in 2019, with many demonstrations and a slowed-down economic activity. The NPU and the PMU worked in close coordination with the Refrigeration association and international experts to determine which equipment would be needed for the first major Vocational school to be established in the capital city (previously operation with practically no training equipment, making the teaching mostly theoretical). The first RAC centre in the Vocational School in Beirut is now operational since September 2019 and was inaugurated. This was actually outreached at the regional level, with the organization of a regional West Asia thematic regional network meeting, allowing to share this experience with neighboring countries. It is worth mentioning that a technician certification system was put in place, and all students graduating from the vocational school receive certification and there will be more work needed to certify all technicians working in the local market. It still will need to be further developed to meet all requirements of certification systems as per international standards, but a key step in the right direction. Also, replication for further procurement of regional centers is ongoing, and in full coordination between the HPMP and the Enabling Activity project, particularly to ensure that energy efficiency testing equipment is also procured. This all fits into not only, obviously, the overall HPMP strategy, but also with the high-quality National Cooling Plan that was developed in 2019 (released in February 2020) with support of the KCEP.

Moldova
Jointly with the Government of the Republic of Moldova, and the National Refrigeration Association, the HPMP Stage II programme has focused on the demonstration of carbon dioxide (CO2) technology in the private sector. Specifically, through a call for innovative technology proposals in the RAC sector, two (2) applicants from a retail food market and vegetable cold chain business (coldstore) were selected on a competitive basis for promotion of non-ODS and low-GWP refrigeration technology. The technology has been sourced from outside the country and then assembled with the help of two national servicing/RAC equipment assembly companies, with co-finance support from the technology recipients. Among results of the project, which are expected when the installation of the technology is complete, are better performance and energy savings, and local practical experience with assembly and servicing of the new technology in the country.

Peru
By the end of 2019, Peru's Stage 2 HPMP developed activities for the installation of three Recovery and Recycling Centers. With support from an International Consultant, criteria for the definition of potential beneficiaries and technical visits to three WEEE recovery plants as possible beneficiaries for R&R centers were performed, In addition, initial equipment purchases for the R&R Centers performed. Moreover, the Government of Peru with support from UNDP, performed an open call for companies or institutions interested in implementing R&R centers present their proposals, in order to be evaluated and, if selected, be awarded with the installation of the R&R Centers.

Timor Leste, Maldives and Fiji
With bilateral support from the Government of New Zealand, and implemented by UNDP, Timor Leste, Maldives and Fiji have started the implementation of demonstration activities in critical sectors (Fisheries in Maldives; Hospitality in Maldives and Cold Chain in Timor Leste) that, during 2020, will assess the supply chain, technical applicability and costs of replacement/retrofit of baseline equipment to lower GWP refrigerants. The results of these activities will support the countries to strengthen their national strategies to phase-out HCFCs and leapfrog HFCs, providing valuable information for the implementation of the Kigali Amendment to the Montreal Protocol, these LVC countries are entirely dependent on imports of RAC equipment and also are particularly vulnerable to technology available and high phase-in costs.

Trinidad and Tobago
A regional workshop on the Kigali Amendment: "Challenges and Opportunities for the Caribbean Region" was organized and hosted by the UNDP and supported by the Government of New Zealand in August 2019 in Port of Spain in Trinidad. The workshop was attended by National Ozone Officers and Technicians from 11 countries in the Caribbean. The purpose provided detailed information about the Kigali Amendment and the early obligations that countries have to comply with once they have ratified the Kigali Amendment. There were intense discussions about the challenges and opportunities the Caribbean region will be facing with the entry into force of the Kigali Amendment.

VII. ADMINISTRATIVE ISSUES (OPERATIONAL, POLICY, FINANCIAL, OTHER)

A. Meetings Attended by UNDP in 2019

From	To	Location	Description
8-Jan-19	10-Jan-19	Brazil	Policy Support and Programme Oversight
20-Jan-19	25-Jan-19	Indonesia	Policy Support and Programme Oversight
1-Feb-19	8-Feb-19	India	Policy Support and Programme Oversight

From	To	Location	Description
4-Feb-19	8-Feb-19	Cuba	Policy Support and Programme Oversight
7-Feb-19	9-Feb-19	India	Policy Support and Programme Oversight
10-Feb-19	13-Feb-19	Bangkok	Policy Support and Programme Oversight
12-Feb-19	15-Feb-19	Mexico	Policy Support and Programme Oversight
12-Feb-19	15-Feb-19	Dominican Republic	Policy Support and Programme Oversight
15-Feb-19	23-Feb-19	France	Policy Support and Programme Oversight
17-Feb-19	22-Feb-19	France	UNEP Global workshop on Kigali Amendment and Energy Efficiency.
5-Mar-19	7-Mar-19	Canada	IACM meeting
21-Mar-19	21-Mar-19	Beijing	Policy Support and Programme Oversight
25-Mar-19	28-Mar-19	Costa Rica	GIZ Green cooling initiative for LAC
7-Apr-19	13-Apr-19	China	Policy Support and Programme Oversight
11-Apr-19	12-Apr-19	Lebanon	Policy Support and Programme Oversight
15-Apr-19	18-Apr-19	Brazil	Policy Support and Programme Oversight
22-Apr-19	26-Apr-19	Mexico	Policy Support and Programme Oversight
20-May-19	25-May-19	USA	"Towards the effective implementation of the Kigali Amendment" Workshop
22-May-19	24-May-19	Nepal	Policy Support and Programme Oversight
27-May-19	31-May-19	Canada	83rd Executive Committee meeting
27-May-19	29-May-19	Sri Lanka	Policy Support and Programme Oversight
10-Jun-19	13-Jun-19	Georgia	Policy Support and Programme Oversight
17-Jun-19	21-Jun-19	Turkey	MPU Business Planning meeting
24-Jun-19	28-Jun-19	India	Policy Support and Programme Oversight
29-Jun-19	5-Jul-19	Thailand	Implementation Committee and OEWG meetings
8-Jul-19	11-Jul-19	Nigeria	Policy Support and Programme Oversight
30-Jul-19	2-Aug-19	Philippines	UNEP Ozone South East Asia Network Meeting
3-Aug-19	6-Aug-19	Maldives	Policy Support and Programme Oversight
5-Aug-19	8-Aug-19	Turkey	Policy Support and Programme Oversight
12-Aug-19	16-Aug-19	Colombia	Policy Support and Programme Oversight
14-Aug-19	16-Aug-19	Brazil	Policy Support and Programme Oversight
19-Aug-19	22-Aug-19	Trinidad and Tobago	Policy Support and Programme Oversight
26-Aug-19	28-Aug-19	Paraguay	UNEP Ozone Latin America & Caribbean Network Meeting
27-Aug-19	29-Aug-19	Haiti	Policy Support and Programme Oversight
3-Sep-19	5-Sep-19	Mexico	Policy Support and Programme Oversight
9-Sep-19	13-Sep-19	Indonesia	Policy Support and Programme Oversight
9-Sep-19	13-Sep-19	Brazil	Policy Support and Programme Oversight
16-Sep-19	18-Sep-19	Lebanon	Policy Support and Programme Oversight
16-Sep-19	19-Sep-19	Fiji	Policy Support and Programme Oversight
16-Sep-19	18-Sep-19	Dominican Republic	Policy Support and Programme Oversight
23-Sep-19	27-Sep-19	India	Policy Support and Programme Oversight
25-Sep-19	27-Sep-19	Dominican Republic	Policy Support and Programme Oversight

From	To	Location	Description
26-Sep-19	27-Sep-19	Ukraine	UNEP Ozone Europe & CIS Network Meeting
30-Sep-19	4-Oct-19	Nigeria	Policy Support and Programme Oversight
1-Oct-19	3-Oct-19	Costa Rica	Policy Support and Programme Oversight
7-Oct-19	10-Oct-10	Mexico	Policy Support and Programme Oversight
9-Oct-19	11-Oct-19	Montreal Canada	IACM meeting
14-Oct-19	17-Oct-19	Timor-Leste	Policy Support and Programme Oversight
15-Oct-19	24-Oct-19	Bangladesh	Policy Support and Programme Oversight
3-Nov-19	8-Nov-19	Rome Italy	32nd MOP meeting
20-Nov-19	21-Nov-19	Mexico	Policy Support and Programme Oversight
20-Nov-19	21-Nov-19	Mexico	Policy Support and Programme Oversight
20-Nov-19	22-Nov-19	Dominican Republic	Policy Support and Programme Oversight
26-Nov-19	29-Nov-19	Malaysia	Policy Support and Programme Oversight
27-Nov-19	29-Nov-19	El Salvador	Policy Support and Programme Oversight
3-Dec-19	5-Dec-19	Guyana	Policy Support and Programme Oversight
9-Dec-19	12-Dec-19	Cuba	Policy Support and Programme Oversight
16-Dec-19	20-Dec-19	Canada	84th meeting of the Executive Committee

B. **Other Issues.**

There were no specific issues in 2019 that need to be addressed.

ANNEX 1: Tables related to the Performance Indicators

1. Performance Indicator 1: MYAs

Multi-year agreements submitted in 2019 are listed in the following table.

MLF Number
COL/PHA/84/TAS/108
COS/PHA/83/INV/59
COS/PHA/84/INV/60
EGY/PHA/84/INV/144
GHA/PHA/84/INV/48
GUY/PHA/83/INV/32
IRA/PHA/84/INV/235
KAM/PHA/83/INV/36
MAL/PHA/84/INV/189

2. Performance Indicator 2: Individual Projects

The number of individual projects approved in 2019 are listed in the following table.

MLF Number	
ANG/PHA/84/TAS/22	JAM/PHA/84/TAS/39
ARM/PHA/84/TAS/23	MAL/SEV/84/INS/188
BGD/SEV/83/INS/55	MLI/PHA/84/PRP/41
CHI/SEV/83/INS/198	MOL/PHA/84/PRP/40
COL/SEV/83/INS/106	MOZ/PHA/84/PRP/32
COS/SEV/84/INS/62	NIR/PHA/83/PRP/154
CUB/SEV/83/INS/62	PAN/PHA/83/PRP/49
DOM/PHA/83/PRP/68	PAN/SEV/84/INS/50
GEO/PHA/84/PRP/41	SWA/PHA/83/PRP/27
GLO/SEV/84/TAS/349	TRI/SEV/83/INS/37
HAI/SEV/84/TAS/23	URU/PHA/83/PRP/73
IDS/SEV/84/INS/215	URU/SEV/84/INS/74
IND/SEV/84/INS/478	ZIM/PHA/83/PRP/58

3. Performance Indicator 3: Funds disbursed

2019 Disbursements	$23,135,600

4. Performance Indicator 4: 2019 ODS phase-out

Correct Code	Consumption ODP to be Phased Out per Proposal
COL/PHA/84/TAS/108	4.8
COS/PHA/83/INV/59	3.5
COS/PHA/84/INV/60	0.7
COS/PHA/84/INV/61	0

EGY/PHA/84/INV/144	21.5
EGY/PHA/84/TAS/143	0
GHA/PHA/84/INV/48	15.6
GUY/PHA/83/INV/32	0.2
IRA/PHA/84/INV/235	9.9
IRA/PHA/84/INV/238	7.3
IRA/PHA/84/TAS/241	2.8
KAM/PHA/83/INV/36	1.4
MAL/PHA/84/INV/189	28.7
MAL/PHA/84/TAS/186	29.9
MAL/PHA/84/TAS/187	0

5. Performance Indicator 5: Projects completed in 2019.

The following 60 projects were completed in 2019, out of which 55 were approved under regular funding.

MLF Number	Date Completed (Actual)
ARG/SEV/76/INS/175	Dec-19
BAR/PHA/80/INV/27	Dec-19
BGD/PHA/65/INV/40	Mar-19
BGD/REF/80/INV/01+	Dec-19
BGD/SEV/77/INS/47	Jun-19
BHU/PHA/76/TAS/26	Nov-19
BRA/PHA/74/INV/307	Dec-19
BRA/PHA/75/INV/315	Dec-19
BRA/PHA/80/INV/319	Dec-19
BRA/PHA/80/TAS/318	Dec-19
BRA/SEV/75/INS/314	Sep-19
BRU/PHA/74/INV/17	Dec-19
CHI/PHA/76/INV/190	Dec-19
CHI/SEV/79/INS/194	Aug-19
COL/DES/66/DEM/82	Jun-19
COL/PHA/75/TAS/91	Dec-19
COS/PHA/80/INV/57	Dec-19
COS/REF/57/PRP/41	Dec-19
COS/SEV/80/INS/56	Dec-19
CPR/FOA/80/PRP/02+	Jun-19
CPR/PHA/71/INV/534	Dec-19
CPR/PHA/73/INV/550	Dec-19
CPR/PHA/75/INV/567	Dec-19
CUB/PHA/77/INV/56	Dec-19
CUB/SEV/75/INS/54	Dec-19
DOM/REF/81/INV/63	Dec-19
EGY/FOA/76/DEM/129	Jul-19
EGY/PHA/65/INV/113	Dec-19
EGY/PHA/68/INV/117	Dec-19

EGY/PHA/82/INV/139	Dec-19
FIJ/PHA/77/INV/31	Dec-19
GLO/SEV/82/TAS/346	Dec-19
GUY/PHA/75/INV/28	Dec-19
IDS/SEV/80/INS/212	Dec-19
IND/SEV/76/INS/467	Dec-19
IRA/PHA/77/INV/226	Dec-19
IRA/SEV/77/INS/229	Mar-19
KAM/PHA/76/INV/33	Dec-19
LEB/SEV/77/INS/89	Nov-19
MAL/PHA/77/INV/181	Dec-19
MAL/SEV/80/INS/185	Dec-19
MDV/PHA/60/INV/20	Dec-19
MDV/PHA/69/INV/24	Dec-19
MDV/REF/76/DEM/30	Dec-19
MEX/PHA/71/INV/168	Dec-19
MEX/PHA/75/INV/178	Dec-19
MLI/PHA/76/INV/38	Dec-19
MOL/PHA/77/INV/34	Dec-19
NEP/PHA/75/INV/35	Dec-19
PAK/SEV/77/INS/96	Mar-19
PAN/PHA/76/TAS/43	May-19
PAR/PHA/74/INV/34	Dec-19
PER/SEV/80/TAS/01+	Aug-19
SRL/PHA/76/INV/49	Dec-19
STK/PHA/64/TAS/16	Jun-19
TRI/PHA/75/INV/33	Apr-19
TRI/SEV/79/INS/34	Dec-19
URU/SEV/80/INS/70	Dec-19
VEN/SEV/77/INS/135	Mar-19
ZIM/REF/80/PRP/02+	Jun-19

7. Performance Indicator 7: Final Revisions

Last year's database 108 projects, of which 76 should have been financially completed in 2019. This year's database counts 79 projects for which a final revision was issued in 2019.

8. Performance Indicator 8: PCRs

100% achieved (10 individual PCRs submitted and 8 MYA PCR submitted out of 5 planned).

9. Performance Indicator 9

Progress Report produced on 27 July 2020 as required.