

# EP

# الأمم المتحدة

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اللجنة التنفيذية للصندوق المتعدد الأطراف  
لتنفيذ بروتوكول مونتريال  
الاجتماع الستون  
مونتريال، 12-15 أبريل/نيسان 2010

برنامج عمل برنامج الأمم المتحدة الإنمائي لعام 2010

## تعليقات أمانة الصندوق وتوصياتها

1- يطلب برنامج الأمم المتحدة الإنمائي (اليونديبي) من اللجنة التنفيذية الموافقة على تخصيص مبلغ 1.114.230 دولارا أمريكيا لبرنامج عمله لعام 2010، زائد تكاليف دعم الوكالة البالغة 85 817 دولارا أمريكيا.

2- وترد الأنشطة المقترحة في برنامج عمل اليونديبي في الجدول الأول أدناه:

## الجدول الأول : برنامج عمل اليونديبي

المبلغ الموصى به (دولار أمريكي)	المبلغ المطلوب (دولار أمريكي)	النشاط/المشروع	البلد
القسم ألف: الأنشطة الموصى بموافقة شمولية عليها			
ألف 1- تجديد مشروعات التعزيز المؤسسي:			
307.125	351.000	تجديد مشروع التعزيز المؤسسي (المرحلة السادسة)	البرازيل
326.576	373.230	تجديد مشروع التعزيز المؤسسي (المرحلة الثامنة)	الهند
633.701	724.230	المجموع الفرعي للقسم ألف 1:	
القسم باء: الأنشطة الموصى بالنظر فيها بصورة فردية			
باء 1- إعداد المشاريع المتعلقة بمشروعات تدليلية للمواد الهيدروكلوروفلوروكربونية:			
30,000*	30.000	إعداد مشروع يتعلق بمشروع تدليلي للتحول من تكنولوجيا الهيدروكلوروفلوروكربون-22 إلى فورمات الميثيل وتكنولوجيا ثاني أكسيد الكربون كعامل نفخ في تصنيع رغاوى البوليستيرين المسحوبة بالضغط في شركة Feininger (Nanjing) Energy Saving Technology Co. Ltd.	الصين
30.000*	30.000	إعداد مشروع يتعلق بمشروع تدليلي للتحول من الهيدروكلوروفلوروكربون-41 إلى زيت السيليكون المعدل الخالي من المذيبات لتطبيقات السيليكات في شركة Shifeng Medical Apparatus and Instrument Co. Ltd.	الصين
30.000*	30.000	إعداد مشروع يتعلق بمشروع تدليلي للتحول من الهيدروكلوروفلوروكربون-41 إلى مزيج من كحول الإيزوبروبيل والمركبات القائمة على الهيدروكربون في تطبيقات التنظيف بالمذيبات في مجموعة Zhejiang KDL Medical Equipment Group Ltd.	الصين
90.000	90,000	المجموع الفرعي للقسم باء 1:	
باء 2-: إعداد مشروع يتعلق بالمشروعات والتجريبية في مجال إدارة فضلات المواد المستنفدة للأوزون:			
80.000*	80.000	إعداد مشروع يتعلق بمشروع تجريبي/تدليلي لتدمير المواد المستنفدة للأوزون	الهند
80.000*	80.000	المجموع الفرعي للقسم باء 2:	
باء 3- المساعدة التقنية:			
*	250.000	تعبئة الموارد لتحقيق منافع مشتركة للمناخ	مشروع عالمي
*	250.000		المجموع الفرعي للقسم باء 3:
803.701	1.144.230	المجموع الفرعي للقسمين ألف وباء:	
60.278	85.817	تكاليف دعم الوكالة (7.5 في المائة لإعداد المشروعات والتعزيز المؤسسي والأنشطة الأخرى التي تزيد تكاليفها عن 250 000 دولار أمريكي، و9 في المائة للأنشطة الأخرى التي تقل تكاليفها عن 250 000 دولار أمريكي):	
863.979	1.230.047	المجموع:	

\* مشروع ينظر فيه بصورة فردية أو معلق

## القسم ألف: الأنشطة الموصى بموافقة شمولية عليها

### ألف 1- تجديد مشروعات التعزيز المؤسسي:

(أ) البرازيل (المرحلة السادسة): 351 000 دولار أمريكي

(ب) الهند (المرحلة الثامنة): 373 230 دولارا أمريكيا

### وصف المشروع

3- قدم اليونديبي طلبين لتجديد مشروع التعزيز المؤسسي للبلدي الإثنين المذكورين أعلاه. ويرد وصف الطلبات لهذين البلدين في المرفق الأول بهذه الوثيقة.

### تعليقات الأمانة

4- استعرضت أمانة الصندوق التقرير الختامي وخطة العمل بشأن مشروع التعزيز المؤسسي المقدمان من قبل اليونديبي بالنيابة عن البرازيل والهند لدعم طلبي التجديد ووجدت أنهما يتماشيان ويتسقان مع مقتضيات التجديد. وأخذت الأمانة في الحسبان المقررات 36/57(ب)، و16/58 و47/59 لدى النظر في طلبي مشروع التعزيز المؤسسي، وخاصة المقرر الأخير الذي قررت فيه اللجنة التنفيذية "تمديد الدعم المالي لتمويل مشروعات التعزيز المؤسسي للأطراف من بلدان المادة 5 فيما بعد عام 2010 وحتى ديسمبر/كانون الأول 2011". وبناء على المقررات المذكورة أعلاه، احتسب التمويل لهذين المشروعين على أساس تناسبي حتى ديسمبر/كانون الأول 2011 فقط.

### توصيات الأمانة

5- توصي أمانة الصندوق بموافقة شمولية على طلبي تجديد مشروع التعزيز المؤسسي للبرازيل والهند على مستوى التمويل التناسبي حتى 31 ديسمبر/كانون الأول 2011، الموضح في الجدول 1 من هذه الوثيقة. وقد ترغب اللجنة التنفيذية في تقديم التعليقات الواردة في المرفق الثاني بهذه الوثيقة إلى حكومتي هذين البلدين.

## القسم باء: الأنشطة الموصى بالنظر فيها بصورة فردية

### باء 1- إعداد مشروعات تتعلق بمشروعات تدللية للتكنولوجيات البديلة للمواد الهيدروكلوروفلوروكربونية

الصين: إعداد مشروع يتعلق بمشروع تدللي للتحول من تكنولوجيا الهيدروكلوروفلوروكربون-142ب+الهيدروكلوروفلوروكربون-22 إلى فورمات الميثيل وتكنولوجيا ثاني أكسيد الكربون كعامل نفخ في تصنيع رغاوى البوليستيرين المسحوبة بالضغط في شركة Feininger (Nanjing) Energy Saving Technology Co. Ltd (30 000 دولار أمريكي)

الصين: إعداد مشروع يتعلق بمشروع تدللي للتحول من الهيدروكلوروفلوروكربون-141ب إلى زيت السيليكون المعدل الخالي من المذيبات لتطبيقات السيليكات في شركة Shifeng Medical Apparatus and Instrument Co. Ltd (30 000 دولار أمريكي)

الصين: إعداد مشروع يتعلق بمشروع تدللي للتحول من الهيدروكلوروفلوروكربون-141ب إلى مزيج من كحول الإيزوبروبيل والمركبات القائمة على الهيدروكربون في تطبيقات التنظيف بالمذيبات في مجموعة Zhejiang KDL Medical Equipment Group Ltd (30 000 دولار أمريكي)

## وصف المشروع

6- قدم اليونديبي ثلاثة طلبات لإعداد مشروعات تدليلية، مشروع واحد لقطاع الرغاوى، ومشروعين لقطاع المذيبات في الصين. وترد هذه المقترحات في المرفق الثاني، والثالث والرابع من برنامج عمل اليونديبي الملحق بهذه الوثيقة. وترد أدناه معلومات أساسية موجزة على الشركات المقترحة أن تنفذ فيها المشروعات تدليلية:

(أ) أنشئت شركة Feininger (Nanjing) Energy Saving Technology Co. Ltd في عام 2002 وهي إحدى شركات التصنيع الرئيسية لخطوط سحب رغاوى البولستيرين المسحوبة بالضغط، وألات إعادة تدوير رغاوى البولستيرين المسحوبة بالضغط وما يرتبط بها من أجهزة فضلا عن ألواح رغاوى البولستيرين المسحوبة بالضغط في الصين. ويهدف المشروع إلى تقييم الجدوى التقنية والتجارية من استخدام فورمات الميثيل مع ثاني أكسيد الكربون كعامل نفخ مشترك لاستبدال الهيدروكلوروفلوروكربون-141ب المستخدم في تصنيع رغاوى البولستيرين المسحوبة بالضغط، وهي تكنولوجيا يمكن أن تستخدمها 500 شركة تصنيع رغاوى صغيرة ومتوسطة الحجم.

(ب) وأنشئت شركة Shifeng Medical Apparatus and Instrument Co. Ltd في عام 1998 وهي إحدى أكبر شركات التصنيع الرئيسية لمجموعة من الأجهزة الطبية، وخاصة الحقن التي تستخدم لمرة واحدة. ويهدف المشروع إلى استكشاف مدى ملائمة زيت السيلكون المعدل بدون مذيبات لتطبيقات السيليكات المستخدمة في تصنيع الحقن التي تستخدم لمرة واحدة، بدلا من التكنولوجيا القائمة على المواد الهيدروكلوروفلوروكربونية في هذه المؤسسة. ويمكن أن يستخدم عدد كبير من الشركات الصغيرة والمتوسطة الحجم العاملة في قطاع المذيبات هذه التكنولوجيا.

(ج) أنشئت مجموعة Zhejiang KDL Medical Equipment Group Ltd في عام 1987 وهي إحدى شركات التصنيع الرئيسية لمجموعة من الأجهزة الطبية التي يمكن زرعها. ويهدف المشروع التبدلي إلى تحديد مدى ملائمة مزيج كحول الإيزوبروبيل ومركبات الهيدروكلوروكربون لاستبدال الهيدروكلوروفلوروكربون-141ب في تنظيف/تطبيقات السيليكات المتعلقة الحقن المستخدمة لمرة واحدة، وحقن الفصف والأجهزة الطبية الأخرى التي يمكن زراعتها التي تُصنعها هذه المؤسسة. ويمكن أن يستخدم عدد كبير من الشركات الصغيرة والمتوسطة الحجم العاملة في قطاع المذيبات هذه التكنولوجيا.

7- وسوف تستخدم أموال إعداد المشروعات لإعداد مقترحات المشروعات الاستثمارية، التي من شأنها أن تؤدي، عند تنفيذها، إلى تطوير نماذج يمكن تكرارها للاستخدام في مؤسسات التصنيع المماثلة، وتحديد الأداء التقني والجدوى الاقتصادية من البدائل التي تم اختبارها فضلا عن منهجية لحساب تكاليف التمويل في المستقبل.

## تعليقات الأمانة

8- أزيلت جميع طلبات المشروعات التدليلية المتعلقة بالمواد الهيدروكلوروفلوروكربونية في قطاعات التبريد والمذيبات والرغاوى، باستثناء خمسة مشروعات في قطاع الرغاوى، من خطط أعمال الوكالات للفترة 2009-2011، وذلك في الاجتماع السابع والخمسين، بما يتماشى مع المقرر 43/55(ب)، الذي قررت فيه اللجنة التنفيذية "أن تختار المشروعات التي تظهر بصورة أفضل التكنولوجيات البديلة وتسهل جمع البيانات الصحيحة عن التكاليف الرأسمالية الإضافية والتكاليف التشغيلية الإضافية أو الوفورات، فضلا عن البيانات الأخرى ذات الصلة بتطبيق التكنولوجيات". وبذلك، لم يسمح هذا المقرر سوى بتقديم هذه المشروعات الخمسة إلى اجتماعات لاحقة للجنة التنفيذية كيما ينظر فيها.

9- وفي الاجتماع التاسع والخمسين، قررت اللجنة في المقرر 9/59 "أن تسمح بإدراج المشروعات الإضافية

المتعلقة بالمواد الهيدروكلوروفلوروكربونية في خطط أعمال عام 2010 للوكالات الثنائية والمنفذة التي تُجرب تكنولوجيا بديلة أو جديدة والتي يمكن أن توفر المعلومات المطلوبة بموجب المقرر 43/55، وذلك نتيجة زيادة الطلبات المتعلقة بإعداد مشروعات تدليلية في برامج عمل الوكالات للبدائل التكنولوجية بخلاف الطلبات الخمسة التي وافقت عليها اللجنة التنفيذية في المقرر 6/57.

10- واستعرضت الأمانة هذه الطلبات بما يتماشى مع المقررات المشار إليها أعلاه، فضلا عن مقتضيات المقرر 16/56(ط). ولاحظت أن طلبات إعداد المشروع الثلاثة هذه مدرجة في خطة أعمال اليونديبي للفترة 2010-2012 التي ستناقش في الاجتماع الستين هذا. ونظرا لذلك، طلبت الأمانة إلى اليونديبي أن يؤجل تقديم طلبات الإعداد إلى اجتماع قادم للسماح للجنة التنفيذية بمناقشة مزايا التكنولوجيات المقترحة التي سيتم اختبارها خلال النظر في خطط أعمال الوكالات. وعلى الرغم من طلب الأمانة، طلب اليونديبي الإبقاء على هذه الطلبات في برنامج عمله مشيرا إلى الحاجة العاجلة إلى إكمال هذه المشروعات واستخدام النتائج للانتهاء من اختيار التكنولوجيا في هذه القطاعات للسماح للبلدان من الوفاء بالتزاماتها المتعلقة بمقتضيات إزالة المواد الهيدروكلوروفلوروكربونية. وأشار اليونديبي، نظرا لهذه الحاجة العاجلة، إلى أن المقترحات الكاملة لهذه الطلبات ستقدم، في حالة الموافقة عليها في هذا الاجتماع، إلى الاجتماع الحادي والستين أو الثاني والستين مع تحديد نهاية عام 2011 كتاريخ مستهدف لإكمال المشروع.

11- وتلاحظ الأمانة أن الطلبات قدمت معلومات أساسية عن كل مؤسسة، ومعلومات على استخدام المواد الهيدروكلوروفلوروكربونية في المؤسسات، فضلا عن إسهامها في إجمالي الاستخدام من المواد الهيدروكلوروفلوروكربونية في البلد، وكمية المواد المستنفدة للأوزون التي ستخضع نتيجة هذه المشروعات التدليلية. كما قدم وصف للتكنولوجيات التي سيتم اختبارها.

12- وفيما يتعلق بطلب المشروع التدليلي الخاص بقطاع رغاوى البوليستيرين المسحوبة بالضغط، التمسست الأمانة الحصول على توضيح من اليونديبي عما إذا كان هناك اتفاق مع الوكالتين الأخريين وهما اليونيدو والوكالة الألمانية للتعاون التقني اللتين تعملان أيضا في نفس القطاع، بشأن أولوية اختبار هذه التكنولوجيا البديلة المحددة، وكيف يمكن أن يسهم ذلك في تحقيق أهداف الخفض في هذا القطاع الفرعي. وأشار اليونديبي إلى أن الصين أبلغت الوكالتين بهذا المشروع، وأنها ترغب في المضي قدما كمسألة ذات أولوية حيث أنه سيقدم معلومات ستفيد نحو 500 مؤسسة صغيرة ومتوسطة الحجم في قطاع رغاوى البوليستيرين المسحوبة بالضغط، التي تستأثر بنحو 70 في المائة من الاستهلاك القطاعي.

13- كما أعربت الأمانة عن قلقها إزاء اختيار مشروعين في قطاع المذيبات بوصفها مسألة ذات أولوية لاختبار التكنولوجيات، نظرا لأن هذا القطاع هو أصغر قطاع يستهلك المواد الهيدروكلوروفلوروكربونية في الصين، وتساءلت كيف سيسهم هذين المشروعين في تحقيق تدابير المراقبة لعامي 2013 و2015 مقارنة بالقطاعات الأخرى الأكثر أهمية. ورد اليونديبي بأن الصين تعترض المشروعين في قطاع المذيبات، الذي تعتبره يحظى بالأولوية للمساهمة في تحقيق أهداف عامي 2013 و2015 نتيجة ارتفاع قدرات استنفاد الأوزون للهيدروكلوروفلوروكربون-141ب والانبعاثات الناتجة عن استخدامه. وبالإضافة إلى ذلك، فإن حساسية وجدوى القطاع الفرعي للتطبيقات الطبية، الذي يستأثر بما يزيد عن 25 في المائة من الاستهلاك في هذا القطاع، تعتبر هامة.

14- كما أوضح اليونديبي أن الطلبات الثلاثة هذه جاءت استجابة لطلبات من حكومة الصين بشأن الحاجة إلى مشروعات لاختبار التكنولوجيا الموصوفة لكل تطبيق، ومن شأن نتائجها أن تساعد حكومة الصين في اتخاذ قرار بشأن البدائل التي يتعين تطبيقها لإزالة استخدام المواد الهيدروكلوروفلوروكربونية في هذه القطاعات.

#### توصيات الأمانة

15- في ضوء تعليقات الأمانة الواردة أعلاه، قد ترغب اللجنة التنفيذية في أن تنظر في الطلبات المشار إليها أعلاه وما إذا كانت ستوافق على طلبات:

- (أ) إعداد مشروع يتعلق بمشروع تدليلي للتحويل من تكنولوجيا الهيدروكلوروفلوروكربون-142 إلى الهيدروكلوروفلوروكربون-22 إلى فورمات الميثيل وتكنولوجيا ثاني أكسيد الكربون كعامل نفخ في تصنيع رغاوى البوليستيرين المسحوبة بالضغط في شركة (Feininger (Nanjing) Energy Saving Technology Co. Ltd (30 000 دولار أمريكي)
- (ب) إعداد مشروع يتعلق بمشروع تدليلي للتحويل من الهيدروكلوروفلوروكربون-141 إلى زيت السيليكون المعدل الخالي من المذيبات لتطبيقات السيليكا في شركة Shifeng Medical Apparatus and Instrument Co. Ltd (30 000 دولار أمريكي)
- (ج) إعداد مشروع يتعلق بمشروع تدليلي للتحويل من الهيدروكلوروفلوروكربون-141 إلى مزيج من كحول الإيزوبروبيل والمركبات القائمة على الهيدروكلوروكربون في تطبيقات التنظيف بالمذيبات في مجموعة Zhejiang KDL Medical Equipment Group Ltd (30 000 دولار أمريكي)

## باء-2- إعداد مشروع يتعلق بالمشروعات التدللية للتخلص من المواد المستنفدة للأوزون

الهند: إعداد مشروع يتعلق بمشروع تجريبي/تدليلي لتدمير المواد المستنفدة للأوزون (30 000 دولار أمريكي)

### وصف المشروع

16- قدم اليونديبي، بالنيابة عن حكومة الهند، طلبا لإعداد مشروع يتعلق بمشروع تدليلي تجريبي للتخلص من المواد الكلوروفلوروكربونية غير المرغوبة والمواد المستنفدة للأوزون الأخرى في البلد على مستوى تمويل يبلغ 80 000 دولار أمريكي. ووفقا للوثائق الداعمة المقدمة، سيحدد هذا المشروع التدليلي، عقب إكماله بنجاح، مدى ملائمة وجدوى نموذج تكنولوجي ومالي وإداري مستدام للتخلص الآمن من المواد المستنفدة للأوزون غير المرغوبة في الهند. كما أنه سيؤدي إلى تدمير سليم بيئيا لنحو 100 طن من قدرات استنفاد الأوزون أساسا من المواد الكلوروفلوروكربونية، ومتوسط سنوي من التخلص يبلغ نحو 100 طن من قدرات استنفاد الأوزون من المواد المستنفدة للأوزون في السنوات اللاحقة.

17- وقدم اليونديبي، في طلب إعداد المشروع الخاص به، نهجا بشأن عملية الإعداد، وأشار إلى أنه سوف يغطي تحليل المصارف المحتملة للمواد المستنفدة للأوزون، ويحدد الكميات المقرر التخلص منها، ويحدد عملية للجمع فضلا عن بارامترات تقنية بشأن مرفق لتدمير منتجات متعددة من المواد المستنفدة للأوزون. كما أنه يهدف إلى تطوير نموذج أعمال بشأن طريقة تنفيذ هذا النشاط، ويشير إلى أن النتائج الرئيسية للمشروع الكامل ستشتمل على ما يلي:

(أ) مرفق لتدمير مجموعة متعددة من المواد المستنفدة للأوزون من شأنها أن تضمن التدمير السليم بيئيا للمواد المستنفدة للأوزون؛

(ب) نموذج تكنولوجي ومالي وإداري لتشغيل المرفق بصورة مستدامة.

18- ويتوقع اليونديبي أن ينتج عن عملية الإعداد هذه مقترح مشروع كامل، من المتوقع تمويله جزئيا من خلال الصندوق المتعدد الأطراف حسب العناصر المؤهلة وفقا للمقررات والمبادئ التوجيهية ذات الصلة للجنة التنفيذية. وسيسعى إلى الحصول على تمويل من مصادر أخرى للعناصر غير المؤهلة بموجب الصندوق من الممكن أن تكون من خلال تمويل الكربون. وترد معلومات تفصيلية عن هذا الطلب في المرفق الخامس من برنامج عمل اليونديبي الملحق بهذه الوثيقة.

## تعليقات الأمانة

19- تلاحظ الأمانة أن اليونديبيي قدم بالفعل إلى الاجتماع التاسع والخمسين مقترحا لمشروع تجريبي للتخلص من المواد المستنفدة للأوزون في الهند لم يوافق عليه نتيجة احتمال وجود تمويل مزدوج حيث أنه يتعلق بتدمير زيادة الإنتاج من رابع كلوريد الكربون. ويركز المقترح المنقح هذا على تدمير المواد الكلوروفلوروكربونية غير المرغوبة، وتتعلق كمية محددة منها بالمشروع التجريبي وليس رابع كلوريد الكربون حسبما اقترح من قبل.

20- كما وافقت اللجنة التنفيذية، في الاجتماع التاسع والخمسين، على عدم تقديم سوى مشروعين تجريبيين إضافيين بشأن التخلص من المواد المستنفدة للأوزون لليونيدو، لضمان التوزيع الإقليمي للمشروعات. ولاحظت الأمانة أن اليونديبيي قد أدرج أيضا هذا الطلب في خطة أعماله كيما ينظر فيه خلال هذا الاجتماع والتمس مرة أخرى النظر في طلب إعداد المشروع عقب الإحاطة علما بخطة الأعمال. وأكد اليونديبيي من جديد أن هناك تقديرا واسع النطاق لنموذج أعمال مشروع التدمير في الهند المقدم إلى الاجتماع التاسع والخمسين، وعلى الرغم من وجود مسألة التمويل المزدوج، فإنه يرى أنه ينبغي الإبقاء على هذا المشروع المنقح في خطة أعماله نظرا لأنه يتناول الآن التخلص من المواد المستنفدة للأوزون غير المرغوبة. وبالإضافة إلى ذلك، يؤكد اليونديبيي أن الهند كانت مدرجة في القائمة السابقة للبلدان المحتملة التي يمكن أن تشرع في مشروعات تجريبية للتخلص من المواد المستنفدة للأوزون.

21- واستعرضت الأمانة الطلب بما يتماشى مع المعلومات المطلوبة بموجب المقرر 19/58، ووجدت أن وصف المشروع يقدم تفاصيل عن نظام بشأن الجمع، وكميات المواد المستنفدة للأوزون المقرر تدميرها في إطار هذا المشروع التجريبي، وأوجه التضافر مع المبادرات القائمة الأخرى بشأن الجمع. كما أنه أوضح كيف يمكن أن يؤدي تمويل الصندوق المتعدد الأطراف إلى الحصول على تمويل مشترك لضمان استمرار أنشطة التدمير في المستقبل على المدى الطويل بدون المزيد من التمويل من الصندوق المتعدد الأطراف.

22- وتلاحظ الأمانة أن المبلغ المطلوب لإعداد المشروع يعتبر معقولا ويتماشى مع الموافقات السابقة لأموال إعداد مشروعات من هذا النوع. وبناء على التوضيحات المقدمة والمناقشات مع اليونديبيي، قد تنظر اللجنة التنفيذية فيما إذا كان المشروع، بصيغته المقدمة، مؤهلا كمشروع تجريبي بما يتماشى مع المقرر 19/58.

## توصية الأمانة

23- قد ترغب اللجنة التنفيذية في أن توافق على طلب إعداد مشروع يتعلق بمشروع تجريبي للتخلص من المواد المستنفدة للأوزون في الهند في ضوء المعلومات المقدمة أعلاه وبما يتماشى مع المقرر 19/58.

## باء3- المساعدة التقنية:

مشروع عالمي: تعبئة الموارد لتحقيق منافع مشتركة للمناخ: 250 000 دولار أمريكي

## وصف المشروع

24- قدم اليونديبيي طلبا إلى الاجتماعات السابع والخمسين والثامن والخمسين والتاسع والخمسين لمشروع مساعدة تقنية لتعبئة الموارد لتحقيق الحد الأقصى من المنافع المناخية من إزالة المواد الهيدروكلوروفلوروكربونية، على مستوى تمويل يبلغ 250 000 دولار أمريكي. ويقدم اليونديبيي مرة أخرى مقترحا معدلا كيما يُنظر فيه خلال هذا الاجتماع. ويرد وصف المشروع بوصفه المرفق السادس في برنامج عمل اليونديبيي المقدم إلى هذا الاجتماع.

25- وعدل هذا المقترح كي يأخذ في الحسبان التطورات الأخيرة في مختلف الاجتماعات، فضلا عن السماح لليونديبيي بالمضي قدما في الأنشطة بالتوازي مع الأعمال الجارية بشأن المرفق الخاص للدخل الإضافي. وسيستمر المشروع في بحث الأنشطة المحتملة التي قد تتطلب تمويلا مشتركا للمنافع المناخية الإضافية، ولكنه سيركز على

مجالين: (1) إدارة المصارف لمشروعات التخلص من المواد المستنفدة للأوزون، وخاصة تلك المتعلقة بإدارة الأجهزة التي وصلت إلى نهاية عمرها الافتراضي؛ و(2) إمكانيات التمويل المشترك لأنشطة إزالة المواد الهيدروكلوروفلوروكربونية.

26- ويقترح المشروع المعدل الآن تنفيذ الأنشطة على مرحلتين. ويمكن أن تبدأ المرحلة الأولى فوراً وستقدم دراسات حالة ملموسة عن التعلم عن طريق التنفيذ من أربعة مقترحات تجريبية مستقلة. ومن ناحية الأخرى، يمكن أن تبدأ المرحلة الثانية في وقت لاحق وستشتمل على تحليل دراسات الحالة هذه في سياق أية آلية لتعبئة الموارد قد تقرها اللجنة التنفيذية. ومن الجوانب الأساسية لهذا المقترح هو أن يعمل اليونديبي كجهة واحدة لجمع مصادر التمويل المختلفة غير الصندوق المتعدد الأطراف لمعالجة بصورة كاملة تكاليف المنافع المناخية المتعلقة بإزالة المواد الهيدروكلوروفلوروكربونية ومشروعات تدمير المواد المستنفدة للأوزون.

27- ويعرض الجدول أدناه توزيعاً لمبلغ الـ 250 000 دولار أمريكي الذي طلبه اليونديبي:

التكاليف	المرحلة الأولى (دولار أمريكي)	المرحلة الثانية (دولار أمريكي)	المجموع (دولار أمريكي)
استشاري دولي للتنسيق التقني	45,000	0	45,000
أربعة خبراء تقنيين معيّنين بالتحليل/إعداد المنهجيات ورسم خرائط لإمكانيات التمويل الإضافية	169,000	0	169,000
السفر	36,000	0	36,000
استرداد التكاليف للمدخلات من اليونديبي	150,000	100,000	250,000
<b>المجموع</b>	<b>400,000</b>	<b>100,000</b>	<b>500,000</b>
التمويل المشترك النوعي المماثل من اليونديبي (50 000 دولار أمريكي) قُدم بالفعل في عام 2009	(150,000)	(100,000)	(250,000)
<b>صافي التمويل المطلوب من الصندوق المتعدد الأطراف (إجمالي المبلغ المطلوب مع تكاليف الدعم)</b>	<b>250,000</b>	<b>0</b>	<b>250,000</b>
	<b>268,750</b>		<b>268,750</b>

#### تعليقات الأمانة

28- تقدم الفقرة 11(ب) من المقرر 6/XIX للاجتماع التاسع عشر للأطراف إرشادات إلى اللجنة التنفيذية لإيلاء الأولوية إلى جملة أمور منها "المواد والتكنولوجيات البديلة التي تخفض إلى الحد الأدنى الآثار على البيئة، بما في ذلك على تغير المناخ، مع مراعاة إمكانية الاحترار العالمي، واستخدام الطاقة والعوامل الأخرى ذات الصلة" عند النظر في مشروعات إزالة المواد الهيدروكلوروفلوروكربونية. وقد وافقت اللجنة التنفيذية حتى الآن على أموال لما يزيد عن 160 بلدا لإعداد خطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية. ومن المنتظر أن تنظر خطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية المقدمة إلى اللجنة التنفيذية للموافقة عليها في الحوافز والإمكانيات المالية للتمويل المشترك وأن تشتمل عليها، وفقا للمقرر 39/54. وقد تكون عناصر التمويل المشترك هذه هامة لضمان أن تؤدي إزالة المواد الهيدروكلوروفلوروكربونية إلى منافع وفقا للمفكرة 11(ب) من المقرر 6/XIX حسبما ذكر أعلاه.

29- وقد لاحظت الأمانة أن نتائج المقترح المعدل هذا الذي قدمه اليونديبي قد يساعد في بحث خيارات التمويل المشترك ليس لتحقيق منافع مناخية من إزالة المواد الهيدروكلوروفلوروكربونية فحسب، بل أيضا لمشروعات التخلص من المواد المستنفدة للأوزون. وحسبما أشير في الطلب الأصلي، سيواصل اليونديبي استعراض المنهجيات الناشئة لتقييم خفض انبعاثات ثاني أكسيد الكربون، ولكن ستتم هذه التقييمات الآن في سياق السيناريوهات المختلفة الأربعة المقترحة في المرحلة الأولى.

30- وناقشت اللجنة التنفيذية في اجتماعها السابع والخمسين والثامن والخمسين، مسألة إنشاء مرفق للدخل الإضافي من القروض والمصادر الأخرى. وخلال مناقشة هذا البند من جدول الأعمال، خلال الاجتماع التاسع والخمسين، طلبت اللجنة التنفيذية، في المقرر 48/59، إلى الأمانة أن تجمع المواد المقدمة بشأن مرفق التمويل



الخاص، وأية مساهمات يقدمها الأعضاء بحلول نهاية عام 2009، تحت بند واحد من جدول الأعمال يتناول كل من المرفق فضلا عن أية مسائل متعلقة بالفقرة 11(ب) من المقرر 6/XIX للاجتماع التاسع عشر للأطراف كيما تنظر فيه في اجتماعها الستين. وستناقش هذه الورقة المنقحة في الاجتماع الستين.

### توصية الأمانة

31- قد ترغب اللجنة التنفيذية في أن تنظر في طلب المساعدة التقنية لتعبئة الموارد لتحقيق الحد الأقصى من المنافع المناخية من إزالة المواد الهيدروكلوروفلوروكربونية، في ضوء المعلومات المقدمة أعلاه، وفي المناقشات المتعلقة بالبند 11 من جدول الأعمال، والحوافز المرتبطة بمؤشر الأثر المناخي الخاص بالصندوق المتعدد الأطراف ومرفق التمويل الخاص.



## المرفق الأول

## مقترحات مشروعات التعزيز المؤسسي

## البرازيل: تجديد مشروع التعزيز المؤسسي

اليونديبي	موجز المشروع والموجز القطري الوكالة المنفذة:
	المبالغ الموافق عليها سابقاً لمشروعات التعزيز المؤسسي (دولار أمريكي):
403,100	المرحلة الأولى: يونيه/حزيران 1993
270,000	المرحلة الثانية: مارس/أذار 1998
270,000	المرحلة الثالثة: ديسمبر/كانون الأول 2000
274,518	المرحلة الرابعة: يوليه/تموز 2004
351,000	المرحلة الخامسة: يوليه/تموز 2007
1,568,618	المجموع
307,125	المبلغ المطلوب للتجديد (المرحلة السادسة) (دولار أمريكي):
307,125	المبلغ الموصى بالموافقة عليه للمرحلة السادسة (دولار أمريكي):
23,034	تكاليف دعم الوكالة (دولار أمريكي):
330,159	التكلفة الإجمالية للمرحلة السادسة من مشروع التعزيز المؤسسي بالنسبة للصندوق المتعدد الأطراف (دولار أمريكي):
غير متاح	المقدار المماثل من إزالة المواد الكلوروفلوروكربونية نتيجة المرحلة السادسة من مشروع التعزيز المؤسسي، بواقع 12.1 دولار أمريكي/كغم (طن قدرات استنفاد الأوزون):
1994	تاريخ الموافقة على البرنامج القطري:
10,862	كمية استهلاك المواد المستنفدة للأوزون المبلغ عنها في البرنامج القطري (1994) (طن قدرات استنفاد الأوزون):
	خط أساس استهلاك المواد الخاضعة للرقابة (طن قدرات استنفاد الأوزون):
10,525.8	(أ) المجموعة الأولى من المرفق ألف (المواد الكلوروفلوروكربونية) (متوسط 1995-1997)
21.3	(ب) المجموعة الثانية من المرفق ألف (الهالونات) (متوسط 1995-1997)
411.6	(ج) المجموعة الثانية من المرفق باء (رابع كلوريد الكربون) (متوسط 1998-2000)
32.4	(د) المجموعة الثالثة من المرفق باء (كلوروفورم الميثيل) (متوسط 1998-2000)
711.6	(هـ) المرفق هاء (بروميد الميثيل) (متوسط 1995-1998)
	آخر استهلاك مبلغ عنه من المواد المستنفدة للأوزون (2008) (طن قدرات استنفاد الأوزون) بموجب المادة 7:
290.4	(أ) المجموعة الأولى من المرفق ألف (المواد الكلوروفلوروكربونية)
0	(ب) المجموعة الثانية من المرفق ألف (الهالونات)
-11	(ج) المجموعة الثانية من المرفق باء (رابع كلوريد الكربون)
0	(د) المجموعة الثالثة من المرفق باء (كلوروفورم الميثيل)
0	(هـ) المرفق هاء (بروميد الميثيل)
1,810.4	(و) المجموعة الأولى من المرفق جيم (المواد الهيدروكلوروفلوروكربونية)
2,089.8	المجموع
2008	سنة الإبلاغ عن بيانات تنفيذ البرنامج القطري:
86,080,151	المبلغ الموافق عليه للمشروعات (دولار أمريكي):
72,474,628	المبلغ المنصرف (حتى فبراير/شباط 2010) (دولار أمريكي):
13,477.3	المواد المستنفدة للأوزون المطلوب إزالتها (طن قدرات استنفاد الأوزون):
12,981.6	المواد المستنفدة للأوزون المزالة (حتى فبراير/شباط 2010) (طن قدرات استنفاد الأوزون):

## 1- موجز الأنشطة والأموال التي وافقت عليها اللجنة التنفيذية:

موجز الأنشطة	التمويل الموافق عليه (دولار أمريكي)
(أ) مشروعات استثمارية:	75,554,865
(ب) مشروعات التعزيز المؤسسي:	1,568,618
(ج) إعداد المشروعات، والمساعدة التقنية، والتدريب والمشروعات غير الاستثمارية الأخرى:	8,956,668
المجموع:	86,080,151

التقرير المرحلي

2- حقق البرازيل، خلال تنفيذ المرحلة الخامسة من مشروع التعزيز المؤسسي لديه، إجمالي إزالة من استهلاك المواد الكلوروفلوروكربونية في جميع القطاعات باستثناء قطاع أجهزة الاستنشاق المزودة بمقياس للجرعات بحلول عام 2007، وإزالة استهلاك المواد الكلوروفلوروكربونية في قطاع أجهزة الاستنشاق المزودة بمقياس للجرعات بحلول الأول من يناير/كانون الثاني 2010. وخلال هذه المرحلة، نجحت وحدة الأوزون الوطنية في البرازيل في تنسيق تنفيذ عدد من المشروعات في مجموعة متنوعة من القطاعات. وتتعلق بعض من هذه المشروعات بإزالة رابع كلوريد الكربون المستخدم كعامل تصنيع والخطة الوطنية لإزالة المواد الكلوروفلوروكربونية التي تتألف من 17 مشروعاً. ومن بين المشروعات الـ 17، اشتملت أهم الإنجازات على النجاح في إنشاء 5 مراكز إعادة تدوير، وإكمال توزيع 2 000 جهاز من أجهزة الاسترداد، وإكمال تدريب 22 063 من تقنيي التبريد بشأن الممارسات الجيدة، وتصميم وتنفيذ إستراتيجية انتقالية تتعلق بأجهزة الاستنشاق المزودة بمقياس للجرعات، وإبرام اتفاقات تعاون تقني مع موزعي الطاقة لاستبدال 544 جهاز تبريد قديم واسترداد المواد الكلوروفلوروكربونية منها، والنجاح في تنفيذ حملة توعية اشتملت على جملة أنشطة منها، الاحتفال باليوم الدولي للأوزون في عام 2006، و 2007 و 2009 وإصدار منشورات وكتيبات ومقالات وملصقات ومواد أخرى للتوعية والتثقيف.

خطة العمل

3- خلال المرحلة السادسة من مشروع التعزيز المؤسسي في البرازيل، ستواصل الحكومة من خلال وحدة الأوزون الوطنية لديها تنفيذ الأنشطة التي تسمح للبلد بالامتثال لبروتوكول مونتريال. ومن بين هذه الأنشطة، تجدر الإشارة إلى إكمال خطة الإزالة الوطنية، وإعداد وتنفيذ المرحلة الأولى من خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية، وإكمال إزالة استخدامات رابع كلوريد الكربون المستخدم كعامل تصنيع، وإعداد وتنفيذ مشروع تجريبي لتدمير المواد المستنفدة للأوزون وتنفيذ مشروع تدليلي بشأن استبدال أجهزة تكييف المباني. كما ستواصل حكومة البرازيل، بمساعدة اليونديبي، تنفيذ مشروعين تجريبيين لاختبار التكنولوجيات البديلة للمواد الهيدروكلوروفلوروكربونية في قطاع الرغاوى والتحقق منها (وهي فورمات الميثيل والميثاليل).

## الهند: تجديد مشروع التعزيز المؤسسي

موجز المشروع والموجز القطري	
الوكالة المنفذة:	
اليونديبي	
	المبالغ الموافق عليها سابقا لمشروعات التعزيز المؤسسي (دولار أمريكي):
428,929	المرحلة الأولى: أكتوبر/تشرين الأول 1992
287,100	المرحلة الثانية: أكتوبر/تشرين الأول 1996
287,100	المرحلة الثالثة: مارس/آذار 1999
285,796	المرحلة الرابعة: يولييه/تموز 2001
370,310	المرحلة الخامسة: ديسمبر/كانون الأول 2003
373,230	المرحلة السادسة: نوفمبر/تشرين الثاني 2005
373,230	المرحلة السابعة: أبريل/نيسان 2001
2,405,695	المجموع
326,576	المبلغ المطلوب للتجديد (المرحلة الثامنة) (دولار أمريكي):
326,576	المبلغ الموصى بالموافقة عليه للمرحلة الثامنة (دولار أمريكي):
24,493	تكاليف دعم الوكالة (دولار أمريكي):
351,069	التكلفة الإجمالية للمرحلة الثامنة من مشروع التعزيز المؤسسي بالنسبة للصندوق المتعدد الأطراف (دولار أمريكي):
غير متاح	المقدار المماثل من إزالة المواد الكلوروفلوروكربونية نتيجة المرحلة الثامنة من مشروع التعزيز المؤسسي، بواقع 12,1 دولار أمريكي/كغم (طن قدرات استنفاد الأوزون):
1993	تاريخ الموافقة على البرنامج القطري:
18,317.6	كمية استهلاك المواد المستنفدة للأوزون المبلغ عنها في البرنامج القطري (1993) (طن قدرات استنفاد الأوزون):
	خط أساس استهلاك المواد الخاضعة للرقابة (طن قدرات استنفاد الأوزون):
6,681	(أ) المجموعة الأولى من المرفق ألف (المواد الكلوروفلوروكربونية) (متوسط 1995-1997):
1,249.4	(ب) المجموعة الثانية من المرفق ألف (الهالونات) (متوسط 1995-1997)
11,505.3	(ج) المجموعة الثانية من المرفق باء (رابع كلوريد الكربون) (متوسط 1998-2000)
122.2	(د) المجموعة الثالثة من المرفق باء (كلوروفورم الميثيل) (متوسط 1998-2000)
0	(هـ) المرفق هاء (بروميد الميثيل) (متوسط 1995-1998)
	آخر استهلاك مبلغ عنه من المواد المستنفدة للأوزون (2008) (طن قدرات استنفاد الأوزون) بموجب المادة 7:
216.5	(أ) المجموعة الأولى من المرفق ألف (المواد الكلوروفلوروكربونية)
0	(ب) المجموعة الثانية من المرفق ألف (الهالونات)
680.5	(ج) المجموعة الثانية من المرفق باء (رابع كلوريد الكربون)
0	(د) المجموعة الثالثة من المرفق باء (كلوروفورم الميثيل)
0	(هـ) المرفق هاء (بروميد الميثيل)
2,007.9	(و) المجموعة الأولى من المرفق جيم (المواد الهيدروكلوروفلوروكربونية)
2,904.9	المجموع
2008	سنة الإبلاغ عن بيانات تنفيذ البرنامج القطري:
232,060,403	المبلغ الموافق عليه للمشروعات (دولار أمريكي):
201,804,880	المبلغ المنصرف (حتى شباط/فبراير 2010) (دولار أمريكي):
54,141	المواد المستنفدة للأوزون المطلوب إزالتها (طن قدرات استنفاد الأوزون):
53,469.9	المواد المستنفدة للأوزون المزلة (حتى شباط/فبراير 2010) (طن قدرات استنفاد الأوزون):

## 4- موجز الأنشطة والأموال التي وافقت عليها اللجنة التنفيذية:

التمويل الموافق عليه (دولار أمريكي)	موجز الأنشطة
220,910,272	(أ) مشروعات استثمارية:
2,405,695	(ب) مشروعات التعزيز المؤسسي:
8,744,436	(ج) إعداد المشروعات، والمساعدة التقنية، والتدريب والمشروعات غير الاستثمارية الأخرى:
232,060,403	المجموع:

التقرير المرحلي

5- واصلت الهند، خلال المرحلة السابعة من مشروع التعزيز المؤسسي، جهودها الدؤوبة في إدارة وتنسيق مشروعات وبرامج الإزالة المتعلقة بإنتاج واستهلاك المواد الكلوروفلوروكربونية، والهالونات ورابع كلوريد الكربون، بما في ذلك التنفيذ السريع للإستراتيجية الوطنية للانتقال من إلى أجهزة استنشاق مزودة بمقياس للجرعات لا تعتمد على المواد الكلوروفلوروكربونية. كما أنها شرعت في إعداد خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية للهند، بمساعدة من الوكالات المنفذة والثنائية، وبالتشاور الوثيق مع أصحاب المصلحة الوطنيين المعنيين ومشاركة رفيعة المستوى من صانعي السياسات العامة في الحكومة. وساعدت هذه الجهود في ضمان امتثال الهند لالتزاماتها بموجب بروتوكول مونتريال. وواصلت خلية العمل المعنية بالأوزون أنشطتها المكثفة المتعلقة بالتوعية ونشر المعلومات لتيسير نشر معلومات عن حماية طبقة الأوزون والتكنولوجيات ذات الصلة الخالية من المواد المستنفدة للأوزون، من أجل ضمان التنفيذ السلس لبرنامج الإزالة. ووجهت أنشطة التوعية خلال عامي 2008 و2009 نحو توعية الصناعة بشأن الإزالة المعجلة للمواد الهيدروكلوروفلوروكربونية ونشر معلومات عن التطورات الدولية المتعلقة بالمواد الهيدروكلوروفلوروكربونية.

خطة العمل

6- سوف يكون التركيز الأساسي للمرحلة الثامنة من مشروع التعزيز المؤسسي هو مواصلة إدارة ورصد أنشطة إزالة المواد المستنفدة للأوزون بصورة فعالة لضمان استدامة إزالة هذه المواد، والتعجيل في تنفيذ الإستراتيجية الوطنية للانتقال إلى أجهزة استنشاق مزودة بمقياس للجرعات لا تعتمد على المواد الكلوروفلوروكربونية وإكمال تصميم خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية والشروع في تنفيذها. وسوف تحتاج الهند، خلال المرحلة القادمة من مشروع التعزيز المؤسسي هذا، إلى صياغة واعتماد السياسات الضرورية، وتعزيز إطارها المؤسسي لتحقيق الأهداف المحددة بموجب الإزالة المعجلة للمواد الهيدروكلوروفلوروكربونية، وخاصة هدفي عام 2013 و2015. وستواصل تنفيذ وإنفاذ القواعد المتعلقة بالمواد المستنفدة للأوزون (التنظيم والمراقبة) وإنفاذ السياسات العامة المتعلقة بمراقبة الإنتاج والتجارة والاستهلاك من المواد المستنفدة للأوزون، وخاصة المواد الهيدروكلوروفلوروكربونية.

## المرفق الثاني

## الآراء التي أعربت عنها اللجنة التنفيذية

## بشأن تجديد مشروعات التعزيز المؤسسي المقدمة إلى الاجتماع الستين

## البرازيل

1- استعرضت اللجنة التنفيذية التقرير الختامي المقدم مع طلب تجديد مشروع التعزيز المؤسسي للبرازيل ولاحظت مع التقدير الإنجازات الباهرة التي حققتها وحدة الأوزون الوطنية بالبرازيل خلال تنفيذ المرحلة الخامسة من المشروع. وبصفة خاصة، تلاحظ اللجنة التنفيذية التقدم الذي أحرزته البرازيل في تنفيذ الإزالة الكاملة للمواد الكلوروفلوروكربونية، بما في ذلك تلك المستخدمة في أجهزة الاستنشاق المزودة بمقياس للجرعات، بحلول يناير/كانون الثاني 2010. كما تلاحظ اللجنة التنفيذية التقدم بشأن صياغة إستراتيجية إزالة المواد الهيدروكلوروفلوروكربونية والنجاح في تنفيذ الخطة الوطنية لإزالة المواد الكلوروفلوروكربونية وإزالة رابع كلوريد الكربون المستخدم في قطاع عوامل التصنيع. وتثني اللجنة التنفيذية على حكومة البرازيل على إنجازاتها خلال المرحلة الحالية وتعرب عن توقعها أن تواصل البرازيل، خلال العامين القادمين، تنفيذ أنشطتها الواردة في البرامج وتحقيق تقدم ونجاح هائل.

## الهند

2- استعرضت اللجنة التنفيذية المعلومات المقدمة مع طلب تجديد مشروع التعزيز المؤسسي للمرحلة السابعة للهند وتلاحظ مع التقدير أن الهند اتخذت خطوات هامة بشأن تنفيذ الخطط المستهدفة لإزالة الإنتاج والاستهلاك من المواد المستنفدة للأوزون من أجل الالتزام بالمراحل الرئيسية للامتثال لعام 2010 والمحافظة على استدامة إزالة المواد المستنفدة للأوزون، وخاصة الإزالة المعجلة لإنتاج المواد الكلوروفلوروكربونية من أغسطس/آب 2008، وذلك سبعة عشر شهرا قبل التاريخ المحدد في بروتوكول مونتريال وهو 2010. وأشارت الهند في تقريرها إلى عدد من أنشطة الإزالة الناجحة، بما في ذلك رصد وتنسيق أنشطة الإزالة لديها بموجب الخطط القطاعية في الوقت المحدد، واتخاذ خطوات مبكرة وتطلعية لإعداد خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية بالتنسيق الوثيق مع الصناعة وبمشاركتها، والرصد الصارم للمواد المستنفدة للأوزون من خلال نظام إصدار التراخيص للاستيراد والتصدير لمراقبة الكمية المعروضة من هذه المواد والاستهلاك منها، والاضطلاع بحملات توعية عامة، وتنظيم حلقات دراسية وبرامج ترويجية بشأن إزالة المواد المستنفدة للأوزون وتعزيز المعلومات المتعلقة بالبدائل الخالية من المواد المستنفدة للأوزون واعتمادها. وتلاحظ اللجنة التنفيذية أيضا مع الرضا أن الهند ستواصل تعزيز القدرات لرصد ومراقبة الأنشطة المتعلقة بالمواد المستنفدة للأوزون لضمان استدامة الإزالة الكاملة فيما بعد عام 2010، والتنفيذ السريع لمشروع إزالة أجهزة الاستنشاق المزودة بمقياس للجرعات التي تستخدم المواد الكلوروفلوروكربونية تكثيف عمليات الشروع في أنشطة مشروع إزالة المواد الهيدروكلوروفلوروكربونية وتنفيذها بما يتماشى مع الجدول الزمني للإزالة المعجلة.



**60<sup>th</sup> Meeting of the Executive Committee of the Multilateral Fund  
for the Implementation of the Montreal Protocol**

*(12 - 15 April 2010, Montreal, Canada)*

**UNDP  
2010 WORK PROGRAMME**

**15 February 2010  
(Final version 07 March 2010)**



**UNDP  
2010 WORK PROGRAMME**

**I. EXECUTIVE SUMMARY**

UNDP's 2010-2011 rolling Business Plan is being submitted for the consideration of the Executive Committee at the 60<sup>th</sup> meeting, to be held in April 2010.

This document represents UNDP's 2010 Work Programme submitted for consideration of the ExCom at the 60<sup>th</sup> Meeting. The list of submissions for all funding requests submitted by UNDP to the 60<sup>th</sup> ExCom Meeting is tabulated in Annex-I to this document. Project proposals, such as MYA tranches, HCFC investment projects, HCFC demonstration (full) projects and others, are not submitted as part of this document and are submitted separately as per normal practice. Only the following (non-investment) submissions are part of this document as per current practice and all requests are made in accordance with the provisions of the relevant decisions and guidelines of the Executive Committee. Section II provides more details about each of the categories of funding requests below:

**Institutional Strengthening Extensions**

The requests for funding for extensions of Institutional Strengthening projects are made for two countries, namely, Brazil and India. All these requests cover funding requirements for two years duration.

**Preparation funding requests**

Four requests are being submitted for preparation funding: one for an ODS disposal demonstration project for India (resubmission incorporating comments from ExCom) and three for the preparation of HCFC alternative technologies demonstration projects in China (XPS and Solvents sectors).

**Global Activities**

UNDP had submitted a request for funding for a global technical assistance activity to the 57<sup>th</sup> and the 59<sup>th</sup> ExCom meetings, for resource mobilization for maximizing climate co-benefits. This request is being resubmitted for the consideration of the Executive Committee at its 60<sup>th</sup> meeting.

**II. FUNDING REQUESTS PART OF THIS WP DOCUMENT**

**Institutional Strengthening Extensions**

Funding requests for extensions of institutional strengthening projects included in this document for submission at the 60<sup>th</sup> ExCom Meeting are tabulated below. The relevant concepts/proposals are attached as Annex-VII (India) and Annex-VIII (Brazil):

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total	Coop Agency
Brazil	INS	Institutional Strengthening Renewal(Phase VI)	24	351,000	26,325	377,325	N/A
India	INS	Institutional Strengthening Renewal (Phase VIII)	24	373,230	27,992	401,222	N/A
<b>Total (2 requests)</b>				<b>724,230</b>	<b>54,317</b>	<b>778,547</b>	

## Preparation funding requests

Funding requests for preparation of pilot/demonstration projects are being submitted to the 60<sup>th</sup> ExCom Meeting are as tabulated below.

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total	Cooperating Agency
China	PRP	Demo: XPS Foams (Feininger)	12	30,000	2,250	32,250	
China	PRP	Demo: Medical devices cleaning (Shifeng)	12	30,000	2,250	32,250	Japan*
China	PRP	Demo: Medical devices cleaning (Zhejiang)	12	30,000	2,250	32,250	Japan*
India	PRP	ODS disposal pilot/demonstration project	12	80,000	6,000	86,000	
<b>Total ( 5 requests)</b>				<b>170,000</b>	<b>12,750</b>	<b>182,750</b>	

\*Will participate as a bilateral cooperating agency for the full project proposal resulting from this request later in 2010. This has been reflected in the business plan. The preparation funding will be implemented solely by UNDP.

The requests for preparation funding for demonstration projects are for technology validation of selected HCFC alternatives with low or negligible GWP, which, upon successful completion of the demonstration projects, will facilitate cost-effective and sustainable reductions for compliance with the 2013-2015 control targets.

The demonstration project for XPS foams has selected Methyl Formate with CO<sub>2</sub> co-blowing as an alternative to the current HCFC technology. This is expected to provide a cost-effective and sustainable option for about 500 SMEs in the sector, which account for about 60% of the total HCFC consumption in the XPS Foams Sector in China. The relevant project concept is attached as Annex-II to this document.

The two demonstration projects for the Solvents Sector in China have respectively selected polymethylsiloxane and alkane graft with appropriate components (solvent-free technology for Shifeng) and isopropyl alcohol in combination with hydrocarbons (Zhejiang). Both these enterprises are representative of the Medical Cleaning sub-sector, which due to the emissive use of HCFC-141b as well as the criticality of the health sector, have been prioritized for 2013/2015 compliance by China. The relevant project concepts are attached as Annex-III (Shifeng) and Annex-IV (Zhejiang).

The request for a demonstration project for ODS disposal is in response to the Decision XX/7 (2) of the Meeting of Parties (for ODS disposal) and takes into account the stipulations of ExCom Decisions 55/43, 56/16, 57/6 and 58/19 as applicable. The full project proposal as an outcome of this preparation funding request, will demonstrate a sustainable technological, financial and management model for addressing the rapidly growing ODS waste flows in India. The relevant project concept is attached as Annex-V.

## Global Activities

Funding request for resource mobilization for maximizing climate co-benefits in HCFC phase-out:

Country	Type	Title	Duration (months)	Amount	Agency Fee	Total	Coop Agency
Global	TAS	Resource mobilization for climate co-benefits	12	250,000	18,750	268,750	N/A
<b>Total (1 request)</b>				<b>250,000</b>	<b>18,750</b>	<b>268,750</b>	

The relevant proposal is attached as Annex-VI.

### III. SUMMARY OF FUNDING REQUESTS (WORK PROGRAMME)

The table below summarizes the funding requests for non-investment activities and proposals, as part of UNDP's Work Programme for 2010, submitted to the 60<sup>th</sup> ExCom Meeting:

Country	Type	Description	Amount	Agency Fees	Total
Brazil	SEV- INS	Institutional Strengthening Renewal (Phase VI)	351,000	26,325	377,325
India	SEV - INS	Institutional Strengthening Renewal (Phase-VIII)	373,230	27,992	401,222
China	XPS - PRP	Preparation of pilot/demonstration project in XPS Foams (Feininger)	30,000	2,250	32,250
China	SOL - PRP	Preparation of pilot/demonstration project in Solvents Sector (Shifeng)	30,000	2,250	32,250
China	SOL - PRP	Preparation of pilot/demonstration project in Solvents Sector (Zhejiang)	30,000	2,250	32,250
India	DES - PRP	Preparation of ODS disposal demonstration project	80,000	6,000	86,000
Global	SEV- TAS	Resource Mobilization for Climate Co-benefits	250,000	18,750	268,750
<b>TOTAL</b>			<b>1,144,230</b>	<b>85,817</b>	<b>1,230,047</b>

ANNEX-I  
**List of All UNDP Submissions to the 60<sup>th</sup> ExCom Meeting**

No	Country	Type	Description	Amount	Agency Fee	Total
1	Bangladesh	PHA - TAS	National ODS Phase-out Plan (Last Tranche)	55,000	4,125	59,125
2	Brazil	INS	Institutional Strengthening Renewal (Phase VI)	351,000	26,325	377,325
3	China	XPS - PRP	Preparation of demonstration project in XPS Foams Sector	30,000	2,250	32,250
4	China	REF - TAS	Demonstration project in ICR Sector (Tong Fang)	1,900,000	142,500	2,042,500
5	China	REF - TAS	Demonstration project in ICR Sector (Yantai Moon)	4,280,000	321,000	4,601,000
6	China	SOL - PRP	Preparation of demonstration project in Solvents Sector (Shifeng)	30,000	2,250	32,250
7	China	SOL - PRP	Preparation of demonstration project in Solvents Sector (Zhejiang)	30,000	2,250	32,250
8	Colombia	INV	Conversion Plan from HCFCs to HCs in the Domestic Refrigeration sub-sector	9,178,580	688,394	9,866,974
9	India	SEV - INS	Institutional Strengthening Renewal (Phase-VIII)	373,230	27,992	401,222
10	India	DES - PRP	Preparation of ODS disposal demonstration project	80,000	6,000	86,000
11	Kyrgyzstan	INV	TPMP 3rd tranche	60,000	4,500	64,500
12	Mexico	INV	Phase-out of HCFC-141b in fully formulated systems for rigid and integral Skin PU Foams – Phase-I	3,624,650	271,849	3,896,499
13	Paraguay	TAS	TPMP Fourth Tranche (Lead Agency UNEP)	21,000	1,575	22,575
14	Turkey	DEM	Validation of HFO-1234ze in XPS foams	192,500	14,500	207,000
15	Uruguay	INV	TPMP (3rd tranche)	45,000	3,375	48,375
16	Global	SEV-TAS	Resource Mobilization for Climate Co-benefits	250,000	18,750	268,750
<b>TOTAL</b>				<b>20,500,960</b>	<b>1,537,635</b>	<b>22,038,595</b>

**Notes:**

- All amounts in US dollars;
- Submissions included as part of this Work Programme document are highlighted, others submitted individually as per current practice.
- Specific reports due (balances, others) not included in this list and submitted separately
- Joint submissions with UNEP submitted by UNEP as lead agency

**ANNEX-II**  
**Request for Preparation Funding - Demonstration Project in XPS Foam Sector in China**

<b>PROJECT CONCEPT</b>	
<b>COUNTRY:</b>	CHINA <span style="float: right;"><b>IMPLEMENTING AGENCY:</b> UNDP</span>
<b>PROJECT TITLE:</b>	Preparation of a demonstration project for conversion from HCFC-142b+HCFC-22 technology to Methyl Formate with CO <sub>2</sub> co-blowing technology in the manufacture of XPS Foam at Feininger (Nanjing) Energy Saving Technology Co. Ltd.
<b>PROJECT IN CURRENT BUSINESS PLAN:</b>	Yes
<b>SECTOR:</b>	XPS Foams (XPS)
<b>SUB-SECTOR:</b>	N/A
<b>ODS USE IN SECTOR:</b>	30,000 metric tonnes (2008)*
<b>PROJECT IMPACT:</b>	210 metric tonnes*  *Preliminary estimates based on ongoing surveys. More accurate estimates would be available in the actual project proposal
<b>PROJECT DURATION:</b>	12 months
<b>PROJECT COST:</b>	US\$ 30,000
<b>REQUESTED GRANT:</b>	US\$ <b>30,000</b>
<b>AGENCY SUPPORT COSTS:</b>	US\$ 2,250
<b>TOTAL COST TO MULTILATERAL FUND:</b>	US\$ <b>32,250</b>
<b>PROJECT MONITORING MILESTONES:</b>	N/A
<b>NATIONAL COORDINATING BODY:</b>	Foreign Economic Cooperation Office, Ministry of Environment Protection

**PROJECT SUMMARY**

This demonstration project, upon successful completion, will establish the suitability of Methyl Formate with CO<sub>2</sub> co-blowing technology as a viable replacement HCFC-142b+HCFC-141b as blowing agent in the manufacture of XPS foam at Feininger (Nanjing) Energy Saving Technology Co. Ltd.

The outcome of this project preparation request will be a demonstration project proposal that will cover technology demonstration at Feininger (Nanjing) Energy Saving Technology Co. Ltd. and its application and conversion this enterprise. The demonstration project will cover development costs for the appropriate process technology with Methyl Formate along with CO<sub>2</sub> co-blowing and other additives as needed, equipment modifications and additional equipment, safety measures, laboratory testing, product trials, evaluation and in addition, development of modified designs of extrusion lines and related equipment suited for this technology and implementation of this technology in XPS manufacturing at this enterprise.

The recipient enterprise is a manufacturer of XPS foam as well as processing equipment, which makes it uniquely suited for cost-effective development and demonstration of this technology, analogous to a systems house in polyurethane foams, which provides upstream technology. As an equipment manufacturer, this enterprise would be in a position to transfer this technology to a potentially large number of SMEs, who would be able to make XPS foam without using ODS-based blowing agents, while still being able to maintain the quality of products consistent with enhanced standards for XPS foam products and remain technologically sustainable and viable. The technology will be provided through UNDP by internationally renowned XPS foam experts/firms.

**PROJECT IMPACT**

The successful implementation of this demonstration project will provide an environmentally safe and cost-effective alternative for enabling replication of this technology in similar applications and SMEs in the XPS Foams Sector in China and facilitate HCFC reductions for compliance with the 2013/2015 control targets. It will also significantly contribute to the viability of SMEs avoid industrial obsolescence and maintain sustainable livelihoods dependent on employment in this sector.

## Objective

The objective of this proposed demonstration project is to establish the suitability of Methyl Formate with CO<sub>2</sub> co-blowing technology as a viable replacement of the currently used combination of HCFC-142b and HCFC-141b as a blowing agent in the manufacture of XPS foam at Feininger (Nanjing) Energy Saving Technology Co. Ltd.

## Sector Background

The XPS Foams Sector in China has experienced remarkable growth in the past several years. Due to the steep growth in the construction industry, demand for XPS foam boards for building insulation has increased significantly, ascribed also to enhanced energy-efficiency standards for buildings. The 2008 estimated HCFC consumption in the sector based on ongoing surveys was about 30,000 metric tonnes. Based on information from ongoing surveys, there are about 20 indigenous manufacturers of XPS extrusion lines and an estimated 500 manufacturers of XPS foam in the sector, most of which are small/medium-sized, signifying an employment of over 25,000 persons and accounting for about 60% of the HCFC consumption in the sector.

Another defining characteristic of this sector is that most of the polystyrene raw material used by SMEs in XPS foam manufacturing originates from recycled polystyrene scrap of unknown composition/contaminants. Recent zero-ODP XPS foam technologies introduced by multinational corporations are expensive and have been closely guarded in terms of intellectual property. Due to this, these technologies are not cost-effectively accessible for SMEs and may not be compatible to operate with a high proportion of recycled polystyrene scrap. It would be a challenge for the SMEs to comply with the recently enhanced building energy-efficiency standards if they have to convert to non-ODS technologies. There is thus, a clear and present need for a cost-effective and environmentally safe technology alternative for SMEs, in order to remain sustainable and maintain product quality.

## Enterprise Background

Feininger (Nanjing) Energy Saving Technology Co. Ltd. was established in 2002 and is one of the major manufacturers of XPS extrusion lines, XPS foam recycling machines and associated equipment and also XPS foam boards of 20 mm to 120 mm thickness.

In 2008, the estimated production level of XPS foam in the enterprise was about 140,000 m<sup>3</sup>. Due to the diversity of its XPS foam-related products including upstream equipment, this enterprise is particularly suited to be a conduit for introduction and transfer of technology.

## Technology

The main alternative zero-ODP technologies for HCFCs are HFCs, CO<sub>2</sub> and Hydrocarbons with additives and co-blowing agents. However, these technologies require a high level of process optimization and changes, require significant investments (several million dollars), are closely guarded in terms of intellectual property rights by a very few large multinational corporations and can be potentially used by only very large enterprises under license or as subsidiaries of these corporations. Introduction of these alternative technologies is a difficult challenge for SMEs.

The challenge is to select and develop an alternative technology that can be cost-effectively and safely used by the large number of SMEs in this sector in China. This is imperative because the sector is experiencing a high growth due to rapidly increasing demand in building and other infrastructural construction uses in China and *the SMEs contribute a significant proportion (~60%) of the HCFC consumption in this sector*. The selected technology, namely, Methyl Formate along with CO<sub>2</sub> co-blowing technology, promises to be an optimal solution for SMEs. This technology so far has not been commercially employed in developed or developing countries or by multinationals elsewhere for XPS foams and is not subject to intellectual property rights limitations. Apart from some flammability issues associated with Methyl Formate, this technology has zero-ODP, negligible GWP, no toxicity and negligible occupational safety issues. Methyl Formate is an industrial chemical which is widely and cost-effectively available. Co-blowing with CO<sub>2</sub> will reduce the flammability. This combination promises to be an optimum solution for SMEs.

The enterprise has selected this technology based on the above considerations. Due to the unique situation of the enterprise as a manufacturer of XPS foam as well as processing equipment, the development and demonstration of this technology would be particularly facilitated cost-effectively. As an equipment manufacturer, this enterprise would be in a position to transfer this technology to a potentially large number of SMEs, who would be able to make XPS foam without using ODS-based blowing agents, while still being able to maintain the quality of products consistent with enhanced standards and remain techno-economically sustainable and viable.

Validation and subsequent adoption of this technology by SMEs through an upstream route using an equipment manufacturer such as Feininger (Nanjing) Energy Saving Technology Co. Ltd., will make a significant contribution to HCFC reductions in this sector. Moreover, this technology promises to be very cost-effective in relation to other candidates with comparable environmental benefits and will therefore ensure sustainable reductions.

The technology will be provided through UNDP by internationally renowned XPS foam experts/firms, which have demonstrated hands-on knowledge and long experience in this field.

### **Project Description and Costs**

The detailed elements of the project will be developed and presented in detail as part of the full project proposal, targeted for submission to the 61<sup>st</sup> or 62<sup>nd</sup> ExCom meeting later this year.

Briefly, the project will cover development costs for the appropriate process technology with Methyl Formate along with CO<sub>2</sub> co-blowing, development/modification of the extrusion line and related equipment designs and implementation suited for this technology, auxiliary equipment as needed, safety measures, laboratory testing, product trials, technical assistance, performance evaluation and dissemination of the results.

The preliminary estimate of the cost of this demonstration project is about US\$ 500,000 at this enterprise.

### **Funding Request**

The present funding request for US\$ 30,000 would cover the cost of national and international technical experts and related expenses for developing the full-fledged proposal.

### **Impact**

The successful implementation of this demonstration project will reduce the HCFC consumption at Feininger (Nanjing) Energy Saving Technology Co. Ltd. by minimum 210 metric tonnes and at the same time, provide an environmentally safe and cost-effective alternative for enabling replication of this technology in similar applications and SMEs in the XPS foam sector in China and facilitate significant HCFC reductions for compliance with the 2013/2015 control targets. It will also significantly contribute to the viability of SMEs in this sector, avoid industrial obsolescence and dislocation and maintain sustainable livelihoods dependent on employment in this sector.

**ANNEX-III**  
**Request for Preparation Funding - Demonstration Project in Solvents Sector in China (Shifeng)**

**PROJECT CONCEPT**

<b>COUNTRY:</b>	CHINA	<b>IMPLEMENTING AGENCY:</b>	UNDP
<b>PROJECT TITLE:</b>	Preparation of a demonstration project for conversion from HCFC-141b to solvent-free modified silicone oil for silication applications at Shifeng Medical Apparatus and Instrument Co. Ltd.		
<b>PROJECT IN CURRENT BUSINESS PLAN:</b>	Yes		
<b>SECTOR:</b>	Solvents (SOL)		
<b>SUB-SECTOR:</b>	Medical Cleaning Applications		
<b>ODS USE IN SECTOR:</b>	4,145 metric tonnes (2008)*		
<b>PROJECT IMPACT:</b>	36 metric tonnes (2008)*		
	<small>*Preliminary estimates based on ongoing surveys. More accurate estimates would be available in the actual project proposal</small>		
<b>PROJECT DURATION:</b>	12 months		
<b>PROJECT COST:</b>	US\$	30,000	
<b>REQUESTED GRANT:</b>	US\$	<b>30,000</b>	
<b>AGENCY SUPPORT COSTS:</b>	US\$	2,250	
<b>TOTAL COST TO MULTILATERAL FUND:</b>	US\$	<b>32,250</b>	
<b>PROJECT MONITORING MILESTONES:</b>	Included		
<b>NATIONAL COORDINATING BODY:</b>	Foreign Economic Cooperation Office, Ministry of Environment Protection		

**PROJECT SUMMARY**

This demonstration project will establish the suitability of modified silicone oil without solvents for silication applications in the manufacture of disposable syringes, in place of the current HCFC-based technology, at Shifeng Medical Apparatus and Instrument Co. Ltd. The selected alternative technology has zero ODP, negligible GWP, no toxicity and potentially favorable costs. This technology has not been applied commercially so far in China and only in limited applications outside China.

The Solvents Sector is characterized by direct emissive use of HCFCs. The Medical Cleaning Applications sub-sector is important from a human health perspective and contributes significantly (~30%) to the overall HCFC consumption in the Solvents Sector in China. The sub-sector also has a large number of SMEs, which currently do not have cost-effective and safe alternatives for HCFCs. For these reasons, China has prioritized this sector/application for early interventions in order to meet the 2013/1015 targets.

**PROJECT IMPACT**

The successful implementation of this demonstration project will provide an environmentally safe and cost-effective alternative for enabling replication of this technology in similar applications and SMEs in the Solvents Sector (Medical cleaning applications) in China and facilitate cost-effective HCFC reductions for compliance with the 2013/2015 control targets. It will also significantly contribute to the viability of SMEs in this sector, avoid industrial obsolescence and dislocation and maintain sustainable livelihoods dependent on employment in this sector.



## **Objective**

The objective of this proposed demonstration project is to establish the suitability of modified silicon oil without solvents for silication applications in the manufacture of disposable syringes, in place of the current HCFC-based technology, at Shifeng Medical Apparatus and Instrument Co. Ltd.

## **Sector Background**

The Solvents Sector is characterized by emissive use of HCFCs. The major applications include cleaning in the Medical, Metal (Compressors), Metal (Other), Electronics (LCD), Electronics (Precision), Electronics (Other) and Formulated Solvents sub-sectors.

The Medical Applications sub-sector is important from a human health perspective and consumed about 1,120 metric tonnes of HCFCs in 2008. The sub-sector has high emissive use of HCFC-141b, the main HCFC used, with the highest ODP among HCFCs. This sub-sector is expected to grow at 10% annually until 2012 and at 5% annually thereafter. The sub-sector also comprises of a large number of SMEs with limited access to alternative technologies for HCFCs and their viability depends upon accessing suitable cost-effective alternative technologies at the earliest. Demonstration of a viable alternative technology would facilitate a much larger contribution from this sector cost-effectively to the overall reduction targets for China. For these reasons, China has prioritized this sector and sub-sector for early interventions to meet the 2013/2015 targets. It will also be critical to have the results of this demonstration project in time to inform the HPMP preparation and finalization. Therefore it is imperative to have the proposal considered at the very earliest, considering the short time available for implementing projects for meeting the 2013 and 2015 targets.

## **Enterprise Background**

Shifeng Medical Apparatus and Instrument Co. Ltd., was established in 1998 and is one of the major manufacturers of a range of medical devices, particularly disposal syringes. The enterprise was selected for this demonstration project in view of its technical and managerial capacity and readiness to evaluate a suitable cost-effective alternative technology to replace HCFC-141b use as a solvent in its manufacturing operations.

## **Technology**

Several alternative technologies such as HFE-7100, HFC-365mfc, Hydrocarbons, Alcohols, Low molecular weight halohydrocarbons, etc., are available. But in general, there has to be a trade-off between solvent properties, costs, toxicity issues and flammability issues.

Silicone oil (polymethylsiloxane and alkane graft with appropriate components) is selected as a replacement technology for HCFC-141b, in view of its zero ODP, negligible GWP, no toxicity, non-flammability, temperature stability and favorable costs. However, some technical issues will need to be resolved through experimentation, equipment modification, trials and testing, such as viscosity reductions and uniformity in application on syringes. This technology has not been applied commercially so far in China and only in limited applications outside China. Further, the technologies are not available off-the-shelf. These need to be customized based on several technical and health related factors. Therefore the enterprise would find it extremely difficult to directly commit to an investment project, without being familiar with the implications on costs and performance.

The currently used HCFC-141b based technology has been used for several years in China. The selected alternatives need to be validated, tested and related health and other regulatory approvals need to be obtained, specifically in the context of China.

## **Project Description and Costs**

The preliminary estimate of the cost of the demonstration project is about US\$ 200,000. This will include development costs for the appropriate components for the modified silicone oil, equipment modifications and additional equipment, safety measures, laboratory testing, product trials, evaluation and testing for biocompatibility, drug compatibility, suitability for radiation sterilization, etc.

## **Funding Request**

The present funding request for US\$ 30,000 would cover the cost of national and international technical experts and related expenses for developing the full-fledged proposal.

## **Impact**

The successful implementation of this demonstration project will result in reductions of 36 metric tonnes of HCFC use at this enterprise and provide a safe and cost-effective alternative for enabling replication of this technology in similar applications and enterprises in the Medical Applications sub-sector in China and facilitate early and cost-effective HCFC reductions for compliance with the 2013/2015 control targets.

**ANNEX-IV**  
**Request for Preparation Funding - Demonstration Project in Solvents Sector in China (Zhejiang)**

**PROJECT CONCEPT**

<b>COUNTRY:</b>	CHINA	<b>IMPLEMENTING AGENCY:</b>	UNDP
<b>PROJECT TITLE:</b>	Preparation of a demonstration project for conversion from HCFC-141b to a combination of Isopropyl Alcohol and Hydrocarbon-based compounds in solvent cleaning applications at Zhejiang KDL Medical Equipment Group Ltd.		
<b>PROJECT IN CURRENT BUSINESS PLAN:</b>	Yes		
<b>SECTOR:</b>	Solvents (SOL)		
<b>SUB-SECTOR:</b>	Medical Cleaning Applications		
<b>ODS USE IN SECTOR:</b>	4,145 metric tonnes (2008)*		
<b>PROJECT IMPACT:</b>	110 metric tonnes (2008)*		
	<small>*Preliminary estimates based on ongoing surveys. More accurate estimates would be available in the actual project proposal</small>		
<b>PROJECT DURATION:</b>	12 months		
<b>PROJECT COST:</b>	US\$	30,000	
<b>REQUESTED GRANT:</b>	US\$	<b>30,000</b>	
<b>AGENCY SUPPORT COSTS:</b>	US\$	2,250	
<b>TOTAL COST TO MULTILATERAL FUND:</b>	US\$	<b>32,250</b>	
<b>PROJECT MONITORING MILESTONES:</b>	Included		
<b>NATIONAL COORDINATING BODY:</b>	Foreign Economic Cooperation Office, Ministry of Environment Protection		

**PROJECT SUMMARY**

This demonstration project will establish the suitability of a combination of Isopropyl Alcohol (IPA) and Hydrocarbon compounds to replace HCFC-141b in cleaning/silication of disposable syringes, injector needles and other implantable medical devices at Zhejiang KDL Medical Equipment Group Ltd. The technology is selected in view of its zero ODP, negligible GWP, no toxicity and favorable costs. However, flammability is an issue and will need to be addressed through introduction of appropriate safety measures. This technology has not been applied commercially so far in China and only in limited applications outside China.

The Solvents Sector is characterized by direct emissive use of HCFCs. The Medical Cleaning Applications sub-sector is important from a human health perspective and contributes significantly (~30%) to the overall HCFC consumption in the Solvents Sector in China. The sub-sector also has a large number of SMEs, which currently do not have cost-effective and safe alternatives for HCFCs. For these reasons, China has prioritized this sector/application for early interventions in order to meet the 2013/1015 targets.

**PROJECT IMPACT**

The successful implementation of this demonstration project will provide an environmentally safe and cost-effective alternative for enabling replication of this technology in similar applications and SMEs in the Solvents Sector (Medical cleaning applications) in China and facilitate cost-effective HCFC reductions for compliance with the 2013/2015 control targets. It will also significantly contribute to the viability of SMEs in this sector, avoid industrial obsolescence and dislocation and maintain sustainable livelihoods dependent on employment in this sector.

## **Objective**

The objective of this proposed demonstration project is to establish the suitability of a combination of Isopropyl Alcohol (IPA) and Hydrocarbon compounds to replace HCFC-141b in cleaning/silication of disposable syringes, injector needles and other implantable medical devices at Zhejiang KDL Medical Equipment Group Ltd.

## **Sector Background**

The Solvents Sector is characterized by emissive use of HCFCs. The major applications include cleaning in the Medical, Metal (Compressors), Metal (Other), Electronics (LCD), Electronics (Precision), Electronics (Other) and Formulated Solvents sub-sectors.

The Medical Applications sub-sector is important from a human health perspective and consumed about 1,120 metric tonnes of HCFCs in 2008. The sub-sector has high emissive use of HCFC-141b, the main HCFC used, with the highest ODP among HCFCs. This sub-sector is expected to grow at 10% annually until 2012 and at 5% annually thereafter. The sub-sector also comprises of a large number of SMEs with limited access to alternative technologies for HCFCs and their viability depends upon accessing suitable cost-effective alternative technologies at the earliest. Demonstration of a viable alternative technology would facilitate a much larger contribution from this sector cost-effectively to the overall reduction targets for China. For these reasons, China has prioritized this sector and sub-sector for early interventions to meet the 2013/2015 targets. It will also be critical to have the results of this demonstration project in time to inform the HPMP preparation and finalization. Therefore it is imperative to have the proposal considered at the very earliest, considering the short time available for implementing projects for meeting the 2013 and 2015 targets.

## **Enterprise Background**

Zhejiang KDL Medical Equipment Group Ltd. was established in 1987 and is one of the major manufacturers of a range of implantable medical devices. The enterprise was selected for this demonstration project in view of its technical and managerial capacity and readiness to evaluate a suitable alternative technology to replace HCFC-141b use as a solvent in its manufacturing operations.

## **Technology**

Several alternative technologies such as HFE-7100, HFC-365mfc, Hydrocarbons, Alcohols, Low molecular weight halohydrocarbons, etc., are available. But in general, there has to be a trade-off between solvent properties, costs, toxicity issues and flammability issues.

The enterprise has selected a combination of Isopropyl Alcohol and Hydrocarbon compounds as a replacement technology for HCFC-141b, in view of its zero ODP, negligible GWP, no toxicity and favorable costs. However, flammability is an issue and will need to be addressed through introduction of appropriate safety measures. This technology has not been applied commercially so far in China and only in limited applications outside China. Further, the technologies are not available off-the-shelf. These need to be customized based on several technical and health related factors. Therefore the enterprise would find it extremely difficult to directly commit to an investment project, without being familiar with the implications on costs and performance.

The currently used HCFC-141b based technology has been used for several years in China. The selected alternatives need to be validated, tested and related health and other regulatory approvals need to be obtained, specifically in the context of China.

## **Project Description and Costs**

The preliminary estimate of the cost of the demonstration project is about US\$ 300,000. This will include development costs for the appropriate solvent mixture, equipment modifications and additional equipment, safety measures, laboratory testing, product trials, evaluation and testing for biocompatibility, drug compatibility, suitability for radiation sterilization, etc.

## **Funding Request**

The present funding request for US\$ 30,000 would cover the cost of national and international technical experts and related expenses for developing the full-fledged proposal.

## **Impact**

The successful implementation of this demonstration project will result in reductions of 110 metric tonnes of HCFC use at this enterprise and provide a safe and cost-effective alternative for enabling replication of this technology in similar applications and enterprises in the Medical Applications sub-sector in China and facilitate early and cost-effective HCFC reductions for compliance with the 2013/2015 control targets.

**ANNEX-V**  
**Request for Preparation Funding - Demonstration Project for ODS Disposal in India**

<b>PROJECT CONCEPT</b>		
<b>COUNTRY:</b>	INDIA	<b>IMPLEMENTING AGENCY:</b> UNDP
<b>PROJECT TITLE:</b>	Preparation of a project for demonstration of a sustainable technological, financial and management model for disposal of ODS in India	
<b>PROJECT IN CURRENT BUSINESS PLAN:</b>	Yes	
<b>SECTOR:</b>	ODS Destruction (DES)	
<b>SUB-SECTOR:</b>	N/A	
<b>ODS USE IN SECTOR:</b>	N/A	
<b>PROJECT IMPACT:</b>	100 ODP tonnes annually*	
	*Preliminary estimates. More accurate estimates would be available in the actual project proposal	
<b>PROJECT DURATION:</b>	12 months	
<b>PROJECT COST:</b>	US\$	80,000
<b>REQUESTED GRANT:</b>	US\$	<b>80,000</b>
<b>AGENCY SUPPORT COSTS:</b>	US\$	6,000
<b>TOTAL COST TO MULTILATERAL FUND:</b>	US\$	<b>86,000</b>
<b>PROJECT MONITORING MILESTONES:</b>	N/A	
<b>NATIONAL COORDINATING BODY:</b>	Ozone Cell, Ministry of Environment and Forests	

**PROJECT SUMMARY**

This demonstration project, upon successful completion, will establish the suitability and viability of a sustainable technological, financial and management model for safe disposal of unwanted ODS in India. It will also result in environmentally sound destruction of about 100 ODP tonnes of CFCs initially, and an average annual disposal of about 100 ODP tonnes of ODS in subsequent years. The project is not intended for addressing Halons.

The outcome of this project preparation request will be a demonstration project proposal that will propose:

- (a) A multi-ODS destruction facility that would ensure environmentally sound destruction of ODS
- (b) A technological, financial and management model for sustainable operation of the facility

The estimated cost of the demonstration project will be about US\$ 5-10 million, which will only be partially financed through the Multilateral Fund resources, to be determined based on eligible components. The balance financing will be leveraged from private and public sector partners through structured investments including equity and debt, carbon finance and other sources.

**PROJECT IMPACT**

The successful implementation of this demonstration project will result in an environmentally safe, cost-effective and sustainable multi-ODS destruction facility in India, and demonstration of a sustainable technological, financial and management model for ODS disposal, leading to avoidance of significant quantities ODS emissions, thus contributing to protection of the ozone layer as well as the climate system.

## Objective

The objective of this proposed demonstration project is to establish the suitability and viability of a sustainable technological, financial and management model for safe disposal of unwanted ODS in India.

## Background and Rationale

India was one of the large producers and consumers of ODS in the past decade. India has phased-out its consumption and production of CFCs since 2008, except in MDI manufacturing. The estimated quantities of CFC banks in appliances and equipment operating on CFCs range from 7,500 to 20,000 metric tonnes depending on estimates from various sources. These banks need to be managed strategically and in an environmentally sound manner, so as to avoid emissions of CFCs to the atmosphere and thereby minimize impact on the ozone layer and the climate system. This would require an effective and efficient mechanism, which incorporates technologically and environmentally sound destruction facilities and a sustainable financial and management model for its operation.

## ODS Waste Streams

The currently identified and potential sources of ODS waste streams in India are as below:

- (a) An estimated 100 metric tonnes of unwanted CFCs available with institutional end-users such as Indian Railways.
- (b) Up to 200 metric tonnes of CFCs from banks in appliances and equipment, which have reached end-of-life and whose retirement is imminent and current, from major sources such as ship-breaking yards.
- (c) Prospective quantities of off-specification CFCs resulting from production of pharmaceutical-grade CFCs for MDI manufacturing (subject to guidance from Montreal Protocol bodies)
- (d) CFC banks in appliances and equipment estimated between 7,500 and 20,000 metric tonnes, which will flow in the waste stream in the next 5-15 years.
- (e) Similar or higher quantities of banks of HCFCs, which will flow into the waste stream on a longer time horizon

The Indian Railways is currently implementing an aggressive programme to retrofit/replace its CFC-12 based air conditioning systems for rail cars. They had earlier been provided with the necessary equipment and support under the Servicing Sector project in India for proper recovery of ODS. In addition, other public sector undertakings as well as the Defense sector also have significant stocks of ODS collected as a result of equipment retrofitting/replacement programmes. Thus, the collection efforts for the initially available quantities of CFCs are either completed or are at a very advanced stage. The details of the various collected stocks will be provided in the full project proposal.

Due to recently launched appliance replacement programmes in response to regulatory initiatives on energy efficiency, the waste stream flow from CFC and HCFC banks in appliances and equipment is likely to be accelerated. In addition, there is also a likelihood of flow of significant quantities of CTC from unwanted co-production due to reduced demand for feedstock uses. This underscores the need for immediate interventions to manage the waste stream flows through introduction of multi-ODS disposal mechanisms and the associated financial, logistical and management arrangements.

## Cross-convention Synergies

In terms of cross-convention synergies, there are several initiatives underway currently:

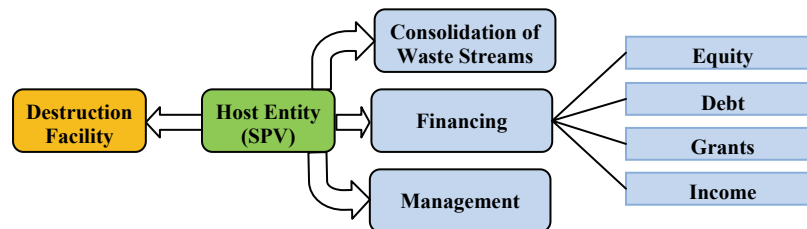
- Prioritizing of the management of e-waste at high-levels by government, industry and civil society (UNDP has already included interventions in its GEF-V business plan), which has led to recent adoption of standards for managing e-waste. Since domestic refrigeration and air conditioning appliances are considered a component of e-waste, this initiative will catalyze ODS waste-stream flows

- High-level government consultations on the policy and regulatory aspects of safe disposal of waste from the ship-breaking industry (India has the world's largest ship-breaking industry). These regulatory interventions will require safe collection and disposal of CFCs from the refrigeration systems in ships and contribute to CFC waste flows.
- A chiller replacement programme under implementation (WB), which will generate unwanted CFCs
- An extensive programmatic energy-efficiency project (ongoing with UNDP-GEF) as a part of which the BEE (Bureau of Energy Efficiency, Ministry of Power) has launched an intensive and successful campaign for promoting domestic appliance energy efficiency. In early January 2010, India became one of the first developing countries to mandate minimum energy-efficiency standards for appliances. In response to these initiatives, two major appliance manufacturers have recently launched appliance replacement programmes. The service networks of these appliance manufacturers have been associated with the servicing sector project in India and many of them have been provided with the necessary equipment for recovery of ODS.

The ODS waste streams which will inevitably result from such initiatives, will need to be managed safely. The collection and transportation of unwanted ODS is not a critical challenge considering the size of the potentially accessible banks (and in any case will not be funded by MLF), provided that an appropriate management model and downstream facilities are available. The present proposal aims to demonstrate a public-private financing and management model, which will take into account the related infrastructural needs. Thus the demonstration element of this proposal will serve as a catalyst for ensuring sustainable and safe flow of unwanted ODS.

### Approach

The host entity is presently conceived as a Special Purpose Vehicle (SPV) comprised of multiple stakeholders including public and private sector players. The elaboration of whether such an SPV will be a corporate entity or otherwise, will be delineated in the full project proposal. The host entity will be operationally responsible for collection, transportation, handling, storage, disposal including destruction and financial management, as schematic below:



The SPV would be established as an independent legal entity, which would have defined procedures for ownership of equipment, receipt of proceedings from sales of emission reduction credits, ODSs destruction and safe disposal of effluents, monitoring and reporting of ODS destruction activities and other operational and administrative procedures. The SPV is expected to have investments through debt, equity and grants and its operations would be funded through carbon finance and cost-recovery mechanisms. The detailed investment plan will be included in the full project proposal. Government would play the key role of facilitating and catalyzing participation of stakeholders and also in policy, regulatory and monitoring aspects.

Currently, under the Indian Ozone Regulations, registration of destruction facilities of ODSs is mandatory. In addition to this, additional regulations are planned for (a) registration and reporting storage of ODSs which would be subsequently destroyed, (b) operating standards for destruction facilities and reporting. Besides, this project is expected to secure co-financing from voluntary carbon markets. Thus, monitoring and reporting procedures applicable under such mechanisms would also form a part of the regulatory framework for implementing this project.



## Scope and Outputs

The scope of this request covers the preparation of the demonstration project and will include the following key outputs:

- Further quantification and analysis including forward projections of imminent ODS waste stream flows
- Define process and estimated costs for consolidation of ODS waste streams
- Define technical and operational parameters and costs for the multi-ODS destruction facility
- Develop business model covering:
  - Establishing overall costs and investments needed
  - Assessing operational costs
  - Defining fund flows (equity, debt, grants)
  - Structuring the financing
  - Projected revenue (from carbon finance and other sources)
  - Investment returns analysis
  - Management arrangements
- Synergies with similar other initiatives in the country and region
- Formulation of regulatory and associated interventions

The overall outcome will be a full project proposal, which is expected to be partially financed through MLF grant funding depending on eligible components in accordance with the relevant ExCom decisions.

## Costs

The preliminary estimate of the cost of the project is about US\$ 5-10 million. However, only the eligible demonstration components of this project will be funded from MLF resources, consistent with relevant MLF policies. The balance funding would be leveraged from other sources such as cash and in-kind public and private sector investments, carbon finance and through synergies with ongoing upstream programmes.

## Funding Request

The present funding request for US\$ 80,000 plus agency support costs would cover the cost of national and international technical experts and related expenses for developing the full-fledged proposal. The breakdown will be as below:

Cost Head	Budget (US\$)
International Experts (50 days X US\$ 600)	30,000
National Experts (100 days X US\$ 200)	20,000
Workshops, meetings and logistics (5)	30,000
<b>Total</b>	<b>80,000</b>

## Impact

The successful implementation of this project will result in demonstration of an environmentally safe, cost-effective and sustainable multi-ODS destruction facility in India, and the demonstration of a sustainable technological, financial and management model for such a facility, leading to avoidance of significant quantities ODS emissions, thus contributing to protection of the ozone layer as well as the climate system.

ANNEX-VI  
**Resource Mobilization to maximize Climate co-benefits**

**1. Resubmission of an Amended Proposal**

In accordance with Executive Committee Decision 59/21, UNDP is resubmitting this proposal for consideration at the 60th Executive Committee meeting. It has been amended to take recent developments into account.

The overall objective of this proposal is for UNDP to explore the different funding solutions and barriers to finance the climate benefits of HCFC phase-out and ODS destruction activities. Specifically, this will focus on non-MLF funding solutions, including such funding sources as GEF, the carbon markets (compliance and voluntary), bilateral donors and private sector partners. In seeking to achieve this objective, UNDP will leverage its experience as a *one-stop-shop* in environmental finance, with the emphasis on efficiently and seamlessly bringing together these different funding sources.

This proposal also relates closely to the ongoing work on a possible Special Funding Facility for Additional Income (SFFAI) under the MLF, still to be discussed and decided by the Executive Committee.

In summary, the activities under this amended proposal are split into two phases:

- *Phase I*, which can commence immediately, will provide concrete, learning-by-doing financing case studies from four distinct pilot project proposals. These case studies will also help identify barriers and potential finance options for climate benefits as they affect on-going HPMP preparation work and ODS destruction project definition. These results will be of value irrespective of the eventual design of any SFFAI.
- *Phase II*, which can commence at a later stage, will involve UNDP collectively analyzing these case studies in the context of any MLF mechanism for resource mobilization. The timing of this phase can align with future developments on any SFFAI.

**1.1 Recent Developments**

UNDP submitted the last version of this proposal to the 59th ExCom meeting. In the interim period, there have been a number of developments:

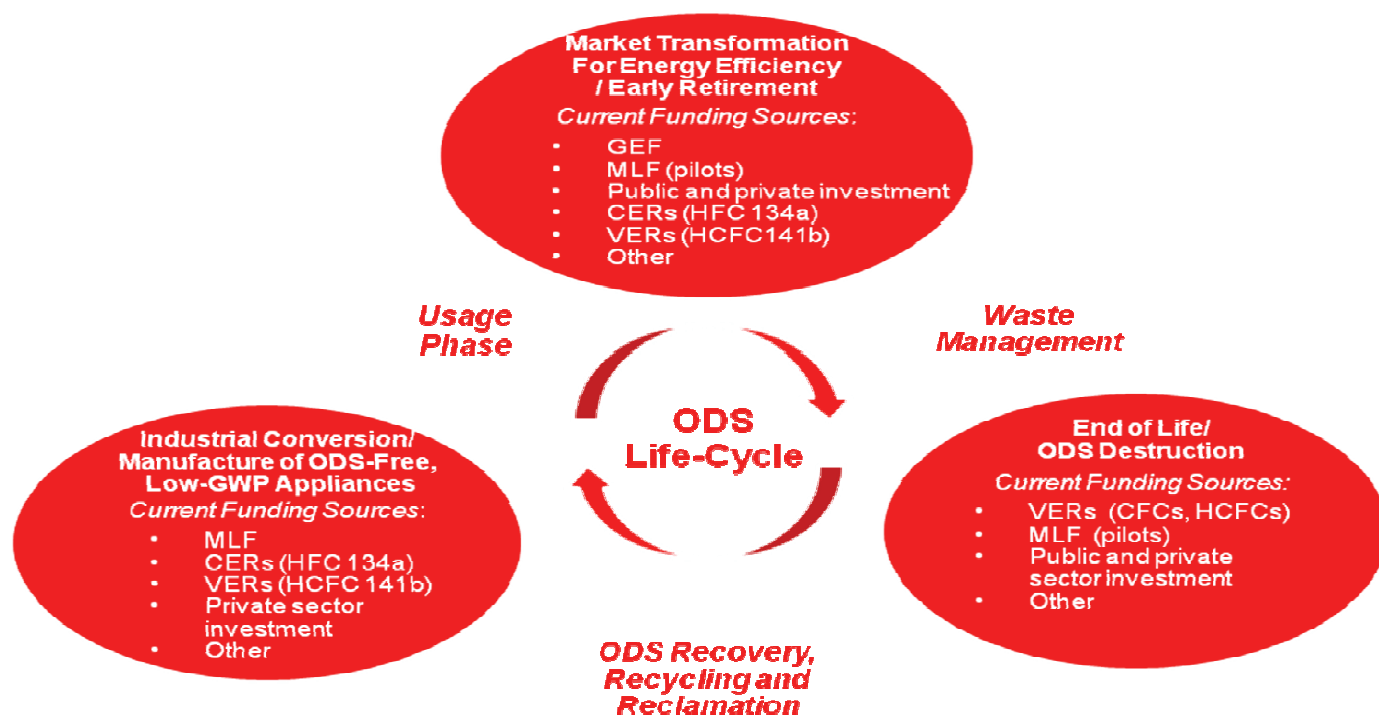
- *Montreal Protocol Meetings*. Recent developments include:
  - The Secretariat's submission at the 59th ExCom Meeting of a new report on the SFFAI, further defining the SFFAI's possible role and in particular focusing on implications for UNEP's Treasury role
  - Discussion of the SFFAI at the 59th ExCom Meeting with Decision 59/48 requesting a specific agenda item to be included at the 60th Meeting
  - Decision XXI/2 of the Meeting of the Parties in November 2009, linking ODS destruction to the SFFAI and requesting the Executive Committee's input on the SFFAI at the 30th Meeting of the Open-ended Working Group to be held in June 2010

- *UNDP Issues Paper.* As part of the Secretariat’s report on the SFFAI to the 59th ExCom Meeting, UNDP contributed an issues paper, attached as an annex to the report, on the role of the carbon markets with regard to the SFFAI. The issues paper recommended that if the carbon markets were to be pursued as a funding source, the long term objective should be the compliance carbon markets, with the voluntary carbon markets only accessed as an interim step. A number of concerns regarding the voluntary carbon markets were expressed. The issues paper also proposed a possible architecture to access the compliance carbon markets. UNDP presented a side event at the 21st Meeting of the Parties to discuss these findings.
- *UNFCCC Meetings.* A series of UNFCCC meetings in 2009 culminated with the 15th Conference of the Parties in Copenhagen. The outcome on financing for climate change from the COP was mixed. On the one hand, there were renewed commitments to make new and additional financing available. On the other hand, the details of many financial mechanisms remain to be determined and there is an increasing view that the financing landscape for climate change, for both public and market sources, will be increasingly fragmented going forward.

## 2. UNDP as a One-Stop-Shop for Financing of Climate Benefits

A central aspect of this proposal is for UNDP to act as a one-stop-shop to bring together different non-MLF funding sources to fully address the costs of climate benefits relating to HCFC phase-out and ODS destruction projects. The following figure illustrates the possible financing sources for life-cycle project opportunities (non exhaustive with focus on Refrigeration & AC sector for illustration purposes).

*Figure 2:1 Funding sources for ODS Life-Cycle Opportunities*



UNDP is well positioned to draw upon its existing experience with different funding sources. These include:

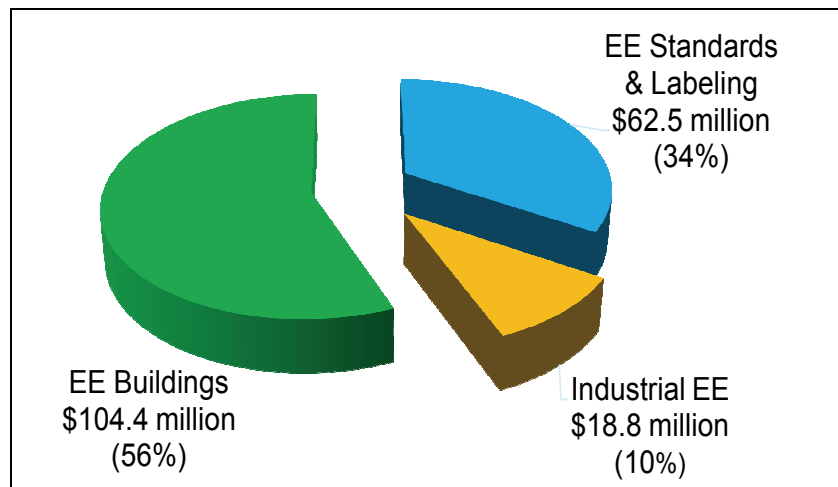
**Multilateral Fund:**

UNDP has long-standing expertise as an Implementing Agency for the Multilateral Fund since 1991. UNDP's current role as the Lead Agency for HPMPs in a significant number of key Article-5 countries places it in a unique position to identify and develop appropriate projects.

**Global Environment Facility (GEF)**

UNDP was designated in 1991 as one of the 3 Implementing Agency for the GEF. UNDP has a large portfolio of projects in the area of climate change, totaling over **US\$185 million**. Opportunities exist to do joint activities with ongoing programmes as well as designing new interventions to tap into funding in GEF 5, taking into consideration the GEF 5 climate change focal area objectives as well as the links with POPs, as far as destruction, and dioxins emissions due to incineration/burning.

*Figure 2:2 UNDP's portfolio of GEF Energy Efficiency Projects (with links to Refrigeration & AC sector)*



**Carbon Finance**

UNDP has been an active participant in the carbon finance arena since 2005 with established procedures, staff and expertise in place. In terms of direct emission reductions, UNDP is active in the following areas:

- The MDG Carbon Facility, which offers project development services for projects under the Clean Development Mechanism (CDM) and other carbon markets.
- UN REDD, which is pioneering carbon finance in 9 pilot countries in the area of avoided emissions from deforestation. As a new area of carbon finance like ODS, there are a number of similarities between the two which UNDP can use and exchange ideas and lessons learnt.

### **3. Proposed Activities**

#### **3.1. Overview of ODS Project Opportunities**

UNDP sees clear opportunities for projects in at least two areas:

1. ODS Bank management and disposal projects – particularly related to the end-of-life management of appliances.
2. Co-financing opportunities in HCFC phase-out where climate co-benefits can be generated and maximized through additional investments for conversion to appropriate technologies.

For example, as mentioned above, there are clear possibilities to use linkages with other programmes (such as but not limited to, the energy efficiency actions under the GEF climate change focal area) to develop projects and leveraging access to the energy gains arising from the replacement of inefficient ODS-based appliances in order to ensure appropriate end-of-life management is achieved. This will tap into country-specific initiatives towards energy savings gains in appliance replacement programmes (e.g. the GEF Market Transformation Programme).

It is recognized that both project areas would be of interest to the Executive Committee of the Multilateral Fund, since the Committee is mandated by MOP Decision XIX/6, at least for HCFC phase-out, to prioritize funding of cost-effective projects and programmes that maximize climate benefits.

#### **3.2 Phase I Activities: Pilot ODS Projects**

Under Phase I of the proposed activities, UNDP has identified four different project scenarios, selected for their distinct illustrative value, which could benefit from co-financing of climate co-benefits. For each of these four areas, UNDP will provide technical assistance for translating these concepts into concrete pilot project proposals, addressing each project type's methodological, structural, commercial and legal aspects. UNDP will then seek to work with project entities to implement these projects. Finally, for each project type, UNDP will evaluate its experience in a detailed case-study report.

The activities under Phase I can commence immediately. Phase I will produce concrete, learning-by-doing case studies at the project level which will be useful for the Montreal Protocol bodies irrespective of the final design of any SFFAI. For the GEF opportunities, UNDP will map existing projects and new opportunities to maximize climate benefits during HPMP preparation as well as destruction projects, in coordination also with GEF, POPs and SAICM activities during GEF 5.

The four different project scenarios are:

- a) An MLF funded project where climate co-benefits can be realized at a cost exceeding \$25 per tonne of CO<sub>2</sub> saved.
- b) An HCFC phase-out project in an Article-5 country, which is not eligible for funding by the MLF but could be funded from the proceeds of realizing climate co-benefits.
- c) An Energy Efficiency project (e.g. GEF) in which end-of-life management of ODS would bring incremental ozone and climate benefits. Standards and Label approaches under the GEF will be also looked into, which can bring benefits during HCFC conversion of the manufacturing plants.
- d) A stand-alone bank management/ODS destruction project which could be based on an existing approved methodology for funding of climate co-benefits

For each project scenario UNDP will perform the following activities:

- 1) An analysis of the baseline data, project type and its potential climate benefits.
- 2) Identification of potential stakeholders who may act as the project entity.

- 3) Review of emerging methodologies for assessing CO2 emission reductions in support of the project type and commissioning of new methodologies, where appropriate.
- 4) Review of financing options, including carbon markets, assessing the technical, regulatory and financial risks and cost effectiveness of different options, and identifying potential financing partners
- 5) Preparation of project proposals for each project type
- 6) Evaluation of experiences and preparation of stand-alone case-study reports for each project type
- 7) Bring lessons into the HPMP preparation and implementation activities

As result, UNDP would be in a better position to share knowledge and identify non-MLF finance opportunities that countries may need to fund climate benefits.

### **3.3 Phase II Activities: Report Analyzing Phase I Pilots in Context of any MLF Mechanism for Resource Mobilization**

In Phase II, UNDP will produce a report analyzing the results of the Phase I pilot projects in the context of any MLF mechanism or framework that may arise from these ongoing studies, including any SFFAI. This Phase II report will provide inputs to the design of any such mechanism, covering aspects such as identifying how each of the four pilot project types would fit into such a mechanism, and where likely benefits or challenges would be found, particularly in scaling up such activities under a mechanism. The report would leverage the hands-on experience of the Phase I case-studies, as well as the expertise of UNDP's climate change and environmental finance (GEF, carbon finance) teams which have been involved in establishing a number of climate change and carbon finance financial mechanisms.

## **4. Resource Requirements**

The total costs are estimated as below (all figures in US dollars):

<b>Cost Head</b>	<b>Phase-I</b>	<b>Phase-II</b>	<b>Total</b>
International Consultant for technical coordination	45,000	0	45,000
Four technical experts for analysis/ methodologies and mapping of additional finance opportunities	169,000	0	169,000
Travel	36,000	0	36,000
Cost recovery for inputs from UNDP	150,000	100,000	250,000
<b>Total</b>	<b>\$400,000</b>	<b>\$100,000</b>	<b>\$500,000</b>
Matching in-kind co-financing from UNDP( \$50k already provided in 2009)	(150,000)	(100,000)	(250,000)
<b>Net MLF Funding Requirement</b>	<b>\$250,000</b>	<b>0</b>	<b>\$250,000</b>
<b>Total Requirement( with support costs</b>	<b>\$268,750</b>		<b>\$268,750</b>

As set out above, UNDP will be making a matching contribution of in-kind services amounting to US\$250,000 when considering both phases. The inputs from UNDP will cover staff time and costs of its in-house carbon finance and other teams for providing technical services related to analysis and development of methodologies and for developing the structural, commercial, legal and policy elements.

The Phase-I costs of US\$250,000 plus support costs are being requested for consideration at the 60th ExCom meeting.

**ANNEX-VII**  
**Proposal for Renewal of Institutional Strengthening Phase-VIII for India**

## **India - Institutional Strengthening Renewal (Phase-VIII)**

### **EXECUTIVE SUMMARY**

#### **Progress Report**

During Phase-VII of the Institutional Strengthening (IS) project, India continued its diligent efforts in management and coordination of the production and consumption phase-out projects and programmes for CFCs, Halon and CTC, including fast track implementation of the national strategy for transition to non-CFC MDIs approved in November 2008 and initiation of preparation of India's HCFC phase-out management plan, with the assistance of implementing and bilateral agencies, and in close consultation with the relevant national stakeholders. These efforts have helped in ensuring India's compliance with its Montreal Protocol obligations.

The Ozone Cell, Ministry of Environment and Forests continued monitoring the production, import and export control systems for effective management of the supply and consumption of ODS. From 01 August 2008 onwards, no further clearances were issued for CFC production, resulting in India ceasing the production of CFCs seventeen months ahead of schedule. Another significant milestone achieved was the rolling out of India's long-term road map for eliminating HCFCs in October 2009, with high-level engagement of government policy makers. Ozone Cell participated and contributed significantly to ExCom, OEWG, MOP meetings and Regional Network Meetings. As a member of the Implementation Committee under the Non-compliance Procedures, the Ozone Cell also participated in its meetings held during 2008.

Ozone Cell continued its extensive public awareness and information dissemination activities to facilitate access to stakeholders for information on ozone layer protection and related non-ODS technologies, in order to enable a smooth implementation of the phase-out programme. Awareness activities during the year 2008 and 2009 were also geared towards sensitizing industry on accelerated HCFC phase-out and disseminating information on international developments related to HCFCs.

Ozone Cell also shares its experience on management of ODS through training to Ozone Officers in other countries in the region. In 2009, support was provided to Ozone Officer from Iran on CFC MDI phase-out project implementation experiences and ODS licensing system implementation. India continued to work with customs and other trade enforcement officials of neighboring countries for preventing illegal trade of ODSs.

#### **Plan of Action**

The main focus of the Phase-VIII of the Institutional Strengthening project will be to (a) continue effective management and monitoring of ODS phase-out activities to ensure sustainability of ODS phase-out (b) expeditiously implement the National Strategy for Transition to non-CFC MDIs and (c) complete the design and initiate implementation of the HCFC phase-out management plan.

In this next phase of the IS project, India will need to formulate and adopt necessary policies and strengthen its institutional framework for achieving targets specified under accelerated HCFC phase-out particularly 2013 and 2015 targets. It will continue to implement and enforce the Ozone Depleting Substances (Regulation and Control) Rules, 2000 and production, trade and consumption control policy enforcement for ODS, especially HCFCs.



**Extension of Institutional Strengthening Projects (ISP)  
Plan of Action for 2010-2012**

(Sections 1-16 to be completed by the country concerned prior to sending it to be implementing agency for comments in Section 17)

1. **Country:** India
2. **National Implementing Agency/Ozone Unit** Ozone Cell, Ministry of Environment & Forests (MoEF)
3. **Implementing Agency:** UNDP
4. **Period of Extension :** From (month/year) 1<sup>st</sup> April, 2010  
to (month/year) 31<sup>st</sup>, March 2012  
*(Based on the approved guidelines)*
5. **Amount of MLF funding requested:** US \$ 373,230
6. **Status of ratification:**

<b><i>Amendment</i></b>	<b><i>Ratification Date</i></b>
London Amendment	19.06.1992
Copenhagen Amendment	03.03.2003
Montreal Amendment	03.03.2003
Beijing Amendment	03.03.2003

7. **Consumption by group of substances and by sector. This is identical to the annual report the Ozone Units submit to the Fund Secretariat on the progress of implementation of Country Programs (CP). Please attach form with data for the most recent year or indicate when you sent it to the Secretariat if this has been done already.**

Chlorofluorocarbons (CFCs)-11, CFC-12 were used in Aerosol, Foam and Refrigeration & Air conditioner sectors. CFC-113 used in solvent sector. Halon 1211, Halon 1301 were used in fire extinguisher. Carbon tetrachloride (CTC) and methyl chloroform were used in solvent sector. HCFCs are used in mainly in refrigeration and air-conditioning, foam, solvents and fire-fighting applications. Sector wise consumption data for each of the Ozone Depleting Substances (ODS) for 2007 and 2008, submitted to the Multilateral Fund (MLF), is enclosed at Annexure 'A'.

**8. Indicate the main project objectives for the next phase in relation to the country compliance with the provisions of the Montreal Protocol:**

**Phase-out project activities**

- Implementation of CP update including preparation of HCFC Phase-out Management Plan (HPMP) and implementation of HCFC phase-out projects.
- Monitoring and management of implementation of National Strategy for Transition to Non-CFC MDIs and Plan for Phase-out of CFCs in the Manufacturing of Pharmaceutical MDIs in India.
- Monitoring and management of implementation of remaining activities pertaining to CFC production sector gradual phase out plan and CTC production and consumption phase out plan and technical assistance components under these projects.

**Awareness and capacity building**

- Awareness programs (Seminar, workshop, print and Electronic media and publication on ozone layer protection and alternative technologies) specifically targeted towards implementation of phase-out of CFCs used in manufacturing of Metered Dose Inhalers (MDIs) and HCFCs to meet the Stage-I targets.

**Compliance and Regulations implementation**

- Implementation of the Ozone Depleting Substances (Regulation and Control) Rules, 2000, and its Amendment Rules 2001, 2003, 2004, 2005 and 2007.
- Implementation of the licensing system and fiscal incentive for ODS phase-out projects and plans.
- Review of existing regulations and fiscal incentive in the light of 2010 and future compliance target including the accelerated phase-out targets for HCFC.
- Compliance with the provisions of the Copenhagen (1992), Montreal (1997), Beijing (1999) Amendments and Montreal Adjustment (2007) (accelerated phase-out of HCFCs) to the Montreal Protocol.

**Monitoring and reporting**

- Reporting of Article 7 data to the Ozone Secretariat. Progress report on implementation of CP to the MLF Secretariat and other reports to implementing agencies and to the Government of India.
- Evaluation and Monitoring of completed investment projects in aerosol, foam, halon, refrigeration & air-conditioning (RAC) and solvent sectors.
- Inputs and other support for preparation of Project Completion report of sectoral projects.

## Others

- South-south cooperation support on project implementation matters for ODS phase-out, on a need basis.
- Attending international meetings relating to Montreal Protocol such as Executive Committee Meetings, Implementation Committee Meetings, Open Ended Working Group Meeting and Meeting of Parties.

## 9. Objectives planned activities per year and expected results:

### 1<sup>st</sup> Year:

No.	Objectives	Planned Activities	Results Expected
1.	Implementation of CP update	<ul style="list-style-type: none"> <li>◆ Management of implementation of remaining activities associated with CFC, Halon, CTC and Methyl Bromide phase-out.</li> <li>◆ Developing policies for implementing HCFC phase-out.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Project completion reporting for remaining activities associated with CFC, Halon, CTC and Methyl Bromide phase-out, as found applicable.</li> <li>✓ Policy framework development for HCFC phase-out activities.</li> </ul>
2.	Monitoring and management of Sectoral Phase-out projects of ODS	<ul style="list-style-type: none"> <li>◆ Management of implementation of remaining activities under National CFC production and consumption phase out plans, and CTC production and consumption plan.</li> <li>◆ Management of implementation of activities related to HPMP preparation and HCFC phase-out projects.</li> <li>◆ Management of implementation of National Strategy for Transition to Non-CFC MDIs and Plan for Phase-out of CFCs in the Manufacturing of Pharmaceutical MDIs in India.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Completion of project implementation modalities for phase-out of CFC production and CTC production and consumption.</li> <li>✓ Completion of the HPMP preparation and submission to the MLF Secretariat.</li> <li>✓ Implementation of CFC MDI phase-out project, thus achieving gradual phase-out of CFCs in MDIs manufacturing.</li> </ul>
3.	Implementation of the ODS Rules, 2000 and its amendments	<ul style="list-style-type: none"> <li>◆ Registration of producers of HCFCs and enterprises using HCFCs and other authorized ODSs</li> <li>◆ License to be issued for export and import of ODS, primarily HCFCs</li> <li>◆ Enforcement of other provisions of the Rules</li> <li>◆ Review of provisions of ODS Rules, 2000 for facilitating HCFC phase out</li> </ul>	<ul style="list-style-type: none"> <li>✓ Achievement of complete phase-out of controlled uses of all ODSs except HCFCs.</li> <li>✓ Systematic implementation of HCFC phase-out activities in line with HPMP.</li> </ul>
4.	Implementation of fiscal measures and licensing systems	<ul style="list-style-type: none"> <li>◆ Provision of fiscal incentives to all ODS phase-out projects which are under implementation in 2010.</li> <li>◆ Provision of bulk licenses to all producers of HCFCs during 2010.</li> <li>◆ Consideration of all import of HCFC 141b, HCFC 124 and other substitutes for ODSs for issue of import license.</li> <li>◆ Implementation of other trade provisions in line with Montreal Protocol requirements.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Control of consumption and supply of ODSs.</li> </ul>
5.	Monitoring and management of implementation of approved projects	<ul style="list-style-type: none"> <li>◆ Completion of remaining activities under ODS Consumption Phase-out projects, including reporting requirements.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Achievement of all ODS phase-out targets in a sustainable manner and reporting requirements</li> </ul>

No.	Objectives	Planned Activities	Results Expected
6.	Monitoring and evaluation of activities undertaken under Multi Year Agreements (MYAs).	<ul style="list-style-type: none"> <li>◆ Monitoring implementation of completed investment projects as identified in consultation with relevant IAs and bilateral agencies.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Completion of monitoring activities in a satisfactory manner and inputs on learning from the implementation process.</li> </ul>
7.	Compliance with the reporting requirements under the Protocol.	<ul style="list-style-type: none"> <li>◆ Collection, analysis and processing of data on production import, export and feedstock for administrative approval for submitting to the Ozone Secretariat under Article 7 of the Protocol for 2009.</li> <li>◆ Submission of sectoral consumption data of ODS to the MLF Secretariat along with the progress report of the implementation of the CP for 2009.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Compliance with Article 7 and CP progress data reporting for 2009.</li> </ul>
8.	Participating in the meetings conference and workshop related to the Montreal Protocol.	<ul style="list-style-type: none"> <li>◆ Participating in Executive Committee meetings during the years 2010 as a member of the Executive Committee.</li> <li>◆ Participating in Meeting of the Parties (MOP) and Open Ended Working Group (OEWG) and other related meetings in 2010.</li> <li>◆ Participating in Joint Network meeting of South Asia and South East Asia of ODS officers and other related workshops related to illegal ODS trade in 2010.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Participation in Executive Committee meetings, OEWG meetings and MOP in 2010.</li> <li>✓ Participation in Network meetings in 2010.</li> </ul>
9.	Training of new ODS Officers of South Asia Network Member	<ul style="list-style-type: none"> <li>◆ Training and capacity building support for ODS officers in the region.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Successful completion of training and capacity building activities requested by the countries during bilateral consultations / network meetings.</li> </ul>
10.	Awareness and Training	<ul style="list-style-type: none"> <li>◆ Publication of six issues of newsletter</li> <li>◆ International Ozone Day celebrations</li> <li>◆ Publication of "India's Success Story" for the year 2010.</li> <li>◆ Publication of posters, stickers etc.</li> <li>◆ Print and electronic media campaign</li> <li>◆ Stakeholders workshop for HCFC for finalization of HPMP and implementation of HCFC phase-out projects</li> <li>◆ Stakeholders workshop for MDIs for completion of CFC MDI phase-out project</li> <li>◆ Assistance to network countries in the region in training new ODS officers on implementation of Montreal Protocol activities, as found necessary.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Increase in awareness among industry, consumers, students, policy makers and NGO's on the national compliance a strategy to phase out ODS and about the provisions of the ODS Rules.</li> <li>✓ Increase in awareness among national stakeholders on accelerated HCFC phase-out and its associated implementation modalities.</li> <li>✓ Assistance to new ODS officers in the region on implementation of Montreal Protocol Phase-out activities.</li> </ul>
11.	Clearing house, information dissemination	<p>The following will be provided on request to actual users:</p> <ul style="list-style-type: none"> <li>◆ Information material published by UNEP-DTIE and Ozone Secretariat.</li> <li>◆ Policy decisions of the MOP and ExCom</li> <li>◆ Information on ODS Rules and other policy measures of the Govt. of India</li> <li>◆ Information on alternative technology and substitutes to HCFCs</li> </ul>	<ul style="list-style-type: none"> <li>✓ To facilitate users to access the information on ozone layer protection and related non ODS technology</li> </ul>

No.	Objectives	Planned Activities	Results Expected
12.	Co-ordination between the South Asia Network Member countries	<ul style="list-style-type: none"> <li>◆ Necessary information on regulation, licensing system and implementation of remaining ODS phase-out activities.</li> <li>◆ Necessary technical support will be provided to member countries</li> </ul>	<ul style="list-style-type: none"> <li>✓ Enable the other South Asia network member countries for smooth implementation of the Montreal Protocol in their countries.</li> </ul>

## 2<sup>nd</sup> Year

No.	Objectives	Planned Activities	Results Expected
1.	Implementation of CP update	<ul style="list-style-type: none"> <li>◆ Management of implementation of remaining activities associated with CFC, Halon, CTC and Methyl Bromide phase-out.</li> <li>◆ Developing policies for implementing HCFC phase-out.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Project completion reporting for remaining activities associated with CFC, Halon, CTC and Methyl Bromide phase-out, as found applicable.</li> <li>✓ Policy framework finalisation for HCFC phase-out activities as a part of HPMP.</li> </ul>
2.	Monitoring and management of Sectoral Phase-out projects of ODS	<ul style="list-style-type: none"> <li>◆ Management of implementation of activities related to HPMP preparation and phase-out projects for HCFC phase-out.</li> <li>◆ Management of implementation of CFC MDI phase-out project.</li> </ul>	<ul style="list-style-type: none"> <li>✓ HPMP implementation would commence from early 2011.</li> <li>✓ Implementation of phase-out of CFCs in MDI manufacturing thus achieving gradual phase-out of CFCs in MDIs manufacturing.</li> </ul>
3.	Implementation of the ODS Rules, 2000 and its amendments	<ul style="list-style-type: none"> <li>◆ Registration of producers of HCFCs and enterprises using HCFCs and other authorized ODSs</li> <li>◆ License to be issued for export and import of ODS, primarily HCFCs</li> <li>◆ Enforcement of other provisions of the Rules</li> <li>◆ Awareness creation on accelerated HCFC phase-out</li> </ul>	<ul style="list-style-type: none"> <li>✓ Achievement of complete phase-out of controlled uses of all ODSs except HCFCs.</li> <li>✓ Systematic implementation of HCFC phase-out activities in line with HPMP.</li> </ul>
4.	Implementation of fiscal measures and licensing systems	<ul style="list-style-type: none"> <li>◆ Provision of fiscal incentives to all ODS phase-out projects which are under implementation in 2011.</li> <li>◆ Provision of bulk licenses to all producers of HCFCs during 2011.</li> <li>◆ Consideration of all import of HCFC 141b, HCFC 124 and other substitutes for ODS for issue of import license.</li> <li>◆ Implementation of other trade provisions in line with Montreal Protocol requirements.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Control of consumption and supply of ODSs.</li> </ul>
6.	Monitoring and evaluation of activities undertaken under Multi Year Agreements (MYAs).	<ul style="list-style-type: none"> <li>◆ Monitoring implementation of completed investment projects as identified in consultation with relevant IAs and bilateral agencies.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Completion of monitoring activities in a satisfactory manner and inputs on learning from the implementation process.</li> </ul>
7.	Compliance with the reporting requirements under the Protocol.	<ul style="list-style-type: none"> <li>◆ Collection, analysis and processing of data on production import, export and feedstock for administrative approval for submitting to the Ozone Secretariat under Article 7 of the Protocol for 2010.</li> <li>◆ Submission of sectoral consumption data of</li> </ul>	<ul style="list-style-type: none"> <li>✓ Compliance with Article 7 and CP progress data reporting for 2010.</li> <li>✓ Submission of report under accounting framework format for CFC MDI supply and use approved under EUN</li> </ul>

No.	Objectives	Planned Activities	Results Expected
		<p>ODS to the MLF Secretariat along with the progress report of the implementation of the CP for 2010.</p> <ul style="list-style-type: none"> <li>◆ Reporting under prescribed accounting framework format for CFC MDI supply and use approved under Essential Use Nominations (EUN) procedures for the year 2010.</li> </ul>	<p>procedures for the year 2010.</p>
8.	<p>Participating in the meetings conference and workshop related to the Montreal Protocol.</p>	<ul style="list-style-type: none"> <li>◆ Participating in Executive Committee meetings during the years 2011 as a member of the Executive Committee, as found necessary.</li> <li>◆ Participating in Meeting of the Parties (MOP) and Open Ended Working Group (OEWG) and other related meetings in 2011.</li> <li>◆ Participating in Joint Network meeting of South Asia and South East Asia of ODS officers and other related workshops related to illegal ODS trade in 2011.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Participation in Executive Committee meetings, OEWG meeting and MOP in 2011.</li> <li>✓ Participation in Network meetings in 2011.</li> </ul>
9.	<p>Training of new ODS Officers of South Asia Network Member</p>	<ul style="list-style-type: none"> <li>◆ Training and capacity building support for ODS officers in the region.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Successful completion of training and capacity building activities requested by the countries during bilateral consultations / network meetings.</li> </ul>
10.	<p>Awareness and Training</p>	<ul style="list-style-type: none"> <li>◆ Publication of six issues of newsletter</li> <li>◆ International Ozone Day celebrations</li> <li>◆ Publication of "India's Success Story" for the year 2011.</li> <li>◆ Publication of posters, stickers etc.</li> <li>◆ Print and electronic media campaign</li> <li>◆ Stakeholders workshop for HCFC for finalization of HPMP and implementation of HCFC phase-out projects</li> <li>◆ Assistance to network countries in the region in training new ODS officers on implementation of Montreal Protocol activities, as found necessary.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Increase in awareness among industry, consumers, students, policy makers and NGO's on the national compliance a strategy to phase out ODS and about the provisions of the ODS Rules.</li> <li>✓ Increase in awareness among national stakeholders on HCFC phase-out activities and its associated implementation modalities.</li> <li>✓ Assistance to new ODS officers in the region on implementation of Montreal Protocol Phase-out activities.</li> </ul>
11.	<p>Clearing house, information dissemination</p>	<p>The following will be provided on request to actual users:</p> <ul style="list-style-type: none"> <li>◆ Information material published by UNEP-DTIE and Ozone Secretariat.</li> <li>◆ Policy decisions of the MOP and ExCom</li> <li>◆ Information on ODS Rules and other policy measures of the Govt. of India</li> <li>◆ Information on alternative technology and substitutes to HCFCs</li> </ul>	<ul style="list-style-type: none"> <li>✓ To facilitate users to access the information on ozone layer protection and related non ODS technology</li> </ul>
12.	<p>Co-ordination between the South Asia Network Member countries</p>	<ul style="list-style-type: none"> <li>◆ Necessary information on regulation, licensing system and implementation of remaining ODS phase-out activities.</li> <li>◆ Necessary technical support will be provided to member countries</li> </ul>	<ul style="list-style-type: none"> <li>✓ Enable the other member countries for smooth implementation of the Montreal Protocol in their countries.</li> </ul>

**10. Describe modalities how regular access of the Ozone Unit to senior decision-makers will be assured. Such modalities may include steering committees, advisory groups or inter-ministerial bodies.**

The MoEF is the designated nodal Ministry for the implementation of the Protocol and the Country Programme. The Ozone Cell has been set up as the national focal point to deal with all matters relating to the phase out of ODS. The Ozone Cell is headed by a Director. The MoEF has established an Empowered Steering Committee (ESC) chaired by the Secretary (E&F).

This Committee is supported by three Standing Committees - namely (i) Technology and Finance Standing Committee (TFSC) (ii) Standing Committee on Monitoring and Evaluation and (iii) Standing Committee for Tiny, Small and Medium-sized Enterprises. The ESC is responsible to the MoEF for the implementation of the Montreal Protocol. All investment and non-investment projects and policy measures are approved by the ESC.

Project Management Unit (PMU) has been established and registered under the Societies Registration Act, 1860 to assist the implementation of CFC Production Sector Phase-out Plan and CTC National Phase-out Plan. In addition to this, Sector Phase-out Plan Unit (SPPU) has also been set up to oversee the implementation of sector phase-out plans implemented by UNDP. These units will continue implementation of remaining activities under the respective projects and would be suitably restructured to address the needs for HCFC phase-out projects in India and other pending ODS phase-out activities, if any.

**11. Describe how the action plan for the ISP will be integrated in the national authorities planning process.**

The Annual Action Plan for the ISP is a part of the Annual Plan of the MoEF. The Ministry of Environment and Forests implements the Annual Action Plan with the approval of the Planning Commission of India.

**12. Planned Project Cost (in US \$)**

Planned project budget break-down is given below.

	<i>Planned Project Cost</i>	<i>MLF Funding</i>	<i>Counterpart Funding</i>	<i>Other Sources</i>
<i>a) Professional Staff</i>	100,000	30,000	70,000	–
<i>b) Equipment</i>	10,000	10,000	–	–
<i>c) Travel</i>	20,000	20,000	–	–
<i>d) Funds for public awareness</i>	50,000	50,000	–	–
<i>e) Operational costs and contingencies</i>	275,230	263,200	12,000	–
<b><i>Total Amount</i></b>	<b>455,230</b>	<b>373,230</b>	<b>82,000</b>	–

### 13. Personnel required

Category and Numbers	Functional Titles/Expertise	Main Tasks	Time Period
<i>Professional Staff – 1</i>			
1	Scientist	Technical review of ODS phase-out projects and support in organizing and reporting technical review meetings.	2 years
<i>Support Staff – 11</i>			
1	Accounts Officer	Management of project accounts	-do-
1	Secretary to Director (Ozone Cell)	Administration assistance to Director	-do-
3	Project Assistant	Assisting in processing of project files and other activities related to implementation of policy measures, awareness	-do-
4	Administration Assistant cum Computer Operator	Assisting professional staff	-do-
2	Messenger	Assisting to professional staff and Director (Ozone) on liaison activities with MOEF officers and other stakeholders	-do-

Director (Ozone Cell), being an employee of the Ministry of Environment & Forests, Government of India, is paid by the Government. The other Senior Officers of the MoEF who partly devote their time towards the monitoring and management of ODS related activities are also paid by the Government of India. The Government designated committees whose Members are drawn from various line Ministries, academic institutions and other organizations are directly paid by the respective organizations also provide guidance and support to Ozone Cell on ODS phase-out policies and ODS phase-out project monitoring activities.

### 14. Title and schedule of reports to be submitted.

<i>To whom:</i>	<i>Title of Report</i>	<i>Planned Submission (Year/Quarter)</i>
1. Government Departments	1. Progress report on implementation of annual action plan of ISP	Quarterly
	2. Annual activities under the protection of ozone layer for inclusion in the Annual report of the Ministry	Yearly
	3. Progress report on implementation of MLF-approved investment and non-investment projects	Yearly
	4. Report on important activities for the Cabinet Secretary	Monthly
	5. Reports pertaining to the parliament questions, financial matters etc.	As and when required
	6. Submission of Indian delegation report on international meetings	On completion of the meeting



<i>To whom:</i>	<i>Title of Report</i>	<i>Planned Submission (Year/Quarter)</i>
2. Reports to MLF Secretariat	1. CP progress report 2. Sector-wise consumption of ODS report 3. Terminal report of ISP 4. Reports/comments on policy papers	Yearly Yearly Bi-annually As required
3. Reports to Ozone Secretariat	1. Article 7 data 2. Report on production, export and import of process agent (decision X/14) 3. Report under Article 9 4. Report on specific meeting of the MOP	Annually Annually  Annually As required
4. Implementing Agency	1. Annual Progress Report for TPR meeting 2. Annual Audit Report 3. Terminal Report of ISP 4. Administrator's Annual Report	Annually Annually Annually Annually
5. Other Implementing Agency(ies)	1. Report on international Ozone Day to UNEP 2. Report on the project "development of policy and regulatory training strategy in India" to UNEP	Annually One time
6. Bilateral Donor(s)	1. Reports on the project for service sector strategy to Government of Switzerland and Government of Germany 2. Report on CTC consumption in solvent sector	One time  One Time
7. Others	1. Reports on Ozone and UV monitoring and research on impact of UV on eco-system to WMO	Tri-annually (2010)

**15. Action Plan prepared by:**

<i>Name of Officer responsible for preparing the Action Plan :</i>	Dr. A. Duraisamy
<i>Title:</i>	Director (O)
<i>Organization/Agency/Ministry</i>	Ozone Cell, MoEF
<i>Date:</i>	8 February 2010

**16. Government endorsement:**

<i>Action Plan authorized by:</i>	Dr. B.P.Nilaratna
<i>Title:</i>	Joint Secretary (MoEF)
<i>Supervising Organization/Agency/ Ministry</i>	MoEF, Government of India
<i>Date:</i>	8 February 2010

## 17. Submission of Action Plan:

<i>Name of the Implementing Agency:</i>	United Nations Development Programme
<i>Name of the Project Officer:</i>	Mr. Nandan Chirmulay
<i>Title:</i>	Sr. Technical Advisor and Regional Coordinator – Asia & Pacific
<i>Date:</i>	9 February 2010
<i>Comments of Implementing Agency:</i>	
<p>The Ozone Cell has successfully managed and monitored ODS phase-out activities in India, to ensure its compliance with the Montreal Protocol obligations particularly 2010 phase-out targets. With the expeditious completion of CFC MDI phase-out project, close monitoring of ODS supply and demand controls and systematic preparation of HPMP, India is expected to continue to successfully comply with its Montreal Protocol obligations in future. Sustaining ODS phase-out efforts, particularly for HCFC phase-out, necessitate continuous and adequate financial support from Multilateral Fund to help the industry implement environmentally friendly technologies.</p>	

## Terminal Report for Institutional Strengthening Projects (ISP) for Phase VII

(Sections 1-20 to be completed by the country concerned prior to sending it to the implementing agency for comments in Section 21)

- 1. Country:** India
- 2. National Implementing Agency/Ozone Unit:** Ozone Cell, Ministry of Environment & Forests (MoEF), Government of India
- 3. Implementing Agency:** UNDP
- 4. List of previous project phases:**

<b>Phase</b>	<b>Duration</b>	<b>MLF Funding (Approved)</b>	<b>MLF Funding (Disbursed)</b>
ISP Phase I	3 years (1994-1997)	US\$ 430,000	US\$ 428,929
ISP Phase II	2 years (1997-1999)	US\$ 287,100	US\$ 287,100
ISP Phase III	2 years (1999-2001)	US\$ 287,100	US\$ 287,100
ISP Phase IV	2 years (2001-2003)	US\$ 287,100	US\$ 287,100
ISP Phase V	2 years (2004-2006)	US\$ 373,230	US\$ 373,230
ISP Phase VI	2 years (2006-2008)	US\$ 373,230	US\$ 373,230
ISP Phase VII	2 years (2008-2010)	US\$ 373,230	US\$ 321,405*

\* Expenditures up to 31<sup>st</sup> December 2009.

- 5. Indicate the main project objectives and the detailed objectives as defined in the action plan for the phase report upon:**

### MAIN OBJECTIVES :

The main objective of the project for the 2 year period was to allow the Ozone Cell in the MoEF to (a) continue to plan, organize, develop and co-ordinate relevant activities for the implementation of India's Country Program (CP), including its update, for the phase-out of Ozone depleting substances (ODS) under the Montreal protocol, and (b) development of a strategy for phasing out HCFCs in line with accelerated phase-out schedule adopted by MOP Decision XIX/6.

### DETAILED OBJECTIVES:

1. Implementation and enforcement of the Ozone Depleting Substances (Regulation and Control) Rules, 2000, and Amendments.
2. Implementation of the licensing system and fiscal incentives for controlling and monitoring ODS phase-out and facilitating implementation of ODS phase-out projects.
3. Implementation of provisions for ensuring compliance with the provisions of the Copenhagen, Montreal and Beijing Amendments to the Montreal Protocol.

4. Reporting of Article 7 data to the Ozone Secretariat, progress report on implementation of Country Programme (CP) to Multilateral Fund (MLF) and other reports to implementing agencies and to National Government.
5. Conducting awareness programs (Seminar, workshop, print and Electronic media and publication on Ozone layer protection and alternative technologies) and information dissemination.
6. South-south cooperation support on project implementation matters for ODS phase-out.
7. Attending international meetings relating to Montreal Protocol such as Executive Committee Meetings, Implementation Committee Meetings, Open Ended Working Group Meeting and Meeting of Parties.
8. Monitoring and management of following-ongoing projects:
  - ▶ Implementation of the CFC production phase out project, including accelerated CFC production phase-out plan, and technical assistance component under this project.
  - ▶ Implementation of National CTC production and consumption phase out plan activities for the period 2008 and 2009.
  - ▶ Implementation of remaining components of RAC Service Sector Strategy and Customs and Policy Training Strategy under National CFC Consumption Phase-out Project (NCCoPP).
  - ▶ Implementation of remaining activities relating to Terminal Phase out Project in Aerosol, Foam, Commercial Refrigeration and Halon Sectors.
  - ▶ Implementation of CFC MDI phase-out project, including preparation of EUN applications for CY 2010 and 2011 and relevant coordination under EUN process.

6. Describe the results achieved by category and compare them with the results foreseen in the Action Plan :

1<sup>st</sup> Year :

No.	Objectives	Planned Activities	Results Expected	Results Achieved
1.	Implementation of CP update	<ul style="list-style-type: none"> <li>◆ Additional Information pertaining to new industries.</li> <li>◆ Stakeholders' workshop.</li> </ul>	Draft CP update would be prepared and circulated for comments from national experts.	<ul style="list-style-type: none"> <li>✓ CP update is periodically reviewed to identify additional interventions.</li> <li>✓ The National Strategy for Transition to Non-CFC Metered Dose Inhalers (MDIs) and Plan for Phase-out of CFCs in the Manufacturing of Pharmaceutical MDIs in India was approved in the 56th Executive Committee meeting (Nov 2008). This project is under implementation with UNDP as Lead Agency and UNEP and Government of Italy as Associate Agencies.</li> <li>✓ Consultations were held with national stakeholders on HCFC accelerated phase-out and activities that are proposed to be undertaken for preparation of phase-out strategy in June 2008.</li> <li>✓ Preparation of HCFC Phase-out Management Plan (HPMP) in India was approved by the 56<sup>th</sup> meeting of the Ex-Com for Stage-I targets with a funding of US \$573,750 and UNDP as lead implementing agency along with other associated implementing agencies UNEP, UNIDO, the World Bank and Govt. of Germany (bilateral agency).</li> <li>✓ A comprehensive Roadmap was developed describing the long term vision and action plan including the policy instruments for phasing out of production and consumption of HCFCs in India.</li> </ul>
2.	Monitoring and management of projects relating to Sectoral Phase-out of ODS	<ul style="list-style-type: none"> <li>◆ Activities envisaged in the Annual Implementation Plan for 2008 to meet the reduction target as given in the agreement made between the Government of</li> </ul>	To achieve the reduction target in production and consumption of CFC and CTC as specified in the respective agreements.	<ul style="list-style-type: none"> <li>✓ <b>National CFC Production phase-out plan:</b> The Phase-out targets for the years 2007 achieved. The 54<sup>th</sup> Ex-Com held in April 2008 decided to accelerate the phase-out of CFCs in India with effect from 1<sup>st</sup> August, 2008, 17 months prior to the Montreal Protocol schedule. India produced not more than 690 MT and</li> </ul>

No.	Objectives	Planned Activities	Results Expected	Results Achieved
		<p>India and the Executive Committee (ExCom) in respect of National CFC production and consumption Plan, CFC and CTC production and consumption plan.</p>		<p>reprocessed 135 MT of CFCs primarily for the manufacture of MDIs. India ceased the consumption of CFCs except for essential use in manufacturing of MDIs.</p> <p>✓ <b>National CTC phase-out plan:</b> Targets for the years 2007 and 2008 achieved for production and consumption of CTC.</p>
3.	Implementation of the ODS Rules, 2000 and its amendments	<ul style="list-style-type: none"> <li>◆ The registration of producers of ODS and enterprises using ODS</li> <li>◆ License to be issued for export and import of ODS, Products made with or containing ODS</li> <li>◆ Enforcement of other provisions of the Rules</li> <li>◆ Awareness creation about ODS phase out among target groups</li> </ul>	Facilitate compliance with the provisions of the Protocol and its amendments.	<p>✓ <b>Registration</b> of ODS producers and consumers ongoing.</p> <p>✓ <b>Licensing</b> system implementation for import and export of ODSs is ongoing. Consultations and periodic workshops on implementation of ODS licensing ongoing.</p>
4.	Implementation of fiscal measures and licensing systems	<ul style="list-style-type: none"> <li>◆ All approved Projects which are under implementation in 2008 &amp; 2009 will be provided fiscal incentive.</li> <li>◆ All producers of CFC's and HCFC will be provided bulk license to export CFC's during 2008 &amp; 2009.</li> <li>◆ All import of HCFC 141b, HCFC 124 and other substitutes for ODS will be considered for issue of import license.</li> </ul>	Control of consumption and supply of ODS.	<p>✓ <b>Licenses for export</b> of CFC-11 and 12 were provided for 2008, HCFC export licenses were issued for the years 2008.</p> <p>✓ <b>Import license</b> for HCFC-141b, HCFC-142b, HCFC-124 and other substitutes of ODS which are not produced in India were also issued for the years 2008.</p> <p>✓ <b>Customs and excise duty exemption</b> facilities were provided to all MLF funded projects which were implemented during 2008.</p>
5.	Monitoring and management of implementation of approved projects	<ul style="list-style-type: none"> <li>◆ Sectoral Phase-out Plan in foam and commercial refrigeration will be completed.</li> <li>◆ Workshops under National Customs and Policy officers</li> </ul>	<p>The completion of the projects will meet the target specified in the agreement.</p> <p>Monitoring and control of illegal</p>	<p>✓ Implementation of sectoral projects for CFC phase-out (including Refrigeration manufacturing, foam and servicing) completed.</p> <p>✓ On-line training program for customs officers completed and being finalized for launch during the first</p>

No.	Objectives	Planned Activities	Results Expected	Results Achieved
		<p>training will be organized.</p> <ul style="list-style-type: none"> <li>◆ Workshop for ODS dealers will be organized.</li> </ul>	trade in ODS	<p>half of 2009. Implementation of National Customs and Policy officers training ongoing.</p> <ul style="list-style-type: none"> <li>✓ ODS trade monitoring undertaken in close coordination with Directorate of Revenue Intelligence and border dialogue initiatives with Nepal, Bangladesh and Bhutan.</li> </ul>
6.	Monitoring and evaluation of activities undertaken under Multi Year Agreements (MYAs).	<ul style="list-style-type: none"> <li>◆ About 250 enterprises will be taken for evaluation purpose.</li> </ul>	Monitoring of completed enterprises will ensure the phase out of ODS in the enterprise and implementation of the national phase-out plan.	<ul style="list-style-type: none"> <li>✓ This activity has been undertaken in 2009.</li> </ul>
7.	Compliance with the reporting requirements under the Protocol.	<ul style="list-style-type: none"> <li>◆ Data on production import, export and feedstock will be collected, analyzed and processed for administrative approval for submitting to the Ozone Secretariat under Article 7 of the Protocol for 2007.</li> <li>◆ Sectoral consumption data of ODS will be submitted to the MLF Secretariat along with the progress report of the implementation of the CP for 2007.</li> </ul>	India will comply with the provisions under Article 7 of the Protocol.	<ul style="list-style-type: none"> <li>✓ <b>Article 7 data report:</b> Data reports required under Article 7 of Montreal Protocol submitted on time to Ozone Secretariat for CY 2007</li> <li>✓ <b>CP progress report:</b> CP progress reports submitted to Multilateral Fund Secretariat for CY 2007.</li> </ul>
8.	Participating in the meetings, conferences, and workshops related to the Montreal Protocol.	<ul style="list-style-type: none"> <li>◆ India as a member or as a co-opted member of the ExCom would attend the ExCom meetings in 2008 and 2009.</li> <li>◆ India will participate in Meeting of the Parties (MOP) and Open Ended Working Group (OEWG) and other related meetings in</li> </ul>	<p>India will participate in the Ex-Com Meetings in 2008 and 2009 either as a member or co-opted member.</p> <p>India will also participate in OEWG meetings and MOP in 2008 and 2009.</p> <p>India will also participate in the</p>	<ul style="list-style-type: none"> <li>✓ India participated in the 54th - 56th Executive Committee meetings held during 2008.</li> <li>✓ India participated in the 28th OEWG, 20th MOP and Implementation Committee meetings in 2008.</li> <li>✓ India participated in the network meetings of Ozone Officers held during 2008 in Langkawi, Malaysia, and Tokyo, Japan.</li> </ul>

No.	Objectives	Planned Activities	Results Expected	Results Achieved
		2008 and 2009. ♦ India is a member of Joint Network meeting of South Asia and South East Asia of ODS officers and other related workshop related to illegal trade.	network meetings during this period.	
9.	Training of new ODS Officers of South Asia Network Member	♦ As per the recommendation of the Joint South Asia and South East Asia Network Meeting of ODS officers held in November 2007 in Bali, Indonesia, the new ozone officers of Maldives, Bhutan and Iran will be trained.	Training on Management of ISP, data reporting, development and enforcement of ODS Regulations, licensing system, monitoring of illegal trade and other activities relating to the Montreal Protocol and its amendments will be organized.	✓ Training program aimed at implementation of activities relating to RAC service sector in Bhutan was held in December 2007.
10.	Awareness and Training	♦ Publication of six issues of newsletter ♦ International Ozone Day celebrations ♦ Publication of 9th edition of "India's Success Story" ♦ Publication of posters, stickers etc ♦ Print and electronic media campaign ♦ 4 workshops in foam and CR sectors ♦ 5 workshops in CTC sector ♦ 10 training workshops for customs and other enforcement officers ♦ Stakeholders workshop for HCFC ♦ Stakeholders workshop for MDI ♦ Stakeholders' workshop for QPS applications of methyl bromide.	Industry, consumers, students, policy makers and NGO's will become aware of the national compliance a strategy to phase out ODS and about the provisions of the ODS Rules.  The training of customs and other enforcement officers will help monitoring the ODS trade and combat illegal trade.	✓ Six issues of news letter were widely distributed. ✓ 10th Edition of India's Success Story released during the International Ozone Day held in September 2008. ✓ Posters, stickers and other awareness materials released during calendar year 2008. ✓ Consultative meeting on CFC MDI phase-out was held in August 2008 on CFC MDI phase-out project and related implementation framework. Stakeholder workshop on HCFC phase-out held in June 2008. ✓ National Workshop on "National CTC Phase-out Plan - Emerging Scenarios in Power Sector Industries" held on 5th December 2008 in New Delhi ✓ Workshop on "ODS Phase-out in Military Applications" held on 13 <sup>th</sup> and 14 <sup>th</sup> October, 2008 in New Delhi.



No.	Objectives	Planned Activities	Results Expected	Results Achieved
11.	Clearing house, information dissemination	The following will be provided on request to actual users: <ul style="list-style-type: none"> <li>◆ Information material published by UNEP-DTIE and Ozone Secretariat.</li> <li>◆ Policy decisions of the MOP and ExCom</li> <li>◆ Information on ODS Rules and other policy measures of the Govt. of India</li> <li>◆ Information on alternative technology and substitutes</li> </ul>	To facilitate users to access the information on ozone layer protection and related non ODS technology	✓ The information as required by users was provided during 2008.
12.	Co-ordination between the South Asia Network Member countries	<ul style="list-style-type: none"> <li>◆ Information on regulation, licensing system and implementation of ODS phase out program will be provided to member countries</li> <li>◆ Necessary technical support will be provided to member countries</li> </ul>	Enable the other members for smooth implementation of the Montreal Protocol in their countries.	<ul style="list-style-type: none"> <li>✓ Information on regulations, licensing system and implementation of ODS phase out program was provided to member countries.</li> <li>✓ Support on ODS trade monitoring is provided to the National Ozone Officers through periodic information sharing.</li> </ul>

## 2<sup>nd</sup> Year

No.	Objectives	Planned Activities	Results Expected	Results Achieved
1.	Implementation of CP update	<ul style="list-style-type: none"> <li>◆ Additional Information pertaining to new industries.</li> <li>◆ Stakeholders' workshop.</li> </ul>	Draft CP update would be prepared and circulated for comments from national experts.	<ul style="list-style-type: none"> <li>✓ CP update is periodically reviewed to identify additional interventions.</li> <li>✓ Organized a Consultative Meeting with MDI Manufacturers for Implementation of National Strategy for Transition to Non-CFC MDIs and Plan for Phase-out of CFCs in the Manufacturing of Pharmaceutical MDIs in India on 24th April, 2009 in New Delhi.</li> <li>✓ National Awareness Workshop on "CFC MDI Phase-out Transition Strategy Implementation and Adoption of CFC free Alternatives in India" held on 5th October, 2009 in New Delhi.</li> </ul>

No.	Objectives	Planned Activities	Results Expected	Results Achieved
				<ul style="list-style-type: none"> <li>✓ Collection and collation of data of CFCs required for manufacturing of MDIs for the year 2010 based on ingredients and markets for preparation of Essential Use Nominations (EUN). Submission of EUN for the year 2010 on 31<sup>st</sup> January 2009 to the Ozone Secretariat.</li> <li>✓ The 21<sup>st</sup> MOP held in November 2009 approved 343.6 MT of CFCs for manufacturing of MDIs through EUN procedures.</li> <li>✓ Besides completion of other remaining ODS phase-out activities, HCFC Phase-out Management plan activities are being implemented expeditiously, A national stakeholder workshop was held in September 2009 followed by launch of Roadmap for HCFC Phase-out by the Hon'ble Minister of Environment &amp; Forests in October 2009. Periodic consultations are being held with National Stakeholders on HCFC phase-out project matters.</li> </ul>
2.	Monitoring and management of projects relating to Sectoral Phase-out of ODS	<ul style="list-style-type: none"> <li>◆ Activities envisaged in the Annual Implementation Plan for 2009 to meet the reduction target as given in the agreement made between the Government of India and the ExCom in respect of National CFC production and consumption Plan, and CTC production and consumption plan.</li> </ul>	To achieve the reduction target in production and consumption of CTC and CFC as specified in the respective agreement.	<ul style="list-style-type: none"> <li>✓ <b>National CFC Production phase-out plan:</b> Implementation of accelerated CFC production phase-out plan closely monitored through a consultative mechanism with the industry during the year 2009.</li> <li>✓ <b>National CTC phase-out plan:</b> Targets for the years 2008 achieved for production and consumption of CTC.</li> </ul>
3.	Implementation of the ODS Rules, 2000 and its amendments	<ul style="list-style-type: none"> <li>◆ The registration of producers of ODS and enterprises using ODS</li> <li>◆ License to be issued for export and import of ODS, Products made with or containing ODS</li> </ul>	Facilitate compliance with the provisions of the Protocol and its amendments.	<ul style="list-style-type: none"> <li>✓ <b>Registration</b> of ODS producers and consumers ongoing.</li> <li>✓ <b>Licensing system</b> implementation for import and export of ODSs is ongoing. Consultations and periodic workshops on implementation of ODS licensing ongoing.</li> </ul>

No.	Objectives	Planned Activities	Results Expected	Results Achieved
		<ul style="list-style-type: none"> <li>◆ Enforcement of other provisions of the Rules</li> <li>◆ Awareness creation about regulations among target groups</li> </ul>		
4.	Implementation of fiscal measures and licensing systems	<ul style="list-style-type: none"> <li>◆ All approved Projects which are under implementation in 2009 &amp; 2010 will be provided fiscal incentive.</li> <li>◆ All producers of CFC's and HCFC will be provided bulk license to export CFC's during 2009 &amp; 2010.</li> <li>◆ All import of HCFC 141b, HCFC 124 and other substitutes for ODS will be considered for issue of import license.</li> </ul>	Control of consumption and supply of ODS.	<ul style="list-style-type: none"> <li>✓ <b>Licenses for export</b> of CFC-11 and 12 were provided for 2009, HCFC export licenses were issued for the year 2009.</li> <li>✓ <b>Import license</b> for HCFC-141b, HCFC-142b, HCFC-124 and other substitutes of ODS which are not produced in India were also issued for the year 2009.</li> <li>✓ <b>Customs and excise duty exemption</b> facilities were provided to all MLF funded projects which were implemented during 2009.</li> <li>✓ <b>Coordination of activities</b> undertaken with neighbouring countries during network meetings and through border dialogues, on controlling and monitoring ODS trade.</li> </ul>
5.	Monitoring and management of implementation of approved projects	<ul style="list-style-type: none"> <li>◆ Sectoral Phase-out Plan in foam and commercial refrigeration will be completed.</li> <li>◆ Workshops under National Customs and Policy officers training will be organized.</li> <li>◆ Workshop for ODS dealers will be organized.</li> </ul>	<p>The completion of the projects will meet the target specified in the agreement.</p> <p>Monitoring and control of illegal trade in ODS</p>	<ul style="list-style-type: none"> <li>✓ Launch of on-line training program for customs officers completed in May 2009. Implementation of National Customs and Policy officers training ongoing.</li> <li>✓ ODS trade monitoring undertaken in close coordination with Directorate of Revenue Intelligence and border dialogue initiatives with Nepal, Bangladesh and Bhutan.</li> </ul>
6.	Monitoring and evaluation of activities undertaken under MYAs.	<ul style="list-style-type: none"> <li>◆ About 250 enterprises will be taken for evaluation purpose.</li> </ul>	Monitoring of completed enterprises will ensure the phase out of ODS in the enterprise and implementation of the national phase-out plan.	<ul style="list-style-type: none"> <li>✓ The Monitoring and Evaluation activity was planned to be undertaken in 2009.</li> </ul>
7.	Compliance with the reporting requirements	<ul style="list-style-type: none"> <li>◆ Data on production import, export and feedstock will be collected, analyzed</li> </ul>	India will comply with the provisions under Article 7 of the Protocol.	<ul style="list-style-type: none"> <li>✓ <b>Article 7 data report:</b> Data reports required under Article 7 of Montreal Protocol submitted on time to Ozone Secretariat for CY 2008</li> </ul>

No.	Objectives	Planned Activities	Results Expected	Results Achieved
	under the Protocol.	<p>and processed for administrative approval for submitting to the Ozone Secretariat under Article 7 of the Protocol for 2008.</p> <ul style="list-style-type: none"> <li>◆ Sectoral consumption data of ODS will be submitted to the MLF Secretariat through the CP Progress report</li> </ul>		<ul style="list-style-type: none"> <li>◆ <b>CP progress reports:</b> CP progress reports submitted to Multilateral Fund Secretariat for CY 2008.</li> </ul>
8.	Participating in the meetings, conferences and workshops related to the Montreal Protocol.	<ul style="list-style-type: none"> <li>◆ India as a member or as a co-opted member of the ExCom would attend the ExCom meeting in 2009 and 2010.</li> <li>◆ MOP, OEWG and other related meetings will be participated in 2009 and 2010.</li> <li>◆ India is a Member of Joint Network meeting of South Asia and South East Asia of ODS officers and other related workshop related to illegal trade.</li> </ul>	<p>India will participate in the ExCom Meetings in 2009 and 2010 either as a member or co-opted member.</p> <p>India will also participate in OEWG and MOP in 2009 and 2010.</p> <p>India will also participate in the Network meetings during this period.</p>	<ul style="list-style-type: none"> <li>◆ India participated in the 57th – 59th Executive Committee meetings held during 2009. India is a member of the Executive Committee for the year 2010.</li> <li>◆ India participated in the 29th OEWG and 21st MOP.</li> <li>◆ India participated in the network meetings of Ozone Officers held during 2009 in Manama, Bahrain (Joint meeting with West Asia Network) and Chiangmai, Thailand.</li> </ul>
9.	Training of new ODS Officers of South Asia Network Member	<ul style="list-style-type: none"> <li>◆ As per the recommendation of the Joint South Asia and South East Asia Network Meeting of ODS officers held in November 2007 in Bali, Indonesia, the new ozone officers of Maldives, Bhutan and Iran will be trained.</li> </ul>	Training on Management of ISP, data reporting, development and enforcement of ODS Regulations, licensing system, monitoring of illegal trade and other activities relating to the Montreal Protocol and its amendments will be organized.	<ul style="list-style-type: none"> <li>◆ South-south cooperation mission with Iran NOU was held in March 2009. The focus of this mission was on implementation of CFC MDI phase-out project, implementation of ODS licensing system and HPMP preparation activities.</li> </ul>
10	Awareness and Training	<ul style="list-style-type: none"> <li>◆ Publication of six issues of newsletter</li> <li>◆ International Ozone Day celebrations</li> <li>◆ Publication of 10th edition of "India's Success Story</li> </ul>	Industry, consumers, students, policy makers and NGO's will become aware of the national compliance and	<ul style="list-style-type: none"> <li>◆ Bumper issue of Ecocool news letter launched in October 2009.</li> <li>◆ 11<sup>th</sup> Edition of India's Success Story released during the International Ozone Day held in September 2009</li> </ul>

No.	Objectives	Planned Activities	Results Expected	Results Achieved
		<ul style="list-style-type: none"> <li>◆ Publication of posters, stickers etc.</li> <li>◆ Print and electronic media campaign</li> <li>◆ 4 workshops in foam and CR sectors</li> <li>◆ 5 workshops in CTC sector</li> <li>◆ 10 training workshops for customs and other enforcement officers</li> <li>◆ Stakeholders workshop for HCFC</li> <li>◆ Stakeholders workshop for MDI stakeholders' workshop for pre-shipment and quarantine applications of methyl bromide.</li> </ul>	<p>strategy to phase out ODS and about the provisions of the ODS Rules.</p> <p>The training of customs and other enforcement officers will help monitoring the ODS trade and combat illegal trade.</p>	<ul style="list-style-type: none"> <li>◆ Posters, stickers and other awareness materials released during calendar year 2009.</li> <li>◆ Roadmap for phase-out of HCFCs in India was launched in October 2009 after extensive stakeholder consultations during meetings held in September 2009.</li> <li>◆ National Awareness Workshop on "CFC MDI Phase-out Transition Strategy Implementation and Adoption of CFC free Alternatives in India" held on 5<sup>th</sup> October, 2009 in New Delhi.</li> <li>◆ Workshop on ODS Phase-out in Defence Applications held on 29<sup>th</sup> April, 2009 at New Delhi</li> </ul>
11	Clearing house, information dissemination	<p>The following will be provided on request to actual users:</p> <ul style="list-style-type: none"> <li>◆ Information materials published by UNEP-DTIE and Ozone Secretariat.</li> <li>◆ Decisions of the MOP and ExCom</li> <li>◆ Information on ODS Rules and other policy measures of the Government of India</li> <li>◆ Information on alternative Technology and Substitutes</li> </ul>	To facilitate users to access the information on ozone layer protection and related non ODS technology	<ul style="list-style-type: none"> <li>◆ The information as required by users was provided during 2009.</li> </ul>
12	Co-ordination between the South Asia Network Member countries	<ul style="list-style-type: none"> <li>◆ Information on regulation, licensing system and implementation of ODS phase out program will be provided to member countries</li> <li>◆ Necessary technical support will be provided to member countries</li> </ul>	Enable the other members for smooth implementation of the Montreal Protocol in their countries.	<ul style="list-style-type: none"> <li>◆ Information on regulation, licensing system and implementation of ODS phase out program was provided to member countries.</li> </ul>

**7. Breakdown of approved costs, actual expenditures and Government funding as pertinent:**

	<b>Approved MLF grant (US \$)</b>	<b>MLF grant spent * (US \$)</b>	<b>Government Funding (US \$)</b>	<b>Other Sources (US \$)</b>
a) Personnel and related costs	92,230	104,059	60,000	-
b) Equipment	10,000	8,409	-	-
c) Travel costs	20,000	45,756	8,000	-
d) Public awareness	50,000	41,595		
e) Operational costs and contingencies	201,000	121,586	-	-
<b>Total Amount</b>	<b>373,230</b>	<b>321,405</b>	<b>68,000</b>	<b>-</b>

\* Note: Expenditure as on 31<sup>st</sup> December 2009

**8. Personnel Employed:**

<b>Category and Numbers</b>	<b>Functional Titles/Expertise</b>	<b>Main Tasks</b>	<b>Time Period</b>
<i>Professional Staff – 1</i>			
1	Scientist	Technical review of ODS phase-out projects and support in organizing and reporting technical review meetings.	2 years
<i>Support Staff – 11</i>			
1	Accounts Officer	Management of project accounts	-do-
1	Secretary – Director (Ozone Cell)	Administration assistance to Director	-do-
3	Project Assistant	Assisting in processing of project files and other activities related to implementation of policy measures, awareness	-do-
4	Administration Assistant cum Computer Operator	Assisting professional staff	-do-
2	Messenger	Assisting to professional staff and Director (Ozone) on liaison activities with MOEF officers and other stakeholders	-do-

Director (Ozone Cell), being an employee of the Ministry of Environment & Forests, Government of India, is paid by the Government. The other Senior Officers of the MoEF who partly devote their time towards the monitoring and management of ODS related activities are also paid by the Government of India.

The Government designated committees whose Members are drawn from various line Ministries, academic institutions and other organizations are directly paid by the respective organizations also provide guidance and support to Ozone Cell on ODS phase-out policies and ODS phase-out project monitoring activities.

**9. Were resources (staff, budget, equipment) used for activities in addition to the approved action plan? If so, please specify:**

No resources have been used for activities other than the activities listed in the approved action plan.

**10. Describe the role and position of the NOU within the national administration, the way its work is supervised and its access to senior decision-makers; this may include the cooperation with steering committees, advisory groups or inter-ministerial bodies:**

The Ozone Cell in the Ministry of Environment & Forests (MoEF) is the national focal point for coordinating all activities of the Montreal Protocol in India including coordination with the Fund Secretariat, the Implementing Agencies, enterprises, industry associations, other Ministries and institutions, UNEP Ozone Secretariat, other countries, NGOs Press etc. It receives projects from the Implementing Agencies, processes them and with the approval of the competent authority endorses the proposals for approval by the ExCom. It also formulates policy and regulatory measures and implements them.

The Ministry has set up an Empowered Steering Committee (ESC) chaired by the Secretary (E&F) which is the apex body to take decisions on all policy measures and approves investment and non investment ODS phase out projects for submission to the ExCom. The ESC is supported by three Standing Committees – namely, (i) Technology and Finance Standing Committee (TFSC), and (ii) Standing Committee on Monitoring and Evaluation (iii) Standing Committee for Tiny, Small and Medium-sized enterprises. The Ozone Cell is headed by a Director. The ESC is responsible for policies related to the Montreal Protocol. All investment and non investment projects and policy measures are approved by the ESC. The activities of the Ozone Cell are undertaken under the supervision of the Director (Ozone). Prior to undertaking any work or activity, the proposals are prepared in the Ozone Cell and submitted for approval to the Joint Secretary, Additional Secretary and Secretary (E&F). The activities relating to policy and regulatory measures are sent to Minister (E&F) for approval. However, Secretary (E&F) as the Chairman of the ESC has been directly guiding and supervising the activities of the Ozone Cell relating to ODS phase out program under the Montreal Protocol.

**11. Describe how the action plan for the IS project has been integrated in the national authorities' planning process:**

The Annual Action Plan for the ISP has become a part of the Annual Plan of the MoEF. The Ministry implements the Annual Action Plan with the approval of the Planning Commission of India.

**12. Title and date of reports submitted:**

<i>To Whom:</i>	<i>Title of Report</i>	<i>Submission (Year/Quarter)</i>	
		<i>Planned</i>	<i>Actual</i>
1. Government Departments	<ul style="list-style-type: none"> <li>Progress report on implementation of annual action plan of ISP</li> <li>Annual activities under the protection of ozone layer for inclusion in the Annual report of the Ministry</li> <li>Progress report on implementation of investment and non investment projects approved by the MLF.</li> <li>Report on important activities to the Cabinet Secretary</li> <li>Reports pertaining to the questions, financial matters etc.</li> <li>Submission of Indian delegation report</li> </ul>	Quarterly Yearly Yearly Monthly As required On completion of the meeting	N/A
2. Reports to MLF Secretariat	<ul style="list-style-type: none"> <li>CP progress report</li> <li>Sector wise consumption of ODS report</li> <li>Terminal report of ISP</li> <li>Reports/comments on policy papers</li> </ul>	Yearly Yearly Bi-annually As required	N/A
3. Reports to Ozone Secretariat	<ul style="list-style-type: none"> <li>Article 7 data</li> <li>Report on production, export and import of process agent (decision 10/14)</li> <li>Report under Article 9</li> <li>Report on specific meeting of the MOP</li> </ul>	Annually Annually Annually As required	N/A
4. Implementing Agency (UNDP)	<ul style="list-style-type: none"> <li>Annual progress report for Tri Partite Review (TPR) meeting</li> <li>Annual Audit Report</li> <li>Terminal Report of ISP</li> <li>Administrator's Annual Report</li> </ul>	Annually Annually Annually Annually	N/A
5. Other Agency(ies)	Report on international ozone Day to UNEP	Annually	NA

**13. Were adequate advice and/or technical support received from:**

<i>Agency</i>	<i>Yes</i>	<i>No</i>	<i>Please specify</i>
a) Implementing Agency	√		▪ UNDP provided advice regarding procurement of hardware suitable for the project work.
b) Other implementing agency(ies)	√		▪ UNEP under its compliance assistance program provides technical support for meeting the compliance targets, for developing policy measures (i.e., information exchange through i-PIC) mainly relating to international ODS trade



<b>Agency</b>	<b>Yes</b>	<b>No</b>	<b>Please specify</b>
			between India and other countries in the region and for creation of awareness specifically on refrigeration servicing sector
c) Bilateral Donor(s)	√		<ul style="list-style-type: none"> <li>▪ Government of Switzerland and Government of Germany together with UNDP and UNEP are assisting in implementing RAC Service Sector Strategy and customs training program. Assistance in implementation of National CTC phase-out plan is provided by Government of Germany.</li> </ul>
d) Government Departments	√		<ul style="list-style-type: none"> <li>▪ Ministry of Commerce and Director General of Foreign Trade (DGFT) had provided full support for implementation of licensing system.</li> <li>▪ Customs authority had extended support to check illegal trade in ODS and provide training to enforcement officers in this regard. National Academy of Customs, Excise and Narcotics (NACEN) is providing training support.</li> <li>▪ Development Commissioner, Small Scale Industries (DCSSI), has been providing full support for identification of small industries for inclusion in the sector phase-out plan.</li> <li>▪ Small Industries Service Institute (SISI), as designated authority, was registering the small enterprises under Ozone Depleting Substances (Regulation and Control) Rules, 2000.</li> </ul>
e) National Steering Committee	√		<ul style="list-style-type: none"> <li>▪ The ESC is the Apex Body to advise and take decisions on all policy issues and implementation of the Montreal Protocol in India. From time to time it provides all supports to the National Ozone Unit for smooth implementation of the ODS phase out program.</li> </ul>
f) Others (Please specify)	√		<ul style="list-style-type: none"> <li>▪ Industry associations and NGOs had provided adequate support in implementing the CFC production and CTC national phase out plan. The foam and refrigeration industry associations are being actively involved in HCFC phase-out management plan preparation.</li> </ul>

**14. Support received from Regional Network (Network Coordination/ Manager and Network members) and input provided to the Network:**

<b>Support received from Regional Network</b>	<b>Input provided to network</b>
<p>The South Asia Regional Network of Ozone Officers provided the following support.</p> <ul style="list-style-type: none"> <li>▪ Data reporting formats and guidance on reporting process under Article 7 and for the progress report of CP, including web-based CP data reporting</li> <li>▪ Information dissemination on ODS phase-out experiences in the region</li> <li>▪ Coordination between member countries</li> </ul>	<ul style="list-style-type: none"> <li>▪ Inputs, on a need basis, on implementation of specific aspects relating to ODS Rules in India</li> <li>▪ Experience on controlling illegal trade, mainly through iPIC and border dialogue consultations</li> <li>▪ Inputs for development of Metered Dose Aerosol Inhalers (MDI) Transition Strategy</li> <li>▪ Inputs for preparation of HPMP</li> </ul>

<b><i>Support received from Regional Network</i></b>	<b><i>Input provided to network</i></b>
<ul style="list-style-type: none"> <li>▪ Control of illegal trade and monitoring of trade in ODS, through iPIC and other mechanisms</li> <li>▪ Training for ozone officers through south-south cooperation</li> <li>▪ Input provided for CFC MDI phase-out strategy – awareness and information outreach component.</li> <li>▪ Guidance on implication of various decisions of Ex-Com and MOP, and assistance for CFC MDI EUN process.</li> <li>▪ Assistance for meeting compliance targets</li> </ul> <p>Assistance provided in creating awareness</p>	<ul style="list-style-type: none"> <li>▪ Provided training to new ozone officers of other member countries</li> <li>▪ Distributed information and awareness material</li> <li>▪ Provided technical support and training to ozone officer of Iran</li> <li>▪ Provided support to new members for developing CP and refrigerant management plan</li> <li>▪ Enforcement training support in India and to countries in the region through NACEN</li> </ul>

**15. Was the NOU subject to an audit by the beneficiary Government or by the Implementing Agency? If yes, what were the results?**

UNDP conducted performance and financial audit of the ISP for the year 2008 and the findings were satisfactory. Audit for the year 2009 would be undertaken in the first half of the year 2010.

**16. Lessons learnt (what were the main successes and difficulties and what can be learnt from them for improving effectiveness and impact during the next phase):**

**SUCCESS:**

- Copenhagen, Montreal and Beijing Amendments were enforced.
- The Ozone Depleting Substances (Regulation and Control) Rules, 2000 were reviewed and amended. The Ozone Depleting Substances (Regulation and Control) Amendment Rules, 2007 were implemented.
- Appropriate activities have been undertaken to implement the sectoral phase-out plans in aerosol, foam, and commercial refrigeration sector. Monitoring and management of the National CFC Consumption Phase-out Plan (NCCoPP) and the National CTC Phase-out Plan, approved by the ExCom.
- 22,588 tons of CFC production has been phased out. 11,535 ODP tons of CTC production and 11,535 ODP tons of CTC consumption have been phased out.
- CFC MDI phase-out project and accelerated CFC production sector phase-out projects are being expeditiously implemented.
- Dr. A. Duraisamy, Director-Ozone Cell, received the USEPA award for Stratospheric Ozone Layer Protection in the year 2008.

**DIFFICULTIES:**

- Identification of CTC consuming small and micro enterprises and exhaustively addressing phase-out issues for these enterprises.
- Need for CFCs for manufacturing MDIs.
- Challenges in achieving HCFC phase-out.

**IMPROVING EFFECTIVENESS:**

- Enforcing ODS Rules and monitoring the trade in ODS, particularly strengthening them for establishing HCFC baseline accurately.

**17. Terminal Report prepared by:**

Name of Officer responsible for preparing the Terminal Report:	Dr. A. DURAISAMY
Title:	Director (O)
Organization/Agency/Ministry:	Ozone Cell, MoEF, Government of India
Date:	8 February 2010

**18. Government Authority with oversight responsibility for the IS Project/NOU:**

Name of Officer responsible :	Dr. B.P.Nilaratna
Title:	Joint Secretary (MoEF)
Organization/Agency/Ministry:	MoEF, Government of India
Date:	8 February 2010

**Comments:**

The activities carried out and services rendered by the Ozone Cell for implementation of ODS phase-out in India during 2008 and 2009 are commendable. Through its systematic initiatives, complete phase-out of production and consumption of CFCs, Halons and CTCs has been achieved with the exception of Essential Uses approved by Meeting of the Parties. The challenge ahead includes the elimination of use of CFCs in MDI manufacturing and development and implementation of HCFC phase-out strategies with minimal impact on industrial development and growth.

## 19. Implementing Agency:

Name of Officer responsible :	Mr. Nandan Chirmulay
Title:	Sr. Technical Advisor and Regional Coordinator – Asia & Pacific
Organization/Agency/Ministry:	United Nations Development Programme
Date:	9 February 2010
<b><u>Comments:</u></b>  The Ozone Cell, Ministry of Environment and Forests has continued with its proactive and forward-looking initiatives in management and coordination of the ODS phase-out programme in India, working together with all stakeholders and implementing agencies for its successful implementation. Specific initiatives include assisting the MDI industry in securing the necessary assistance for conversion of their facilities to non-CFC alternatives and also assisting them in obtaining essential use authorization for CFCs post-2010, to ensure that affordable treatment remains available to the millions of asthma and COPD patients in India. The Ozone Cell has also successfully obtained high-level engagement from government decision makers for the HCFC phase-out programme.	

## **Views expressed by the ExCom (Draft)**

### **India**

The Executive Committee has reviewed the information presented with the Institutional Strengthening (Phase-VIII) renewal request for India and notes with appreciation that India has taken significant steps on the implementation of ODS production and consumption phase-out plans in order to achieve the 2010 compliance milestones and sustaining ODS phase-out, particular the accelerated cessation of CFC production from August 2008, seventeen months in advance of the Montreal Protocol phase-out date of 2010.

In its submission, India reported on a number of successful phase out activities, including timely monitoring and coordination of its phase-out activities under the sectoral plans, early and forward-looking steps in preparation of HPMP in close coordination with and participation of the industry, strict monitoring of ODS through its import and export licensing system to control supply and consumption of the substances, conducting public awareness campaigns, seminars and information outreach programmes on ODS phase-out and promoting information on and adoption of ODS free alternatives.

The Executive Committee also notes with satisfaction that India will continue to strengthen capacity to monitor and control ODS activities to ensure sustainability of complete phase-out post-2010, expeditious implementation of CFC MDI phase-out project and intensify initiation and implementation of HCFC phase-out project activities in line with the accelerated phase-out schedule.

**ANNEX-VIII**  
**Proposal for Renewal of Institutional Strengthening Phase-VI for Brazil**

## **Brazil - Institutional Strengthening Renewal (Phase-VI)**

### **EXECUTIVE SUMMARY**

#### **Progress Report**

During the implementation of the 5<sup>th</sup> Phase of Brazil's Institutional Strengthening project, the country achieved the total phase out of CFC consumption in all sectors except MDI sector by January 1<sup>st</sup> 2007, and phase out of CFC consumption in the MDI sector by January 1<sup>st</sup> 2010.

During this phase the National Ozone Unit of Brazil managed to successfully coordinate the execution of a number of projects in a diverse set of sectors. Some of these projects were the elimination of CTC as process agent and the National Plan for the Elimination of CFCs which was composed of 17 projects. Of these 17 projects, some of the most important achievements were the successful establishment of 5 Recycling Centers, completion of the distribution of 2000 recovery equipment, completion of training on good practices of refrigeration to 22,063 refrigeration technicians, design and implementation of the MDI transition strategy, technical cooperation agreements reached with electric power distributors for the replacement of 19,544 obsolete refrigerators and recovery of their CFCs, and the successful implementation of an awareness campaign which included, among other activities, the celebration of the International Ozone Day in 2006, 2007 and 2009 and the production of publications, brochures, articles, posters and other awareness and educational material.

#### **Action Plan**

During the 6<sup>th</sup> Phase of the Institutional Strengthening project in Brazil, the government of Brazil, through its National Ozone Unit will continue to contribute with the Ozone Layer protection through various activities, some of the most important include the preparation and implementation of the HCFC Phase out Management Plan Phase I, the completion of the CFC Phase out National Plan, the completion of the CTC use as a process agent phase out, the preparation and implementation of the ODS destruction pilot project and the implementation of the demonstration project on chillers replacement. The government of Brazil will also continue with UNDP's assistance the implementation of two pilot projects to test and validate alternative technologies to HCFCs in the foam sector (i.e. Methyl Formate and Methylal).

## BRAZIL

### Terminal Report for Institutional-Strengthening Project Phase-V

1. Country: Brazil

2. National Implementing Agency – Ministry of Environment

3. Implementing Agency: PNUD

4. List of previous project phases:

Phase	Duration	MLF Funding (Approved) US\$	MLF Funding (Disbursement) US\$
First	1993 – 1998	403,100.00	403,100.00
Second	1998 – 2000	270,000.00	270,000.00
Third	2001 – 2004	270,000.00	270,000.00
Fourth	2004 – 2006	351,000.00	293,790,00
Fifth	2007 – 2009	351,000.00	260,582.51

5. Main project objective and specific objects defined in action plan:

Contribute to the Ozone Layer protection by providing support to the Brazilian government to implement the Montreal Protocol to reduce and phase-out production and consumption of substances that Deplete the Ozone Layer – ODS, and to meet the goals established in this Protocol. The project's goal is to strengthen the Ministry of Environment – MMA to coordinate, effectively, all activities related to ODS phase-out.

Among the specific objectives:

- ✓ Strengthening of Government structure for the implementation of the Brazilian Program to Phase-out the Production and Consumption of Substances that Deplete the Ozone Layer (*PBCO*, the National CFCs Phase-Out Plan , the National Methyl Bromide Phase-Out Plan and the CTC Phase-Out Plan;
- ✓ Adjustment of national rules and legislation according to the Montreal Protocol;
- ✓ Hold dissemination campaigns to broadcast the Country Program, including a number of events and material to promote the Governments activities regarding the protection of Ozone Layer;
- ✓ To continue activities addressed to the refrigeration and air conditioning servicing sector, such as technicians training and CFC recovery, to keep recycling and reclaiming centers in operation and supplying the servicing sector with CFCs;
- ✓ Search for technological alternative solutions that meet Montreal and Kyoto Protocols, protecting the ozone layer, saving energy, and protecting the global climatic system.



## 6. Outputs reached by sector vs. forecast of action plan.

The Ozone Layer Protection Coordination – CPCO is the area responsible for the monitoring, coordination and follow up of all actions towards phase out of substances that deplete the ozone layer in the Country. CPCO coordinates several activities, such as: PNC – CFC National Phase-Out Plan, CTC Project, Halons Project, and Methyl Bromide Phase-Out Plan.

In addition of monitoring PBCO and PNC, the Ministry of Environment participates in the Executive Committee and the Montreal Protocol meetings, coordinating actions of the implementing agencies, as well as others activities, according to table below.

The particular case of the National Plan (PNC) has additional support approved by the Multilateral Fund to provide the Brazilian Government with technical and operational assistance through a monitoring and implementing unit, managed by the Lead implementing agency, , UNDP, to facilitate the implementation of the specific activities established in the PNC.

Activities	Expected Outputs	Outputs Accomplished
<p>Coordination of the actions taken by the implementing agencies and by all partners in the implementation of projects for the servicing sector including review and publication of legislation, when necessary.</p>	<p>CFCs stocks in servicing refrigeration sector properly managed.</p>	<ul style="list-style-type: none"> <li>• Projects on CFC contention implemented through the training of 25,000 technicians on Best Practices on Refrigeration, training and delivery of equipment for reclaiming, recycling and recovery of CFCs;</li> <li>• Liaison with IBAMA (Brazilian Institute of Environment and Renewable Natural Resources) and Environmental State Agencies to institutionalize the CFC recovery and reclaiming activities;</li> <li>• Companies from the energy sector aware of the issues related to the final destination of domestic refrigerators and their CFCs partnering with the ozone program for their energy efficiency programs.</li> <li>• Publication of legislation for eligibility of companies to perform in the sector;</li> <li>• Administrative Rule MMA 24/2008 – eligibility criteria to receive recovery machines.</li> <li>• Administrative Rule MMA 462/2009 – eligibility criteria for companies applying to receive recycling Unities.</li> </ul>
<p>To coordinate the elaboration of proposals on legislation, rules, techniques, policies, etc, to phase-out and manage ODS.</p>	<p>Proposals Rules and legislation elaborated.</p> <p>Rule for reduction of cooling fluids emissions in stationary facilities of refrigeration and air conditioning;</p> <p>Rule on procedure, reclaim, recycling and recovery of halogenated fluids;</p>	<ul style="list-style-type: none"> <li>• Publication, on November 2008, of Rule Institution 207 on control of imports related to Annex C, Group I HCFCs and blends with HCFCs, meeting Decision XIX/6 of Montreal Protocol, and further arrangements;</li> <li>• Publication, on March 2010, of directions on operations with ammonia: Guide 1 “Recommendations of project for safe operation of refrigeration systems”; Guide 2 “Recommendations on commissioning and start of safe operation of systems of ammonia by ammonia”; Guide 3 “Recommendation on operation and maintenance of refrigeration system by ammonia”.</li> </ul>

Activities	Expected Outputs	Outputs Accomplished
	<p>Rule on emission reduction of cooling fluids in supermarket facilities.</p> <p>Review of Resolution CONAMA 267 to meet new aiming of Montreal Protocol regarding control of HCFCs, the final destination of impure ODS and retrievals of replaced refrigerators;</p> <p>Definition of criteria for consumption control of HCFCs and HFCs;</p>	<ul style="list-style-type: none"> <li>• Publication of rule for Reverse Manufacture of Refrigerators – ABNT (Brazilian Association of Technical Standards) after submission to public consultation;</li> <li>• Elaboration in process of rule on emission reduction of refrigerating fluids in stationary facilities, including supermarkets.</li> <li>• Regarding Conama Review 267, it has been established that to meet new Montreal Protocol requirements on HCFCs, it is wiser to wait for conclusion on HCFCs diagnostics, and based on them define strategies related to regulation of HCFCs imports, use, and trade.</li> </ul>
Control of CFCs imports	<p>Control the entrance of CFCs in the Country, just for medical purposes.</p> <p>Improvement of ODS imports and exports control.</p>	<ul style="list-style-type: none"> <li>• Total phase out of CFCs consumption in all of the sectors since January 2007, except for MDIs.</li> <li>• Total phase-out of the CFCs consumption in January 2010.</li> <li>• Control of ODS exports from 2009.</li> <li>• Publication of ODS Control Guidelines with directions on control of illegal traffic of ODS to assist the activities of the customs officers.</li> <li>• Improvement of ODS import and export control system</li> <li>• Establishment of the control tool for the Technical Federal Register/IBAMA which delivers reports regarding the use, recovery, recycling, reclaiming, destruction, sell, purchase, import and export of ODS.</li> </ul>
Permanent liaison with private sector, including associations such as ABRAVA, ABRAS, and associations from the farming sector.	Promote the exchange and improvement of maintenance of commercial refrigeration equipment that operate with ODS in order to reduce ODS emission and reduce expenses related to energy and maintenance.	<ul style="list-style-type: none"> <li>• Production of the Manual on Good Practices in Refrigeration and Air Conditioner Systems for Supermarkets.</li> <li>• Coordination of meetings with the associations of the refrigeration sector to discuss the management of the CFC stock and HCFCs phase out.</li> <li>• Great part of the user sector is aware of new deadlines for HCFCs phase-out.</li> </ul>
Implementation and strengthening of a public campaign to maintain the PNC counterparts properly informed, emphasizing the progressive reduction on CFCs availability, clarifying on the essential uses and need to reclaim, recycle, and recovery.	<p>Awareness Campaign along with the projects on training of refrigeration technicians, and CFC recovery &amp; reclaiming , repeated in proper intervals;</p> <p>Translation and dissemination of international manuals, reports and CDs related to the Ozone Layer protection;</p>	<ul style="list-style-type: none"> <li>• Dissemination of the PNC actions in several events and of the CFCs preservation projects due to the deadline to phase out consumption in 2010;</li> <li>• Development of several materials that reinforce ODS phase out actions (booklet, folder, etc);</li> <li>• Celebration of Ozone International Day in 2006, 2007 and 2009.</li> <li>• Seminar on alternative refrigerators held in the cities of Recife and Porto Alegre;</li> </ul>

Activities	Expected Outputs	Outputs Accomplished
	Institutional mobilization to promote the use of alternative refrigerants.	<ul style="list-style-type: none"> <li>• Dissemination of actions performed by the project and development of materials for the sector.</li> <li>• Ministry of Environment website, improved and constantly updated, increasing available information <a href="http://www.mma.gov.br">www.mma.gov.br</a>.</li> </ul>
Participation in Refrigeration National and International ozone related events, as well as in Seminars and Meetings in public and private Organizations.	Dissemination of actions and commitments related to Montreal Protocol.	<ul style="list-style-type: none"> <li>• Participation in FENAFRIO - National Fair on Air Conditioner, Refrigeration, Ventilation, Air Heating and Treatment, on October 2008.</li> <li>• Participation in the International Fair on Air Conditioner, Refrigeration, Ventilation, Air Heating and Treatment – Febrava, held on September 2009, assembly of stand and space for lecture;</li> <li>• Participation in the Brazilian Symposium of Environmental Education - SBEA, with participation of MMA stand and promotion of materials, held on August 2009.</li> <li>• Participation in the Congress of Brazilian Society for Pneumology and Tisiology, held on October 2009 to disseminate the activities held on PNC regarding the Transition Strategy for MDIs.</li> </ul>
Publication of results from National Program of Methyl and Bromide Phase-Out.	Elaboration of folder presenting results of National Program of Methyl and Bromide Phase-Out.	<ul style="list-style-type: none"> <li>• The promotion of meetings and discussion with the Ministry of Environment, Cattle Breeding and Supply to internalize the Decisions made on regard of Montreal Protocol has shown a positive impact in the country's compliance with the MeBr phase out targets.</li> <li>• Publication of folder on results of National Program of Methyl and Bromide Phase-Out, including the activities accomplished to eliminate the substance on flowers, decorative plants, strawberry crops, and other crops, as well as the training to farmers.</li> </ul>
Coordination of activities made by bilateral and implementing agencies, in the scope of Country Program approved by Multilateral Fund.	Awareness in the sector, integration of the commitments regarding the ozone layer protection in the national policies, legislation, and enforcement in accordance to the progress and completion of the activities approved by the Multilateral Fund.	<ul style="list-style-type: none"> <li>• Actions from implementing and bilateral agencies were coordinated according to guidelines established by the Brazilian Government;</li> <li>• Dissemination, through the specialized media of actions undertaken to protect the ozone layer, reinforcing the commitments assumed by the Government with Montreal Protocol;</li> <li>• The MMA received and supported missions of implementing agencies, such as: Ecomate demonstrative project, Methylal demonstrative project, Market Transformation for Energy Efficiency in Buildings, ODS Destruction Project, Reversal Manufacture Project.</li> </ul>
Participation of Coordination members in meetings of Montreal Protocol Parties and Multilateral Fund Executive Board	Internalization of decisions in the Protocol scope, making feasible the accomplishment of goals established in Montreal Protocol and contribution to decisions;	All decisions made within Montreal Protocol scope were internalized in the Country in articulation with the remaining government agencies and with participation of private sector, through publication of Normative Instructions, Administrative Rules, and public consultations

Activities	Expected Outputs	Outputs Accomplished
Submission of official data to the Ozone and Multilateral Fund Secretariats.	Official data provided in dates specified by the Ozone Secretariat and by the Multilateral Fund Executive Committee.	Goals accomplished according to consumption data sent annually.
Incentive actions for the Protection of Ozone Layer and promotion of energy efficiency, avoiding global warming.	<p>Government Program that promotes the replacement of old refrigerators for new, more efficient ones; implementation of domestic refrigerators de manufacturing ensuring the recovery and later destination of ODS.</p> <p>Coordination with institutions from energy sector for the recovery of the CFCs from the refrigeration systems and foams from the equipment collected in energy efficiency projects or similar ones.</p> <p>Definition of a strategy for the treatment of foams collected from domestic refrigerators collected by the Federal Government.</p>	<ul style="list-style-type: none"> <li>• Government program to replace obsolete household refrigerators in elaboration phase, under coordination of the Energy and Mineral Ministry;</li> <li>• Several meetings undertaken with the Energy Facilitators with the objective to inform the need to recover the CFCs of the refrigerators replaced and the correct destination for this refrigerant fluid.</li> <li>• Technical Cooperation Agreements with electric power distributors are finalized with the replacement of 19,544 obsolete refrigerators.</li> </ul>
Coordination of the implementing agency activities regarding CTC Use as a process agent	<p>Elaboration of the indicative report regarding the use of CTC in Brazil.</p> <p>Elaboration with UNDP of the CTC phase out project.</p>	<p>Elaboration of indicative report regarding the CTC uses in Labs and as a process agent.</p> <p>Elaboration and execution with UNDP's assistance of the project's activities to phase out the CTC use as a process agent.</p> <p>Mission to visit the company Braskem with the objective to verify the production process of the PERCLORETILENO in the Camaçari and Maceió plants and to certify that the use of CTC is discontinued in Camacari and that the CTC used in Maceio is destroyed partially in the plant and partially in an incinerator .</p> <p>Mission to visit the company Dow Química to certify the use of CTC as feedstock and therefore there are not CTC emission.</p> <p>Elaboration of a report to the Multilateral Fund and Ozone Secretariat informing the process, mass of balance and CTC emission of BRASKEM in Maceió and certifying that the CTC use by Dow Quimica is not emissive.</p>

Activities	Expected Outputs	Outputs Accomplished
MDIs Transition Strategy for the CFCs phase out in this sector	Transition of the MDIs with CFC uses to CFC-free MDIs in a safety way for the patients and with the lower social economic impact possible.	<ul style="list-style-type: none"> <li>• Elaboration of the National Transition Strategy for the replacement of MDIs with CFCs to MDIs-CFC free together with Ministry of Health, ANVISA and IBAMA.</li> <li>• Coordination and discussion of the actions needed for the CFCs phase out in the MDIs sector with IBAMA, Ministry of Health, ANVISA and the private sector.</li> <li>• Publication of Administrative Order GM of the Ministry of Health n. 1.788, of 1st of August 2006, instituting the Work Group for planning, management, oversight, monitoring and evaluation of the actions in the scope of the health sector in complying with the Montreal Protocol.</li> <li>• Publication of Administrative Order GM/MS n. 2.799, of 30th of October 2007, establishing the "criterion of absence of CFC for the MDI procurement carried out by the Ministry of Health as of 1st of January 2008".</li> <li>• Holding of Public Consultation n. 104, of 31st of October 2007, of Resolution of the Collegiate Board of Directors of the National Health Surveillance Agency, granting a period of time, until 31st of December 2010, for the companies holding registration of MDIs with CFC to adjust their registrations, and forbidding, as of 1st of January 2011, the production and import of MDIs with CFC.</li> <li>• Publication, on the 20th of March 2008, of a Technical Cooperation Term between the Ministry of Health and the Brazilian Society of Pneumology and Tisiology – SBPT, aimed at prevention, health care, rehabilitation and scientific investigation of respiratory diseases, such as asthma, pneumonia, COPD, tuberculosis among others, including actions related to the national strategic transition for the elimination of MDIs with CFCs.</li> <li>• Publication of Resolution of the Collegiate Board of Directors of the National Health Surveillance Agency, granting a period of time, until 31st of December 2010, for the companies holding registration of MDIs with CFC to adjust their registrations, and forbidding, as of 1st of January 2011, the production and importation of MDIs with CFC.</li> <li>• Support to the Ministry of Health in articulation with the medical society and health public agents to disseminate the MDIs National Transition Strategy.</li> </ul>
<p><b>Additional outputs not foreseen in the action plan:</b></p> <p>a) Accomplishment of seminary “Government and Society towards HCFCs phase out”.</p> <p>b) Articulation with implementing agencies and remaining government agencies, as well as with private sector to define elaboration strategy of the Brazilian Program of HCFCs phase-out.</p> <p>c) Creation of Work Group for discussions with private section on HCFCs phase-out.</p> <p>d) Coordination of PBH elaboration activities; such as organization of bimonthly meetings with agencies and private sector</p>		

e) Technical cooperation meeting with Germany Government for implementation of refrigerators reversal manufacture system, to properly perform the refrigerators disassembly and collection of refrigerating fluid and expanding agent. The company that operates the equipment has been chosen and the equipment is estimated to be in operation on September 2010. This project will contribute to the Government Program of Ministry of Energy and Mines - MME program to replace 10 million refrigerators, which is in elaboration and for the collection of ODS found in banks of Brazilian domestic refrigerators.

f) Articulation with European Community to accomplish Technical Cooperation Agreement, to implement three pilot systems of refrigerators reversal logistic and reclaim of refrigerating fluid with integration of local government, and refrigerator manufacturers

## 7. Details of approved costs, current expenses (US\$):

<i>Item</i>	<i>Approved</i>	<i>Spent</i>
a) Equipment component	13,950	
b) Professional Staff	-	
c) Support staff	-	
d) Consultants	117,210	89,486.61
e) Operational cost	9,340	6,862.78
f) Funds for public awareness	-	74,514.94
g) Contingency	-	195.46
h) Others including in-kind (inspection and travel expenses)	58,160	89,117.05
i) Subcontracts	105,840	-
j) Training	27,900	-
k) Reporting Costs	9,300	-
l) Miscellaneous	9,300	-
<b>Total</b>	<b>351,000</b>	<b>260,176.84</b>

## 8. Details of Personnel:

<b>Category and Numbers</b>	<b>Functional Titles/ Expertise</b>	<b>Main Tasks</b>	<b>Time Period</b>
<b>EMPLOYEES</b>			
Branca Americano	Program Director	The Technicians assist the Director and Coordinator on the following activities:	Part time and full time
Magna Ludovice	Coordinator of Ozone Layer Protection Coordination	<ul style="list-style-type: none"> <li>• Development of activities to give incentive to governmental and private institutions to participate on implementation of Montreal Protocol;</li> <li>• Supervision of implementation of Institutional Strengthening Action Plan (IS);</li> </ul>	

<b>Category and Numbers</b>	<b>Functional Titles/ Expertise</b>	<b>Main Tasks</b>	<b>Time Period</b>
Tatiana Zanette  Frank Amorim  Euler Martins Lage	Environmental Analyst  Environmental Analyst  Expert	<ul style="list-style-type: none"> <li>• Monitoring and evaluation of ODS phase-out activities;</li> <li>• Contribution for the exchange of information and data with other national and international organizations;</li> <li>• Recommendation of policies and measures to control ODS;</li> <li>• Implementation of public awareness campaigns related to ODS phase-out and protection of ozone layer;</li> <li>• Identification and proposal of economic mechanisms to give incentive the consumers to adopt alternative to ODS;</li> <li>• Coordinate all activities related to ODS phase-out.</li> </ul>	
<b>ASSISTANTS</b>			
Alex Marques da Silva	Assistant/ Administrative Agent	<ul style="list-style-type: none"> <li>• Organize files of project document;</li> <li>• Perform administrative actions for the office operation;</li> <li>• Offer logistic support for all Coordination members.</li> </ul>	Full Time
Silvia Rodrigues Conceição	Assistant/ Administrative Agent	<ul style="list-style-type: none"> <li>• Organize Director Board files;</li> <li>• Perform administrative actions for the office operation;</li> <li>• Offer logistic support for all Direction members.</li> </ul>	Full Time
<b>CONSULTING</b>			
Liamarcia Silva Hora Fonseca	Technical Assistant	<ul style="list-style-type: none"> <li>• Recommendation of policies and measures related to ODS;</li> <li>• Contribution for the accomplishment of activities related to communication.</li> </ul>	Full Time
Claudia Focking	Communication Assistant Consultant	<ul style="list-style-type: none"> <li>• Contribution for the analysis of related technical documentation.</li> <li>• Implementation of public awareness campaigns related to effects that damage health resultant from exposure to sun and all actions related to the protection of ozone layer.</li> </ul>	

**9. Were the resources (employees, budget, and equipment) used for activities beyond to the ones approved in action plan? If yes, specify:**

The Brazilian Government has incorporated the action to protect the Ozone Layer as part of its regular activities. National resources were made available as counterpart for the Institutional Strengthening project related to the availability of Government employees, managers, environmental analysts, specialists, physical infrastructure, equipment and logistic equipment for the operation of the Ozone Layer Protection Coordination.

**10. Describe the role and position of Ozone Layer Protection Coordination within the national administration, the way its work is supervised and its access to senior decision-makers; this may include the cooperation with steering committees, advisory groups or inter-ministerial bodies:**

The Ozone Layer Protection Coordination is located in the Climatic Changes Department, part of the Climatic Changes and Environmental Quality Secretariat of the Ministry of Environment.

The Ministry of Environment coordinates and implements the Brazilian Program with help of the Environment and Renewable Resources Brazilian Institute – IBAMA, agency responsible for control of imports, registration of individuals and legal entities that manipulate ODS in the country through the CTF (Federal Technical Registry, monitoring from trading activities up to the inspection of these substances. This work has the support of an inter-ministerial Executive Committee, called Prozon. The Committee, coordinated by the Ministry of Environment, was created by a Decree, of Brazil’s President, published on December 1995, and updated in March 2003, and it is composed by representatives of other Ministries: Development, Industry and Foreign Trade, International Relations, Science and Technology, Revenue, Health, and Agriculture.

**11. Describe how the action plan for the IS project was integrated to the planning process of national authorities:**

As previously mentioned, the Ministry of Environment coordinates all activities related to the ozone layer protection, in addition of coordination of the inter-ministerial executive Committee – Prozon, composed of more six Ministries. The private sector also contributes in this process by discussing actions to be adopted in a Technical Work Group, also coordinated by the Ministry of Environment.

The action plan for the Institutional Strengthening project contributes so actions required for the implementation of Montreal Protocol are properly and fully accomplished, reaching goals with agility. Thus, the action plan is integrated to the planning process of Brazilian authorities, its technical and local team is properly equipped to perform the activities according established in the action plan.

**12. Name and date of reports presented:**

<i>To Whom:</i>	<i>Title of Report</i>	<i>Submission (Year/Quarter)</i>	
		<i>Planned</i>	<i>Actual</i>
1. Report to Multilateral Fund Secretariat	Report of implementation of Country Program	Yearly	Yearly
2. Reports to Ozone Secretariat	Data of ODS consumption to comply with Article 7 of Montreal Protocol	Yearly	Yearly
3. Implementing Agency	IS follow up Reports-UNDP	Quarterly	Quarterly
4. Others: ODS Latin American Network	Country Program implementation Report.	Every six months	Every six months



**13. When necessary, assistance and/or technical support received from:**

<i>Agency</i>	<i>Yes</i>	<i>No</i>	<i>Please specify</i>
a) Implementing Agency	x		UNDP is actively assisting the Ozone Layer Protection Coordination.
b) Other Implementing Agency(agencies)	x		UNIDO
c) Bilateral Donator (or do(s))	x		GTZ
d) Government Departments	x		IBAMA, Ministry of Development, industry and Foreign Trade, Ministry of Foreign Relations, Ministry of Science and Technology, Ministry of Economy, Ministry of Health and Ministry of Agriculture.
e) National Steering Committee	x		PROZON, GT Ozone, Steering committee of Methyl Bromide, GT of Illegal Trade, and MDIs GT.
f) Others (please specify)			
• MLF Secretariat	x		
• Ozone Secretariat	x		
• ODS Latin-American Network	x		

**14. Support received from Regional Network (Network Coordinator /Manager and Network members) and input provided to Network:**

<i>Support Received from Regional Network</i>	<i>Input Provided to Network</i>
The information exchange among representatives and experts of countries of region has contributed for ODS phase-out actions in Brazil.	Brazil participates of Latin American Network Meetings since its first edition. The NOU of Brazil has presented experiences regarding the ODS trade control, license system, databank, and on actions for ODS phase-out.

**15. Did the Ozone National Unit go through an audit from the beneficiary government, performed by the Implementing Agency? If yes, what are the results?**

The Institutional Strengthening Project has received a visit of the Multilateral Fund for the Implementation of Montreal Protocol in 2007 during its mission to evaluate and monitor the activities held under CFC Phase-out National Plan.

All of the projects executed by UNDP are yearly audited by an independent auditor. The result is that the IS has accomplished the proper management and accounting of the project.

**16. Lessons learned (what are main successful accomplishments and difficulties and what can we learn from them to improve effectiveness and impact during next stage):**

The strengthening of governmental institutions responsible to develop activities to protect the ozone layer and the strengthening of the coordinating institution is very important for the implementation of

projects foreseen in the CFCs Phase-Out National Plan, to continue the ODS trade control, as well as to elaborate activities of the HCFCs Phase-out Brazilian Program.

Moreover, actions oriented to build an interaction between Montreal and Kyoto Protocols to protect the ozone layer, to improve energetic efficiency, and to protect the global climatic system.

It is important to emphasize the importance of the articulation with remaining government agencies, for example, Ministry of Health for the elaboration of the MDIs Transition Strategy and Ministry of Agriculture, Cattle, and Supply, for the execution of the Methyl Bromide Project; and with the private sector for the internalization of Decisions made in the Montreal Protocol scope. The IS coordination and management of discussion with the counterparts has shown great impact on reaching Brazilian goals to eliminate ODS.

The coordination of work by all implementing agencies in the implementation of the projects funded by the Multilateral Fund has been very satisfactory.

**17. Terminal Report prepared by:**

Name of Officer responsible for preparing Final Report:	Magna Luduvicé
Title:	Coordinator
Organization/Agency/Ministry:	Coordination of Ozone Layer Protection/Ministry of Environment
Date:	February 2010

**18. The government authority responsible to supervise the FI Project/Ozone National Unity:**

Name of Officer responsible:	Magna Luduvicé
Title:	Coordinator
Organization/Agency/Ministry:	Ministry of Environment
Date:	September 2009

**19. Implementing Agency:**

Name of Officer responsible:	Alejandro Ramirez-Pabón
Title:	Program Coordinator
Organization/Agency/Ministry:	UNDP
Date:	February 2010

The implementation of activities by the National Ozone Unit of Brazil during the current phase was very satisfactory as it was able to mobilize diverse sectors to ensure compliance with all the control measures for all the substances. The country achieved total phase out of CFCs in all sectors except MDIs in 2007, and established in a timely manner the quotas to achieve compliance in the MDI sector on 1<sup>st</sup> January 2010 as per the Montreal Protocol. Consuming companies were able to adapt to the control measures without funding from the Multilateral Fund. On the servicing sector, with the assistance of UNDP, Brazil was able to establish the necessary infrastructure to contain and reuse CFCs after the phase out. In addition the Ozone office successfully implemented a project in the process agents sector to ensure compliance with the control measures on CTC. A remarkable achievement during this phase was the series of partnerships established with several electricity utilities to recover the CFC from the domestic refrigerators being replaced for energy efficiency purposes, The Ozone Unit in Brazil has since then been very active in looking for solutions to properly address the CFC banks in the country, especially in the domestic refrigeration sector where old equipment is being replaced and CFC recovered. The Ozone Unit in Brazil is currently working in the preparation of its HPMP with UNDP and GTZ, and is also participating in two pilot projects to test and validate two alternative technologies to HCFC in the foam sector. If these two technologies can be validated and used in other countries, it will become a substantial contribution to the search for alternatives for SMEs with low GWP.

**BRAZIL**  
**Extension of Institutional Strengthening Project Phase-VI**  
**Action Plan**

1. Country: Brazil
2. Execution National Agency: Ministry of Environment
3. Implementing Agency: UNDP
4. Extension Period: January 1st 2010 to December 31st 2011
5. Amount of financing requested to Multilateral Fund: 351.000,00
6. Ratification situation:

Document	Brazil Prorate
Vienna Convention - 1985	March 19 <sup>th</sup> 1990
Montreal Protocol - 1987	March 19 <sup>th</sup> 1990
London Amendment - 1990	October 1 <sup>st</sup> 1992
Copenhagen Amendment - 1992	June 25 <sup>th</sup> 1997
Montreal Amendment - 1997	June 30 <sup>th</sup> 2004
Beijing Amendment - 1999	June 30 <sup>th</sup> 2004

**7. Consumption by groups of substances and by sectors:**

REVISED \*\* COUNTRY PROGRAMME REPORT FORMAT  
 COUNTRY: BRAZIL YEAR: January to December of the year 2008

A. Data on Controlled Substances (in METRIC TONNES)

NOTE: Data entry is required in UNSHADED cells only

Substance <sup>1</sup>	Use by Sector											TOTAL	Import	Export	Production	Remarks (e.g., stockpiling if use is different from consumption)		
	Aerosol	Foam	Fire Fighting	Refrigeration		Solvent	Process agent	MDI	Lab Use	Methyl bromide <sup>**</sup>							Tobacco fluffing	
				Manufacturing	Service/ing					OPS	Non-OPS							
Annex A, Group I																		
CFC-11								77,154							77,154		77,154	
CFC-12								153,208							153,208		153,208	
CFC-113																	0,025	
CFC-114								60,076							60,076		60,076	
CFC-115																		
Sub-Total								290,437							290,437		290,437	0,025
Annex A, Group II																		
Halon 1211																		
Halon 1301																		
Halon 2402																		
Sub-Total																		
Annex B, Group I																		
CFC-13																		
Sub-Total																		
Annex B, Group II																		
Carbon tetrachloride																		
Sub-Total																		
Annex B, Group III																		
Methyl chloroform																		
Sub-Total																		
Annex C, Group I																		
HCFC-22																21,514,440	0,645	
HCFC-141b																5,650,218	24,503	
HCFC-142b																19,565		
HCFC-123																20,555		
Other <sup>3</sup> - HCFC-124																302,417		
Sub-Total																27,507,307	25,148	
Annex E																		
Methyl bromide																		218,879
Sub-Total																		218,879
TOTAL								290,437							509,316	28,016,623	25,173	

\* OPS = Quarantine and pre-shipment, Non-OPS = Non-quarantine and pre-shipment.

<sup>1</sup> Where the data involves a blend of two or more substances, the quantities of individual components of controlled substances must be indicated separately, e.g.: For R502 consisting of 51.2% CFC-115 and 48.8% HCFC-22, indicate the total quantity of each controlled substance (i.e., CFC-115 and HCFC-22) in the appropriate row.

<sup>2</sup> Where applicable.

<sup>3</sup> Indicate relevant controlled substances.

\*revised April 2008 by the Fund Secretariat in accordance with decision 54/4(f)

**8. Indicate the main objective of next stage regarding compliance of country to Montreal Protocol arrangements.**

The main goal of the institutional strengthening project is to empower the Ministry of Environment and remaining institutions in the application of Montreal Protocol in Brazil.

In this next state, the Ozone Unity will have the following goals:

- ✓ Coordinate and follow-up project activities conclusion foreseen in the CFCs Phase-out National Plan.
- ✓ Coordinate conclusion of CTC use phase-out project as process agent.
- ✓ Update the diagnostic of Halons use and coordinate actions to ensure the supply in the Country;
- ✓ Coordinate elaboration and implementation of PBH – Brazilian Program of HCFCs Phase-Out;
- ✓ Develop and apply normative political measures to meet the ODS consumption level in the Country;
- ✓ Keep control of national and international trade of ODS and prevent illegal trade of these substances;
- ✓ Implement communication actions related to ODS phase-out in Brazil;
- ✓ Follow up international discussions within Montreal Protocol scope.
- ✓ Elaborate strategy of Methyl Bromide Phase-Out Plan for quarantine and pre-shipment uses.
- ✓ Coordinate the activities for the formulation and implementation of the ODS destruction pilot project;
- ✓ Participation in the execution of the Replacement of Chillers being executed by UNDP, BID , GEF and MLF;
- ✓ Coordination of the Seminars to be held with the objective to disseminate the alternatives technologies for the HCFCs for the foam sectors: Methyl Formate and Methylal.

**9. Objectives, Activities, Planned by Year and Expected Outputs.**

Year	Objectives	Planned activities	Expected outputs
2010 -2011	Coordination and follow-up of project activities conclusion foreseen in the CFCs Phase-out National Plan.	Coordinate and supervise implementation of PNC projects.	Projects accomplished according to agreement between Brazil and Executive Committee.
		Monitor with Ibama and UNDP: CFCs reclaim, recovery, and recycling system.	Data of CFCs reclaimed, recycled/recovered available in the Ibama Federal Technical Registry.
		Coordinate actions related to management of ODS bank in Brazil, keeping interface with the National Policy on Solid Residues and other government agencies. Coordinate the programs related to the management of old equipment with ODS.	National strategy on final disposal of ODS defined.
2010 - 2011	Coordinate the conclusion of CTC use phase-out project as process agent.	Monitor consumption and destruction of CTC.	Reduction of CTC consumption.

<b>Year</b>	<b>Objectives</b>	<b>Planned activities</b>	<b>Expected outputs</b>
2010 - 2011	Update the diagnostic of Halons use and coordinate actions to ensure supply throughout the country.	Elaborate detailed report with diagnostic presenting main users of Halons in Brazil, their respective consumptions and future needs.	The Country needs for Halon known.
2010 - 2011	Coordinate elaboration and implementation of PBH – HCFCs Phase out Brazilian Program.	Create and coordinate a work group with different public and private institutions to follow up PBH elaboration.	PBH elaborated with participation of all sectors affected by HCFCs phase out.
		Coordinate and supervise the process of data collection and analysis from governmental, industrial, and services sectors.	Consumption of HCFCs by known sector.
		Coordinate meetings with several sectors that use HCFCs to build PBH proposal.	Reality of sectors affected by HCFCs phase out reflected in the project document.
		Coordinate the elaboration of PBH draft with implementing agencies and remaining public and private sectors.	PBH draft elaborated.
		Coordinate accomplishment of national public consultation on PBH document.	Document submitted to public consultation.
		Coordinate elaboration of industrial conversion projects.	Industrial conversion projects elaborated to present to Multilateral Fund.
		Coordinate activities of pilot project implementation.	Results of technology validation projects (Metylal and Ecomate) presented to ExCom and TEAP.
2010 - 2011	Develop and apply normative political measures to meet the ODS consumption level in the Country.	Coordinate discussion with remaining private and public agencies on need to establish rules related to import/use/trade/emission of HCFCs.	Rules draft elaborated.
		Coordinate discussion with remaining public and private agencies on prohibition of disposable cylinders for HCFCs filling.	Agreement among the different counterparts regarding the rules related to the disposal cylinders.
		Conduct discussion of technical rules related to emission of refrigerant fluid in chillers and procedures for ODS reclaim, recycling, and recovery.	Rules draft elaborated.
		Elaboration of reports on ODS national consumption according to Article 7 of Montreal Protocol, and Program of Country based on decisions of Multilateral Fund.	Reports of ODS national consumption submitted to the Ozone Secretariat and Multilateral Fund.
		Develop reports on application and compliance to Montreal Protocol.	Progress reports presented according to pre-established requests and formats.

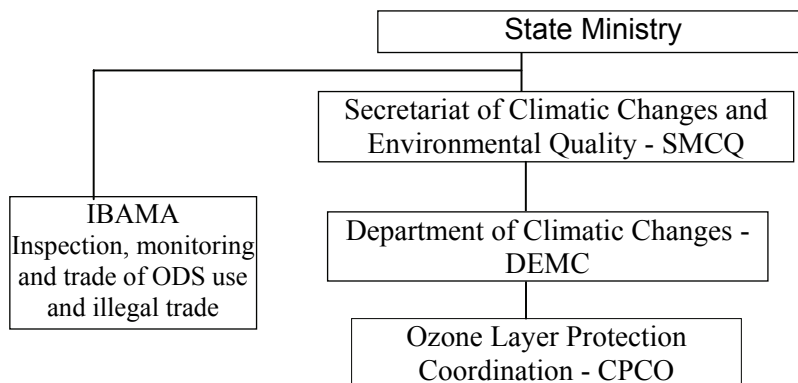
<b>Year</b>	<b>Objectives</b>	<b>Planned activities</b>	<b>Expected outputs</b>
2010 - 2011	Keep control of national and international trade of ODS and prevent the illegal trade of these substances.	Keep on giving support to improve the system of ODS import and export licenses in coordination with Ibama, Federal Revenue Secretariat – SRF/MF, Department of Foreign Trade Control– DECEX/MDIC, to ensure ODS levels allowed and detect potential cases of illegal trade of ODS.	Maintenance of ODS allowed levels.
2010 - 2011	Implement communication actions related to protection of ozone layer and ODS phase out in Brazil.	Organize activities to celebrate the International Day of Ozone Layer Protection.	Public awareness messages issued through seminars, newspapers, radio, and TV.
		Elaboration of technical and institutional Dissemination materials related to ozone protection and ODS phase out, mainly related to HCFCs.	Increase of sensibility and awareness of great users of HCFCs regarding the need to eliminate this substance, and the Brazilian commitment to Montreal Protocol and Fund protection of Ozone Layer, Climatic Change, and energetic efficiency.
2010 - 2011	Follow up international discussions within the Montreal Protocol scope.	Participation in Meetings of the Parties, in the Open Work Group, and Multilateral Fund Executive Committee.	Report of analysis on the evolution of international negotiation in the Montreal Protocol scope elaborated.
		Participate in Meetings of Network of Action for Ozone, of UNEP, and in electronic forums to exchange information at national level.	Ozone National Unit strengthened through the exchange of experiences among participants.
		Participate of UNEP coordination networks for prevention of ODS illegal trade.	Coordination Team of Ozone Layer Protection, Ibama, SRF, and region customs empowered to face ODS illegal traffic.
2010 - 2011	Elaboration of strategy to phase out Methyl Bromide for quarantine and pre-shipment purposes.	Coordinate with Agriculture Ministry, IBAMA and private sector, an evaluation of control system of applications of methyl bromide in quarantine and pre-shipment, to decrease risk of methyl bromide use for other purposes.	Use of methyl bromide for applications of quarantine and pre-shipment properly controlled.
		Elaboration of the diagnostic of the Methyl Bromide uses for applications of quarantine and pre-shipment.	Diagnostic and strategy to phase out quarantine and pre-shipment elaborated.
		Coordinate elaboration of strategy document to eliminate use of methyl bromide for quarantine and pre-shipment.	Strategy document elaborated.
2010- 2011	Coordination of the activities regarding the elaboration of the ODS destruction pilot project	Coordinate the data collection regarding costs and data collection procedures, storage, transport and SDOs destruction, including visits to the destruction centers.	Project prepared according to the MFL guidelines.
		Discuss with the Government counterparts regarding the Norms and Rules needed for the dangerous disposals destruction centers.	National legislation reviewed and, if needed, proposals of new regulations.

Year	Objectives	Planned activities	Expected outputs
2010-2011	Coordination of the activities regarding the Market Transformation Project.	Coordinate the training for technicians for the Chillers substitution activities	Technicians of the refrigeration sector properly trained to manage the Chillers replacement without fluid refrigerant linking to the atmosphere.
		Coordinate the elaboration of the practice guide for the Chillers replacement	Practical Guides for the Chillers replacement elaborated in order to assist the exchange of new equipments.
		Coordinate the Chillers replacement activities to validate the CFC recovery and the gain on the Energy Efficiency.	Equipments replaced and beneficiaries related to the Ozone Layer and EE measured.
2010-2011	Coordination of Seminars to disseminate the HCFCs alternatives technologies of the foam sector (Methyl Formate, Methylal)	Coordinates the holding of Seminars to disseminate the result of the testing of new HCFCs alternatives technologies of the foam sector (Methyl Formate, Methylal) .	Seminars held and the new HCFCs alternative discussed and disseminated for the counterparts of the foam sectors (Ozone Units, System Houses, Foam Manufactures, etc), national and internationally.

**10. Describe national scheme that ensures a regular contact of Ozone Coordination to maximal level of decision making.**

The Ministry of Environment coordinates actions to protect ozone layer starting from the political structure presented in the scheme below. CPCO is the Coordination responsible for interaction with implementing and bilateral agencies. CPCO actions are conducted on direction of Climatic Changes - DEMC, which follows guidelines elaborated by the Secretariat of Climatic Changes and Environmental Quality – SMCQ, and of the Ministry of Environment itself.

PROZON is the Inter-ministerial Executive Committee to protect the Ozone Layer, composed of seven ministries: Ministry of International Relations, Ministry of Agriculture, Ministry of Health, Ministry of Science and Technology, Ministry of Revenue, Ministry of Development, Industry, and Foreign Trade, and Ministry of Environment. The activities submitted to PROZON concern actions related to decisions on implementation of projects, policies elaboration, programs, orientations, and guidelines in which all participants contribute in issues that involve their attributions to elaboration of national policy concerning the Ozone Layer in Brazil. The Ministry of Environment coordinates PROZON.



## 11. Describe how the Action Plan of Institutional Strengthening Project is integrated in the authorities planning process.

The Ministry of Environment, as PROZON coordinator, spread information on actions to be developed by each Ministry member and follow up on their performance. In regular meetings, PROZON evaluates and deliberates on strategies to be followed for the conclusion of what has been established in the Montreal Protocol. The Ministry of Environment provides the internalization of these deliberations for the ministries members through their respective legal representatives, through ordinary or extra-ordinary meetings.

## 12. Project Estimated Cost (US\$):

It is important to mention that the following budget regards the cost estimated amount of the Institutional Strengthening Project.

<i>Item</i>	<i>Approved (US\$)</i>	<i>2010(US\$)</i>	<i>2011(US\$)</i>
a) Equipment component	8,000	6,000	2,000
b) Professional Staff	-	-	-
c) Support staff	-	-	-
d) Consultants	156,600	78,300	78,300
e) Operational cost	10,000	5,000	5,000
f) Funds for public awareness	64,500	20,000	44,500
g) Contingency	5,700	2,850	2,850
h) Others (travel expenses)	80,000	25,000	55,000
i) Subcontracts	-	-	-
j) Training	26,200	13,100	13,100
k) Reporting Costs	-	-	-
l) Miscellaneous	-	-	-
<b>Total Amount</b>	<b>351,000</b>	<b>150,250</b>	<b>200,750</b>

## 13. Personnel:

<b>Category and Numbers</b>	<b>Function/Expertise</b>	<b>Main goals</b>	<b>Period</b>
Consultant	Technical Assistant / Environment Professional with experience in Montreal Protocol	Analyze and propose considerations to documents on discussion Montreal Protocol meetings (Multilateral Fund Executive Committee and Interested Parties Meetings) that provide technical assistance to the participation of Brazilian Government representatives in those meetings.	6 to 11 months
	Technical Assistant / Environment Professional	Assist in the elaboration of phase-out strategy of Methyl Bromide for quarantine and pre-shipment uses.	6 to 11 months
	Technical Assistant / Environment Professional with experience in the Refrigeration Sector	Assist the government in the elaboration and implementation of Brazilian Program of HCFCs phase-out – Refrigeration sector.	6 to 11 months



Category and Numbers	Function/Expertise	Main goals	Period
	Technical Assistant / Environment Professional with experience in the Foam Sector	Assist the government in the elaboration and implementation of Brazilian Program of HCFCs phase-out – Foam sector.	6 to 11 months
	Expert in communication	Assist in elaboration of campaigns related to protection of Ozone Layer and ODS phase-out.	6 to 11 months

#### 14. Schedule of reports to be submitted:

Destination	Report Name:	Planned Submission (Year/quarter)
1. Government Department	Implementation Report	Yearly
2. Report for the Multilateral Fund Secretariat	Progress Report	Biennial
3. Reports for the Ozone Secretariat	ODS consumption data to meet Article 7 of Montreal Protocol	Yearly
4. Implementing Agency		
5. Other Implementing Agencies		
6. Bilateral Donators		
7. Others		

#### 15. Action Plan prepared by:

Name of officer responsible for preparing Action Plan:	Magna Luduvicé
Position:	Coordinator
Organization/Agency/Ministry:	Coordination of Ozone Layer Protection /SCMQ/ Ministry of Environment
Date:	January 2010

#### 16. Governmental Approval:

Action Plan authorized by:	Branca Americano and Magna Luduvicé
Position:	Director and Coordinator
Supervisor Organization/Agency/Ministry:	Ministry of Environment
Date:	January 2010

**17. Submission of Action Plan:**

Name of Implementing Agency:	UNDP
Project Officer Name:	Alejandro Ramirez-Pabón
Date:	January 2010
During the next Institutional Strengthening phase Brazil will focus in several important issues: the completion of the CFC phase out national Plan, the phase I of the HPMP which includes the activities to comply with the 2013 freeze and the 10% reduction in 2015, it is expected that this HPMP will be submitted this year. In addition the national ozone unit will continue the formulation and implementation of the pilot project on destruction and the pilot projects to test and validate Methyl Formate and Methylal as alternatives to HCFCs in the manufacturing of foams.	

## **Views expressed by the ExCom (Draft)**

### **Brazil**

The Executive Committee has reviewed the terminal report presented with the institutional strengthening project renewal request for Brazil and notes with appreciation the outstanding achievements made by Brazil's National Ozone Unit during the implementation of its 5<sup>th</sup> Phase. In particular the Executive Committee notes the progress made by Brazil in carrying out the complete phase out of CFCs in 2007 for all sectors except MDI, and the establishment and enforcement of quotas to achieve CFC phase out in the MDI sector by January 1<sup>st</sup> 2010. The Executive Committee also notes progress on the formulation of the HCFC Phase out Strategy and notes the successful implementation of the National CFC phase out plan and the elimination of CTC in the process agents sector. The Executive Committee commends the Government of Brazil for its achievements during the current phase and expresses the expectation that, in the next two years, Brazil will continue the implementation of its programmed activities with outstanding progress and success.