



**Programme des
Nations Unies pour
l'environnement**

Distr.
RESTREINTE

UNEP/OzL.Pro/ExCom/41/37
24 novembre 2003



FRANÇAIS
ORIGINAL : ANGLAIS

COMITÉ EXÉCUTIF
DU FONDS MULTILATÉRAL AUX FINS
D'APPLICATION DU PROTOCOLE DE MONTRÉAL
Quarante et unième réunion
Montréal, 17 - 19 décembre 2003

PROPOSITIONS DE PROJET : INDONESIE

Le présent document porte sur les observations et les recommandations du Secrétariat du Fonds sur les propositions de projet suivantes :

Fumigènes

- Élimination de l'utilisation du bromure de méthyle dans l'entreposage des céréales Canada

Réfrigération

- Plan d'élimination du CFC dans le secteur de la réfrigération (fabrication) (solde de la deuxième tranche) PNUD
- Plan d'élimination du CFC dans le secteur de la réfrigération (entretien des climatiseurs d'automobile) : Programme annuel pour 2004 Banque mondiale
- Plan d'élimination du CFC dans le secteur de la réfrigération (entretien) (deuxième tranche) PNUD

FICHE D'ÉVALUATION DU PROJET INDONÉSIE

SECTEUR : Fumigènes

Consommation sectorielle de SAO
(à l'exclusion des applications sanitaires et préalables à
l'expédition) : 37,8 tonnes PAO

Seuil de coût-efficacité du secteur :

s.o.

Titre du projet :

- a) Élimination de l'utilisation du bromure de méthyle dans l'entreposage des céréales

Données sur le projet	Secteur des fumigènes
Consommation de l'entreprise (tonnes PAO)	37,80
Incidence du projet (tonnes PAO)	37,80
Durée du projet (mois)	
Montant initial sollicité (\$US)	433 620
Coût définitif du projet (\$US)	
Coûts différentiels d'investissement (a)	394 200
Imprévus (b)	39 420
Coûts différentiels d'exploitation (c)	
Coût total du projet (a+b+c)	433 620
Participation locale à la propriété (%)	
Part exportée (%)	
Montant sollicité (\$US)	433 620
Rapport coût-efficacité (\$ US/kg)	11,47
Financement de contrepartie confirmé ?	
Organisme national de coordination	Ministère de l'Environnement
Agence d'exécution	Canada

Recommandations du Secrétariat	
Montant recommandé (\$US)	
Incidence du projet (tonnes PAO)	
Rapport coût-efficacité (\$US/kg)	
Coûts d'appui d'agence d'exécution (\$US)	
Coût total pour le Fonds (\$US)	

DESCRIPTION DU PROJET

1. Le gouvernement canadien a soumis un projet de coopération bilatérale visant à éliminer 37,8 tonnes PAO de bromure de méthyle (Br-Me) utilisées pour la fumigation des stocks de riz en Indonésie. Ce chiffre représente la consommation totale d'utilisations réglementées de bromure de méthyle dans ce pays. La valeur de référence concernant le bromure de méthyle s'élève à 135,6 tonnes PAO.
2. L'Indonésie produit tous les ans environ 30 millions de tonnes de riz. Une partie de cette production (1,23 million de tonnes) est stockée par l'organisme national chargé de la logistique (BULOG) pendant une période pouvant aller jusqu'à 9 mois. Le riz est traité par fumigation avec du bromure de méthyle et de la phosphine par BULOG (dans le cas de riz stocké dans ses entrepôts) et par dix sociétés privées de fumigation. La fumigation n'a lieu que s'il est reconnu que le riz est infesté.
3. Le bromure de méthyle est quasiment le seul fumigène utilisé par les sociétés privées de fumigation. La faible utilisation de phosphine semble être due au prix élevé du phosphore d'aluminium en Indonésie, ainsi qu'à la durée requise par l'opération et qu'à la gestion de la poudre résiduelle.
4. Le projet propose de remplacer toutes les utilisations réglementées du bromure de méthyle en matière de stockage par un système intégré de lutte phytosanitaire en entrepôt.
5. Ce projet comprend la mise en œuvre d'un tel système, la formation du personnel de fumigation à l'utilisation de comprimés de phosphine, et la fourniture d'outils et d'appareils de base permettant l'application de la phosphine (tels que doseurs, conduites d'échantillonnage de gaz et masques à gaz).
6. Le projet comprend par ailleurs un programme de formation (six formateurs) en biologie des insectes abordant les mesures sanitaires et la bonne utilisation de l'équipement et des méthodes d'application de la phosphine. Ces formateurs formeront à leur tour le personnel des sociétés de fumigation. Le système intégré de lutte phytosanitaire en entrepôt sera mis en œuvre par le biais d'ateliers et de manuels quant à la quantité de riz perdu à cause des insectes. BULOG sera l'agence de coordination de cette formation et fournira le matériel et l'équipement nécessaires.
7. Le programme comprend également l'élaboration et l'application de mesures gouvernementales, législatives et réglementaires concernant l'importation et l'utilisation du bromure de méthyle. Ces mesures sont indispensables en vue de l'élimination du bromure de méthyle et doivent être en place si l'on veut garantir que ce produit ne sera pas à nouveau adopté lorsque des solutions de remplacement auront été appliquées avec succès.
8. Le coût total du projet est estimé à 433 620 \$US et sa durée sera de quatre ans.

OBSERVATIONS ET RECOMMANDATIONS DU SECRETARIAT

OBSERVATIONS

9. La proposition de projet a initialement été présentée par le gouvernement canadien pour examen par le Comité exécutif à sa 40^e réunion (UNEP/OzL.Pro/ExCom/40/37). À cette époque, le Comité exécutif a été informé que la consommation de bromure de méthyle pour 2001 déclarée au Secrétariat de l'ozone (75,6 tonnes PAO) était inférieure à la valeur de conformité requise de l'Indonésie pour 2005 (108,5 tonnes PAO). Le gouvernement canadien a par ailleurs déclaré que la consommation de bromure de méthyle utilisée pour calculer la consommation de référence de l'Indonésie comprenait les applications sanitaires et préalables à l'expédition. En l'absence de lettre officielle du gouvernement indonésien confirmant que les données corrigées avaient été soumises au Secrétariat de l'ozone, le gouvernement canadien a décidé de retirer le projet.

10. Le 23 septembre 2003, le gouvernement indonésien a envoyé une lettre au Secrétariat de l'ozone indiquant que la consommation de bromure de méthyle déclarée pour 1995-1998 comprenait les applications sanitaires et préalables à l'expédition en sus des autres applications. La consommation de bromure de méthyle concernant les utilisations réglementées s'élevait à 40,7 tonnes PAO pour cette période. À la lumière de cette lettre, le gouvernement canadien a soumis une proposition de projet révisée à la 41^e réunion du Comité exécutif.

11. Le gouvernement canadien a par la suite informé le Secrétariat qu'à sa 31^e réunion (novembre 2003), le Comité d'application avait examiné cette demande du gouvernement indonésien avec d'autres demandes plus complexes émanant de pays visés à l'Article 5 et demandant l'augmentation de leur consommation de référence. Le Comité d'application n'a pas formulé de recommandation concernant la demande de l'Indonésie. Le gouvernement canadien « est d'avis que le fait que le Comité d'application n'ait pas pu approuver la demande de l'Indonésie concernant la modification de ses données de référence cette année ne devrait pas empêcher le Comité exécutif d'examiner ce projet, étant donné que l'Indonésie devra réduire sa consommation de bromure de méthyle non liée aux applications sanitaires et préalables à l'expédition d'au moins 20 pour cent d'ici 2005. Si le Comité d'application décidait d'approuver en 2004 la demande de l'Indonésie concernant l'adoption d'une consommation de référence de bromure de méthyle de 40,7 tonnes PAO, il serait alors trop tard pour exécuter le projet à temps pour que le pays puisse atteindre la réduction requise de 20 pour cent. Il ne fait aucun doute que la valeur de référence précédemment communiquée par l'Indonésie contenait, par erreur, la consommation des applications sanitaires et préalables à l'expédition. L'Indonésie a maintenant officiellement fourni les données de référence correctes, en déduisant cette consommation de référence de la période 1995-1998, et nécessite un projet d'élimination. Le Canada saurait donc gré au Secrétariat de transmettre cette proposition de projet au Comité exécutif ».

12. La technologie de remplacement proposée dans le projet soumis à la 40^e réunion, concernait de la phosphine gazeuse en bouteilles et un système intégré de lutte phytosanitaire en entrepôt. Le rapport coût-efficacité du projet s'élevait à 22,21 \$US/kg. À cet égard, le Secrétariat s'est interrogé sur la viabilité et le rapport coût-efficacité à long terme de la technologie sélectionnée comparée à l'utilisation de comprimés de phosphine (une technologie éprouvée de

remplacement du bromure de méthyle en matière de fumigation, facile à appliquer et ne nécessitant pas d'équipement majeur).

13. Depuis la 40^e réunion, le gouvernement canadien a révisé la proposition de projet à la lumière des commentaires et observations du Secrétariat du Fonds. Le projet révisé soumis à la 41^e réunion concerne un programme d'assistance technique plutôt qu'un projet d'investissement et vise à remplacer l'utilisation du bromure de méthyle par des comprimés de phosphine (plutôt que de la phosphine gazeuse en bouteille) et un système intégré de lutte phytosanitaire en entrepôt.

RECOMMANDATION

14. Le Secrétariat du Fonds et le gouvernement canadien se sont accordés sur le coût total du projet (350 000 \$US). Le Comité exécutif est invité à envisager l'approbation du projet à la lumière de ce qui précède.

DESCRIPTION DU PROJET

Données générales

15. Au nom du gouvernement indonésien, le PNUD et la Banque mondiale ont soumis aux fins d'examen par le Comité exécutif les rapports périodiques annuels pour 2003 relatifs à la mise en œuvre du plan sectoriel de la fabrication d'équipements de réfrigération commerciale et du Plan sectoriel de l'entretien des équipements de réfrigération (PNUD) et du Plan sectoriel de l'entretien des climatiseurs d'automobile (Banque mondiale) visant à l'élimination des SAO dans le secteur indonésien de la réfrigération, accompagnés de propositions de programmes de mise en œuvre pour 2004. Ces rapports dressent un bilan des progrès réalisés depuis juillet 2002 dans le secteur de la fabrication d'équipements de réfrigération commerciale et depuis décembre 2002 dans le secteur de l'entretien des équipements de réfrigération et de l'entretien des climatiseurs d'automobile; ils contiennent un résumé des activités entreprises à ce jour dans le cadre du plan de mise en œuvre pour 2003 et des trois programmes de mise en œuvre pour 2004 ainsi que des demandes de décaissement des fonds relatifs à ces tranches.

16. À sa 37^e réunion, le Comité exécutif a approuvé un plan sectoriel visant l'élimination du CFC dans le sous-secteur indonésien de la fabrication d'équipements de réfrigération et devant être mis en œuvre par le PNUD. À la même réunion, le Comité exécutif a approuvé la première tranche de financement qui s'élevait à 1 288 000 \$US. Un nouvel accord a été approuvé par le Comité exécutif à la 38^e réunion. Il couvrirait l'élimination totale du CFC dans le secteur indonésien de la réfrigération, avec un niveau de financement de 15 627 300 \$US. Ce nouvel accord incorporait l'accord approuvé à la 37^e réunion ainsi que les plans sectoriels des sous-secteurs de l'entretien des équipements de réfrigération et des climatiseurs d'automobile.

17. À sa 40^e réunion, le Comité exécutif a approuvé une avance correspondant à la deuxième tranche pour permettre la poursuite du programme annuel de mise en œuvre pour 2002-2003 du plan sectoriel de la fabrication d'équipements de réfrigération commerciale exécuté par le PNUD. Ces fonds ont été demandés pour compléter le premier versement reçu en 2002 par le PNUD qui avait déjà été totalement affecté. Cette avance a été déduite du versement de 2003.

Rapports périodiques

18. Les rapports périodiques pour 2002 sont annexés au présent document. Les progrès réalisés sont résumés ci-après pour chaque plan d'élimination.

Plan sectoriel de la fabrication d'équipements de réfrigération (PNUD)

Total des fonds reçus : 1 888 000 \$US;
Élimination visée pour 2002 : 0 tonne PAO;
Élimination visée pour 2003 : 90 tonnes PAO.

- Le PNUD et le ministère de l'Environnement se sont accordés sur le mécanisme opérationnel de mise en œuvre qui définissait les rôles et responsabilités des diverses parties prenantes; le descriptif de projet du PNUD concernant la première phase a été signé par toutes les parties en mai 2003;

- Le PNUD a préparé les spécifications techniques concernant l'équipement qui sera fourni au premier groupe d'entreprises en février 2003.
- Le processus de sélection des fournisseurs et de passation des commandes s'est achevé en septembre 2003. Le montant total des fonds affectés à l'approvisionnement du premier groupe d'entreprises participantes s'élève à environ 1,6 million \$US. L'installation et la mise en service de l'équipement début 2004 se solderont par la réalisation des objectifs d'élimination (environ 300 tonnes PAO) d'ici la fin de la même année.
- La vérification des données de référence auprès du premier groupe d'entreprises s'est achevée en juillet 2003. La vérification des entreprises des autres groupes en matière de participation/approvisionnement est entamée et se poursuit de manière continue.
- Le ministère de l'Environnement a poursuivi la mise en œuvre et le contrôle du respect des réglementations du gouvernement indonésien relatives à l'utilisation des SAO.
- Deux ateliers ont été organisés en janvier 2003 pour les éventuelles entreprises bénéficiaires, les parties prenantes des secteurs public et institutionnel et les décideurs.
- L'achèvement d'ici novembre 2003 de six projets en cours devrait permettre d'atteindre l'élimination visée de CFC pour 2003, soit 90 tonnes PAO.

Plan sectoriel de l'entretien des équipements de réfrigération (PNUD)

Total des fonds reçus : 2 196 758 \$US;

Élimination visée pour 2002 : 0 tonne PAO;

Élimination visée pour 2003 : 0 tonne PAO.

- La première tranche de 2 196 758 \$US a été reçue par le PNUD en décembre 2002. Le PNUD et le ministère de l'Environnement se sont accordés sur le mécanisme opérationnel de mise en œuvre qui définissait les rôles et responsabilités des diverses parties prenantes. Le descriptif de projet du PNUD concernant la première phase a été signé par toutes les parties en août 2003.
- Le programme de récupération et de recyclage visait la participation de 385 établissements d'entretien pendant 2003. La première liste, qui comprenait environ 170 établissements d'entretien, a été approuvée à titre provisoire en septembre 2003 par le ministère de l'Environnement en vue de leur participation au programme de récupération et de recyclage.
- Un inventaire des établissements de formation a été réalisé en mai-juillet 2003. Environ 134 établissements de formation ont été sélectionnés pour participer au programme de récupération et de recyclage et recevoir des équipements de démonstration dans ce domaine.
- Le PNUD a préparé les spécifications techniques concernant l'équipement qui sera fourni au premier groupe d'entreprises en octobre 2003. Les étapes du processus d'approvisionnement, à savoir l'évaluation des soumissions, les approbations du Comité de l'approvisionnement du PNUD et la sélection des fournisseurs, devraient être achevées en novembre 2003.

- À l'issue de toutes les activités menées dans les premier et deuxième groupes d'établissements d'entretien et de formation, qui comprennent au total 920 ateliers d'entretien, la réduction de la consommation de CFC dans le secteur de l'entretien devrait s'élever à environ 220 tonnes PAO en 2004 et 2005.

Plan sectoriel de l'entretien des climatiseurs d'automobile

Total des fonds reçus : 1 369 800 \$US;

Élimination visée pour 2002 : 0 tonne PAO;

Élimination visée pour 2003 : 220 tonnes de PAO.

- La gestion du sous-secteur de l'entretien des climatiseurs d'automobile a été organisée avec celle des sous-secteurs de la fabrication et de l'entretien des équipements de réfrigération grâce à l'élaboration d'une Unité de coordination et de gestion des plans sectoriels, comprenant un directeur de programme et trois adjoints chargés de superviser la mise en œuvre du plan sectoriel correspondant, à savoir la fabrication d'équipements de réfrigération, l'entretien des équipements de réfrigération et les climatiseurs d'automobile. Le personnel a été recruté en juin 2003 et l'unité est entrée en service à cette époque.
- Activités menées dans les entreprises : à ce jour, 260 ateliers ont été inventoriés et visités et des contrats ont été signés avec 216 d'entre eux. Ces 216 entreprises ont une consommation cumulée de 254,5 tonnes PAO.
- Le ministère de l'Environnement a tardé à approuver le budget mais l'approvisionnement en équipement de recyclage a maintenant commencé.
- L'application des mesures gouvernementales et réglementaires est commune à celle des autres sous-secteurs de la réfrigération car l'ensemble du programme doit reposer sur une stratégie et une réglementation intégrées. Le ministère de l'Environnement a poursuivi la mise en œuvre et le contrôle du respect des réglementations du gouvernement indonésien relatives à l'utilisation des SAO.
- L'amélioration du système de surveillance et de contrôle des importations et des exportations de SAO en Indonésie est le principal outil permettant d'atteindre les résultats définis dans les plans sectoriels de sorte à garantir que l'Indonésie s'acquittera de ses obligations aux termes du Protocole de Montréal. Un système de quotas réalistes tenant compte des importateurs non agréés et de la demande de SAO sur le marché, dans les limites de la consommation cumulée de SAO permise aux termes des plans sectoriels, est en préparation.

Objectifs de réduction des CFC

19. Les objectifs de réduction des CFC pour 2003 fixés dans les trois plans sectoriels sont indiqués dans le tableau ci-dessous :

	2002	2003
Limite de consommation annuelle de CFC pour le sous-secteur de la fabrication d'équipements de réfrigération	1 231	1 231
Élimination annuelle visée dans le sous-secteur de la fabrication d'équipements de réfrigération (PNUD) : réduction découlant de projets en cours	0	90
Élimination annuelle visée dans le sous-secteur de la fabrication d'équipements de réfrigération (PNUD) : réduction découlant du plan	0	0
Limite de consommation annuelle de CFC pour le sous-secteur de l'entretien des climatiseurs d'automobile	915	915
Élimination annuelle visée dans le sous-secteur de l'entretien des climatiseurs d'automobile (Banque mondiale) : réduction découlant du plan	0	220
Limite de consommation annuelle de CFC pour le sous-secteur de l'entretien des équipements de réfrigération	1 072	1 072
Élimination annuelle visée dans le sous-secteur de l'entretien des équipements de réfrigération (PNUD) : réduction découlant du plan	0	0
Limite de consommation annuelle de CFC totale pour le secteur de la réfrigération	3 218	3 218
Élimination de SAO totale dans le secteur de la réfrigération	0	310

20. La réduction de 310 tonnes PAO de la limite de consommation annuelle fixée pour 2003 (3 218 tonnes PAO) garantira que la limite de consommation de CFC pour 2004 ne dépassera pas 2 908 tonnes PAO.

Programmes annuels de mise en œuvre pour 2004 et financements sollicités

21. Les programmes annuels de mise en œuvre pour 2004 et les budgets associés à la mise en œuvre des trois plans sectoriels figurent dans les rapports des agences joints au présent document.

Plan sectoriel de l'entretien des équipements de réfrigération

- Le programme annuel de mise en œuvre pour 2004 assurera l'élimination d'environ 300 tonnes PAO de CFC fin 2004 et d'environ 150 tonnes PAO fin 2005.
- Une avance de 600 000 \$US sur la deuxième tranche de 2 200 000 \$US a été approuvée à la 40^e réunion du Comité exécutif en juillet 2003 et remise au PNUD en août 2003.

Comme indiqué dans le calendrier des décaissements qui figure dans le Tableau 1 de l'accord conclu entre le Comité exécutif et le gouvernement indonésien, le Comité exécutif est invité à approuver le programme annuel de mise en œuvre pour 2004 ainsi que la remise du solde de 1 600 000 \$US pour 2003 ainsi que des frais d'appui correspondants de 141 100 \$US.

Plan sectoriel de l'entretien des équipements de réfrigération

- Le programme annuel de mise en œuvre pour 2004 garantira l'élimination d'environ 200 tonnes PAO de CFC.
- Comme indiqué dans le calendrier des décaissements qui figure dans le Tableau 1 de l'accord conclu entre le Comité exécutif et le gouvernement indonésien, le Comité exécutif est invité à approuver le programme annuel de mise en œuvre pour 2004 ainsi que la remise du solde de 1 805 987 \$US pour 2003 et des frais d'appui correspondants de 160 939 \$US.

Plan sectoriel de l'entretien des climatiseurs d'automobile

- Le programme annuel de mise en œuvre pour 2004 garantira l'élimination d'environ 110 tonnes PAO.
- Comme indiqué dans le calendrier des décaissements qui figure dans le Tableau 1 de l'accord conclu entre le Comité exécutif et le gouvernement indonésien, le Comité exécutif est invité à approuver le programme annuel de mise en œuvre pour 2004 ainsi que la remise du solde de 1 347 300 \$US pour 2003 et des frais d'appui correspondants de 119 937 \$US.

22. L'exécution des trois programmes annuels de mise en œuvre se soldera par une élimination totale de CFC de 610 tonnes PAO, qui seront déduites de la limite annuelle de consommation pour 2004.

OBSERVATIONS ET RECOMMANDATIONS DU SECRÉTARIAT

OBSERVATIONS

Plan sectoriel de la fabrication d'équipements de réfrigération

23. Le Secrétariat a demandé confirmation au PNUD concernant la date d'achèvement des six projets de réfrigération commerciale en cours, qui doivent contribuer à une réduction de 90 tonnes PAO de la consommation de CFC. Le PNUD a confirmé que ces projets étaient achevés début novembre 2003 et que les documents pertinents seront fournis selon les besoins.

Plan sectoriel de l'entretien des équipements de réfrigération

24. L'élimination annuelle de CFC visée pour 2004 est fixée à 200 tonnes PAO dans le plan sectoriel de l'entretien. La majorité de cette réduction (140 tonnes PAO) est censée être atteinte grâce à la fourniture et à l'installation de 435 appareils de récupération et de recyclage. Le reste de la réduction de CFC sera atteint grâce à des activités de conversion (40 tonnes PAO) et de formation (20 tonnes PAO). L'incidence totale de l'introduction d'un système de récupération et de recyclage en Indonésie a été estimée à 213 tonnes PAO (Section 4.1.1 du plan). La majorité de cette quantité évaluée de frigorigène se trouvait dans le sous-secteur de la réfrigération à usage domestique (145 tonnes PAO). Le PNUD entend utiliser environ 3 millions \$US du premier versement approuvé et de la tranche sollicitée pour 2004 en vue de la fourniture de 435 appareils de récupération et de recyclage. Ceci représente environ 63 % du coût total du plan.

25. Le PNUD a été informé que les nombreuses informations reçues par le Secrétariat, par le biais de rapports périodiques, de rapports d'achèvement de projet (RAP), de rapports et d'exposés des Unités nationales de l'ozone (UNO) aux réunions de réseau et d'autres sources, indiquent que les capacités et résultats des opérations de récupération et de recyclage sont limités. Les quantités de CFC récupéré semblent invariablement être inférieures aux quantités prévues dans les descriptifs de projets. La quantité de CFC traité dans les centres de recyclage en vue de sa réutilisation est très faible.

26. Le Secrétariat a fait observer au PNUD qu'une mission d'enquête a été entreprise en Indonésie dans le cadre d'une étude sur le secteur de la réfrigération à usage commercial et domestique réalisée par le PNUE. Concernant la récupération et le recyclage, le rapport indique que « la récupération de CFC, de systèmes de réfrigération à usage domestique par exemple, n'est pas envisagée comme une entreprise très rentable : la charge du système est si faible que la majorité du frigorigène reste dans les conduites et n'atteint jamais la bouteille de stockage. La majorité des appareils arrivant dans les ateliers d'entretien sont déjà vides, en raison de fuites. La récupération et le recyclage ne constituent pas un enjeu et, à l'heure actuelle, ne sont ni stimulés ni encouragés par le gouvernement. »

27. À la lumière de ces informations, le Secrétariat a attiré l'attention du PNUD sur le fait que si les fonds sont affectés à des appareils et des activités de récupération et de recyclage, et si l'élimination anticipée n'est pas réalisée, les objectifs du pays en la matière pourraient être compromis. À cet égard, il pourrait être utile d'évaluer de manière précise et réaliste le stock de frigorigène présent dans les équipements de réfrigération se prêtant à la récupération et au recyclage et d'étudier les aspects pratiques de ces opérations. De même, il conviendrait peut-être d'adopter une approche plus souple en matière de mise en œuvre.

28. Le Secrétariat a noté que la Décision 22/23 du Comité exécutif invitait instamment les agences d'exécution « à collaborer avec les pays intéressés pour veiller à ce que les conditions nécessaires au succès soient mises en place avant la mise en œuvre de projets de récupération et de recyclage des frigorigènes. »

29. En guise de réponse, le PNUD a précisé que la récupération et le recyclage doivent être envisagés dans le contexte de la disponibilité de CFC à un prix raisonnable. Il est vraisemblable

que la disponibilité de CFC diminuera progressivement et que les prix augmenteront en conséquence. La disponibilité réduite de CFC et le contrôle de l'utilisation de CFC par le biais d'instruments gouvernementaux et réglementaires amélioreront les résultats de la récupération et du recyclage en Indonésie. Le gouvernement examinera cette question avant la passation de commandes, qui est prévue pour la fin 2003, et fera les ajustements nécessaires en fonction de la situation et des conditions. Concernant le système de permis d'importation, le PNUD a indiqué que le ministère indonésien de l'Environnement a publié un décret en 2002 autorisant uniquement les « importateurs agréés » à importer du CFC. D'autres mesures gouvernementales et réglementaires seront vraisemblablement mises en place au cours des 12 à 24 prochains mois.

Plan sectoriel de l'entretien des climatiseurs d'automobile

30. L'élimination annuelle de CFC visée pour 2003 est fixée à 220 tonnes PAO pour le secteur des climatiseurs d'automobile. Le Secrétariat a noté que la fourniture d'équipements de récupération et de recyclage a été retardée en 2003. Compte tenu du temps nécessaire à l'installation et à la formation du personnel, il est vraisemblable que ces équipements seront opérationnels en 2004. Le Secrétariat a indiqué à la Banque mondiale que, dans ces circonstances, la réalisation de l'élimination visée pour 2003 pourrait être menacée. La Banque mondiale a précisé que la réduction de la consommation de CFC du secteur des climatiseurs d'automobile ne représente qu'une partie de la réduction totale visée par l'ensemble du secteur de la réfrigération et que la consommation de CFC pour 2003 dans ce secteur ne peut pas être vérifiée avant 2004.

Limite de consommation de CFC

31. Le gouvernement indonésien a indiqué au Secrétariat que la consommation du secteur de la réfrigération s'élevait à 3 402 tonnes PAO en 2002. L'accord ne prévoit pas de limite de consommation de CFC pour 2002 dans le secteur indonésien de la réfrigération. Le premier objectif de réglementation est la limite de consommation de CFC pour 2003 fixée à 3 218 tonnes PAO. Cette consommation sera déclarée et vérifiée en 2004. La réduction totale visée pour 2003 est de 310 tonnes PAO pour les trois plans sectoriels. Si cette réduction est atteinte, la limite de consommation de CFC passera à 2 908 tonnes PAO en 2004.

Audit annuel indépendant

32. Les modalités de mise en œuvre définies dans les plans sectoriels stipulent qu'un audit annuel indépendant sera effectué par les agences d'exécution pour vérifier les niveaux de consommation de CFC, notamment à l'aide de contrôles et de visites par sondage. Le volet de soutien stratégique et administratif comprend par ailleurs l'établissement et l'application d'un mécanisme décentralisé de surveillance et d'évaluation des réalisations des plans, destiné à en assurer la durabilité, en collaboration avec des organismes provinciaux de réglementation environnementale. Le Secrétariat a attiré l'attention du PNUD et de la Banque mondiale sur l'importance d'établir sans tarder un système d'audit indépendant en Indonésie et a noté que les programmes annuels de mise en œuvre pour 2004 ne prévoient pas les mesures nécessaires à cet égard. En guise de réponse, le PNUD a indiqué que, pour vérifier la limite de consommation de CFC fixée pour 2003 et garantir que les activités associées ont été entreprises, le PNUD et le

ministère de l'Environnement demanderont à un organisme indépendant de contrôler le niveau de consommation nationale du secteur de la réfrigération en effectuant un audit des données de production, d'importation et d'exportation en 2004. Cet organisme indépendant vérifiera également que les activités stipulées dans le programme annuel pour 2003 ont été menées. La Banque mondiale a précisé que la consommation nationale de CFC-12 du secteur des climatiseurs d'automobile serait vérifiée de manière indépendante grâce au système amélioré de contrôle et de surveillance des importations et des exportations de SAO mis en place en Indonésie. Bien que les agences aient exposé à grands traits leur intention d'entreprendre des audits indépendants, le Secrétariat estime qu'à l'avenir les rapports devront exposer de manière plus détaillée les modalités de la vérification des niveaux de consommation.

RECOMMANDATION

33. Le Comité exécutif est invité à envisager l'approbation des tranches de financement concernant la mise en œuvre des programmes annuels pour 2004 au titre des plans sectoriels relatifs à la fabrication d'équipements de réfrigération, à l'entretien de ces équipements et à l'entretien des climatiseurs d'automobile, formulés dans l'accord approuvé à la 38^e réunion. Les montants sollicités et les coûts d'appui d'agence associés sont présentés ci-dessous.

Projet	Coût du projet (\$US)	Coûts d'appui (\$US)
Plan sectoriel de la fabrication d'équipements de réfrigération (PNUD)	1 600 000	141 100
Plan sectoriel de l'entretien des climatiseurs d'automobile (Banque mondiale)	1 347 300	119 937
Plan sectoriel de l'entretien des équipements de réfrigération (PNUD)	1 805 987	160 939

**SECTOR PHASE-OUT PLAN FOR ELIMINATION OF CFCs IN THE REFRIGERATION
(MANUFACTURING) SECTOR IN INDONESIA**

**REPORT ON THE IMPLEMENTATION OF CY 2002 - 2003 ANNUAL PROGRAMME AND
REQUEST FOR THE RELEASE OF THE SECOND FUNDING TRANCHE**

Prepared By

**SECTOR PHASE-OUT PLAN MANAGEMENT & COORDINATION UNIT (SPMCU),
KEMENTERIAN LINGKUNGAN HIDUP (LH)**

AND

UNDP

**SECTOR PHASE-OUT PLAN FOR ELIMINATION OF CFCs IN THE REFRIGERATION
(MANUFACTURING) SECTOR IN INDONESIA**

Report on CY 2002-2003 Implementation Programme and Request for Release of Second Tranche
(As of 15 October 2003)

1. Background

The Sector Phase-out Plan for Elimination of CFCs in the Refrigeration (Manufacturing) Sector in Indonesia was approved at the 37th Meeting of the Executive Committee of MLF, at a total funding level of US\$ 6,398,000, to be provided in five annual tranches, leading up to the complete phase-out of CFCs in the Refrigeration (Mfg) Sector in Indonesia by 01 January 2008.

The Phase-out Plan will be implemented through five annual implementation programmes and together with the implementation of the approved ongoing projects, will result in the complete phase-out of CFCs in the Refrigeration (Mfg) Sector in Indonesia in four years. The Phase-out Plan will cover the technology conversions in all the remaining eligible enterprises in the Refrigeration (Mfg) Sector and also ensure timely, sustainable and cost-effective phase-out in the Refrigeration (Mfg) Sector through a combination of investment, technical support and management components.

The breakdown of the approved overall funding was as below:

Investment Component:	US\$ 6,123,000 (including contingencies)
Policy/Management Component:	US\$ 275,000
Total:	US\$ 6,398,000

The extract of the agreement between Government of Indonesia and the Executive Committee of the Multilateral Fund (Document UNEP/OzL.Pro/ExCom/38/70, Annex-XI) covering the disbursement schedule and annual CFC consumption and phase-out control targets, pertaining to the Refrigeration (Mfg) Sector in Indonesia, is reproduced below:

Parameter	2002	2003	2004	2005	2006	2007	2008	Total
Annual CFC Consumption limit in the Refrigeration Sector (ODP MT)	NA	3,218	3,018	2,408	1,698	966	0	N/A
Annual CFC phase-out target in the Refrigeration (Mfg) Sector (ODP MT)	0	90	300	300	300	241	0	1,231
Annual Funding Installment * (US\$)	1,288,000	2,200,000	1,762,000	750,000	217,000	181,000	0	6,398,000
Agency Support Costs* (US\$)	111,920	194,000	156,900	67,500	19,530	16,290		566,140

* An advance of US\$ 600,000 was released from the second tranche of US\$ 2,200,000 in July 2003

The annual implementation programme for CY 2002-2003 was submitted to MLF in November 2002 (attached as Annex-1 to this document).

2. Preparatory Activities

- The first tranche of US\$ 1,288,000 was received by UNDP in August 2002. An additional US\$ 600,000 was approved at the 40th ExCom Meeting and was released as advance from the second tranche, in August 2003.
- It was agreed by UNDP and KLH that the project would be implemented through the NEX (National Execution) modality.
- The UNDP first-phase project document covering the first tranche was prepared and submitted to KLH in December 2002.
- UNDP and KLH agreed on the Operational Mechanism for Implementation (OMI), which delineated the roles and responsibilities of the various stakeholders, in January 2003.
- The first phase project document was signed by Government in April 2003.
- The UNDP first-phase project document was fully signed for all parties in May 2003.

3. Investment Component

3.1 Enterprise Participation

The first list of participating enterprises was provisionally endorsed by KLH in April/May 2003. Upon verification of the enterprise baselines by KLH and UNDP, the final endorsement of the 40 enterprises for participation in the first batch for implementation, was provided by KLH to UNDP in August 2003. Upon completion of all activities in these enterprises (targeted in CY 2004 and 2005), the CFC phase-out that would be achieved, would contribute 443 MT to the CY 2004 and CY 2005 annual CFC phase-out target.

3.2 Procurement

- UNDP notified the invitations for Expressions of Interest for prospective suppliers of the equipment to be procured under this project in January 2003. The invitations for Expressions of Interest were posted in the websites of UN Development Business, UNDP's Inter-Agency Procurement Services Office (IAPSO) and UNDP-Jakarta for one month.
- UNDP prepared the technical specifications for the equipment to be procured for the first batch of enterprises, in February 2003. UNDP also finalized the short list of vendors for the international competitive bidding exercise, based on the roster of existing suppliers and based on the evaluation of responses to the Expressions of Interest.
- The Invitations to Bid (ITB) for the equipment to be procured for the first batch of enterprises, based on the above, were issued by UNDP in February 2003. Four different invitations to bid, covering the different types of equipment required were issued to a total of 6-8 vendors for each type of equipment.

- The bids received were evaluated in March 2003. The process of approval from UNDP's procurement committees was completed in August 2003.
- The process of finalization of the vendors and issuance of purchase orders was completed in September 2003. The total funds committed for the procurement for the first batch of participating enterprises, amount to about US\$ 1.6 million. Installation and commissioning of the equipment in early 2004 will lead to achieving the phase-out targets of about 300 ODP tonnes at the end of 2004.

4. Non-Investment (Policy and Management Support) Component

4.1 Sector Phase-out Plan Management and Coordination Unit (SPMCU)

A National Programme Manager and two staff for the SPMCU were recruited and the Unit became fully operational in June 2003.

4.2 Enterprise Participation

- The operational mechanism for enterprise participation in the Sector Phase-out Plan was finalized by KLH in consultation with UNDP.
- The verification of baseline at the first batch of enterprises was concluded in July 2003. This included plant visits by KLH/SPMCU and UNDP, and collection of participation documentation and commitments from the enterprises in line with KLH regulations.
- The verification of enterprises in future batches of participation/procurement has been initiated and would be an ongoing exercise.

4.3 Other Policy, Regulatory and Awareness Actions

- KLH continued the implementation and enforcement of the Government of Indonesia regulations related to ODS use.
- Two workshops were held in January 2003. The first workshop targeted prospective recipient enterprises under the Plan, for introducing the Plan and for briefing them on the roles, responsibilities, mechanism, procedures, terms and commitments for participation. About 70 enterprises attended the workshop. The second workshop targeted government and institutional stakeholders and decision makers, for briefing them on the government level policy and regulatory actions to be taken as a part of Plan implementation. About 50 persons attended. The workshop highlighted the roles of various line ministries and departments in the Plan implementation, reinforcing the need for coordinated actions and included panel discussions on experiences of policy measures in other Article 5 countries.

5. CFC Phase-out and Results

The annual CFC phase-out target for CY 2003 is 90 MT, to be achieved through the completion of ongoing projects. Through the completion of six ongoing projects by November 2003, the CY 2003 annual CFC phase-out target would be achieved (see Annex-2).

The completion of the enterprise-level activities in the enterprises included in the first batch is envisaged during 2004. This would lead to the phase-out of at least 300 MT, which is the CFC phase-out target for that year.

6. 2004 Annual Implementation Programme

The 2004 Annual Implementation Programme is submitted for the review and approval of the Executive Committee. The 2004 Annual Implementation Programme will phase out about 150 ODP MT of CFC upon completion in CY 2004 and about 150 ODP MT in CY 2005.

As per disbursement schedule in Table 1 of the Agreement between the MLF and the Government of Indonesia, \$600,000 advance against the second tranche of \$2,200,000 was approved at the 40th Executive Committee Meeting in July 2003 and released to UNDP in August 2003. The Executive Committee is requested to approve the 2004 Annual Implementation Programme and the release of the remaining 2003 funding level of \$1,600,000 and the corresponding support fees of \$141,100.

INDONESIA
Refrigeration (Manufacturing) Sector Phase-out Plan
Annual Implementation Program (Tranche 1) for CY 2003

1. Data

Country	Indonesia
Year of plan	2003
Number of years completed	0
Number of years remaining under the plan	5
Target ODS consumption in Sector for the preceding year (ODP MT)	1,231
Target ODS consumption in the Sector for the year of plan (ODP MT)	1,231
Level of funding requested (US\$)	1,600,000
Lead implementing agency	UNDP
Co-operating agency (ies)	N/A

2. Targets

Target:	Preparatory technical assistance and policy/management support activities			
Indicators		Preceding Year	Year of Plan	Reduction
Supply of ODS (ODP MT)	Import	5,585	5,585	0
	Production	0	0	0
	Total (1)	5,585	5,585	0
Demand of ODS (ODP MT)	Manufacturing	1,231	1,231	0
	Servicing	N/A	N/A	N/A
	Stock piling	N/A	N/A	N/A
	Total (2)	1,231	1,231	0

3. Industry Action

Sector	Consumption Preceding Year (1)	Consumption Year of Plan (2)	Reduction within Year of Plan (1) - (2)	No. of Projects Complete	Number of Servicing Related Activities	ODS Phase-Out (ODP MT)
Refrigeration (Mfg) Sector	1,231	1,231	0	0	0	0

It is envisaged that the phase-out of CFCs in ongoing projects in the Refrigeration (Manufacturing) Sector amounting to 90 MT, will be accomplished during 2003.

4. Technical Assistance

Activity	Description	
Workshop for user industry	Objective	Initiating enterprise participation and phase-out activities
	Target group	Prospective recipient enterprises
	Impact	Obtaining enterprise commitments for time-bound phase-out
Technical Assistance for procurement of equipment	Objective	Initiate procurement procedures for equipment to be provided to recipient enterprises for conversion to non-CFC technology
	Target group	Recipient enterprises
	Impact	Finalization of specifications and vendor shortlists, international competitive bidding and issuance of purchase orders/contracts

The technical assistance activities would be initiated through sub-projects for about 30 enterprises, leading to an elimination of about 170 MT of CFCs upon completion, envisaged for 2004. It is foreseen that the durations for the sub-projects for these 20 enterprises would be set in such a way as to ensure that their completion would contribute to about 57% of the verifiable annual performance target for CY 2004 (300 MT) leading to a minimum phase-out of about 170 MT CFCs through the Sector Phase-out Plan. The balance of the 2004 target would be met through the second funding tranche to be obtained in 2003.

5. Government Action

Policy/Activity Planned	Schedule of Implementation
Type of Policy Control on ODS Import	Continuing enforcement of existing controls
Public Awareness	N/A
Others	See below

The following activities are proposed for 2002, under the Policy and Management Support component:

- a) Completing recruitment and allocation of coordinating personnel within the ozone unit for plan management
- b) Continuing implementation of the operational mechanism for participation by enterprises in the Sector Phase-out Plan and for obtaining phase-out commitments from enterprises.
- c) Organization of one awareness workshop for the sector.
- d) Initiating establishment of product and practices standards for the sector
- e) Preparation of annual implementation programme

6. Annual Budget

Activity	Planned Expenditures (US \$)
Operation of Sector Plan Management and Coordination unit (SPMCU)	60,000
Technical Assistance	90,000
Workshops and awareness	20,000
Equipment	1,300,000
Contingencies	130,000
TOTAL	1,600,000

7. Administrative Fees

The administrative fees will be utilized by UNDP throughout the implementation of this tranche.

INDONESIA
Refrigeration (Mfg) Sector Phase-out Plan

Projects in the Refrigeration (Mfg) Sector (to be) Completed during CY 2003

UNDP Project Number	MLF Project Number	Project Name	Approved Grant (US\$)	ODS (MT/y)	ODP (MT/y)	Remark
INS/01/G67	IDS/REF/35/INV/131	PT Nikoteknik	238,903	29.73	27.90	Target 11/2003
INS/01/G66	IDS/REF/35/INV/132	PT Sapporo Mestika	153,768	11.58	11.18	Target 11/2003
INS/01/G61	IDS/REF/35/INV/133	PT Hatindo Metal Utama	145,894	10.15	9.59	Target 11/2003
INS/01/G63	IDS/REF/35/INV/134	PT Leoindo Kreasi	119,394	16.81	15.74	Target 11/2003
INS/01/G65	IDS/REF/35/INV/135	PT Alfa Metalindo Agra	146,960	10.23	9.66	Target 11/2003
INS/01/G62	IDS/REF/35/INV/136	PT Gastro Gizi Sarana	221,049	16.49	15.50	Target 11/2003
TOTAL			1,025,968	94.99	89.57	

Notes:

1. All enterprises would achieve all project objectives and meet all project obligations, such as phase-out of CFCs, phase-in of CFC-free production, depletion of CFC stocks, destruction of redundant and replaced baseline equipment, etc. upon completion targeted for November 2003.
2. HOPs for these projects are targeted to be issued and signed before December 2003.
3. The annual **CFC phase-out target for CY 2003**, in accordance with the schedule agreed in the Indonesia Refrigeration (Mfg) Sector Phase-out Plan is **90 MT**.

**SECTOR PHASE-OUT PLAN FOR ELIMINATION OF CFCs IN THE REFRIGERATION
(MANUFACTURING) SECTOR IN INDONESIA**

Annual Implementation Program (Tranche 2) for CY 2004

1. Data

Country	Indonesia
Year of plan	2004
Number of years completed	1
Number of years remaining under the plan	4
Target ODS consumption in Sector for 2003 (ODP MT)	1,231
Target ODS consumption in Sector for 2004 (ODP MT)	1,141
Level of funding requested (US\$)*	1,600,000*
Lead implementing agency	UNDP
Co-operating agency (ies)	N/A

* Represents the net funding request. The original tranche amount was US\$ 2,200,000, of which, US\$ 600,000 was released in advance in July 2003, in accordance with the provisions of the Agreement between Indonesia and the Executive Committee.

2. Targets

Target:	CFC phase-out target for 2004 in the Refrigeration (Mfg) Sector: 300 MT			
Indicators		Preceding Year	Year of Plan	Reduction
Supply of ODS (ODP MT)	Import	5,585		0
	Production	0	0	0
	Total (1)	5,585		0
Demand of ODS (ODP MT)	Manufacturing	1,231	1,141	90
	Servicing	N/A	N/A	N/A
	Stock piling	N/A	N/A	N/A
	Total (2)	1,231	1,141	90

3. Industry Action

Sector	Consumption Preceding Year (1)	Consumption Year of Plan (2)	Reduction within Year of Plan (1) - (2)	No. of Projects Complete	Number of Servicing Related Activities	ODS Phase-Out (ODP MT)
Refrigeration (Mfg) Sector	1,231	1,141	90	6	0	90

It is envisaged that the phase-out of CFCs through completion of enterprise-level activities for the first batch of enterprises in the Refrigeration (Manufacturing) Sector would contribute 300 MT to the CFC phase-out target for CY 2004.

4. Technical Assistance

Activity	Description	
Workshop for user industry	Objective	Initiating enterprise participation and phase-out activities for the second batch of participating enterprises
	Target group	Prospective recipient enterprises
	Impact	Obtaining enterprise commitments for time-bound phase-out
Technical Assistance for procurement of equipment	Objective	Initiate procurement procedures for equipment to be provided to recipient enterprises for conversion to non-CFC technology for the second batch of participating enterprises
	Target group	Second batch of recipient enterprises
	Impact	Finalization of specifications and vendor shortlists, international competitive bidding and issuance of purchase orders/contracts

The technical assistance activities would be initiated through sub-projects for about 30 enterprises, leading to an elimination of about 150 MT of CFCs upon completion in 2004 and about 150 MT of CFCs in 2005. It is foreseen that the durations for the sub-projects for these 30 enterprises would be set in such a way as to ensure that their completion would contribute to about 50% of the verifiable annual performance target for CY 2005 (300 MT) leading to a minimum phase-out of about 150 MT CFCs through the Sector Phase-out Plan. The balance of the 2005 target would be met through the third funding tranche to be obtained in 2004.

5. Government Action

Policy/Activity Planned	Schedule of Implementation
Type of Policy Control on ODS Import	Continuing enforcement of existing controls
Public Awareness	N/A
Others	See below

The following activities are proposed for 2004, under the Policy and Management Support component:

- a) Continuing monitoring of Plan implementation activities, continuing implementation of the operational mechanism for participation by enterprises and obtaining phase-out commitments from enterprises.
- b) Organization of one user industry workshop.
- c) Organization of one awareness workshop.
- d) Initiating establishment of product and practices standards for the sector
- e) Preparation of annual implementation programme

6. Annual Budget

Activity	Planned Expenditures (US \$)
Operation of Sector Plan Management and Coordination unit (SPMCU)	60,000
Technical Assistance	90,000
Workshops and awareness	20,000
Equipment	1,300,000
Contingencies	130,000
TOTAL	1,600,000

7. Administrative Fees

The administrative fees will be utilized by UNDP throughout the implementation of this tranche.

**REFRIGERATION SECTOR PHASE-OUT PLAN:
MOBILE AIR CONDITIONER (MAC)
SERVICING SECTOR
2004 ANNUAL PROGRAM**

**SECTOR PLAN MANAGEMENT AND
COORDINATION UNIT
MINISTRY OF ENVIRONMENT**

AND

THE WORLD BANK

October 22, 2003

Data Sheet

Country	Indonesia
Year of plan	2004
Number of years completed	1
Number of years remaining under the plan	4
Ceiling of ODS consumption of the preceding year (ODP MT)	695
Target ODS consumption of the year of plan (ODP MT)	585
Total MLF funding approved in principle (38th Excom Meeting) (US\$)	4,317,000
Total MLF funding released to the Bank by Oct 2003 (US\$)	1,369,800
Level of funding requested for the 2004 Annual Plan (US\$)	1,347,300
National Implementing operating agency	Ministry of Environment
Implementing agency	World Bank

TABLE OF CONTENTS

INTRODUCTION

PART A STATUS OF IMPLEMENTATION OF 2003 ANNUAL PROGRAM

PART B 2004 ANNUAL PROGRAM

- 1) OBJECTIVES
- 2) POLICY INSTRUMENTS
- 3) ENTERPRISE-LEVEL ACTIVITIES
- 4) TECHNICAL ASSISTANCE ACTIVITIES

The MAC Sector Plan

BACKGROUND

1. In accordance with the Executive Committee's approval of the Sector Plan for the Phaseout of the use of CFC-12 in the Mobile Air Conditioning Sector in Indonesia (IDS/REF/38/INV/153), Indonesia is hereby requesting release of the second tranche of US\$1,347,300 for implementation of the year 2004 Annual Program. With this funding, Indonesia's CFC-12 consumption for servicing in the MAC sector will be reduced to a maximum of 695 MT in 2004. Details of the annual program are in Part B.
2. After the approval of the Indonesia MAC Sector Plan at the 38th meeting of the ExCom and release of funds for the first (2003) Annual Program, Indonesia began implementation of the MAC Sector Strategy. The national consumption level of CFC-12 allowed for 2003 in the MAC sector is 805 MT. A detailed implementation status is provided in Part A.
3. This phaseout result have been achieved through close cooperation between the Ministry of Environment (KLH), Group Coordinating agency (Dasa Windu Agung) and the concerned enterprises. The experience from the implementation has confirmed the necessity of strong policy enforcement and monitoring of the MAC phaseout program. Training and public awareness are key elements in the MAC sector plan implementation due to the number and geographical distribution of the enterprises involved.

This MAC servicing sub-sector will facilitate elimination of all the remaining eligible CFC consumption in the mobile air conditioning sub-sector in Indonesia, upon completion. The MAC will be implemented through five annual implementation programs and together with the implementation of the approved ongoing projects in the Refrigeration Sector, is expected to result in the complete phase-out of CFCs in the Refrigeration Sector in Indonesia in five years. The MAC will address the conversion requirements in the mobile air conditioning sub-sector for ensuring a timely, sustainable and cost-effective phase-out, through a combination of policies and technical assistance components. investment, technical support and policy/management support components.

4. The extract of the Agreement between Government of Indonesia and the Executive Committee of the Multilateral Fund (Document UNEP/OzL.Pro/ExCom/38/70, Annex-XI) covering the disbursement schedule and annual CFC consumption and phase-out control targets, pertaining to the MAC Servicing sub-Sector in Indonesia, is reproduced below:

Year	National CFC consumption limit		Annual CFC Consumption limit in the Refrigeration Sector (ODP MT)		Annual CFC consumption limit in the MAC Servicing sub-sector (ODP MT)		MLF funding for the MAC sector annual programs**
	Planned *	Actual	Planned	Actual	Planned	Actual	
2002		5,585	NA		915	915	
2003	NA		3,218		805		1,369,800
2004	NA		3,018		695		1,347,300
2005	NA		2,408		585		1,347,300
2006	NA		1,698		475		126,800
2007	NA		966		365		125,800
2008	0*		0		0		0
2009	0*		0		0		0
2010	0		0		0		0

* As per Country Program Update.

** To be released with the approval of the annual program at the last meeting of the preceding year

Part A

Implementation Status Of 2003 Annual Program

Background

1. The National Plan for Phasing Out the Use of CFC-12 in the Mobile Air Conditioning Sector through a Combination of Policies; Technical Assistance Program and CFC-12 Recycling and Recovery was approved at the 38th Meeting of the Executive Committee of MLF, at a total funding level of US\$ 4,317,000, to be provided in five tranches, facilitating the complete phase-out of CFC-12 in the Mobile Air Conditioning (MAC Servicing) Sub-Sector in Indonesia by 01 January 2008. The first tranche of US\$ 1,369,800 for implementation of the 2003 annual program was released with the approval of the sector plan at the 38th meeting of the ExCom in November 2002.

2. This MAC servicing sub-sector will facilitate elimination of all the remaining eligible CFC consumption in the mobile air conditioning sub-sector in Indonesia, upon completion. The MAC will be implemented through five annual implementation programs and together with the implementation of the approved ongoing projects in the Refrigeration Sector, is expected to result in the complete phase-out of CFCs in the Refrigeration Sector in Indonesia in five years. The MAC will address the conversion requirements in the mobile air conditioning sub-sector for ensuring a timely, sustainable and cost-effective phase-out, through a combination of policies and technical assistance components. investment, technical support and policy/management support components.

Progress in Project Preparation

3. The management of the MAC servicing sub-sector was organized along with Refrigeration Manufacturing and Servicing sub-sectors by the formation of Sector Plan Management and Coordination Unit (SPMCU) consisting of a Programme Manager and three Operation Assistants each overseeing the implementation of corresponding sector, namely Refrigeration Manufacturing, Refrigeration Servicing and MAC. The personnel of SPMCU was recruited in June 2003 and this unit became operational on that date.

4. SPMCU has completed office establishment in the LH building, which also facilitated the renovation of the overall office space for the staff of Assistant Deputy 3 overseeing atmosphere and climate change. SPMCU office is equipped with adequate furniture, computers and telecommunication lines allowing SPMCU to work independently.

5. **Policy Action and Regulation.** The implementation of this activity is merged with that of the other refrigeration Sub-Sector as the whole program needs an integrated policy and regulation. KLH continued the implementation and enforcement of the Government of Indonesia regulations related to ODS use. Interaction meetings were held with major distributors and traders of CFCs and with representatives of industry

associations related to refrigeration and MAC servicing. This is expected to lead to the institutionalizing these contacts and result in formation of a core group of industry stakeholders, to increase involvement and ensure commitments to cooperation for the successful achievement of the phase-out targets and control measures under the Plan.

Import and Export Monitoring and Control System for ODS

Improving the Import and Export Monitoring and Control System for ODS in Indonesia is essential to Indonesia, as this is the main tool for meeting the performance agreements under the sector plans and will ensure that Indonesia will meet its reporting obligations under the Montreal Protocol. Indonesia is in the process of setting up a realistic quota system reflecting the actual informal importers and the ODS demand in the market which is within the aggregate ODS consumption allowed under the sector plans. The national coordinating agency (ITB) will conduct a training workshop for customs agencies and 55 informal importers. It is envisaged that quotas will be issued to eligible importers on an annual basis, and that each importer will be entitled to a quota based on historical imports and adjusted so the aggregate import is within the allowed annual consumption. The import quota system will allow control of import of each ODS substance in accordance with the overall agreements. It is under research if it is possible to develop a system where the consumption in each ODS consuming sector can effectively be monitored.

2. Enterprise level activities: This component focuses on enabling the MAC servicing enterprises to physically reduce CFC-12 usage in their servicing activities, thereby reduces the import need for CFC in the country. The main activity of this component is to assist the participant enterprises to build their capacity in best practice in MAC servicing by improving their knowledge and technique on managing CFC-12 in the air conditioning system by providing training in and equipment for recovery and recycling program. This program will target a total CFC-12 consumption of 220 MT ODP by the end of 2003.

6. The implementation of the recovery and recycling program has been carried out by PT Dasa Windu Agung (DWA), the Group Coordinator of MAC Sector Plan as signified under the Sub-grant Agreement Document of July 17, 2003. DWA has initiated the activity with surveying and registering potential recipient establishments. So far, 260 workshop establishments have been visited and surveyed, and 216 of them have responded by submitting their application to participate in the program. These 216 enterprises carry a cumulative ODP of 254.5 MT which is over the 2003 phase-out target of 220 MT ODP.

7. **Technical Assistance: Training of trainers.** The distribution of servicing equipment would only be beneficial if the operators of such equipment were provided with the necessary skill and knowledge. It was understood that most of MAC technicians in Indonesia never had a proper training, gaining their skill only by working in the workshops. The activity of Training of Trainers was designed to create a pool of trainers that will train MAC technicians in their respected areas. The activity consists of development of curriculum, recruiting instructors, identifying candidates for trainees and collaborate with training establishment already identified in the preliminary stage.

8. **Public Awareness.** This activity has been integrated with the other

Refrigeration sub-sectors i.e. manufacturing and servicing whenever appropriate, such as in the workshops for stakeholders.

9. **CFC Phase-out and Results:** The target of CFC-12 phase-out under the Mobile Air Conditioning (MAC) for 2003 is 220 MT. The completion of activities in recovery and recycling involving 216 enterprises recommended by DWA would phase out some 254,5 MT ODP and the target would have been reached.

PART B

2004 ANNUAL PROGRAM

Objectives

1. The phaseout objective of the 2004 annual program is to ensure that: (i) the national CFC-12 consumption limit of 695 MT will not be exceeded in 2004. Indonesia is requesting the release of the approved amount of US\$ 1,347,300 for the 2004 annual program as agreed in the overall MAC Sector Phaseout Plan. can be met.

Phaseout Targets

Target:		Procurement actions, training actions, technical assistance and policy/management support activities		
Indicators		Preceding Year	Year of Plan	Reduction
Supply of ODS (ODP MT)	Import	5,585	5,585	0
	Production	0	0	0
	Total (1)	5,585	5,585	0
Demand of ODS (ODP MT)	Manufacturing	N/A	N/A	N/A
	MAC Servicing	805	695	0
	Stock piling	N/A	N/A	N/A
	Total (2)	805	695	110

Policy Actions. The following activities will be continued and/or promulgated to support implementation of the 2004 Annual Program

- (i) *Discussion with other related government agencies* - to develop possible measures/regulations such as: a) ban on new MAC installations with CFC, b) venting ban, c) compulsory use of recovery until when the system is serviced or decommission; d) prohibition of mislabeling containers, e) training for proper method in MAC servicing sector, procurement of around of refrigerant identifiers, in supports to policy action, will be concluded based on recommended actions with the government agencies.
- (ii) *Issuance of certification* –Certification will be provided to MAC service shops that have joined and passed technical examination of technicians

Enterprise-level activities

The 2004 Annual Program aims to eliminate the consumption of 110 MT of CFC-12 by installing about 100 recycling machines. Due to a geographical spread of service shops in the country, the program divides its distribution into eight regions;

1. Jakarta
2. West Java
3. Central Java
4. East Java

5. Bali & Nusa Tenggara
6. Sumatra
7. Kalimantan
8. Sulawesi & east Indonesia

Considering a large number of service shops that are mainly concentrated in Java Island, the first two implementation programs will be concentrated in cities in Java particularly in Jakarta, West Java & East Java.

All contracts for conversion projects are expected to be signed in the early 2004 and implementation may take one and half years. In addition, during the period of the 2004 Annual Program, service shops' identification will be carried out in several ways, in cooperation with MAC distributors, Ministry of Industry, Provincial bodies, upstream suppliers of CFC-12, MAC service shops, car manufacturers, and car associations.

Technical assistance (TA) Activities

TA activities under the MAC Sector Plan's 2004 Annual Program concentrate on the following: (a) strengthening the overall institutional framework for phase-out; (b) provides regulatory support; (c) public awareness, (d) management, monitoring and evaluation of the project and enhancement of capabilities of participating institutions under the PMU; (e) project implementation that will be subcontracted to an independent institution, and; (f) information exchange. The main TA activities proposed for the First Implementation Program include the following:

- (i) *Workshops to MAC service shop personnel involved in implementation of phase-out activities* – workshops to MAC service shops' owners and technicians is needed initially for them to prepare commitment participation and other terms set forth, to monitor and report CFC-12 consumption, , and to learn operating procedures in MAC sector phase-out approach. The workshop will need to be repeated every year in the first few years of implementation;
- (ii) *National workshops* - to introduce and promote (a) MAC sector phase-out strategy, (b) policies already promulgated and new policies to be introduced for MAC sector phase-out, (d) government commitment to CFC-12 phase-out, and (e) alternative technology. Proposed participants include national, provincial, and local level policy makers, sector ministries related to MAC industries, MAC professional associations and related industry; Public awareness of the environmental and economic impact of ozone layer depletion via newspapers, seminar and/or electronic media;
- (iii) Launch promotional program to encourage public to have MAC systems repaired by certified technicians.
- (iv) **Train the Trainer Program.** The program will continue from the first implementation period into the 2004 Annual Plan period. This program is organized to minimize (a) current practice of topping up refrigerant without fixing leaks; (b) education for proper service method. At the end, technicians who have attended the training and passed technical tests shall receive certification. Under the planned duration, the program will concentrate on the following:

- Develop and upgrade, if possible the existing training requirements and materials used for MAC training offered by training centers/technical institutes assisted by international and/or local experts appointed by NOU;
 - Invite potential training center and technical institutes; including the regional and provincial training centers for accreditation for respective courses.
- (v) **Development of Standard Inspection Manual** – An inspection Manual shall be developed within the first implementation period to equip MAC distributors and service shops identifying different types of refrigerants contained in MAC system;
- (vi) **Development and Printing of pamphlets** - stickers shall be produced for car owners to identify refrigerant type in the MAC unit, name of the shop that last worked on the system, date of last serviced, and type of service made;
- (vii) **Trainings** - Training sessions shall be held to empower voluntary agreements with MAC service shops and components suppliers. Training about usage and function of refrigerant identifier will be a part of the session. Training of technicians shall be conducted by the appointed training centers and subsequently will issue certifications to technicians who participate in the program;

The above policy initiatives, enterprise-level and technical assistance activities are summarized in the Tables below.

**Phase-out Targets and Policy Instruments
(January 2004 – December 2004)**

	2004	Key actions required	Key dates
Phase-out target (MT)	110	Signing of commitment participation	March 04
	183	Singing of commitment participation	July 04
	Actions Required		By Whom
			Key Dates
1. Commitment Letter of service shop	1. Commitment participation finalized;	SPMCU	February 04
	2. Commitment participation finalized;	SPMCU	June 04
2. Policy action	3. Development of standard inspection manual;	SPMCU	January 04
	4. Development & printing of pamphlets;	SPMCU	February 04
	5. Procurement of 20 units refrigerant identifier	SPMCU	July 04
	6. Trainings of MAC focal points & distribution of identifiers	SPMCU	March 04
3. Train the trainers	7. Set-up the program;	SPMCU	November 03
	8. Invitation and appointment potential training center;	SPMCU	January 04
	9. Procurement of basic MAC units;	SPMCU	February 04
	10. Train the trainers including distr. of basic equipment.	SPMCU	August 04
4. Technical assistance activities	11. Trainings, workshops, certification, awareness and promotion program.	SPMCU	On-going

2004 Annual Program

	<i># of enterprises targeted</i>	<i>Key Actions Required</i>	<i>Key Dates</i>
1. Elimination of CFC-12 in MAC service shops	~100	Survey and selection of participating MAC service shops	1. March 04 – Commitment participation collected 2. April 04 – Procurement of Investment 3. Oct. 04 – Completion of distribution & hands-on training of equipment to service shops
1. Elimination of CFC-12 in MAC service shops	~180	Survey and selection of participating MAC service shops	1. June 04 – Commitment participation collected 2. July 04 – Procurement of Investment 3. March 05 – Completion of distribution & hands-on training of equipment to service shops
<i>Activities</i>		<i>Actions Required</i>	<i>Key Dates</i>
1. MAC SPMCU	Set up SPMCU (completed) Ongoing monitoring and operations of SPMCU		Ongoing
2. Selection of consultant/independent verification	Selection of qualified consultant/institution to carry out independent verification of the project		Will be carried out in 1Q 2004-activities completed
4. Training	Training activities for: (a) trainer at training centers (b) Training of MAC service shops technicians		Will be carried out in: (a) 1Q 2004-activities completed (b) 2Q 2004- activities completed
5. Workshops	Workshops for: (a) potential service shops (b) National workshops for policy makers to introduce implementation of the program (c) policy makers to develop measures/regulation of MAC		Will be carried out in 1Q 2004-activities completed
6. Regulatory and supports	Funds to support costs for setting up MAC regulation through workshops/seminars and trainings for NOU and related government agencies and MAC focal points		Will support for actions taken by NOU through out the first implementation program
7. Awareness & Promotional program	(a) Public awareness for environmental and economic impact of ozone layer program thru; newspapers, seminars, electronic media etc. (b) Promo program to encourage public to have MAC system repaired by certified technicians		(a) 4Q 2003 to end of 2004 - will be executed (b) 4Q 2003 to end of 2004 – will be executed
8. Establishment of standard & technical program	(a) Selection of qualified consultants/institutions to develop inspection manual (b) Selection of qualified consultants/institutions to develop training materials & requirements, including training manual and Certification schemes under Train the trainer program		Will be carried out in 4Q 2003 to end of 2004

Annual Budget

Activity	Planned Expenditures (US \$)
Ongoing monitoring and operations of SPMCU	30,000
Technical Assistance	60,000
Workshops, Training and awareness	50,000
Recovery/recycling equipment	1,207,300
TOTAL	1,347,300

**PHASE-OUT MANAGEMENT PLAN FOR CFCs IN THE REFRIGERATION (SERVICING)
SECTOR IN INDONESIA**

**REPORT ON THE IMPLEMENTATION OF CY 2003 ANNUAL PROGRAMME AND
REQUEST FOR RELEASE OF SECOND FUNDING TRANCHE**

Prepared By

**SECTOR PLAN MANAGEMENT & COORDINATION UNIT (SPMCU),
KEMENTERIAN LINGKUNGAN HIDUP (LH)**

AND

UNDP

**PHASE-OUT MANAGEMENT PLAN FOR CFCs IN THE REFRIGERATION (SERVICING)
SECTOR IN INDONESIA**

Report on CY 2003 Implementation Programme and Request for Release of Second Tranche
(As of 15 October 2003)

1. Background

The Phase-out Management Plan for CFCs in the Refrigeration (Servicing) Sector in Indonesia was approved at the 38th Meeting of the Executive Committee of MLF, at a total funding level of US\$ 4,912,300, to be provided in five tranches, facilitating the complete phase-out of CFCs in the Refrigeration (Servicing) Sector in Indonesia by 01 January 2008.

This Phase-out Management Plan will facilitate elimination of all the remaining eligible CFC consumption in the Refrigeration (Servicing) Sector in Indonesia, except in the MAC and Chiller sub-sectors, upon completion. The Phase-out Management Plan will be implemented through five annual implementation programmes and together with the implementation of the approved ongoing projects in the Refrigeration Sector, is expected to result in the complete phase-out of CFCs in the Refrigeration Sector in Indonesia in five years. The Phase-out Management Plan will address the conversion requirements in the Refrigeration (Servicing) Sector for ensuring a timely, sustainable and cost-effective phase-out, through a combination of investment, technical support and policy/management support components. The breakdown of the approved overall funding was as below:

Investment Component:	US\$ 4,149,300 (including contingencies and technical support)
Training Component:	US\$ 573,000
Policy/Management Component:	US\$ 190,000
Total:	US\$ 4,912,300

The extract of the Agreement between Government of Indonesia and the Executive Committee of the Multilateral Fund (Document UNEP/OzL.Pro/ExCom/38/70, Annex-XI) covering the disbursement schedule and annual CFC consumption and phase-out control targets, pertaining to the Refrigeration (Servicing) Sector in Indonesia, is reproduced below:

Parameter	2002	2003	2004	2005	2006	2007	2008	Total
Annual CFC Consumption limit in the Refrigeration Sector (ODP MT)	NA	3,218	3,018	2,408	1,698	966	0	N/A
Annual CFC phase-out target in the Refrigeration (Servicing) Sector (ODP MT)	0	0	200	300	322	250	0	1,072
Annual Funding Installment (US\$)	2,196,758	1,805,987	500,000	250,000	159,555	0	0	4,912,300
Agency Support Costs* (US\$)	195,708	160,939	43,400	21,300	13,160	0		434,507

The annual implementation programme for CY 2003 was submitted to MLF in November 2002 (attached as Annex-1 to this document).

2. Preparatory Activities

- The first tranche of US\$ 2,196,758 was received by UNDP in December 2002.
- It was agreed by UNDP and KLH that the project would be implemented through the NEX (National Execution) modality.
- The UNDP first-phase project document covering the first tranche was prepared and submitted to KLH in February 2003.
- UNDP and KLH agreed that the Operational Mechanism for Implementation (OMI), which delineated the roles and responsibilities of the various stakeholders and was earlier designed for implementing the INS/02/G68 – Sector Phase-out Plan for Elimination of CFCs in the Refrigeration (Manufacturing) Sector in Indonesia would be also followed for implementation of the IND/03/G61 – Phase-out Management Plan for CFCs in the Refrigeration (Servicing) Sector in Indonesia
- The first phase project document was signed by Government in August 2003.
- The UNDP first-phase project document was fully signed for all parties in August 2003.

3. Investment Component

3.1 Recovery/Recycling Programme

Enterprise Participation

The recovery/recycling programme targeted initiating participation of about 385 servicing establishments during 2003. About 170 larger-sized service establishments were identified by SPMCU in collaboration with *Asosiasi Bengkel Elektronik Indonesia* (Indonesia Electronic Service Association). The first list of about 170 servicing establishments was provisionally endorsed by KLH in September 2003 for participating in the recovery/recycling programme.

A survey of training establishments was carried out during May-July 2003 by KLH/SPMCU with assistance from *Institut Teknologi Bandung* (ITB). About 134 training establishments were identified, for participation in the recovery/recycling programme, through the provision of demonstration recovery/recycling equipment.

Procurement

- UNDP notified the invitations for Expressions of Interest for prospective suppliers of the recovery/recycling equipment to be procured under this project in April 2003. The invitations for Expressions of Interest were posted in the websites of UN Development Business, UNDP's Inter-Agency Procurement Services Office (IAPSO) and UNDP-Jakarta for one month.
- UNDP prepared the technical specifications for the equipment to be procured for the first batch of enterprises, in October 2003. UNDP also finalized the short list of vendors for

the international competitive bidding exercise, based on the roster of existing suppliers and based on the evaluation of responses to the Expressions of Interest.

- The Invitations to Bid (ITB) for the equipment to be procured for the first batch of participating servicing and training establishments, based on the above, were issued by UNDP in October 2003.
- The further procurement steps, such as evaluation of bids, UNDP procurement committee approvals and finalization of vendors are expected to be completed in November 2003.

Upon completion of all activities in the first batch of servicing and training establishments (targeted in CY 2004 and 2005), the CFC reduction in servicing that would be facilitated, would contribute about 100 MT to the CY 2004 and CY 2005 annual CFC phase-out targets. The funds committed for procurement of equipment for the first batch of participating establishments, is expected to amount to about US\$ 1.5 million.

The second batch of participating service establishment, estimated at about 250 medium-sized servicing establishments and about 500 small-sized establishments, is expected to be finalized by end-2003. The completion of all activities in this second batch of participating servicing establishments is expected to result in an additional 120 MT in reduction of CFC usage in servicing during 2004 and 2005, thus contributing to CFC reduction targets for 2004 and 2005.

3.2 Pilot Retrofitting/Replacement Demonstration Programme

The process of identifying about 70 representative end-users to participate in the retrofitting/replacement demonstration programme has been initiated. Preliminary screening of about 28 supermarkets, 13 hotels, 7 hospitals, 5 restaurants, 5 marine installations and 10 industrial installations (total 68) has been completed. The mechanism of participation in the Plan and for providing assistance to these end-users is being finalized. The demonstration retrofitting/replacement activities are expected to be completed at these end-users by mid-2004, which in turn is expected to accelerate retrofitting/replacement actions in the end-user sector, leading to a reduction in CFC usage in servicing by about 40 MT during 2004.

4. Training Component

The Master Trainers programme under this component has been initiated. About 150 potential master trainers have been identified and the activities leading to the training of these master trainers are expected to be completed in November 2003. The delivery of this capacity-building training to the Master Trainers, would in turn facilitate the initiation of the subsequent technician training program, leading to the introduction of good practices and efficiencies in servicing, is expected to lead to the reduction of CFC usage in servicing by about 20 MT during 2004.

5. Non-Investment (Policy and Management Support) Component

5.1 Sector Phase-out Plan Management and Coordination Unit (SPMCU)

The SPMCU including the national programme manager and staff, set up under the Indonesia Refrigeration (Mfg) Sector Plan, has been also assigned the task of supporting the implementation activities of the Refrigeration (Servicing) Sector Plan and the SPMCU is fully functional.

5.2 Enterprise Participation

- The operational mechanism for enterprise participation in the Sector Phase-out Plan was finalized by KLH in consultation with UNDP.
- The verification of baseline at the first batch of participating servicing and training establishment was concluded in September 2003.
- The verification of enterprises in future batches of participation/procurement has been initiated and would be an ongoing exercise.

5.3 Other Policy, Regulatory and Awareness Actions

- KLH continued the implementation and enforcement of the Government of Indonesia regulations related to ODS use.
- Two workshops were held in 2003. The first workshop, held in March 2003, targeted prospective participating servicing establishments under the Plan, for introducing the Plan and for briefing them on the roles, responsibilities, mechanism, procedures, terms and commitments for participation. About 50 servicing establishments attended the workshop. The workshop also targeted government and institutional stakeholders and decision makers, for briefing them on the government level policy and regulatory actions to be taken as a part of Plan implementation. About 30 persons attended. The workshop highlighted the roles of various line ministries and departments in the Plan implementation, reinforcing the need for coordinated actions and included panel discussions on experiences of policy measures in other Article 5 countries. The second workshop held in October 2003, was intended to operationalize the participation of service establishments and training establishments and aimed at finalizing the participation agreements and also at identification of service establishments for participating in future batches.
- Interaction meetings were held with major distributors and traders of CFCs and with representatives of industry associations related to refrigeration servicing. This is expected to lead to the institutionalizing these contacts and result in formation of a core group of industry stakeholders, to increase involvement and ensure commitments to cooperation for the successful achievement of the phase-out targets and control measures under the Plan.

5. CFC Phase-out and Results

There was no CFC phase-out target under the Indonesia Refrigeration (Servicing) Sector Phase-out Management Plan for 2003. The completion of activities in recovery/recycling, retrofitting/replacement demonstration and training initiated in 2003 would lead to the reduction of

CFC usage in servicing by at least 200 MT in 2004, which is the CFC phase-out target for that year under this plan.

6. 2004 Annual Implementation Programme

The 2004 Annual Implementation Programme is submitted for the review and approval of the Executive Committee. The 2004 Annual Implementation Programme will phase out about 200 ODP MT of CFC upon completion in CY 2004.

As per disbursement schedule in Table 1 of the Agreement between the MLF and the Government of Indonesia, the Executive Committee is requested to approve the 2004 Annual Implementation Programme and the release of the 2003 funding level of \$1,805,987 and the corresponding support fees of \$160,939.

INDONESIA
Refrigeration (Servicing) Sector Phase-out Plan

Annual Implementation Program (Tranche 1 & 2) for CY 2002 and CY 2003

1. Data

Country	Indonesia
Year of plan	2002 and 2003
Number of years completed	0
Number of years remaining under the plan	5
Target ODS consumption of the preceding year (ODP MT)	1,072
Target ODS consumption of the year of plan (ODP MT)	1,072
Level of funding requested (US\$)	2,196,758 (1,002,745 + 1,194,013)
Lead implementing agency	UNDP
Co-operating agency (ies)	None

2. Targets

Target:	Procurement actions, training actions, technical assistance and policy/management support activities			
Indicators		Preceding Year	Year of Plan	Reduction
Supply of ODS (ODP MT)	Import	5,585	5,585	0
	Production	0	0	0
	Total (1)	5,585	5,585	0
Demand of ODS (ODP MT)	Manufacturing	N/A	N/A	N/A
	Servicing	1,072	1,072	0
	Stock piling	N/A	N/A	N/A
	Total (2)	1,072	1,072	0

3. Industry Actions

3.1 Sector-level Actions

Sector	Consumption Preceding Year (1)	Consumption Year of Plan (2)	Reduction within Year of Plan (1) - (2)	No. of Projects Complete	Number of Servicing Related Activities	ODS Phase-Out (ODP MT)
Refrigeration (Servicing) Sector	1,072	1,072	0	0	2	0

3.2 Recipient-level Actions

Out of the total of 885 service establishments estimated to participate in the recovery & recycling program (as mentioned in the approved project proposal) it is planned that about 385 service establishments (about 44% of the total) will commence participation during 2002-2003. In addition, out of the total of 100 training establishments estimated to be recipients of the recovery/recycling demonstration program, it is planned that about 50 training establishments (about 50% of the total) would commence participation during 2002-2003.

It is proposed to initiate procurement of recovery/recycling and charging/evacuation equipment for these servicing and training establishments (amounting to 435 sets or nearly 50% of the total). The estimated cost is about 50% of the budget in the approved project proposal or about US\$ 1.62 million. It is foreseen that the duration of implementation of this program for these establishments would be set in such a way as to ensure that their completion would contribute to about 70% of the verifiable annual performance target for CY 2004 (200 MT) leading to reductions in CFC consumption in servicing at these establishments of about 140 MT upon completion.

About 70 representative end-users would be identified for the retrofitting demonstration program. The end-users would be so selected as to be representative of various end-use applications. Agreements with the selected end-users are expected to be in place, for demonstrating the retrofitting technologies within a predefined time frame. This action is expected to accelerate retrofitting/replacement decisions for CFC-based refrigeration equipment by the user industry, leading to a reduction of about 40 MT by 2004.

4. Technical Assistance and Training

Activity	Description	
Workshops for government policymakers and decision-makers	Objective	Ensuring high-level commitment for meeting Plan obligations by government policy-makers and decision-makers
	Target group	Responsible officials from associated line ministries. It is proposed to organize two one-day workshops, each for up to 50 persons in late 2002 and mid-2003.
	Impact	Reinforcing commitment to plan obligations from government and ensuring that the various policy and regulatory actions are taken in accordance with the Plan.
Workshops for Servicing and Training establishments	Objective	Initiating participation and phase-out activities and commitments from service establishments. Initiating the appropriate curricula in the training establishments for disseminating technologies and practices in refrigeration servicing to ensure sustainable reductions in CFC usage.
	Target group	Prospective recipient service establishments and training establishments. It is proposed to organize two one-day workshops, each for about 70 major servicing establishments and about 50 training establishments in the first and second quarters of 2003
	Impact	Participation agreements with servicing establishments in place for the recovery/recycling program. Appropriate curricula in place in the training establishments
Technical Assistance for procurement of equipment	Objective	Initiate procurement procedures for equipment to be provided to recipient servicing establishments for recovery/recycling and training establishments for demonstration
	Target group	Service establishments
	Impact	Finalization of specifications and vendor shortlists, international competitive bidding and issuance of purchase orders/contracts
Technical Assistance for retrofitting demonstration	Objective	Demonstration of retrofitting technologies
	Target group	About 70 end-users would be identified and selected for participation in the program.
	Impact	Facilitating early retrofitting/replacement decisions for CFC-based equipment by end-users, thereby reducing dependence on CFCs for servicing and leading to reductions of about 40 MT in servicing by 2004
Training	Objective	Capacity-building for training of technicians
	Target group	About 150 master trainers will be selected and provided with training and capacity-building inputs through one two-day workshop
	Impact	Delivery of training inputs to master trainers, in preparation for the subsequent technician training program, in order to introduce good practices and awareness thereby facilitating initial emission reductions amounting to about 20 MT during servicing by 2004.

5. Government Action

Policy/Activity Planned	Schedule of Implementation
Type of Policy Control on ODS Import	Continuing enforcement of existing controls
Awareness	See below
Others	See below

Activities for 2002:

- a) Establishment of the Sector Plan Management and Coordination Unit (SPMCU) for facilitating the management of the Sector Phase-out Plan:
 - Determination of personnel and logistics requirements
 - Finalizing terms of reference for personnel
 - Initiation of recruitment of personnel
- b) Formulation of detailed terms of reference and work plans for various activities under the Policy & Management Support component.
- c) Establishment of an operational mechanism for Plan implementation and for participation by servicing and training establishments in the Plan and for obtaining phase-out commitments.
- d) One workshop for institutional and government stakeholders/decision-makers.

Activities for 2003:

- a) Completing recruitment and allocation of coordinating personnel within the ozone unit for plan management
- b) One workshop for institutional and government stakeholders/decision-makers.
- c) Organization of two workshops for servicing and training establishments.
- d) Reaching agreements with the selected servicing establishments for participation in the recovery and recycling program and with the training establishments for incorporating appropriate provisions in their curricula to ensure sustainable dissemination of servicing technologies and practices.
- e) Selection of about 150 master trainers and organization of one workshop for master trainers.
- f) Preparation of Annual Implementation Program

It is expected that the Government of Indonesia may set the time table of the activities mentioned above in a manner that they consider will best assist the industry and ensure the Government's compliance with the performance agreement.

6. Annual Budget

Activity	Planned Expenditures (US \$)
Establishment of, recruitment of staff for and operation of Sector Plan Management and Coordination unit (SPMCU)	40,000
Technical Assistance	100,000
Workshops and awareness	25,000
Training	50,000
Retrofitting demonstration equipment	210,000
Recovery/recycling equipment	1,611,000
Contingencies	161,069
TOTAL	2,196,758

7. Administrative Fees

The administrative fees will be utilized by UNDP throughout the implementation of this tranche.

**PHASE-OUT MANAGEMENT PLAN FOR CFCs IN THE REFRIGERATION (SERVICING) SECTOR
IN INDONESIA**

Annual Implementation Program (Tranche 2) for CY 2004 and Request for Release of Second Tranche

1. Data

Country	Indonesia
Year of plan	2004
Number of years completed	1
Number of years remaining under the plan	4
Target ODS consumption of the preceding year (ODP MT)	1,072
Target ODS consumption of the year of plan (ODP MT)	872
Level of funding requested (US\$)	1,805,987
Lead implementing agency	UNDP
Co-operating agency (ies)	World Bank

2. Targets

Target:	Procurement actions, training actions, technical assistance and policy/management support activities			
Indicators				
		Preceding Year	Year of Plan	Reduction
Supply of ODS (ODP MT)	Import	5,585	5,585	0
	Production	0	0	0
	Total (1)	5,585	5,585	0
Demand of ODS (ODP MT)	Manufacturing	N/A	N/A	N/A
	Servicing	1,072	1,072	0
	Stock piling	N/A	N/A	N/A
	Total (2)	1,072	872	200

3. Industry Actions

3.1 Sector-level Actions

Sector	Consumption Preceding Year (1)	Consumption Year of Plan (2)	Reduction within Year of Plan (1) - (2)	No. of Projects Complete	Number of Servicing Related Activities	ODS Phase-Out (ODP MT)
Refrigeration (Servicing) Sector	1,072	872	200	0	3	200

3.2 Recipient-level Actions

Out of the total of 885 service establishments estimated to participate in the recovery & recycling program (as mentioned in the approved project proposal) it is planned that enterprise-level activities at about 150 large-sized service establishments, which commenced participation during 2002-2003, would be completed, through the provision of recovery/recycling equipment.

In addition, the activities at 134 training establishments who are recipients of the recovery/recycling demonstration program and had commenced participation during 2002-2003 would be completed.

It is planned to initiate/complete procurement of recovery/recycling and/or charging/evacuation equipment for the 250 medium-sized service establishments and 500 small-sized service establishments, constituting the second batch of participating service establishments in the recovery/recycling program. The estimated cost of procuring this equipment would be about US\$ 1.5 million.

It is foreseen that the implementation of the recovery/recycling program for these establishments would be set in such a way as to ensure that the completion of activities would lead to a reduction of 140 MT in CFC usage in servicing, which is 70% of the annual phase-out target for CY 2004 (200 MT). An additional about 75 MT would be reduced by 2005, thus contributing to the phase-out target for 2005.

It is planned that the activities at about 70 representative end-users, which were identified for the retrofitting/replacement demonstration program would be completed. This action is expected to accelerate retrofitting/replacement decisions for CFC-based refrigeration equipment by the user industry, leading to a reduction of CFC usage of about 40 MT during 2004. An additional reduction of 80 MT is expected to take place by 2005, thus contributing to the phase-out target for 2005.

Thus, the total reduction in CFC usage in servicing, resulting from completion of enterprise-level activities as described above, would be about 180 MT during 2004 and about 155 MT during 2005.

4. Technical Assistance and Training

Activity	Description	
Workshops for Servicing establishments	Objective	Continued participation, commitments and phase-out activities from service establishments and for disseminating technologies and practices in refrigeration servicing to ensure sustainable reductions in CFC usage.
	Target group	Prospective recipient service establishments. It is proposed to organize two one-day workshops, each for about 250 servicing establishments in the first and third quarters of 2004
	Impact	Participation agreements with servicing establishments in place for the second and subsequent batches of the recovery/recycling program.
Technical Assistance for procurement of equipment	Objective	Initiate procurement procedures for equipment to be provided to the second batch of recipient servicing establishments for recovery/recycling
	Target group	Service establishments (second batch)
	Impact	Finalization of specifications and vendor shortlists, international competitive bidding and issuance of purchase orders/contracts
Technical Assistance for retrofitting/replacement demonstration	Objective	Completion of activities for retrofitting/replacement of CFC-based equipment and demonstration of retrofitting/replacement technologies.
	Target group	About 70 end-users identified and selected for participation in the program during 2003.
	Impact	Facilitating early retrofitting/replacement decisions for CFC-based equipment by end-users, thereby reducing dependence on CFCs for servicing and leading to reductions of about 40 MT in servicing by 2004
Training	Objective	Training of technicians
	Target group	Refrigeration servicing technicians (about 6,000 in the first batch)
	Impact	Delivery of training inputs to technicians, in order to introduce good practices and awareness thereby facilitating initial emission reductions amounting to about 20 MT during servicing by 2004.

The impact of training activities would be improved practices and efficiencies in refrigeration equipment servicing, leading to emission reductions during servicing amounting to about 20 MT during 2004.

5. Government Action

Policy/Activity Planned	Schedule of Implementation
Type of Policy Control on ODS Import	Continuing enforcement of existing controls
Awareness	See below
Others	See below

Activities for 2004:

- a) One workshop for institutional and government stakeholders/decision-makers.
- b) Organization of two workshops for selected servicing establishments and industry stakeholders.
- c) Continuation of agreements with selected servicing establishments for participation in the recovery and recycling program.
- d) Initiation, management and monitoring of the technician training programme
- e) Preparation of Annual Implementation Program

It is expected that the Government of Indonesia may set the time table of the activities mentioned above in a manner that they consider will best assist the industry and ensure the Government's compliance with the performance agreement.

6. Annual Budget

Activity	Planned Expenditures (US \$)
Ongoing monitoring and operations of SPMCU	40,000
Technical Assistance	90,000
Workshops and awareness	20,000
Training	100,000
Recovery/recycling equipment	1,450,000
Contingencies	105,987
TOTAL	1,805,987

7. Administrative Fees

The administrative fees will be utilized by UNDP throughout the implementation of this tranche.