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执行蒙特利尔议定书  
多边基金执行委员会  
第五十四次会议  
2008年4月7日至11日，蒙特利尔

### 开发计划署 2008 年增订工作方案

## 基金秘书处的评论和建议

1. 开发计划署请执行委员会为其 2008 年增订工作方案核准 10,637,556 美元，外加 798,267 美元的机构支助费用。
2. 开发计划署增订工作方案拟议的活动如下文表 1 所示：

表 1：开发计划署的增订工作方案

| 国家                       | 活动/项目     | 所需数额<br>(美元) | 建议数额<br>(美元) |
|--------------------------|-----------|--------------|--------------|
| <b>A 节：建议一揽子核准的活动</b>    |           |              |              |
| <b>A1. 延长体制建设项目</b>      |           |              |              |
| 斯里兰卡                     | 体制建设      | 134,056      | 134,056      |
| 体制建设项目小计：                |           | 134,056      | 134,056      |
| A 节小计：                   |           | 134,056      | 134,056      |
| <b>B 节：建议单独审议的活动</b>     |           |              |              |
| <b>B1. 氟氯烃淘汰计划的项目编制：</b> |           |              |              |
| 安哥拉                      | 氟氯烃淘汰管理计划 | 245,000      |              |
| 阿根廷                      | 氟氯烃淘汰管理计划 | 330,000      |              |
| 亚美尼亚                     | 氟氯烃淘汰管理计划 | 205,000      |              |
| 玻利维亚                     | 氟氯烃淘汰管理计划 | 135,000      |              |
| 巴西                       | 氟氯烃淘汰管理计划 | 670,000      |              |
| 柬埔寨                      | 氟氯烃淘汰管理计划 | 135,000      |              |
| 中国                       | 氟氯烃淘汰管理计划 | 1,568,500    |              |
| 智利                       | 氟氯烃淘汰管理计划 | 245,000      |              |
| 哥伦比亚                     | 氟氯烃淘汰管理计划 | 425,000      |              |
| 哥斯达黎加                    | 氟氯烃淘汰管理计划 | 245,000      |              |
| 科特迪瓦                     | 氟氯烃淘汰管理计划 | 205,000      |              |
| 多米尼加共和国                  | 氟氯烃淘汰管理计划 | 245,000      |              |
| 萨尔瓦多                     | 氟氯烃淘汰管理计划 | 245,000      |              |
| 斐济                       | 氟氯烃淘汰管理计划 | 205,000      |              |
| 冈比亚                      | 氟氯烃淘汰管理计划 | 135,000      |              |
| 格鲁吉亚                     | 氟氯烃淘汰管理计划 | 205,000      |              |
| 加纳                       | 氟氯烃淘汰管理计划 | 245,000      |              |
| 印度                       | 氟氯烃淘汰管理计划 | 645,000      |              |
| 印度尼西亚                    | 氟氯烃淘汰管理计划 | 440,000      |              |
| 伊朗伊斯兰共和国                 | 氟氯烃淘汰管理计划 | 415,000      |              |
| 牙买加                      | 氟氯烃淘汰管理计划 | 205,000      |              |

|   |           |            |         |
|---|-----------|------------|---------|
| 吉尔吉斯斯坦  | 氟氯烃淘汰管理计划 | 205,000    |         |
| 黎巴嫩   | 氟氯烃淘汰管理计划 | 245,000    |         |
| 马来西亚  | 氟氯烃淘汰管理计划 | 495,000    |         |
| 墨西哥   | 氟氯烃淘汰管理计划 | 190,000    |         |
| 摩尔多瓦  | 氟氯烃淘汰管理计划 | 205,000    |         |
| 尼泊尔   | 氟氯烃淘汰管理计划 | 135,000    |         |
| 尼日利亚  | 氟氯烃淘汰管理计划 | 245,000    |         |
| 巴拿马   | 氟氯烃淘汰管理计划 | 245,000    |         |
| 巴拉圭   | 氟氯烃淘汰管理计划 | 135,000    |         |
| 秘鲁  | 氟氯烃淘汰管理计划 | 245,000    |         |
| 斯里兰卡  | 氟氯烃淘汰管理计划 | 245,000    |         |
| 特立尼达和多巴哥  | 氟氯烃淘汰管理计划 | 245,000    |         |
| 乌拉圭   | 氟氯烃淘汰管理计划 | 245,000    |         |
| 氟氯烃淘汰计划项目编制小计：  |           | 10,473,500 | *       |
| <b>B2. 计量吸入器战略：</b>   |           |            |         |
| 亚美尼亚  | 计量吸入器过渡战略 | 30,000     |         |
| 计量吸入器过渡战略小计：  |           | 30,000     | *       |
| B 节小计：  |           | 10,637,556 | 134,056 |
| 机构资助费用（7.5%用于项目编制和体制建设以及超过 250,000 美元的其他项目、即 9%用于其他 250,000 美元以下的项目）： |           | 798,267    | 10,054  |
| 共计：   |           | 11,435,823 | 144,110 |

\* 供个别审议或待定

## A 节：建议一揽子核准的活动

### A1. 延长体制建设项目：

斯里兰卡：体制建设（134,056 美元）

#### 项目说明

#### 基金秘书处的评论和建议

- 开发计划署提交了斯里兰卡延长体制建设项目的申请。项目的说明载于本文件附件一。
- 基金秘书处建议按照表 1 所示供资数额一揽子核准斯里兰卡延长体制建设的申请。谨建议执行委员会向斯里兰卡政府表达如下的评论：

执行委员会审查了报告所提斯里兰卡体制建设项目延长，并满意地斯里兰卡 2006 和 2007 年向臭氧秘书处报告了数据，这些数据低于 1995—1997 年的平均氟氯化碳履约基准，并超过了《蒙特利尔议定书》减少 50% 的目标和国家履约行动计划规定的目标。因此，斯里兰卡看来遵守了《蒙特利尔议定书》减少目标和国家履约行动计划规定的承诺。执行委员会还注意到，在体制建设项目框架内，斯里兰卡采取了重大的步骤淘汰其消耗臭氧层物质的消费，特别是推进了甲基溴淘汰项目的执行工作，为制冷技术员和海关官员组织了培训讲习班以协助业界遵守氟氯化碳的淘汰目标；通过许可证制度控制各类氟氯化碳和使用氟氯化碳设备的进口和执行解决斯里兰卡剩余氟氯化碳消费的国家计划。执行委员会大力支持斯里兰卡努力减少消耗臭氧层物质的消费。因此，执行委员会希望斯里兰卡在今后两年内继续执行其国家方案和国家淘汰计划活动，在减少消耗臭氧层物质当前的消费量方面取得显著的成功。

## B 节：建议个别审议的活动

### B1. 氟氯烃淘汰计划的项目编制：

|     | 国家       | 项目            | 所需数额(美元)  |
|-----|----------|---------------|-----------|
| (a) | 安哥拉      | 氟氯烃淘汰管理计划项目编制 | 245,000   |
| (b) | 阿根廷      | 氟氯烃淘汰管理计划项目编制 | 330,000   |
| (c) | 亚美尼亚     | 氟氯烃淘汰管理计划项目编制 | 205,000   |
| (d) | 玻利维亚     | 氟氯烃淘汰管理计划项目编制 | 135,000   |
| (e) | 巴西       | 氟氯烃淘汰管理计划项目编制 | 670,000   |
| (f) | 柬埔寨      | 氟氯烃淘汰管理计划项目编制 | 135,000   |
| (g) | 中国       | 氟氯烃淘汰管理计划项目编制 | 1,568,500 |
| (h) | 智利       | 氟氯烃淘汰管理计划项目编制 | 245,000   |
| (i) | 哥伦比亚     | 氟氯烃淘汰管理计划项目编制 | 425,000   |
| (j) | 哥斯达黎加    | 氟氯烃淘汰管理计划项目编制 | 245,000   |
| (k) | 科特迪瓦     | 氟氯烃淘汰管理计划项目编制 | 205,000   |
| (l) | 多米尼加共和国  | 氟氯烃淘汰管理计划项目编制 | 245,000   |
| (m) | 萨尔瓦多     | 氟氯烃淘汰管理计划项目编制 | 245,000   |
| (n) | 斐济       | 氟氯烃淘汰管理计划项目编制 | 205,000   |
| (o) | 冈比亚      | 氟氯烃淘汰管理计划项目编制 | 135,000   |
| (p) | 格鲁吉亚     | 氟氯烃淘汰管理计划项目编制 | 205,000   |
| (q) | 加纳       | 氟氯烃淘汰管理计划项目编制 | 245,000   |
| (r) | 印度       | 氟氯烃淘汰管理计划项目编制 | 645,000   |
| (s) | 印度尼西亚    | 氟氯烃淘汰管理计划项目编制 | 440,000   |
| (t) | 伊朗伊斯兰共和国 | 氟氯烃淘汰管理计划项目编制 | 415,000   |
| (u) | 牙买加      | 氟氯烃淘汰管理计划项目编制 | 205,000   |
| (v) | 吉尔吉斯斯坦   | 氟氯烃淘汰管理计划项目编制 | 205,000   |

|      |          |               |         |
|------|----------|---------------|---------|
| (w)  | 黎巴嫩      | 氟氯烃淘汰管理计划项目编制 | 245,000 |
| (x)  | 马来西亚     | 氟氯烃淘汰管理计划项目编制 | 495,000 |
| (y)  | 墨西哥      | 氟氯烃淘汰管理计划项目编制 | 190,000 |
| (z)  | 摩尔多瓦     | 氟氯烃淘汰管理计划项目编制 | 205,000 |
| (aa) | 尼泊尔      | 氟氯烃淘汰管理计划项目编制 | 135,000 |
| (bb) | 尼日利亚     | 氟氯烃淘汰管理计划项目编制 | 245,000 |
| (cc) | 巴拿马      | 氟氯烃淘汰管理计划项目编制 | 245,000 |
| (dd) | 巴拉圭      | 氟氯烃淘汰管理计划项目编制 | 135,000 |
| (ee) | 秘鲁       | 氟氯烃淘汰管理计划项目编制 | 245,000 |
| (ff) | 斯里兰卡     | 氟氯烃淘汰管理计划项目编制 | 245,000 |
| (gg) | 特立尼达和多巴哥 | 氟氯烃淘汰管理计划项目编制 | 245,000 |
| (hh) | 乌拉圭      | 氟氯烃淘汰管理计划项目编制 | 245,000 |

## 项目说明

5. 开发计划署为 34 个氟氯烃淘汰管理计划的编制提交了申请，细分如下：

| 开发计划署的申请                  | 申请数目 |
|---------------------------|------|
| 仅开发计划署                    | 15   |
| 开发计划署/环境规划署               | 8    |
| 开发计划署/环境规划署/工发组织/德国技术合作公司 | 2    |
| 开发计划署/工发组织/世界银行           | 1    |
| 开发计划署/德国技术合作公司            | 3    |
| 开发计划署/环境规划署/工发组织          | 1    |
| 开发计划署/工发组织                | 3    |
| 开发计划署/环境规划署/工发组织/世界银行/德国  | 1    |
| 共计                        | 34   |

6. 在提交这些申请时，开发计划署表示，其依照技术和经济评估小组增资问题工作队的分类办法，根据氟氯烃的消费量将各国分成 4 个主要的组别，其中中国被列为第 1 组国家。其他组别的说明如下：

| 组别    | 说明  |
|-------|---|
| 第 2 组 | 氟氯烃消费量多的国家，介于 120—1,200 ODP 吨                 |
| 第 3 组 | 消费量中等的国家，介于 6 至 100 ODP 吨                     |
| 第 4 组 | 低消费量国家，低于 6 ODP 吨，大多数仅用于维修。这一组别还包括氟氯烃消费量为零的国家 |

7. 开发计划署在按上述组别提交每一申请的费用估计时还提及，为那些开发计划署作为其牵头结构的国家所申请的费用，与为那些仅作为其合作结构的国家所申请的费用之间存在差别，前者系用作申请较高费用的基础。

8. 开发计划署提及与氟氯烃淘汰管理计划编制有关的以下任务清单：

- (a) 借鉴氟氯化碳淘汰期间所汲取经验教训的体制安排；
- (b) 整合现有安排和实行新的安排，以期氟氯烃淘汰管理计划由编制阶段向执行阶段顺利过渡；
- (c) 实行适当的协调平台确保顺利的安排与协调，特别是多机构的情况；
- (d) 系统地将国家和国际一级的技术专门知识集中到氟氯烃淘汰管理计划的编制上来（未来集中到执行）；
- (e) 根据第 54/39 号决定的要求和细节收集和分析数据；
- (f) 确保与国家有关利益方进行广泛的协商；以及
- (g) 负责根据第 54/39 号决定所要求的多边成本计算和筹资设想承担涉及费用估算的额外任务。

9. 开发计划署按照国家组别的资金申请（不包括第 1 组—中国）可归纳如下：

| 国家组别  | 开发计划署作为牵头机构(申请美元费用) | 开发计划署作为合作机构(申请美元费用) |
|-------|---------------------|---------------------|
| 第 1 组 | 427,000*            | 190,000             |
| 第 2 组 | 245,000             | 135,000             |
| 第 3 组 | 205,000             | 135,000             |

\* 此组内 8 个国家的费用各异，金额只是申请的平均费用

10. 呈件中的申请归纳如下：

| 组别           | 申请资金             | 支助费用           | 共计               |
|--------------|------------------|----------------|------------------|
| 第 2 组 (9 国)  | 3,610,000        | 270,750        | 3,880,750        |
| 第 3 组 (13 国) | 3,320,000        | 249,000        | 3,569,000        |
| 第 4 组 (11 国) | 1,975,000        | 148,125        | 2,123,125        |
| <b>共计</b>    | <b>8,905,000</b> | <b>667,875</b> | <b>9,572,875</b> |

11. 开发计划署还提供了认可开发计划署为其氟氯烃淘汰管理计划编制工作的牵头或合作机构的国家的新的信函。在没有提供新的信函的情况下，提交呈件期间收到的通讯即被

视为可以满足这一目的。其氟氯烃淘汰管理计划编制申请业已收悉的所有国家，已列入开发计划署业务计划，并已得到第五十四次会议的核准。

### 基金秘书处的评论

12. 在没有具体与氟氯烃有关的商定供资政策的情况下，秘书处根据借鉴了迄今为止基金在解决消耗臭氧层物质方面的经验。在审查这些申请时，秘书处考虑了下列各项：

- (a) 第 7 条清单上的国家最新氟氯烃消费情况；
- (b) 呈件所体现的氟氯烃淘汰管理计划项目编制中的共同内容；
- (c) 第 54/39 号决定核准的氟氯烃淘汰管理计划准则，以及其中所显示的氟氯烃淘汰管理计划的内容；
- (d) 先前的国家方案编制、制冷剂管理计划/最终淘汰管理计划/国家淘汰计划编制的费用，以及所有国家氟氯化碳淘汰行业计划编制的费用和拥有氟氯烃制造业的国家的单独的编制的费用；以及
- (e) 13 个国家先前经核准的氟氯烃调查。

13. 根据第 54/39 号决定，秘书处还将各国分为两个主要类别：

- (a) 仅维修行业有氟氯烃（HCFC-22）消费的国家；以及
- (b) 维修和制造业均有氟氯烃（HCFC-22、HCFC-141b 和其他氟氯烃）消费的国家。

14. 为根据执行委员会先前的决定和准则确定标准的费用，秘书处确定，氟氯烃淘汰管理计划的编制可根据第 54/39 号决定分为以下组成部分：

- (a) 对政策和立法的协助；
- (b) 氟氯烃使用情况调查和数据分析；
- (c) 全面氟氯烃淘汰管理计划的编制和定稿，包括咨询；以及
- (d) 单独投资项目提案。

15. 秘书处还考虑到，上文第14段所述头 3 个组成部分对所有国家来说都有，无论消费量多少。最后一个组成部分仅适用于在制造业有氟氯烃用途的国家。在考虑头 3 个组成部分时，秘书处还注意到，对某些国家来说，这些可能已经包括了可能只需做简单改造和已了解可以使用何种替代品的小型投资项目的某些内容。

16. 在其呈件中，开发计划署表示，在已提交的国家总数（34）中，有 24 个国家指定其为负责项目编制的牵头机构，还有中国。开发计划署表示，作为牵头结构，它们将负有相对于国家臭氧机构和政府、合作机构、该国的业界以及相对于秘书处和执行委员会的若干责任。它们提供了这些责任的任务清单，载于本文件所附的它们的工作方案。

17. 在要求澄清是否精简了由开发计划署作为其牵头结构、而其他机构是合作机构的国家的费用以避免重复时，开发计划署表示，已作了努力以确保避免重复，但有可能在一些领域还可能存在重复。开发计划署还表示，与合作机构讨论了如何确定各合作机构在编制工作中的份额；但无法保证其他机构所提交的会符合业已商定的内容。

18. 就中国而言，所有机构提交的氟氯烃淘汰管理计划编制的总申请金额为 4,532,995 美元，其中开发计划署的组成部分的费用超过 150 万美元。在开发计划署的申请中，要求拨款 360,000 美元用于全面战略的编制，而其他资金用于溶剂、化工行业和商业制冷行业以及机构在聚苯乙烯泡沫塑料行业中的份额，德国被确定为聚苯乙烯泡沫塑料行业的牵头结构。

19. 开发计划署表示，作为中国的牵头结构，开发计划署在各机构提交呈件前举行了非常详尽的协商会议，所载不同行业的信息和费用与商定的十分接近，但环境规划署的费用看来包括执行的内容而不包括编制，因此不在此列。秘书处询问是否与机构讨论过这些问题，得到的答复是肯定的，但同时也获知，开发计划署对各有关机构最后的呈件没有控制权。

20. 在审查开发计划署推出的申请时，秘书处还考虑了第四十五次会议为 12 个国家开展氟氯烃淘汰管理计划调查所核准的资金，其中多数列在开发计划署现增订工作方案中，其中载有关于氟氯烃淘汰管理计划编制的申请。依照执行委员会关于确保各国平等的准则，需要从为这些国家所核准的筹备资金总额中扣除这些资金。秘书处请开发计划署提出关于如何扣除原始费用的提案。但截至编制本文件时，秘书处仍未收到答复。

21. 开发计划署向秘书处提供了较大国家的若干申请的详细预算分类账，随附于本文件之后。在与开发计划署讨论时，秘书处请该机构进一步审查这些费用，并根据秘书处提议的费用标准重新予以提交。经若干次讨论后，在各国的拟议费用以及中国的拟议费用问题上，未能同开发计划署达成一致。鉴于其复杂性和金额巨大，秘书处认为，有必要将中国与其他氟氯烃淘汰管理计划编制的资金申请分开审议。

22. 鉴于各机构提交氟氯烃淘汰管理计划编制资金申请的费用涉及面很广，秘书处在经过上述详细分析后，提议按下表拨给费用：



氟氯烃淘汰管理计划编制的建议费用总表

| 国家分类                          | 零消费           | 仅有维修的国家(仅限于HCFC-22) | 维修和制造均有的国家*(低消费量国家) | 维修和制造均有的国家*(高消费量国家) |
|-------------------------------|---------------|---------------------|---------------------|---------------------|
| 活动                            | 预算(美元)        |                     |                     |                     |
| <b>1. 氟氯烃淘汰管理计划许可证制度的政策援助</b> |               |                     |                     |                     |
| 法律顾问                          | 4,000         | 10,000              | 15,000              | 15,000              |
| 为准则和规则定稿的咨询会议                 | 4,000         | 5,000               | 10,000              | 10,000              |
| 促进执法的信息传播                     | 2,000         | 5,000               | 5,000               | 5,000               |
| <b>小计:</b>                    | <b>10,000</b> | <b>20,000</b>       | <b>30,000</b>       | <b>30,000</b>       |
| <b>2. 调查、数据收集和分析**</b>        |               |                     |                     |                     |
| 顾问费                           | 5,000         | 10,000              | 20,000              | 40,000              |
| 有关利益方咨询会议和报告定稿                | 5,000         | 5,000               | 10,000              | 10,000              |
| 数据收集费用(需要时包括旅费)               | 5,000         | 10,000              | 25,000              | 35,000              |
| <b>小计</b>                     | <b>15,000</b> | <b>25,000</b>       | <b>55,000</b>       | <b>85,000</b>       |
| <b>3. 战略制订和定稿</b>             |               |                     |                     |                     |
| 3次国家会议(启动进程、初步协商和最终协商)        | 10,000        | 15,000              | 20,000              | 30,000              |
| 文献和信息材料(分包合同)                 | 5,000         | 5,000               | 5,000               | 5,000               |
| 会议与会者当地旅费                     | 10,000        | 20,000              | 15,000              | 15,000              |
| 顾问审查技术包括气候的惠益                 | 不适用           | 不适用                 | 25,000              | 30,000              |
| <b>小计</b>                     | <b>25,000</b> | <b>40,000</b>       | <b>65,000</b>       | <b>80,000</b>       |
| <b>费用总数</b>                   | <b>50,000</b> | <b>85,000</b>       | <b>150,000</b>      | <b>195,000</b>      |

\* 这些费用为编制氟氯烃淘汰管理计划的标准费用，示范和其他投资项目的各单独项目编制将分开计算成本。

\*\* 各国已收到调查用资金将相应调整到低于这些拟议的费用。

23. 秘书处与该机构讨论了为该机构增订工作方案所列国家氟氯烃淘汰管理计划项目编制提议的供资数额。虽然截至本文件编制时看了在所提议的方式上达有了一致看法，但在费用问题上仍未达成协议。

### 基金秘书处的建议

24. 待定。

## B2. 计量吸入器过渡战略的编制

### 亚美尼亚：计量吸入器过渡战略（30,000 美元）

#### 背景

25. 执行委员会在第五十一次会议的第 51/34(d) 号决定中特别商定，“依照第 45/54 号决定逐案审议没有计量吸入器生产设施的第 5 条缔约方要求编制过渡到无氟氯化碳计量吸入器的战略的请求，但缔约方必须提出最近三年的下列资料，充分显示和说明需要这一战略。”

- (a) 氟氯化碳和无氟氯化碳计量吸入器及干粉吸入器：在缔约方销售的数量，按其活性成分、商标/厂家和来源分列；
- (b) 无氟氯化碳计量吸入器及干粉吸入器：缔约方国内核准、批准销售和/或推出的日期
- (c) 氟氯化碳和无氟氯化碳计量吸入器及干粉吸入器：估计成本，按活性成分和来源分列。

26. 亚美尼亚是自全球环境建收到资助氟氯化碳淘汰资金的国家之一。亚美尼亚嗣后改变地位，成为第 5 条国家。该国没有从多边基金收到氟氯化碳淘汰的任何援助，包括在计量吸入器行业。亚美尼亚自全球环境基金收到的资金既不包括对氟氯化碳计量吸入器淘汰的资助，也不可靠对过渡战略的资助。亚美尼亚系根据第 51/34 号决定提交这一申请。

#### 项目说明

27. 开发计划署代表亚美尼亚政府为计量吸入器过渡战略的编制提交了申请，以淘汰在计量吸入器消费行业中使用的氟氯化碳。亚美尼亚并不生产氟氯化碳计量吸入器。该国自波兰和俄罗斯联邦进口不含氟氯化碳的计量吸入器。在过去三年（2005—2007）里，氟氯化碳计量吸入器的平均进口量超过 12,000 套，不含氟氯化碳的计量吸入器进口量超过 30,000 套。现有数据显示，进口在增加。没有提供该国慢性阻塞性肺病发病率的具体数据，原因是这些数据是作为各类支气管和肺气管疾病的整体数字的一部分上报的。但政府日益关切的是这些疾病的发病率在以每年 10% 的速度增加。正因为如此，需要保证计量吸入器的稳定供应以满足病人的需要。申请为制订计量吸入器过渡战略提供的资金，预期会用于向进口氟氯化碳计量吸入器的替代品完全过渡的明确时间表。同时还需要有促进和支持淘汰这些产品的条例，以及提高医生的认识和患者对氟氯化碳计量吸入器替代品接受程度及监测计量吸入器进口的方案。

28. 为支持其所提呈件并根据第 51/34 号决定，开发计划署表示，关于亚美尼亚计量吸入器的供应状况及其不含氟氯化碳的相应替代品可简要概况如下：

- (a) 市场上有氟氯化碳计量吸入器和氢氟烷烃计量吸入器；
- (b) 2005 年和 2006 年，氢氟烷烃计量吸入器在市场上全部计量吸入器中的所占份额超过了 75%。现已下降到 70%，而由于其价格较高，氟氯化碳计量吸入器的份额在上升；
- (c) 2005 年和 2006 年，与氢氟烷烃计量吸入器相比，氟氯化碳计量吸入器在场所占比例为 23%。2006 年，氟氯化碳计量吸入器的进口量增加到占市场份额的 32%，2007 年并呈进一步上升趋势。进口的增加是由于相对于替代品而言这一产品的价格较低；
- (d) 使用含氟氯化碳和不含氟氯化碳推进剂的计量吸入器产品属于不同的成分，因此，价格无法直接作比较；以及
- (e) 虽然市场上有干粉计量吸入器，但其份额可忽略不计。

29. 此外，开发计划署还提供了综合列表，列出了该国进口、出售或分销的氟氯化碳和非氟氯化碳计量吸入器和干粉吸入器，通过活性成分、商标/厂家和来源分列。所列资料还包括每一产品的价格以及国家当局批准每一药品的日期。报告还提供了关于氟氯化碳计量吸入器来源的资料，这些产品大多数来自波兰和俄罗斯联邦，在场所占份额如下：

| 2007 年氟氯化碳计量吸入器来源国 | 各种来源的次级市场份额（占全部数量的百分比） |
|--------------------|------------------------|
| 波兰                 | 58.3                   |
| 俄罗斯联邦              | 33.3                   |
| 其他                 | 8.4                    |
| 共计                 | 100.0                  |

30. 提交的数据还显示，与其他计量吸入器相比，氟氯化碳计量吸入器仍较便宜，并提出了氢氟烷烃计量吸入器目前无法获得的各种成分，含氟氯化碳的产品与现有含氢氟烷烃的不同，因此，难以比较价格。但文件显示，波兰的计量吸入器主要供应商对于价格和需求问题认识都比较敏感，并在有寻求的情况下愿意供应氟氯化碳计量吸入器。没有得力的价格政策，也导致了价格的波动，造成了产品根据需求供应的情况而产生大的波动。

31. 文件还指出，卫生当局不清楚《蒙特利尔议定书》淘汰计量吸入器中氟氯化碳的要求，而且计量吸入器进口计划常常是依据能够以最低成本提供产品的来源，而不是所使用的推进剂。

## 基金秘书处的评论

32. 提交项目编制申请的目的是确保亚美尼亚向无氟氯化碳计量吸入器顺利过渡，从而淘汰计量吸入器行业的氟氯化碳消费。秘书处注意到，不同计量吸入器在供应方面有很大的不同，且氟氯化碳和氢氟烷烃计量吸入器的进口容易出现大的波动。开发计划署表示，这种波动可能带来问题，如果市场上没有可买得起的计量吸入器，就会影响病人的医护。开发计划署解释说，价格的波动是因为该国的价格政策不得力，因此，需要加强价格政策。

33. 秘书处还注意到，虽然氟氯化碳计量吸入器和其他使用替代品的计量吸入器价格不同，但也显示，每一产品的单位价格有所增加，尽管增加不多。这意味着价格的增加转嫁到消费者的身上。

34. 在讨论该国编制过渡战略的计划时，秘书处得知，关于以替代品取代氟氯化碳计量吸入器的国家战略打算将以下内容考虑在内：

- (a) 更好地研究和分析当前计量吸入器的市场消费情况、供应来源和未来趋势；
- (b) 分析替代产品及其影响和健康效益；
- (c) 与主要进口商和医疗机构的代表合作，组织并采取各项措施向可买得起的替代药物转换，包括进口、替代的时间表以及与供应商和销售商之间的个人和团体的协定；
- (d) 制订多年期国家进口计划，并确保向替代品的平稳转换；
- (e) 采取广泛、明达和参与性的决策过程；
- (f) 通过培训和有目标的认识活动，增强信心和确保患者和医生接受替代产品；以及
- (g) 与哮喘协会开展广泛的有针对性的工作和提供培训，确保更好地向氢氟烷烃计量吸入器过渡。

## 基金秘书处的建议

35. 根据以上评论，谨建议执行委员会考虑按上文表 1 的要求核准编制计量吸入器过渡战略的申请，供资金额 30,000 美元。委员会亦不妨确认所提供的资料是否符合第 51/34 号决定的请求。

36. 在批准这一项目时，应请开发计划署注意到，计量吸入器行业的氟氯化碳淘汰将不会获得进一步的供资。

附件一

体制建设项目提案

斯里兰卡：延长体制建设

| 项目摘要和国家概况                                  |           |
|--|-----------|
| 执行机构：                                      | 开发计划署     |
| 以前核准的体制建设供资数额（美元）：                         |           |
| 第一阶段：1994年3月                               | 154,680   |
| 第二阶段：1997年11月                              | 103,120   |
| 第三阶段：1999年11月                              | 103,120   |
| 第四阶段：2002年7月                               | 134,056   |
| 第五阶段：2004年7月                               | 134,056   |
| 第五阶段：2006年11月                              | 134,056   |
| 共计   | 763,088   |
| 为延长所申请金额（第七阶段）（美元）：                        | 134,056   |
| 建议为第七阶段核准的金额（美元）：                          | 134,056   |
| 机构资助费用（美元）：                                | 10,054    |
| 多边基金体制建设第七阶段的总费用（美元）：                      | 144,110   |
| 由于体制建设第七阶段同等数量氟氯化碳淘汰成本为 12.1 美元/公斤（ODP 吨）： | 暂缺        |
| 国家方案核准日期                                   | 1994年3月   |
| 国家方案所报告的消耗臭氧层物质消费量（1991年）（ODP吨）：           | 223.1     |
| 管制物质基准消费量（ODP吨）：                           |           |
| (a) 附件 A 第一类（氟氯化碳）（1995—1997年平均数）          | 445.6     |
| (b) 附件 A 第二类（哈龙）（1995—1997年平均数）            | 0         |
| (c) 附件 B 第二类（四氯化碳）（1998—2000年平均数）          | 35.1      |
| (d) 附件 B 第三类（三氯甲烷）（1998—2000年平均数）          | 3.0       |
| (e) 附件 E（甲基溴）（1995—1998年平均数）               | 4.1       |
| 依照第 7 条最新报告的消耗臭氧层物质消费量（2006年）（ODP年）：       |           |
| (a) 附件 A 第一类（氟氯化碳）                         | 105.3     |
| (b) 附件 A 第二类（哈龙）                           | 0         |
| (c) 附件 B 第二类（四氯化碳）                         | 0         |
| (d) 附件 B 第三类（三氯甲烷）                         | 0         |
| (e) 附件 E（甲基溴）                              | 0         |
| (f) 附件 C 第一类（氟氯烃）                          | 12.4      |
| 共计   | 117.7     |
| 报告国家方案执行数据的年份：                             | 2007      |
| 项目核准金额（美元）：                                | 4,150,085 |
| 已发放金额（截至 2008 年 5 月）（美元）：                  | 3,248,758 |
| 将要淘汰的消耗臭氧层物质（ODP吨）：                        | 96.0      |
| 已淘汰消耗臭氧层物质（截至 2008 年 5 月）（ODP吨）：           | 88.0      |

## 1. 活动摘要及执行委员会核准的供资数额:

| 活动摘要 |                       | 核准的供资数额 (美元) |
|------|-----------------------|--------------|
| (a)  | 投资项目:                 | 761,145      |
| (b)  | 体制建设:                 | 763,088      |
| (c)  | 项目编制、技术援助、培训和其他非投资项目: | 2,506,048    |
|      | 共计:                   | 4,030,281    |

进度报告

2. 在其第六阶段期间, 斯里兰卡的体制建设项目继续成功实现了遵守并维持遵守《蒙特利尔议定书》的管制措施。特别是, 斯里兰卡国家臭氧机构协调并执行了若干淘汰消耗臭氧层物质的项目, 包括作为制冷剂管理计划一部分进行的对海关官员和制冷技术员的培训, 以及国家履约协助项目和根据甲基溴技术援助项目开展的对熏蒸技术员的培训。制冷剂管理计划的海关培训组成部分系在这一阶段内完成。举办了国家哈龙介绍讲习班。提高认识活动包括作为教师和政府官员的培训方案实施了 18 项提高学校儿童认识方案。臭氧机构在第五阶段持续开展了臭氧问答活动后, 筹备了胜出的队参加区域臭氧问答活动竞赛。该队进入了前三名。

行动计划

3. 斯里兰卡国家臭氧机构为体制建设项目 (2009 年 1 月至 2010 年 12 月) 规定了以下目标: 监测单独供资所有用途的甲基溴淘汰项目 (检疫和装运前消毒处理除外) 的执行情况, 监测根据国家履约协助项目商定的目标减少氟氯化碳消费量的执行情况以便继续维持履约。在体制建设的下一阶段, 国家臭氧机构将继续执行当前正在开展的活动, 包括制冷剂管理计划、甲基溴淘汰和国家履约行动计划。除执行具体项目外, 国家臭氧机构还将继续通过各种活动提高公众的认识。在这一阶段, 国家臭氧机构还将开始其氟氯烃淘汰管理计划编制的筹备工作。

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## **UNDP HPMP PRP BUDGETS BREAKDOWN**

### **Explanatory Notes**

#### **1. Basis/Assumptions**

- The outcomes of HPMP preparation are as below:
  - An overarching HPMP Strategy
  - HPMP (First Stage) document which sets out priorities and actions for 2013/2015 compliance, related costs and incorporates project proposals (individual, sectoral, national, pilot/demonstration) to be submitted in 2009 based on country priorities
- The request for HPMP preparation funding is the only request/opportunity for such funding prior to 2013/2015 compliance milestones
- Limited timeframe available for compliance actions (3-5 years)
- Technologies not mature/validated in A5 context. This will need more intensive interactions between industry and government stakeholders, assisted by agency national and international technical experts as well as technology providers
- Volumetric phase-out (ODS tonnes) needed for compliance is much greater as compared to CFCs (due to high growth rates, new consumer-driven sectors such as air conditioning, etc). The total funding provided for preparation of CFC phase-out projects in a more favorable context of technology maturity and time frame, was substantial. CP/RMP/TPMPs can only provide limited basis, as they addressed only residual consumption in most cases.
- Decision 54/39 stipulates extensive requirements both for data and its analysis and presentation (covering multiple funding scenarios, multiple environmental goals, etc)
- Involvement of multiple agencies during HPMP preparation, new stakeholders, limited awareness, technology challenges: all of these place extra burdens of coordination, to ensure that the HPMP accurately describes the national situations and proposes appropriate implementable actions, in a very limited time frame

#### **2. Budgets**

- Three stakeholder consultations are envisaged: Inception and final national-level consultation with all stakeholders and intervening consultations with industry stakeholders
- Data collection and analysis costs are based on resource requirements for interactions with individual enterprises for obtaining data to the level of detail needed to comply with Decision 54/39 and carrying out the required analysis.
- Management and coordination costs that include costs of project/programme personnel and experts and related operational and other expenses. Considering that less than a year would be available for generating an implementable HPMP and drawing from lessons learnt during CFC phase-out, it would be essential to seamlessly integrate structures created for CFC phase-out for HPMPs and also allow smooth transition to the implementation stage of the HPMP. The programme personnel would act under the supervision of the NOU and will facilitate validating the enterprise baseline data and documentation from a regulatory perspective, assist NOU in coordination and monitoring of HPMP preparation activities and also for policy/regulatory actions.

## **Key additional tasks and responsibilities of the Lead Agency for First Stage HPMP Preparation**

The ExCom Decision 54/39, Annex-XIX of Document 54/59 and other documents referred therein, introduce higher levels of details/confidence on collection, presentation and validation of data, as well as additional requirements of coordination and management structures and respective roles, particularly where multiple agencies are involved in HPMP preparation. This introduces tasks and responsibilities on the Lead Agency, which are additional to the roles and responsibilities of the Lead Agency usually defined in the earlier performance-based MYAs, which will result in additional costs. Following are the key additional tasks and responsibilities of the Lead Agency in context of HPMP preparation (meaning the First Stage HPMP, for meeting 2013 and 2015 compliance targets):

### Lead Agency with respect to NOU

- Support NOU in ensuring an effective and smooth process in preparation of the strategies for sectors/components and the integrated HPMP;
- Provide operational support to NOU in managing the activities of the HPMP PMU;
- Support NOU in review of the draft strategies for the components/sectors and integrated HPMP, for timely finalization and submission to the ExCom;
- Act in close collaboration with NOU to follow-up the activities of the cooperating agencies to ensure timely initiation and completion of the strategies for individual sectors/components;
- Work in close cooperation and coordination with NOU on integration of the strategies for sectors/components and finalization of the integrated HPMP;
- Provide assistance with policy, management and technical support to NOU for developing an overall long term HPMP strategy

### Lead Agency with respect to Cooperating Agencies

- Provide overall coordination between the Cooperating Agencies and NOU to ensure effective cooperation and consistent actions in the HPMP process;
- Arrange and manage coordination and consultation meetings amongst agencies;
- Coordinate and generate synergy on the overall technical, policy, regulatory and administrative actions proposed in the strategies for individual strategies/components to ensure consistent and uniform application throughout the integrated HPMP;
- In consultation with NOU, coordinate the activities of cooperating agencies.

### Lead Agency with respect to Industry

- Assist NOU in the process of consultations with industry representatives on the technical and logistical aspects in HPMP preparation;
- In close coordination with the cooperating agencies, assist NOU in interactions with the industry on strategic identification and selection of alternative technologies and on technology transfer issues.

### Lead Agency with respect to MLF Secretariat and ExCom

- Undertake consultations and clarifications with MLF Secretariat on HPMP guidelines and HPMP preparation process to facilitate effective preparation;
- Assist NOU, in close coordination with the cooperating agencies, in responding to comments on HPMP from MLF/ExCom;
- Provide status/progress reports to MLF as required



**EXECUTIVE COMMITTEE OF THE MULTILATERAL  
FUND  
FOR THE IMPLEMENTATION OF THE  
MONTREAL PROTOCOL  
(55<sup>th</sup> Meeting, 14 – 18 July 2008, Bangkok)**

**2008 WORK PROGRAMME AMENDMENT**

**UNITED NATIONS DEVELOPMENT PROGRAMME**

**Request for Project Preparation and Non-Investment Projects at the  
55<sup>th</sup> Executive Committee Meeting**

**May 2008**

## **2008 UNDP WORK PROGRAMME**

### **55<sup>th</sup> Executive Committee Meeting (14-18 July 2008, Bangkok)**

This Work Programme document contains all non-investment and project preparation programmes that are being requested at the 55<sup>th</sup> Meeting of the Executive Committee. These requests amount to US\$ 10,637,556 plus US\$ 798,267 of support cost, as elaborated upon below.

#### **1. Institutional Strengthening Renewal Requests.**

The following Institutional Strengthening Renewal Requests are being submitted at the 55<sup>th</sup> meeting of the Executive Committee:

| No  | COUNTRY   | TITLE                       | ODP       | BUDGET         | SUPPORT COST  | TOTAL          |
|---|-----------|-----------------------------|-----------|----------------|---------------|----------------|
| 1   | Sri Lanka | Institutional Strengthening | 22        | 134,056        | 10,054        | 144,110        |
| <b>Sub-total: Institutional Strengthening</b> |           |                             | <b>22</b> | <b>134,056</b> | <b>10,054</b> | <b>144,110</b> |

The documents for the IS Renewal Request for Sri Lanka was submitted separately by UNDP.

#### **2. Requests for Activities in the MDI Sector.**

| No   | COUNTRY | TITLE                   | BUDGET        | SUPPORT COST | TOTAL         | REMARKS       |
|--|---------|-------------------------|---------------|--------------|---------------|---------------|
| <i>MDI Transition Strategies</i>               |         |                         |               |              |               |               |
| 1  | Armenia | MDI Transition Strategy | 30,000        | 2,700        | 32,700        | See Annex-III |
| <b>Sub-total: Activities in the MDI Sector</b> |         |                         | <b>30,000</b> | <b>2,700</b> | <b>32,700</b> |               |

#### **3. Requests for Activities related to HCFCs**

##### *Preparatory Funds for HCFC Phase Out Management Plans*

Subsequent to the Decisions 19/6 of the Meeting of the Parties and 53/37 of the Executive Committee, and in response to the request of 37 countries, UNDP included in its Business Plan for the year 2008 the preparation of HCFC Phase-out Management Plans (HPMPs). An initial request of funds for the HPMPs preparation was included in the UNDP's Work Programme submitted to the 54<sup>th</sup> Executive Committee; however this proposal was a first approximation as the guidelines for the preparation of HPMPs were not available yet. At the 54<sup>th</sup> Meeting the Decision 54/39 approved the guidelines for the preparation of HPMPs and provided an indicative outline with a set of data, information requirements and contents that HPMPs should fulfill as a

minimum.

At the same meeting, Decision 54/23 approved an advance of US \$257,000, and US \$19,275 in agency support costs, which represented 10% of the project preparation funds for HPMPs requested by UNDP *at that meeting*. This advance enabled UNDP to initiate (as of the date funds were transferred by the UNEP Treasurer) the administrative internal process required for inclusion of country individual preparation activity in the UNDP internal financial control system helping to speed up the process. Decision 54/23 also allowed UNDP to submit a request for preparatory funding for HPMPs to the 55<sup>th</sup> Meeting.

In light of the above decisions, and based on the elements required by the guidelines to prepare HPMPs, UNDP developed a cost structure that allowed preparing the HPMP preparation budgets customized for each one of the countries taking into consideration their individual needs and characteristics. The HPMP preparation budgets have been estimated taking into consideration the following:

- Institutional arrangements that draw upon lessons learnt during CFC phase-out
- Integrate existing arrangements and introduce new arrangements in such a way as to facilitate seamless transition from the preparatory to the implementation stage of the HPMP
- Introduce appropriate platforms to ensure smooth management and coordination especially in multi-agency situations
- Systematically channeling technical expertise at the national and international levels to HPMP preparation (and in future, implementation)
- Collection and analysis of data to the level of confidence and details required by Decision 54/39
- Ensure extensive consultations with national stakeholders
- Accounting for additional tasks involved in preparation based on multiple costing and financing scenarios as required by Decision 54/39

Following the classification of the countries proposed in the TEAP Replenishment Task Force Report (May 2008), UNDP has divided the countries into four groups to be consistent with that classification:

- **Group-1:** Very large consumption over 1,200 ODP tonnes: includes only China
- **Group-2:** Large consumption between 120 - 1,200 ODP tonnes. The countries working with UNDP included in this group are: Argentina, Brazil, Colombia, India, Indonesia, Iran, Malaysia and Mexico. Due to significant variations in profile in various sectors including local costs, characteristics of the manufacturing industry, existence of production sector in some cases, etc., the funds requested for the preparation of HPMPs in this group are based on customized budgets. The values being submitted within this group fluctuate between US\$ 330,000 for the smallest one to US\$ 670,000 to the largest case. In countries where UNDP is cooperating agency, the levels of funds requested are lower as it is assumed that several institutional and coordination activities would be budgeted by the Lead Agency.

- **Group 3:** Medium-sized countries with consumption between 6 and 100 ODP tonnes. The funds requested for the preparation of HPMPs for countries in this group has been standardized at US\$245,000 each, based on the costs collected. For countries where UNDP is not Lead Agency a total of US\$ 110,000 has been discounted.
- **Group 4:** Includes countries with consumption below 6 ODP tonnes. Most of these countries do not have manufacturing sectors and most of the activities will concentrate on the servicing sector. The funds requested for the preparation of HPMPs for countries in this group has been standardized at US\$205,000 each, based on costs collected. For countries where UNDP is not Lead Agency a total of US\$ 70,000 has been discounted.

| NO   | COUNTRY            | TITLE        | BUDGET     | SUPPORT COST | TOTAL      | REMARKS           |
|--|--------------------|--------------|------------|--------------|------------|-------------------|
| <i>HCFC Phase Out Management Plans (HPMPs)</i> |                    |              |            |              |            |                   |
| 1  | Angola             | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 2  | Argentina          | PRP for HPMP | 330,000    | 24,750       | 354,750    | UNDP Lead Agency  |
| 3  | Armenia            | PRP for HPMP | 205,000    | 15,375       | 220,375    | UNDP Lead Agency  |
| 4  | Bolivia            | PRP for HPMP | 135,000    | 10,125       | 145,125    | UNDP Coop. Agency |
| 5  | Brazil             | PRP for HPMP | 670,000    | 50,250       | 720,250    | UNDP Lead Agency  |
| 6  | Cambodia           | PRP for HPMP | 135,000    | 10,125       | 145,125    | UNDP Coop. Agency |
| 7  | China              | PRP for HPMP | 1,568,500  | 117,638      | 1,686,138  | UNDP Lead Agency  |
| 8  | Chile              | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 9  | Colombia           | PRP for HPMP | 425,000    | 31,875       | 456,875    | UNDP Lead Agency  |
| 10   | Costa Rica         | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 11   | Cote d'Ivoire      | PRP for HPMP | 205,000    | 15,375       | 220,375    | UNDP Lead Agency  |
| 12   | Dominican Republic | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 13   | El Salvador        | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 14   | Fiji               | PRP for HPMP | 205,000    | 15,375       | 220,375    | UNDP Lead Agency  |
| 15   | Gambia             | PRP for HPMP | 135,000    | 10,125       | 145,125    | UNDP Coop. Agency |
| 16   | Georgia            | PRP for HPMP | 205,000    | 15,375       | 220,375    | UNDP Lead Agency  |
| 17   | Ghana              | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 18   | India              | PRP for HPMP | 645,000    | 48,375       | 693,375    | UNDP Lead Agency  |
| 19   | Indonesia          | PRP for HPMP | 440,000    | 33,000       | 473,000    | UNDP Lead Agency  |
| 20   | Iran               | PRP for HPMP | 415,000    | 31,125       | 446,125    | UNDP Lead Agency  |
| 21   | Jamaica            | PRP for HPMP | 205,000    | 15,375       | 220,375    | UNDP Lead Agency  |
| 22   | Kyrgyzstan         | PRP for HPMP | 205,000    | 15,375       | 220,375    | UNDP Lead Agency  |
| 23   | Lebanon            | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 24   | Malaysia           | PRP for HPMP | 495,000    | 37,125       | 532,125    | UNDP Lead Agency  |
| 25   | Mexico             | PRP for HPMP | 190,000    | 14,250       | 204,250    | UNDP Coop. Agency |
| 26   | Moldova            | PRP for HPMP | 205,000    | 15,375       | 220,375    | UNDP Lead Agency  |
| 27   | Nepal              | PRP for HPMP | 135,000    | 10,125       | 145,125    | UNDP Coop. Agency |
| 28   | Nigeria            | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 29   | Panama             | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 30   | Paraguay           | PRP for HPMP | 135,000    | 10,125       | 145,125    | UNDP Coop. Agency |
| 31   | Peru               | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 32   | Sri Lanka          | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 33   | Trinidad & Tobago  | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| 34   | Uruguay            | PRP for HPMP | 245,000    | 18,375       | 263,375    | UNDP Lead Agency  |
| Sub-total: HPMP Preparation                    |                    |              | 10,473,500 | 785,513      | 11,259,013 |                   |

Note: The groups of countries have been color coded as below and above.

Countries Group 2

Countries Group 3

Countries Group 4

Based on the above criteria, the funds requested for preparation of HPMPs are as follows:

**Countries in Group-1 where UNDP is Lead Agency: China**

With the current status of the production and consumption of HCFCs in China and the growth forecasted, China will have to overcome a number of unique challenges to reduce production and consumption if it is to meet agreed MP 2013 and 2015 targets. Even with the proactive and ambitious approach being proposed by China, it is clear that the HPMP process is on the critical path for compliance and that investment projects must follow no later than the end of 2010 if the objectives of Decision XIX/6 are to be met.

The HPMP development project has been structured with this urgency in mind, while taking into account that any overarching strategy must also achieve the maximum climate benefits within any funding limits imposed. In this context, pilot/demonstration projects are likely to be an essential component of China's phase-out strategy – particularly in areas where current technologies do not yield adequate climate benefits. In addition, the sectors in China often have unique characteristics making the local demonstration of technologies an important element in building confidence.

***Process for Development of the HPMP Budget in China***

The Lead Agency and Cooperating Agencies met with the Foreign Economic Cooperation Office Ministry of Environmental Protection ((FECO/MEP), and other industry stakeholders in Beijing (May 19<sup>th</sup>-21<sup>st</sup>). The purpose of the meeting was to exchange ideas on the National HPMP, to finalise the sectoral assignments of the Cooperating Agencies, to discuss the process for the development of the HPMP and to finalise budget requirements for both national and international support.

The Lead Agency (UNDP) worked with the Cooperating Agencies (World Bank, UNEP, UNIDO, Germany and Japan ) to address methodological issues. The process identified for the development of the HPMP is based around the following five steps:

- Characterisation of current sector situations (both market assessment and technology options)
- Analysis of sectoral inputs and development of an overarching strategy with confirmation of HCFCs compliance with the 2013 freeze and 2015 reduction (10%) together with an assessment of climate benefits or burdens arising
- Finalisation of the overarching strategy and detailed data collection for sector plans
- Development of HCFC phase-out sector plans for each of the 6 HCFC consumption sectors and the HCFC production sector,
- Assembly of sector plans and development of final HPMP for China
- Sectoral and consolidated Stakeholder meetings to convey the outcomes of the HPMP to the Chinese industry and to publicise the potential benefits to both ozone and climate.

The agencies selected by FECO/MEP to lead the preparation of the first stage HPMP activities (and respective supporting agencies) were as follows:

|  |   |                  |
|--|---|------------------|
| Overarching/National Strategy  | - | UNDP             |
| National enabling activities for HPMP <sup>1*</sup>                                    | - | UNEP             |
| Domestic Refrigeration/Room Air Conditioning - Commercial and Industrial Refrigeration | - | UNIDO            |
| Commercial and Industrial Refrigeration  | - | UNDP             |
| Servicing Sector   | - | UNEP (Japan)     |
| Production   | - | World Bank       |
| PU Foam  | - | World Bank       |
| XPS Foam   | - | GTZ (UNDP/UNIDO) |
| Solvents   | - | UNDP             |

On the basis of these assignments, each of the Agencies developed budgets based around assessments of the resource requirements for the process identified for China, as below:

| <b>China<br/>UNDP Lead Agency</b>               | <b>Funds<br/>Requested</b> | <b>Support Cost</b> | <b>Total</b>     | <b>Lead Agency</b> |
|---|----------------------------|---------------------|------------------|--------------------|
| Overarching Strategy/1 <sup>st</sup> Stage HPMP | 360,000                    | 27,000              | 387,000          | UNDP               |
| Solvent Sector                                  | 474,500                    | 35,588              | 510,088          | UNDP               |
| Industrial & Commercial Refrigeration           | 650,000                    | 48,750              | 698,750          | UNDP               |
| <b>China<br/>UNDP Cooperating</b>               | <b>Funds<br/>Requested</b> | <b>Support Cost</b> | <b>Total</b>     | <b>Lead Agency</b> |
| Foam XPS Sector                                 | 84,000                     | 6,300               | 90,300           | GTZ                |
| <b>Total for China</b>                          | <b>1,568,500</b>           | <b>117,638</b>      | <b>1,686,138</b> | <b>N/A</b>         |

**Countries in Group-2 where UNDP is Lead Agency**

| <b>Countries Group-2<br/>UNDP Lead</b> | <b>Funds Requested<br/>UNDP</b> | <b>Support Cost</b> | <b>Total</b>     |
|--|---------------------------------|---------------------|------------------|
| Argentina                              | 330,000                         | 24,750              | 354,750          |
| Brazil                                 | 670,000                         | 50,250              | 720,250          |
| Colombia                               | 425,000                         | 31,875              | 456,875          |
| India                                  | 645,000                         | 48,375              | 693,375          |
| Indonesia                              | 440,000                         | 33,000              | 473,000          |
| Iran                                   | 415,000                         | 31,125              | 446,125          |
| Malaysia                               | 495,000                         | 37,125              | 532,125          |
| <b>Total (7 countries)</b>             | <b>3,420,000</b>                | <b>256,500</b>      | <b>3,676,500</b> |

<sup>1\*</sup> National HPMP Preparation would involve public awareness, policy assistance related to import-export control and monitoring, training for local authorities and border police and customs, networking of the local authorities .

**Countries in Group-2 where UNDP is Cooperating Agency**

| <b>Countries Group-2<br/>UNDP Cooperating</b> | <b>Funds Requested<br/>UNDP</b> | <b>Support Cost</b> | <b>Total</b> | <b>Lead Agency</b> |
|---|---------------------------------|---------------------|--------------|--------------------|
| Mexico  | 190,000                         | 14,250              | 204,250      | UNIDO              |

**Countries in Group-3 where UNDP is Lead Agency**

| <b>Countries Group-3<br/>UNDP Lead</b>  | <b>Funds Requested<br/>UNDP</b> | <b>Support Cost</b> | <b>Total</b>     |
|---|---------------------------------|---------------------|------------------|
| Angola, Chile, Costa Rica,<br>Dominican Republic,<br>El Salvador, Ghana, Lebanon,<br>Nigeria, Panama, Peru,<br>Sri Lanka, Trinidad &<br>Tobago, Uruguay | 245,000                         | 18,375              | 263,375          |
| <b>Total (13 Countries)</b>   | <b>3,185,000</b>                | <b>238,875</b>      | <b>3,423,875</b> |

**Countries in Group-3 where UNDP is Cooperating Agency**

| <b>Countries Group-3<br/>UNDP Cooperating</b> | <b>Funds Requested<br/>UNDP</b> | <b>Support Cost</b> | <b>Total</b>   | <b>Lead Agency</b> |
|---|---------------------------------|---------------------|----------------|--------------------|
| Cambodia                                      | 135,000                         | 10,125              | 145,125        | UNEP               |
| <b>Total (1 countries)</b>                    | <b>135,000</b>                  | <b>10,125</b>       | <b>145,125</b> |                    |

**Countries in Group-4 where UNDP is Lead Agency:**

| <b>Countries Group-4<br/>UNDP Lead</b>                                    | <b>Funds Requested<br/>UNDP</b> | <b>Support Cost</b> | <b>Total</b>     |
|---|---------------------------------|---------------------|------------------|
| Armenia, Cote d'Ivoire, Fiji,<br>Georgia, Jamaica,<br>Kyrgyzstan, Moldova | 205,000                         | 15,375              | 220,375          |
| <b>Total (7 countries)</b>  | <b>1,435,000</b>                | <b>107,625</b>      | <b>1,542,625</b> |

**Countries in Group-4 where UNDP is Cooperating Agency:**

| <b>Countries Group-4<br/>UNDP Cooperating</b> | <b>Funds Requested<br/>UNDP</b> | <b>Support Cost</b> | <b>Total</b>   | <b>Lead Agency</b>              |
|---|---------------------------------|---------------------|----------------|---------------------------------|
| Bolivia, Gambia, Nepal,<br>Paraguay           | 135,000                         | 10,125              | 145,125        | Germany,<br>UNEP, UNEP,<br>UNEP |
| <b>Total (4 countries)</b>                    | <b>540,000</b>                  | <b>40,500</b>       | <b>580,500</b> |                                 |



The consolidated funding request for preparation of HPMPs being submitted to this meeting is as follows:

| Country & Group        | Funds Requested   | Support Cost   | Total             |
|------------------------|-------------------|----------------|-------------------|
| Group-1 (China)        | 1,568,500         | 117,638        | 1,686,138         |
| Group-2 (8 countries)  | 3,610,000         | 270,750        | 3,880,750         |
| Group-3 (14 countries) | 3,320,000         | 249,000        | 3,569,000         |
| Group-4 (11 countries) | 1,975,000         | 148,125        | 2,123,125         |
| <b>Total</b>           | <b>10,473,500</b> | <b>785,513</b> | <b>11,259,013</b> |

The detailed breakdown of funding requests for HPMP preparation in Group-2, 3 and 4 countries is attached in Annex-I and Annex-II.

**Note on justification of HPMP Preparation Funding Levels**

1. The evaluation of the funding requests needs to consider the following unprecedented challenges for HPMPs:
  - Requirements, explicit and implied, in the HPMP preparation guidelines (Decision 54/39 and supporting/related documentation), *especially those related to data collection, management and analysis, analysis of technology options which take into account climate impact, costing for multiple scenarios of eligibility, etc.*
  - The net time available for Article-5 countries to comply with the 2013 freeze and 2015 reduction, is only 3-5 years, requiring activities to be compressed them into a timeframe that has no precedent in CFC phase-out. Thus, the HPMP preparation process needs to account for this, and therefore needs to be completed in a short timeframe of 9-12 months. This would need efficient project management structures in place at the country level, much before actual implementation of HPMP activities commences.
  - The HPMP document needs to provide an implementable strategy and action plan. The phase-out challenges to meet the freeze in 2013 and 10% reductions in 2015 are far greater than those encountered for CFC phase-out. Moreover, the technology options for CFC replacement were already mature and available at least 4-5 years prior to the 1999 freeze commitment for CFCs. This is not the case with HCFCs. In terms of volumes, far larger quantities would need to be phase-out, just to meet the freeze – and this is context of a much higher growth rate in HCFC consumption experienced, as compared to the growth rates prevalent in CFC consumption in the previous decade and also in context of much lesser developed alternative technologies.
  - In view of the above, comparing HPMP preparation funding with that provided for CP/RMP/TPMPs (which were developed for different reasons, at different times, with distinctly less unfavorable circumstances) would be misleading. There are more reliable indicators for comparison available for estimating costs of HPMP preparation.

2. As an illustration, an analysis of historical approvals of project preparation funding for Brazil and India was carried out. It should be noted that only “PRP” activities were included – funding for country programme/update preparation (CPG) is excluded. The PRP funding includes all sectors and agencies.

In case of India, until 1999, a total of about US\$ 2.82 million was approved for preparation of CFC phase-out projects/activities which were to contribute to meeting the freeze in 1999 at the baseline level (6,681 ODP tonnes for India for CFCs). The actual phase-out that occurred in India from 1992 until 1999 (7 years) was in the range of 2,000 ODP tonnes. Since the ODP of CFCs is 1, the phase-out by volume is similar. In comparison, for HCFCs, India would need to phase-out around 6,000 metric tonnes of HCFCs to comply with the 2013 freeze, in a scenario of technology challenges and time constraints (3 years).

Similarly, for Brazil, until 1999, about US\$ 2.6 million were approved for preparation of CFC phase-out projects activities.

3. It is also very important to note that given the strategic framework of the Multilateral Fund, revised since 2001, it is unlikely that approval of any further requests for project preparation (after approval of HPMPs) would be forthcoming for compliance with the 2013 and 2015 control targets. Thus, these HPMP preparation requests would be the only opportunity for Article-5 countries to seek assistance for preparing for the 2013 and 2015 compliance.
4. It is strongly recommended that evaluation of HPMP preparation funding requests take into account the overall considerations as described above.

**ANNEX-I**  
**UNDP HPMP Preparation Budgets Breakdown For Group-2 Countries**

| COUNTRY   | ARG            | BRA            | COL            | IND            | IDS            | IRA            | MAL            | MEX            |  |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|
| LEAD AGENCY   | UNDP           | UNDP           | UNDP           | UNDP           | UNDP           | UNDP           | UNDP           | UNIDO          |  |
| COOPERATING AGENCY  | UNIDO          | GERMANY        |                | ALL            |                | ALL            |                | UNDP           |  |
| ACTIVITY  | BUDGETS (US\$) |                |                |                |                |                |                |                |  |
| <b>1. Initiation meetings off/for stakeholder consultation (2-day Stakeholder Workshop)</b>   |                |                |                |                |                |                |                |                |  |
| Meeting arrangements including venue, etc (sub-contract)  | 10,000         | 15,000         | 10,000         | 15,000         | 10,000         | 10,000         | 10,000         | 0              |  |
| Documentation and information materials (sub-contract)  | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 0              |  |
| Office and communication expenses (sub-contract)  | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 0              |  |
| Local travel and expenses for key stakeholders (airfare, DSA, TA)   | 15,000         | 40,000         | 15,000         | 25,000         | 15,000         | 15,000         | 15,000         | 0              |  |
| <b>Sub-total:</b>   | <b>35,000</b>  | <b>65,000</b>  | <b>35,000</b>  | <b>50,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>0</b>       |  |
| <b>2. Personnel and Operational Costs (Management and coordination)</b>   |                |                |                |                |                |                |                |                |  |
| Programme Manager (12 months)   | 60,000         | 50,000         | 30,000         | 40,000         | 30,000         | 30,000         | 30,000         | 0              |  |
| Program Assistant(s) (12 months)  | 15,000         | 20,000         | 15,000         | 40,000         | 15,000         | 15,000         | 15,000         | 0              |  |
| Operational expenses for programme personnel (12 months)  | 15,000         | 20,000         | 15,000         | 15,000         | 15,000         | 15,000         | 15,000         | 0              |  |
| National Experts (Avg. US\$ 200/work-day)   | 20,000         | 60,000         | 40,000         | 60,000         | 40,000         | 40,000         | 40,000         | 20,000         |  |
| International Experts (Avg. US\$ 500/work-day)  | 30,000         | 50,000         | 30,000         | 50,000         | 30,000         | 30,000         | 30,000         | 30,000         |  |
| Other experts from national technical and scientific institutions   | 15,000         | 15,000         | 15,000         | 15,000         | 15,000         | 15,000         | 15,000         | 15,000         |  |
| Operational expenses of experts (travel, DSA, TA, etc)  | 40,000         | 100,000        | 60,000         | 100,000        | 60,000         | 60,000         | 60,000         | 40,000         |  |
| <b>Sub-total:</b>   | <b>195,000</b> | <b>315,000</b> | <b>205,000</b> | <b>320,000</b> | <b>205,000</b> | <b>205,000</b> | <b>205,000</b> | <b>105,000</b> |  |
| <b>3. Information dissemination/industry interaction (Industry Interaction Workshops)</b>   |                |                |                |                |                |                |                |                |  |
| Documentation and information dissemination (sub-contract)  | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          |  |
| Interaction workshops one each for each Sector, including venue arrangements, office & communication expenses and local travel at US\$ 15,000 per workshop (sub-contract)   | 15,000         | 60,000         | 60,000         | 60,000         | 30,000         | 30,000         | 60,000         | 15,000         |  |
| <b>Sub-total:</b>   | <b>20,000</b>  | <b>65,000</b>  | <b>65,000</b>  | <b>65,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>65,000</b>  | <b>20,000</b>  |  |
| <b>4. Data Collection and Analysis</b>  |                |                |                |                |                |                |                |                |  |
| Data collection from individual enterprises (to be physically carried out by a sub-contracted agency). HCFC consuming enterprises would need to be individually visited/contacted to obtain additional information at the level of detail required by 54/39. Estimated based on US\$ 25,000 minimum, plus net average cost of US\$100 per manufacturing enterprise and \$25 per servicing enterprise) | 40,000         | 150,000        | 80,000         | 150,000        | 125,000        | 100,000        | 150,000        | 60,000         |  |
| Documentation and reporting including analysis  | 5,000          | 10,000         | 5,000          | 10,000         | 5,000          | 5,000          | 5,000          | 5,000          |  |
| <b>Sub-total:</b>   | <b>45,000</b>  | <b>160,000</b> | <b>85,000</b>  | <b>160,000</b> | <b>130,000</b> | <b>105,000</b> | <b>155,000</b> | <b>65,000</b>  |  |
| <b>5. Draft Proposal, Stakeholder consultations and Finalization (2-day Stakeholder Workshop)</b>   |                |                |                |                |                |                |                |                |  |
| Meeting arrangements including venue, etc (sub-contract)  | 10,000         | 15,000         | 10,000         | 15,000         | 10,000         | 10,000         | 10,000         | 0              |  |
| Documentation and information materials (sub-contract)  | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 0              |  |
| Office and communication expenses (sub-contract)  | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 5,000          | 0              |  |
| Local travel and expenses for stakeholders (airfare, DSA, TA)   | 15,000         | 40,000         | 15,000         | 25,000         | 15,000         | 15,000         | 15,000         | 0              |  |
| <b>Sub-total:</b>   | <b>35,000</b>  | <b>65,000</b>  | <b>35,000</b>  | <b>50,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>0</b>       |  |
| <b>Total Cost</b>   | <b>330,000</b> | <b>670,000</b> | <b>425,000</b> | <b>645,000</b> | <b>440,000</b> | <b>415,000</b> | <b>495,000</b> | <b>190,000</b> |  |
| Agency Support Cost (7.5%)  | 24,750         | 50,250         | 31,875         | 48,375         | 33,000         | 31,125         | 37,125         | 14,250         |  |
| <b>Total Cost to MLF</b>  | <b>354,750</b> | <b>720,250</b> | <b>456,875</b> | <b>693,375</b> | <b>473,000</b> | <b>446,125</b> | <b>532,125</b> | <b>204,250</b> |  |

**ANNEX-II**  
**UNDP HPMP Preparation Budgets Breakdown For Group-3 and 4 Countries**

| COUNTRY   |   | GROUP-3        | GROUP-4        |
|---|---|----------------|----------------|
| ACTIVITY  |   | BUDGETS (US\$) |                |
| <b>1. Initiation meetings off/for stakeholder consultation (Stakeholder Workshop)</b>       |   |                |                |
|   | Meeting arrangements including venue, etc (sub-contract)  | 10,000         | 10,000         |
|   | Documentation and information materials (sub-contract)  | 5,000          | 5,000          |
|   | Office and communication expenses (sub-contract)  | 5,000          | 5,000          |
|   | Local travel and expenses for key stakeholders (airfare, DSA, TA)   | 10,000         | 10,000         |
|   | <b>Sub-total:</b>   | <b>30,000</b>  | <b>30,000</b>  |
| <b>2. Personnel and Operational Costs (Management and Coordination)</b>                     |   |                |                |
|   | Programme Manager (12 months)   | 25,000         | 20,000         |
|   | Programme Assistant(s) (12 months)  | 15,000         | 10,000         |
|   | Operational expenses of programme personnel (12 months)   | 10,000         | 10,000         |
|   | National Experts (Avg. US\$ 200/work-day)   | 20,000         | 15,000         |
|   | International Experts (Avg. US\$ 500/work-day)  | 30,000         | 25,000         |
|   | Other experts from national technical and scientific institutions   | 5,000          | 5,000          |
|   | Operational expenses of experts (travel, DSA, TA, etc)  | 30,000         | 20,000         |
|   | <b>Sub-total:</b>   | <b>135,000</b> | <b>105,000</b> |
| <b>3. Information dissemination/industry interaction (Industry Interaction Workshops)</b>   |   |                |                |
|   | Documentation and information dissemination (sub-contract):   | 5,000          | 5,000          |
|   | Interaction workshops one each for each Sector, including venue arrangements, office & communication expenses and local travel at US\$ 10,000 per workshop (sub-contract)   | 10,000         | 10,000         |
|   | <b>Sub-total:</b>   | <b>15,000</b>  | <b>15,000</b>  |
| <b>4. Data collection and Analysis</b>  |   |                |                |
|   | Data collection from individual enterprises (to be physically carried out by a sub-contracted agency). HCFC consuming enterprises would need to be individually visited to obtain additional information at the level of detail required by 54/39. Estimated at a net average cost of US\$100 per manufacturing enterprise and \$25 per servicing enterprise) plus a US\$ 10,000 minimum (sub-contract) | 30,000         | 20,000         |
|   | Documentation and reporting including analysis  | 5,000          | 5,000          |
|   | <b>Sub-total:</b>   | <b>35,000</b>  | <b>25,000</b>  |
| <b>5. Draft Proposal, Stakeholder consultations and Finalization (Stakeholder Workshop)</b> |   |                |                |
|   | Meeting arrangements including venue, etc (sub-contract)  | 10,000         | 10,000         |
|   | Documentation and information materials (sub-contract)  | 5,000          | 5,000          |
|   | Office and communication expenses (sub-contract)  | 5,000          | 5,000          |
|   | Local travel and expenses for stakeholders (airfare, DSA, TA)   | 10,000         | 10,000         |
|   | <b>Sub-total:</b>   | <b>30,000</b>  | <b>30,000</b>  |
| <b>Total Cost</b>   |   | <b>245,000</b> | <b>205,000</b> |
| Agency Support Cost (7.5%)  |   | <b>18,375</b>  | <b>15,375</b>  |
| <b>Total Cost to MLF</b>  |   | <b>263,375</b> | <b>220,375</b> |

**Notes:**

1. For countries in Group-3, where UNDP is not the lead agency, US\$ 110,000 is discounted.
2. For countries in Group-4, where UNDP is not the lead agency, US\$ 70,000 is discounted.



**ANNEX-III**  
**MDI Transitional Strategy – Armenia**

**PROJECT COVER SHEET**

|   |  |                             |      |
|---|--|-----------------------------|------|
| <b>COUNTRY:</b>                               | ARMENIA  | <b>IMPLEMENTING AGENCY:</b> | UNDP |
| <b>PROJECT NAME</b>                           | MDI Transition Strategy  |                             |      |
| <b>PROJECT IN CURRENT BUSINESS PLAN</b>       | YES  |                             |      |
| <b>SECTOR COVERED</b>                         | MDI  |                             |      |
| <b>PROJECT IMPACT</b>                         | 0.0 ODP tons   |                             |      |
| <b>PROJECT DURATION</b>                       | 18 months  |                             |      |
| <b>TOTAL PROJECT COST</b>                     | US\$ 30,000  |                             |      |
| <b>LOCAL OWNERSHIP</b>                        | 100 %  |                             |      |
| <b>EXPORT COMPONENT</b>                       | N/A  |                             |      |
| <b>REQUESTED GRANT</b>                        | US\$ 30,000  |                             |      |
| <b>COST-EFFECTIVENESS</b>                     | Not Applicable – TAS   |                             |      |
| <b>AGENCY SUPPORT COSTS</b>                   | 2,250  |                             |      |
| <b>STATUS OF COUNTERPART FUNDING</b>          | N/A  |                             |      |
| <b>NAT. COORDINATING AGENCY</b>               | National Ozone Unit under the Ministry of Nature Protection of Armenia |                             |      |
| <b>PROJECT MONITORING MILESTONES INCLUDED</b> | Included in Document   |                             |      |
| <b>BENEFICIARY ENTERPRISE</b>                 | Not Applicable   |                             |      |

***PROJECT SUMMARY***

Through this Technical Assistance approved by the Multilateral Fund for the Implementation of the Montreal Protocol, UNDP aims to assist the Government of Armenia to implement a project in MDI sector in order to develop a sound MDI transition strategy.

## **Submission background**

Taking into account the MTOC Assessment Report 2006 (published in March 2007) which emphasizes the following:

*“There is an urgent need for all Article 5(1) countries that have not already done so to develop effective national transition strategies in accordance with Decision XII/2. MTOC strongly recommends that these activities be made a priority to ensure a smooth transition to CFC-free alternatives by about 2010. Countries will need to set an end-date for transition that accounts for the Montreal Protocol phase-out schedule.”*

The current project document was specifically developed to demonstrate the need for the MDI transition strategy in Armenia (in line with decisions 45/54 and 51/34) and to provide the smooth MDI transition strategy.

The following reasons to have the MDI transition strategy were considered during the compilation of the required information:

- Ensure orderly transition to new products and most importantly ensure that the patients will have available equally effective alternative products at a reasonable cost (compared to CFC MDI products) and on time to guarantee that when the CFC MDI supply stops alternatives are sustainably available, registered and approved by the local regulatory entity. This includes possible contingency plans in case that registration and approval is a long process and there is a risk of a shortage of alternative products by the time CFC MDIs are out of the market.
- Facilitate the transition to new products by providing training and targeted awareness activities to ensure acceptance of the alternative products (in some cases they will be HFA MDI and in others DPI) by the patients and by the doctors
- Update the legislation to ensure that when the transition takes place no CFC MDI products will be imported and sold.

## **Part I. Situation analysis**

### **1. Asthma statistics and economic situation:**

The trends of medical inhalers imports are subject to the increasing demand. The number of cases of asthma and chronic obstructive pulmonary diseases (COPD) in the country, including tuberculosis, has been steadily increasing due to underfinancing of the health sector provided by the Government dictated by generally unstable economic conditions of the country.

#### **1.1. Number of patients with asthma and COPD:**

There is no specific statistics for COPD in Armenia, since it forms a part of general reporting on all types of bronchitis and pulmonary diseases, the number of patients suffering from asthma has shown a steady increase over the years. Compared to the base 2003, this number increased by 10% in 2007.

| Years | Number of patients with asthma |
|-------|--------------------------------|
| 2003  | 8,328                          |
| 2004  | 8,623                          |
| 2005  | 8,845                          |
| 2006  | 9,000                          |
| 2007  | 9,030                          |

Conclusions:

- asthma statistics show an increasing trend from 2003 to 2007, and the data for COPD is not separately available and needs to be further analyzed
- the medical care system is not sufficiently financially supported due to general economic instability.

**2. National legislation:**

Armenia does not manufacture ODS and ODS-containing aerosol/inhaler-type products.

The national legislation that controls the activities in the sector does not specifically regulate import/export of CFC MDIs products. There is only one resolution that controls the imports of medical products (including CFC-MDIs) in Armenia – *The Government Resolution on the Approval of the Procedure of the Import/Export of Medicines and Medical Products of 20 September, 2000 N 581*. The regulation considers CFC MDIs during imports in bulk with other medicines/medical products.

Conclusions:

- Specific regulations which would control the use of CFC MDI are lacking

**2. Supply of anti-asthma/COPD inhalers and other medical products:**

Aerosol products containing CFCs for MDI applications are still being imported into the country. Although the statistics shows that the substitution of some CFC-based MDIs is ongoing, the country feels that there should be a coordination strategy for the gradual and informed phase-out of imported CFCs-based MDIs from the country market, including the appropriate supporting measures.

The situation with the supply of MDIs and their non-CFC equivalents in Armenia in brief can be described by the following factors:

- Both CFC MDIs, HFA MDIs are present on the market; DPI products are available in negligible quantities;
- HFA MDIs are being supplied on the market, generally exceeding 75% share of the market in 2005 and 2006. The share is dropping below 70% giving a way for CFC-based MDIs in 2007; Starting 2005, the sales of CFC-MDIs lost almost 9% in market share (data for 2007).
- While staying at 23% share compared to HFA-MDIs in 2005 and 2006, CFC MDIs imports reached 32% share of the market in 2007 showing an increase by almost 10% as compared to 2005;



The 2007 increase in the imports of CFC MDIs were dictated by its lower prices which resulted in higher demand in comparison to more expensive HFA MDIs. Thus, the importing companies after 2005-2006 made a market survey which proved that expensive HFA MDIs had an adverse economic effect on the purchase power of the population. This explains why in the year of 2006 and 2007 an increase of CFC MDIs can be observed. .

Main sources of CFC MDIs in Armenia are Poland and Russia which have been registered in the local market since 2003 (Poland) and 2005 (Russia). The other sources are India and Syria.

| Country of CFC MDI origin in 2007 | Sub-market shares for various sources (% of total) |
|-----------------------------------|--|
| Poland                            | 58.3   |
| Russia                            | 33.3   |
| Others                            | 8.4  |
| Total                             | 100.0  |

GlaxoSmithKline-Poland is dominating the market (almost 60% of total) and reduces the imports of HFA-based MDIs in line with the less demand for more expensive products.

Conclusions:

- Imports HFA MDIs are not stable and decrease over 2005-2007 time scale;
- Imports of CFC-based MDIs slowly increase taking more than 30% of market share in 2007;
- Import of drugs by GlaxoSmithKline-Poland (major market supplier in Armenia) is sensitive to the purchase power and thus the company adjusted the import patterns in favor of CFC-based MDIs
- Actions are necessary to be taken to ensure that no further increases in import of CFC MDIs occur.

**3. Institutional capacity to control the transition :**

The Ministry of Health and the PharmInspection Company experienced problems during the compilation of the MDI consumption data, and multiple consultations with NOU- Armenia were required in order to manage the process in a coordinated manner. Institutional capabilities to proactively and knowledgably plan the imports of CFC and non-CFC MDIs for anti-asthma/COPD treatment in order to ensure more stable imports from predictable sources is lacking. A multi-year planning with a due consideration given to current developments on the market, purchase power and beneficial effects of HFA-MDIs and other products may not be considered as an established practice. When making a decision on selecting the MDI supply sources, due to bad economic conditions, it is traditional to consider cheaper sources, thus, adjusting the supplies to both the demand and current purchasing power.

Conclusions:

- The health authorities are not aware of the implications of the Montreal Protocol on the world production of CFC MDIs
- The imports system is sensitive to cheaper MDIs sources
- Taking into account future closure of more CFC MDI lines, need of some producers to evacuate stocks and possible lack of CFC pharmaceutical grade, more distortions in the market (in quantities, price and quality) are expected.

## Part II. MDI transition strategy

The national strategy on replacement of CFC-based MDI with alternatives should include the following:

- Better study and analysis of current MDI market consumption, supply sources and future trends in the context of the purchase power and non-CFC MDI solutions and their benefits;
- Analysis of alternative products and their effects and health benefits;
- Cooperation with the main importers and representatives of medical establishments towards organization and taking measures to shifting to affordable alternative medications, including timeframes for the import substitution and individual and group agreements with suppliers and distributors;
- Development of a multi-year national planning on imports and ensuring a smooth shift towards alternatives;
- Adopting a wide, informed and participatory decision-making process;
- Through training and targeted awareness activities, to increase confidence and ensure acceptance of the alternative products by the patients and by the doctors
- Extended and targeted work with asthma associations and delivering of trainings in yearly family-based financial planning to ensure better transition to HFA MDIs

Actions could include adjustments made to the legal framework, such as a modification of CFC Import Licensing System to include import of MDI and controlling MDI supplies under humanitarian aid.

### Budget for actions:

#### Planned expenditures

| Description                 | US\$          |
|-----------------------------|---------------|
| National Consultant in MDIs | 8,000         |
| Technical assistance        | 8,000         |
| Promotion, printing         | 6,000         |
| Workshops                   | 8,000         |
| <b>Total</b>                | <b>30,000</b> |

### Monitoring Milestones

| TASK                                      | MONTH |
|---|-------|
| (a) Project document submitted            | 1     |
| (b) Project document signature            | 3     |
| (c) Contracts Awarded                     | 7     |
| (d) Begin importers consultations efforts | 9     |
| (e) Training/Seminars                     | 9     |
| (f) Strategy developed                    | 12    |
| (g) HOP signature                         | 18    |

**Imports of CFC, non-CFC MDIs and DPIs to Armenia (units).**

| Nr. d/o      | Product   | Active Ingredient      | Brand/Manufacturer/ Country                  | Technology/Years         |              |              |              |
|--------------|---|------------------------|--|--------------------------|--------------|--------------|--------------|
|              |   |                        |  | (CFC - MDI/HFA- MDI/DPI) | 2005         | 2006         | 2007         |
| 1            | Astmopent aerosol 0,75 mcg/doze -20 ml/400 doaes in inhaler   | Orciprenaline          | Glaxo Smith Kline Pharmaceuticals SA, Poland | CFC-MDI                  | 6000         | 4500         | 7000         |
| 2            | Asthmerol aerosol 25 mcg/doze-120 dozes in inhaler            | Salmeterol             | KasparChabani Labs, Syria                    | CFC-MDI                  | 350          | 400          | 500          |
| 3            | Asthalin inhailor aerosol 100 mcg/doze-200 dozes in inhaler   | Salbutamol             | Cipla Ltd, India                             | CFC-MDI                  | 570          | 650          | 700          |
| 4            | Salbutamol inhailor aerosol 100 mcg/doze-200 dozes in inhaler | Salbutamol             | Glaxo Smith Kline Pharmaceuticals SA, Poland | CFC-MDI                  | 1000         | 1100         | 1200         |
| 5            | Salbutamol inhailor aerosol 100 mcg/doze-12 ml bottle         | Salbutamol             | Altaivitaminy CJSC, Russia                   | CFC-MDI                  | 3000         | 3500         | 4018         |
| 6            | Serevent spray metered, 25mcg/doze-60 dozes in inhaler        | Salmeterol             | Glaxo Smith Kline Pharmaceuticals SA, Poland | CFC-MDI                  | 0            | 0            | 2000         |
| <b>Total</b> |   |                        |  |                          | <b>10920</b> | <b>10150</b> | <b>15418</b> |
| 7            | Salbutamol susp. for inhala.t presurizate 100 mcg/-200 doze   | Salbutamol sulphate    | Glaxo SmithKline Pharmaceuticals, Poland     | Non CFC (HFA 134a)       | 18000        | 16500        | 16500        |
| 8            | Flixotide 125 mcg/ 120 doze evohaler                          | Fluticasone propionate | Glaxo Smith Kline Pharmaceuticals SA, Poland | Non CFC (HFA 134a)       | 3500         | 2000         | 2030         |
| 9            | Flixotide 50 mcg/ 120 doze evohaler                           | Fluticasone propionate | Glaxo Smith Kline Pharmaceuticals SA, Poland | Non CFC (HFA 134a)       | 1500         | 1690         | 1100         |
| 10           | Flixotide 50 mcg/ 250 doze evohaler                           | Fluticasone propionate | Glaxo Smith Kline Pharmaceuticals SA, Poland | Non CFC (HFA 134a)       | 15000        | 13000        | 13000        |
| <b>Total</b> |   |                        |  |                          | <b>38000</b> | <b>33190</b> | <b>32630</b> |