



联合国  
环境规划署



Distr.  
GENERAL  
UNEP/OzL.Pro/ExCom/68/6/Add.1  
12 November 2012  
CHINESE  
ORIGINAL: ENGLISH

执行蒙特利尔议定书  
多边基金执行委员会  
第六十八次会议  
2012年12月3日至7日，蒙特利尔

增编

情况报告和履约情况

印发本文件是为了增加以下内容：

- 第五部分：资源调动活动报告；
- 第六部分：核查报告和甲基溴项目进展报告；
- 第七部分：环境规划署关于执行委员会第 66/15 号决定的执行情况进展报告。

## 第五部分：资源调动活动报告

1. 执行委员会第六十三次会议批准为开发计划署、环境规划署、工发组织和世界银行分别执行的四项全球资源调动项目提供资金 680,000 美元，其中开发计划署 200,000 美元，环境规划署 100,000 美元，工发组织 200,000 美元，世界银行 180,000 美元。这些项目旨在调动资源，在通过淘汰氟氯烃一条途径以外，实现其他气候惠益。开发计划署、环境规划署、工发组织和世界银行均向执行委员会第六十六次会议提交了中期报告。在第 66/15 号决定 (m) 段和 (o) 段中，执行委员会请环境规划署和世界银行向执行委员会第六十八次会议提交进一步报告。

### 全球：为促进气候共同惠益调动资源（环境规划署）

#### 进展报告

2. 虽经多次提醒，但环境规划署没有向秘书处提交关于为促进气候共同惠益调动资源项目的执行情况进展报告。

#### 秘书处的建议

3. 谨建议执行委员会敦促环境规划署在执行委员会第六十九次会议之前提交关于这个项目的最终报告，或者，假如届时没有取得任何进展，则退还已经核准的项目资金。

### 全球：为淘汰氟氯烃和气候共同惠益调动资源（世界银行）

#### 进展报告

4. 世界银行提交资料，介绍了在第六十六次会议和第六十七次会议之间调动资源工作取得的进展情况。世界银行在报告中重申，当前正在开展的这项研究的目的是确定和强调如何利用其他资金来源，为提高能效提供资金，提高能效与向着由多边基金资助的非消耗臭氧层物质技术过渡可以同时进行。在消耗臭氧层物质淘汰项目的执行过程中，这可以弥补资金缺口，利用潜在的、可能丧失的机会，同时最大限度地发挥普遍气候融资的协同作用，特别是世界银行的能效和气候综合方案。

5. 报告详细介绍了拟议研究的概况，同时说明了拟议报告的各个具体章节。报告将分析减缓气候变化的融资因素、节能、前期货币化的概念模式、利益均沾的选项以及投资机会。世界银行进一步指出，这项研究的处理方法发生变化，现在将利用世界银行内部关于气候融资方面的专业知识，取代关于由独立咨询公司负责的最初建议。不仅如此，由于当前的碳市场薄弱，研究将减少对于碳融资信用前期货币化的关注，而是重点关注为促进节能开展气候融资的更广泛的机会。

6. 世界银行还介绍了在推行广泛的一揽子融资方案时需要考虑到的涉及各个领域的问题，例如拟议项目的额外贷款；透明度和良好管理；确保这些项目不会给各国造成不良的刺激；研究利益均沾的可能性，包括向多边基金返还资金；确保拟议项目的可持续性；避免类似项目的重复；按照第 63/23 号决定 (a) (二) 段的要求，提供关于交易成本的资料。世界银行提交的报告将作为本文件的附件一（UNEP/OzL.Pro/ExCom/68/6/Add.1）。

## 秘书处的意见

7. 秘书处对于世界银行提交的进展报告发表了意见和观点，并就一些问题进行了讨论，特别是关于改变研究方法、当前利用其他资金来源为提高能效供资的关联以及这个项目如何看待这一点、项目产出如何形成资源调动。秘书处还要求对方澄清当前的研究进展情况，以及是否改变了完成项目的时间安排，秘书处强调各国在编写第二阶段氟氯烃淘汰管理计划时了解这些资料的重要性。

8. 在讨论中，世界银行说明，在世界银行内部为此组建了一个小组，目前已经开始分析世界银行提出的综合方案，特别是关于潜在协同作用和未来资金来源的内容。世界银行还解释说，之所以改变做法，在世界银行内部完成这项研究，而不是与外部顾问合作，是由于这项研究创造了一个机会，可以与世界银行在能源融资、气候融资和臭氧层活动主流化方面的当前各项活动联系起来。世界银行认为，这是一个重要的发展方向，可以由此制订项目，将淘汰氟氯烃与世界银行的其他优先要务结合起来，这是由于在世界银行本身内部就存在很多尚未开发利用的潜在资金来源。然而世界银行指出，不会仅仅局限于内部，还将同时研究世界银行外部的可能性。

9. 秘书处关切地指出，研究成果可能是仅仅是理论上的，世界银行对此肯定地表示，报告将利用具体项目作为实例，说明如何弥补融资缺口。世界银行还确认，最终成果将按计划提交给执行委员会第六十九次会议审议。

## 秘书处的建议

10. 谨建议执行委员会注意到世界银行提交的关于为促进气候共同惠益调动资源的中期报告，并敦促世界银行向执行委员会第六十九次会议提交关于此次研究的最终报告。

## **第六部分：核查报告和甲基溴项目进展报告**

11. 根据第 66/16 号决定 (b) (四) 段，已经提交、且不属于付款要求或项目完成情况报告的核查报告和甲基溴报告，列入《情况报告和履约情况》文件接受审查。向执行委员会第六十八次会议提交了关于如下各项多年期协定的核查报告——中国：加工剂行业计划（第二阶段）：四氯化碳淘汰在《加工剂淘汰协定二》加工剂处理当中的情况；尼日利亚：最后执行进展报告（2010 至 2012）以及 2009 和 2010 年消费情况核查报告；以及，突尼斯：国家消耗臭氧层物质淘汰计划（2010 年氟氯化碳和哈龙消费情况核查报告）。另外提交了一份关于哥斯达黎加的甲基溴情况的报告。

**中国：加工剂行业计划（第二阶段）：四氯化碳淘汰在《加工剂淘汰协定二》加工剂处理当中的情况（世界银行）**

12. 世界银行将代表中国政府，向执行委员会第六十八次会议提交两份文件，说明用于加工剂用途的消耗臭氧层物质的生产和消费情况：

- (a) 2010 年用于加工剂行业计划—第二阶段（《加工剂淘汰协定二》）的四氯化碳消费情况核查报告；以及

(b) 2010 年四氯化碳的生产和消费情况核查报告。

13. 《加工剂淘汰协定二》规定的资金已经全额拨付，方案也已经付诸实施。

14. 在第六十五次会议上，秘书处通报，由于已经提供了 2010 年核查报告，与此前的报告相比，世界银行改变了关于四氯化碳作为加工剂在中国的生产和消费情况的核查报告的格式。秘书处指出，众多企业在 2010 年做出改变，例如关闭设施或转产，但有关方面没有走访这些企业。

15. 执行委员会第 65/10 号决定 (i) 段请世界银行提供关于 2010 年用于受控用途的四氯化碳的生产和消费情况的独立核查，独立核查工作至少应核实监测制度的建立与否以及通过这项制度提供的资料质量如何；以及，现场考察尚未考察过的相关企业，并再次研究业已考察过的这些企业中的一个样本，以便为核查报告收集必要数据。

16. 秘书处审议了核查报告，并注意到：

(a) 在第六十五次会议之前，秘书处向世界银行提供了一份列有尚未完成核查工作的九家企业的名单，此次核查的范围增加了其中四家已经加入《加工剂淘汰协定二》、且核查人员此前从未考察过的四家企业；另外五家企业分别是：常熟向阳公司、盐城润华公司、宜兴永固公司、沙隆达公司（锦州）以及江苏长龙公司；以及

(b) 没有开展关于是否建立了四氯化碳监测制度以及通过这项制度提供的资料质量如何的核查。秘书处请世界银行相应修订核查报告。世界银行提交了单页说明，解释在线监测系统的功能，但没有纳入核查报告，同时也没有评估相关资料的质量。

17. 秘书处回顾，在世界银行向第六十五次会议提交的报告中，秘书处注意到世界银行就《加工剂淘汰协定一》、《加工剂淘汰协定二》以及 2009 年之前历年和 2009 年的四氯化碳生产情况提供了高质量的核查报告，确保商定的生产和消费减少数量得到落实，以及相关生产设施转产或拆除。

18. 秘书处希望指出，中国完成了《加工剂淘汰协定一》和《加工剂淘汰协定二》的执行工作，且执行委员会第 66/16 号决定 (b) (四) 段请执行机构提交多年期协定项目完成情况报告以及所有已经完成的核查报告，特别是关于四氯化碳。

## 建议

19. 谨建议执行委员会考虑，请世界银行代表中国政府，根据第 65/10 号决定 (i) 段，在执行委员会第七十次会议之前，提交一份关于加工剂行业计划第二阶段的项目完成情况报告，同时提交修订后的 2010 年行业核查报告及四氯化碳生产和消费情况核查报告。

## 尼日利亚：最终执行进展报告（2010 至 2012 年）以及 2009 和 2010 年消费情况核查报告

20. 开发计划署作为执行机构，代表尼日利亚政府向执行委员会第六十八次会议提交了 2009 年和 2010 年消费情况核查报告以及国家氟氯化碳淘汰计划执行情况报告。执行委员会第三十八次会议批准了尼日利亚的国家氟氯化碳淘汰计划，以期到 2009 年 12 月 31 日，在该国彻底淘汰氟氯化碳消费。分八次核准了 13,130,786 美元资金和机构支助费用，最后两次是在 2009 年召开的第五十九次会议上。核查报告证实了尼日利亚提交的 2009 年和 2010 年第七条数据，2009 年和 2010 年的消费量分别为 15.13ODP 吨和 0ODP 吨。报告还介绍了海关主管部门自 2003 年以来在数据管理方面以及在海关与国家臭氧层机构关系方面取得的实质性改善，由此可以提供可靠的消费情况数据。执行情况报告的时间跨度从 2010 年 1 月到目前。在此期间，有两家泡沫塑料企业实现转产，企业总数由此达到 112 家。又有一百零七名海关官员接受了培训，受训海关官员总数由此达到 803 人，500 家代理商接受了培训。2010 年以来，培训了 1,400 名制冷行业技工，项目所涉技工总数由此达到 10,813 人。开发计划署通报，当前余额为 38,785 美元，其中一部分将用于出版《尼日利亚国家氟氯化碳淘汰计划执行情况：对准目标》，其余资金计划返还给多边基金，或是从今后的氟氯烃淘汰管理计划资金中扣除。

21. 秘书处在审议呈文之后，建议执行委员会采取如下行动：

- (a) 注意到 2009 年和 2010 年尼日利亚氟氯化碳消费情况核查报告；
- (b) 注意到提交了 2010 至 2012 年尼日利亚国家氟氯化碳淘汰计划执行情况报告；以及
- (c) 批准呈文的提议，将部分剩余资金用于一份出版物，同时将余额返还给多边基金。

## 突尼斯：国家消耗臭氧层物质淘汰计划（2010 年氟氯化碳和哈龙消费情况核查报告）

22. 根据第 65/10 号决定（f）（三）段的要求，世界银行作为执行机构，代表突尼斯政府向执行委员会第六十八次会议提交了 2010 年消费情况核查报告。2006 年召开的执行委员会第四十九次会议批准了突尼斯国家消耗臭氧层物质淘汰计划，以期淘汰氟氯化碳和哈龙。核查报告证实，2010 年没有进口氟氯化碳和哈龙，2010 年这两类物质在突尼斯的消费量均为零 ODP 吨。核查报告还证实，附件 A、第一类物质和第二类物质所列的消耗臭氧层物质（即，氟氯化碳和哈龙）的进口管制程序是可靠的，在进口程序的各个阶段均充分实施消耗臭氧层物质的进口管制措施。然而，许可证制度目前不包括所有制成品均出口企业的进口。

23. 秘书处在审议呈文之后，建议执行委员会注意到 2010 年突尼斯氟氯化碳和哈龙消费情况核查报告。

哥斯达黎加：全面淘汰用作瓜果、鲜切花、香蕉、烟草苗床和苗圃熏蒸剂的甲基溴的执行情况进展报告，检疫和装运前消毒处理除外（开发计划署）

## 背景

24. 开发计划署代表哥斯达黎加政府，向执行委员会第六十八次会议提交了关于全面淘汰用作瓜果、鲜切花、香蕉、烟草苗床和苗圃熏蒸剂的甲基溴（检疫和装运前消毒处理除外）项目第五次付款执行情况的 2012 年年度进展报告。

25. 执行委员会第三十五次会议原则上批准了这个项目，并同意拨付第一笔款项（1,211,321 美元，另外提供给开发计划署机构支助费用 143,245 美元）。执行委员会第四十三次会议批准了第二次和第三次付款，共计 1,938,114 美元，另外提供机构支助费用 145,359 美元。执行委员会第四十九次会议批准了第四次付款，共计 969,057 美元，另外提供机构支助费用 72,679 美元。执行委员会第五十九次会议批准了项目的第五次付款，共计 726,791 美元，另外向开发计划署提供机构支助费用 54,509 美元，资金发放安排如下：2009 年发放 363,400 美元；2010 年底发放 255,000 美元；2012 年底发放 108,391 美元。但有一项理解是：2010 年和 2012 年资金的发放条件是，开发计划署提交报告，说明已经完成了淘汰目标（第 59/36 号决定（c）段）。第 59/36 号决定（d）段还要求开发计划署提交项目执行情况的年度进展报告，包括财务报告，直至项目完成。

## 年度进展报告

26. 在所有农场推广替代技术，包括综合利用日晒和生物熏蒸，以及/或者采用其他化学熏蒸剂。组织了多个代表团，洪都拉斯和哥斯达黎加专家就生物熏蒸的应用交流了经验，此后，利用这项技术对表面进行处理的做法大幅增加，目前已经成为受到青睐的替代技术之一。事实证明，在不适宜种植瓜类的季节引种水稻和/或玉米等其他作物，可以有效地防治土壤虫害，减少化肥和熏蒸剂的用量。提供了技术援助，以便提高农场产力。此外还就使用有益的本土真菌和应用生物防治开展了研究。已核准资金总计 4,845,283 美元，其中，已经拨付了 4,548,053 美元，余额 297,230 美元将在 2013 年和 2014 年拨付。

## 将采取的进一步活动

27. 建议在 2013 至 2014 年开展如下活动，预算为 297,300 美元：购置更多设备，提高生物防治的应用；增加有益微生物的存储能力；为生物防治的生产提供技术援助；为农民开办培训课程，支持他们改用生物防治技术；与政府保持顺畅的交流，确保到 2013 年 1 月 1 日全面淘汰甲基溴；以及，开展监督。

## 秘书处的意见

28. 哥斯达黎加政府规定，2012 年的甲基溴进口配额为 85.0 ODP 吨，接近第五十九次会议商定的修订后时间表中的水平。开发计划署还证实，哥斯达黎加政府将不再为用于受控用途的甲基溴提供配额。

29. 讨论并处理了关于各种替代技术的长期可持续性问题的，以及种植者对于这些技术的接受程度问题。开发计划署解释说，将不再为用于受控用途的甲基溴提供配额（正如现行的消耗臭氧层物质立法规定）。通过开展这个项目，为农民提供了多种工具和设备，让他们能够处理今后可能出现的土壤虫害。作物和耕地的轮种，再加之新的替代技术——生物

防治、其他化学熏蒸剂，单独使用或是与日晒方法结合起来，共同构成充分的替代作业方法，而不必使用甲基溴。此外，由于进口量减少，甲基溴的成本可能会提高，人们因此更倾向于使用替代方法。不仅如此，国际食品市场要求尽可能减少使用或完全不使用化学品进行处理，这也有助于各项技术的可持续性。

### 秘书处的建议

30. 秘书处建议执行委员会采取如下行动：

- (a) 注意到关于在哥斯达黎加全面淘汰用作瓜果、鲜切花、香蕉、烟草苗床和苗圃熏蒸剂的甲基溴（检疫和装运前消毒处理除外）项目第五次付款执行情况的 2011 年年度进展报告；
- (b) 授权开发计划署向哥斯达黎加拨付 297,300 美元，作为项目的第五次付款；以及
- (c) 请开发计划署在项目第五次付款结束后尽快向执行委员会提交项目完成情况报告。

### **第七部分：环境规划署关于执行委员会第 66/15 号决议执行情况的进展报告**

#### **朝鲜民主主义人民共和国：环境规划署关于执行委员会第 66/15 号决定执行情况的进展报告**

#### 背景

31. 执行委员会第六十四次会议决定，将朝鲜民主主义人民共和国体制建设项目的延长申请推迟到第六十六次会议上审议，并请秘书处和作为执行机构的环境规划署在执行委员会第六十六次会议之前，提出关于发放资金的替代办法、组织结构和监督程序的建议（第 64/20 号决定）。环境规划署向执行委员会第六十六次会议提交了报告，执行委员会在这次会议上决定，请环境规划署和其他相关机构考虑到在该国当地工作的其他机构的经验，进一步拟定发放资金的替代办法、组织结构和监督程序，供执行委员会第六十八次会议深入审议（第 66/15 号决定（k）段）。推迟审议体制建设项目的延长申请，直到执行委员会审议了这些新的资料。

32. 环境规划署向执行委员会第六十八次会议提交了关于朝鲜民主主义人民共和国体制建设项目的执行委员会第 66/15 号决定执行情况的进展报告。这份报告见本文件附件二（UNEP/OzL.Pro/ExCom/68/6/Add.1）。

#### 秘书处的意见

33. 秘书处注意到，与提交给第六十六次会议的报告相比，环境规划署的报告没有提出关于资金发放和监督的新的选择方案。环境规划署解释说，在与开发计划署、工发组织和其他机构讨论之后，环境规划署得出结论认为，“鉴于环境规划署行政管理框架的制约”，这个选择方案“是最佳的和最可靠的”。

34. 秘书处审议了有关方面提交的报告，注意到在与开发计划署及工发组织进行更多磋商之后提供了如下新的资料：

- (a) 关于将体制建设项目移交工发组织，后者是提交给执行委员会第六十八次会议的朝鲜民主主义人民共和国氟氯烃淘汰管理计划的领导机构，报告指出“在与其行政管理部门进行磋商之后，表明工发组织面临着与环境规划署类似的问题，因此，工发组织不符合执行委员会关于管理体制建设项目的要求”；
- (b) 开发计划署指出，在朝鲜民主主义人民共和国境内没有《蒙特利尔议定书》相关项目，开发计划署作为多边基金执行机构（开发计划署，纽约）和/或执行项目的当地机构（即开发计划署，平壤）参与进来，需要在纽约和平壤的两个机构之间制订切实可行的安排，同时得到朝鲜政府的支持；
- (c) 秘书处还注意到，环境规划署支持执行委员会决定的替代办法，包括将朝鲜民主主义人民共和国体制建设项目转交给另一个执行机构，但这首先需要在环境规划署和其他机构之间以及在朝鲜民主主义人民共和国与相关执行机构之间开展磋商，并达成协议。

35. 此外，秘书处建议环境规划署就拟议的执行方式，咨询其设在内罗毕的法律事务办事处，确认这样做符合联合国安全理事会第 1695（2006）号决议、第 1718（2006）号决议和第 1874（2009）号决议。但在本报告定稿时，环境规划署尚未完成与其法律部门的磋商。

36. 总之，环境规划署当前提出的建议与其向第六十六次会议提出的建议并无本质上的差别，但秘书处注意到，环境规划署已然尽全力研究关于体制建设项目的资金发放替代办法、组织结构和监督程序。环境规划署确认，由于行政管理方面的制约，要提出与此前提出的意见有着本质区别的方案，其能力有限。为此，考虑到为该体制建设项目提供援助的迫切性，环境规划署希望执行委员会指导在受制于这些不利因素的情况下如何开展下一步工作。环境规划署愿意根据拟议的选择方案来执行体制建设项目，并为此向第六十八次会议提出了体制建设项目延长申请。

#### 秘书处的建议

37. 谨建议执行委员会：

- (a) 注意到环境规划署提交的关于朝鲜民主主义人民共和国体制建设项目的执行委员会第 66/15 号决定执行情况进度报告；以及
- (b) 审议，鉴于环境规划署提出的种种不利因素，拟议的发放资金替代办法、组织结构和监督程序是否对应执行委员会第六十六次会议表达的关切；或者
- (c) 审议是否将体制建设项目移交给另一个执行机构，条件是后者已经掌握了在类似情况下发放资金的可行办法。



## 建议

38. 关于文件 UNEP/OzL.Pro/ExCom/68/6/Add.1，谨建议执行委员会考虑：

- (a) 关于为促进气候共同惠益调动资源：
  - (i) 敦促环境规划署在第六十九次会议之前提交关于这个项目的最终报告，假如届时没有取得任何进展，则返还这个项目的批准资金；
  - (ii) 注意到世界银行提交的关于为促进气候共同惠益调动资源的中期报告，并敦促世界银行在第六十九次会议之前提交关于这项研究的最终报告；
- (b) 关于中国的核查报告：“加工剂行业计划（第二阶段）：四氯化碳淘汰在《加工剂淘汰协定二》加工剂处理中的情况”，请世界银行代表中国政府，根据第 65/10 号决定（i）段，在执行委员会第七十次会议之前，提交一份关于加工剂行业计划第二阶段的项目完成情况报告，同时提交修订后的 2010 年行业核查报告及四氯化碳生产和消费情况核查报告。
- (c) 关于尼日利亚的核查报告：“最终执行进展报告（2010 至 2012 年）以及 2009 和 2010 年消费情况核查报告”：
  - (i) 注意到 2009 年和 2010 年尼日利亚氟氯化碳消费情况核查报告；
  - (ii) 注意到提交了 2010 至 2012 年尼日利亚国家氟氯化碳淘汰计划执行情况报告；以及
  - (iii) 批准呈文的提议，将部分剩余资金用于一份出版物，同时将余额返还给多边基金。
- (d) 关于突尼斯核查报告：“国家消耗臭氧层物质淘汰计划（2010 年氟氯化碳和哈龙消费情况核查报告）”，注意到 2010 年突尼斯氟氯化碳和哈龙消费情况核查报告；
- (e) 关于哥斯达黎加甲基溴项目：
  - (i) 注意到关于在哥斯达黎加全面淘汰用作瓜果、鲜切花、香蕉、烟草苗床和苗圃熏蒸剂的甲基溴（检疫和装运前消毒处理除外）项目第五次付款执行情况的 2011 年年度进展报告；
  - (ii) 授权开发计划署向哥斯达黎加拨付 297,300 美元，作为项目的第五次付款；以及；
  - (iii) 请开发计划署在项目第五次付款结束后尽快向执行委员会提交项目完成情况报告；以及

- (f) 关于环境规划署关于执行委员会第 66/15 号决议在朝鲜民主主义人民共和国执行情况的进展报告：
- (i) 注意到环境规划署提交的关于朝鲜民主主义人民共和国体制建设项目的执行委员会第 66/15 号决定执行情况的进展报告；以及
  - (ii) 审议，鉴于环境规划署提出的种种不利因素，拟议的发放资金替代办法、组织结构和监督程序是否对应执行委员会第六十六次会议表达的关注；或者
  - (iii) 审议是否将体制建设项目移交给另一个执行机构，条件是后者已经掌握了在类似情况下发放资金的可行办法。

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**Annex I**

**RESOURCE MOBILISATION FOR HCFC PHASE-OUT CO-BENEFITS STUDY**

**WORLD BANK PROGRESS REPORT TO THE 68<sup>TH</sup> MEETING  
OF THE EXECUTIVE COMMITTEE**

# **Resource Mobilisation for HCFC Phase-out Co-benefits Study World Bank Progress Report to the 68<sup>th</sup> Meeting of the Executive Committee**

**5 October 2012; rev. 2 Nov 2012**

## **A. BACKGROUND**

1. The ExCom by Decision 63/24 approved funding at the level of US\$ 180,000, plus agency support costs of US\$ 16,200, for resource mobilization activities related to the phase out of HCFCs.
2. The original proposal from the World Bank had envisaged addressing resource mobilization from two complementary approaches, harnessing market mechanisms to accelerate donor funding at the level of the replenishment and overall resources available to the Multilateral Fund, and using market mechanisms at the project level. The discussions within the Committee led to dropping the first approach related to donor's commitments, and decision 63/24 therefore requests the Bank to focus solely on the project-level approach.
3. Decision 63/24 also requested the World Bank to provide an interim report at the 66th meeting. Further to that interim report, the Committee requested "the World Bank to submit a more substantial report to the Executive Committee at its 68th meeting (Decision 66/15)".

## **B. STUDY OBJECTIVE**

4. The objective of this study is to identify and highlight ways through which energy efficiency improvements taking place simultaneously with ODS-free transition supported by the Multilateral Fund of the Montreal Protocol (MLF), thereby addressing a financing gap and possible missed opportunities in ODS phase-out projects. It will also look at strategies to maximize synergies with climate financing in general in combination with the World Bank's energy efficiency and climate mitigation portfolios in particular.
5. This will be achieved through exploring options and mechanisms and offering concrete proposals as to how a project addressing the phase out of HCFC could benefit upfront from climate change financing mechanisms for energy savings, thereby increasing the level and/or lowering the cost of financing for these projects. Activities and outputs envisaged include an analysis of the various instruments available for financing energy efficiency measures related to HCFC phase-out, including promotion of low GWP alternatives; an outline of specific investment opportunities; analysis of options for "profit sharing" as requested by the ExCom and recommendations for successful blending.

### C. APPROACH AND METHODOLOGY

6. The study will build on preliminary work undertaken in collaboration with the Carbon Finance Unit of the Bank and Treasury (see Annex), and will continue to pursue collaboration with these units and the climate policy team. The study will be undertaken through coordinating the input of these various groups, and others, with a view to harnessing the expertise that resides in the World Bank related climate financing and financial engineering. A draft final report will be submitted to the April 2013 meeting of the Executive Committee, and could be revised to take into account comments and recommendations of Committee at that time.
7. This approach is a departure from the interim report to the 66<sup>th</sup> meeting of the Executive Committee that envisaged working through a consulting firm. On further reflection it was felt that the study could more fruitfully be undertaken by relying on in-house expertise and understanding of climate finance.
8. A second departure from the original concept lies with a lesser emphasis in the study on the upfront monetization of credits from Carbon Finance / Clean Development Mechanism operation, taking into account the current weakness of the carbon markets, and the lack of visibility regarding their future, still. Instead, the paper emphasizes climate financing for energy savings more broadly. This is not to say that CDM-like market-based approaches will not be very relevant to the problem at hand however, but only that in the near term there is much uncertainty, and that whilst there is great hope in domestic carbon markets in developing countries for filling the gap, this is still some years away.
9. A related consideration is that the study aims to describing the climate finance architecture, and relies therefore on understanding and characterisation of the state of carbon markets and carbon finance in general, both of which are in a state of flux, and will likely remain so until at least 2015. Nevertheless, the approaches that will be developed are likely to apply independently of the exact configuration of climate related financing in the future. Furthermore, the team can tap on a large pool of wisdom and insights within the Bank on this subject.
10. It should be noted that an intrinsic risk to this type of study is that it might not lead to the uptake of new innovative approaches in future projects, in other words, that the study would have limited impact. Uptake (and therefore impact) will require that barriers can be broken down also between the energy and the "Montreal Protocol" sectors both in developing country clients and in Multilateral Fund agencies - something that goes beyond the scope of this study (although the study will make recommendations in this respect. Moreover, tapping into the large resources related to energy efficiency might require some flexibility on the part of the Montreal Protocol community. Again, the study is designed to address this aspect also, but can only hope to be one small element to facilitate the dialogue between sectors.

11. Taking into account the risks and considerations outlined above, it should be recognized that the study takes a fairly long-term view and seeks to outline ways forward in the midst of a still; ill-defined and changing landscape for climate financing.

#### **D. AUDIENCE AND DISSEMINATION**

12. In the broadest sense, this study can be expected to contribute to educating the Montreal Protocol community about opportunities for financing under the climate agenda, whilst conversely it aims at educating the climate mitigation community about opportunities and challenges under the Montreal Protocol and the HCFC phase out agenda. In facilitating the dialogue between the two communities, the study responds directly to the letter and the spirit of Decision XIX/6 of the Meeting of the Parties to the Montreal Protocol that links HCFC phase out with the minimization of climate impact.

13. Formally, the primary audience for this work is the Executive Committee of the Multilateral Fund that has approved funding for this work and towards the study report is addressed. Other stakeholders that can benefit from the study are the parties to the Montreal Protocol, in particular developing countries. Indirect audiences are the stakeholders involved in ODS phase out, in particular the private sector in the refrigeration and refrigeration-using sectors in Bank client countries.

14. Internally from a World Bank perspective, the study aims at, and is a means to, intensifying the dialogue between staff working on the Montreal Protocol, on climate finance, and on energy efficiency operations, and can help therefore mainstream the objectives of the Montreal Protocol in broader World Bank operations. Internal dissemination is envisaged through Brown Bag Lunch and through the Climate Financing Thematic Group.

15. The study is to be submitted for discussion at the Executive Committee of the Multilateral Fund. It will also be available for information of all countries at the Meeting of the Parties to the Montreal Protocol, and will be shared with UNEP for dissemination through the OzonAction network. Internally, a BBL can be organised, while externally, the study could be presented at a side-event of the Open-Ended Working Group, or during a "Stockholm Group" meeting on the margins of the same.

16. The issues will also be considered for presentation to a climate audience through a combination of outreach towards the UNFCCC – presentations to the Subsidiary Body for Implementation can be envisaged from the GEF and/or carbon finance perspectives, and outreach towards the GEF can inform and help shape the GEF-6 strategy for climate mitigation. Finally, the study is relevant also to the work of the Climate and Clean Air Coalition to address Short Lived Climate Pollutants, including HFCs, and will be shared with partners in that coalition.

17. The document will be available for download on the Bank's external website. Translation of an executive summary is also expected, while translation of the main text can be envisaged based on demand.

## **E. STUDY REPORT OUTLINE**

### **Executive Summary**

18. This will be prepared after the final version has been received by the Executive Committee, and would be translated into Spanish and French.

### **Background and Sector Setting**

19. This section confirms the rationale and TORs of the study and sets common language and parameters between ozone layer depletion and climate change for the purpose of the study.

20. Sector setting discusses the HCFCs scheduled for reduction under the Montreal Protocol (MP), and relationship with Kyoto Protocol and UNFCCC, including relationship with HFCs (in terms of “avoided phase in”). Key characteristics of volumes, growth, and estimated financing needs to achieve targets are described. Related potential energy savings are estimated as well.

### **Financing Instruments for Climate Change Mitigation**

21. This section is an analysis of the “landscape” of climate financing with focus on linkages with the Montreal Protocol agenda that builds on the work of the Climate Policy Initiative. This will take the form of a matrix that will indicate the amounts that are practically available, address experience with implementation, and pass judgement therefore on whether specific instruments should be pursued or not.

22. The review will take a broad definition of climate financing, and will consider other possible sources of financing such as related to green growth or cleaner production.

23. The review will provide estimates for the evolution of climate financing over a 3 - 10 year horizon, and provide pointers to the Montreal Protocol to tap into new financing instruments at country or global level.

### **Climate Change Financing for Energy Savings**

24. New equipment or industrial processes have two benefits which make them eligible to earn carbon credits: they can be more energy efficient, or the new equipment may contain low ODP/ low GHG refrigerant (taking into account also associated production processes). This section will discuss the state and possible evolution over a

3 - 10 year horizon of the carbon markets with focus on linkages with the Montreal Protocol, and implications for carbon markets as one of the instruments to speed up the phase out of HCFCs as complement to Multilateral Fund funding, as well as supporting development and implementation of recovery and destruction of used ODS “banks”.

25. The section will provide an overall assessment on extent to which carbon markets at global level and emerging domestic levels can: (i) generate real market demand for carbon credits from HCFC phase out; (ii) destruction of ODS banks; and (iii) support energy efficiency improvements with co benefits – including examining the actual financial contribution that is possible, and therefore the extent to which these can be relied upon as a financial mechanism to support these activities. The section will entail:

- Review the current status of the CDM market post 2012 including European position related to purchase of carbon credits from middle income countries and from HFC23 projects and likely implications for financing HCFC phase out activities from carbon finance;
- Review status of the voluntary carbon market, as well as emerging domestic markets in largest HCFC countries (China, India) and implications for financing HCFC phase out activities from carbon finance;
- Review trends in prices of carbon assets in different carbon markets and including discussion of likely pricing for assets associated with HCFC. Review implication of carbon prices on typical projects and what it does for IRR.
- Review existing baseline technologies and their replacement alternatives, taking into account sector prioritization, energy savings potential, and existence of low GWP alternatives;
- Review existing methodology (voluntary market and CDM) and any operational complications caused by requirements from these methodologies. Assess the need to develop new methodologies or revise existing methodologies.
- Briefly review and evaluate the experience for the sector with carbon finance, including at project level (description and lessons learnt) and for the global chillers program.

26. Typical case studies will be analysed to provide a handle on whether co-benefits from energy efficiency could help bridge the financing gaps of for HCFC phase out projects, or simply whether carbon revenues from energy efficiency might represent sufficient incentives to accelerate the phase-out of HCFC without dedicated Montreal Protocol financing.

### **Conceptual Models for Upfront Monetization**

27. This section will build on the scheme described in the original concept note (see Annex), and provide concrete proposals for the nuts and bolts of a “monetization” scheme related to a project. It will give a detailed description of how a project could be set up in practice with an upfront monetization scheme and new carbon market instruments, for a number of model scenarios. In addressing the recommendations from



the ExCom at time of approval, this will seek to include estimates of the range of transaction costs that would typically be associated with the services and financial engineering required to support and operate such a scheme.

28. The “scenarios” or project types that are envisaged include:

- Appliance replacement or manufacturing. For CDM-type support this would require the definition of a dynamic baseline to allow for growth of equipment;
- City-wide approaches that target several sources of emissions in a programmatic manner;
- The topic of chillers replacement, including whether different approaches to financing might have mitigated some of the implementation challenges faced by some of these projects at present; and
- Revisiting the issue of financing for the destruction of ODS banks, building on the existing studies and work already supported by the Multilateral Fund.

### **Options for Profit Sharing**

29. The Executive Committee requested with its approval that the study “explore possibilities of profit-sharing, including return of funds to the Multilateral Fund”. This involves legal issues related to, amongst other things, ownership of carbon credits; it is largely a legal issue of how the proceeds can be distributed, and will be reviewed under the various models explored in the previous chapter.

30. This matter is difficult to analyse in the absence of a specific concrete case. Conceptually, this would appear to be difficult since the shared “profits” would involve private sector actors, and would typically derive from energy savings and reduced CO<sub>2</sub> emissions, and not be directly linked to the ODS reduction that might be supported by the Multilateral Fund. Moreover, a known barrier to multiple-strand financing is that generally this comes with an increase in transaction cost which decreases the attraction of any such scheme for investors.

31. Nevertheless, the problem will be briefly and tentatively explored, taking into account both legal aspects and financial/economic feasibility aspects, so as to provide elements of response to the Executive Committee.

### **Investment Opportunities**

32. World Bank investments for clean energy are growing at rapid pace. World Bank Group commitments for energy efficiency have been around \$1.5 billion per year for the past five years. This section seeks to establish the possible linkages between these operations and the Montreal Protocol agenda. Ultimately, this should serve both to educate the energy community about the agenda and opportunities that lie with the Montreal Protocol, as well as educating the Montreal Protocol community about the potential scope and scale of activities that could be tapped into if incentives can be aligned and transaction costs kept to a minimum.

33. This section is both backward looking – based on analysis of lending and possible missed opportunities in the past years, as well as forward looking. It aims at identifying potential mid-term investment opportunities – in other words World Bank operations in the pipeline that could lead themselves to enhanced Montreal Protocol synergetic work.

34. The Bank pipeline review and analysis will make concrete recommendations regarding energy efficiency and “cities” investments across the Bank that would offer potential for co-financing, going forward. The extent to which the IFC portfolio can also contribute will be analysed.

35. By way of guide and example, a preliminary outline of the typology of tradition World Bank investments in energy efficiency gives a flavour for the potential for synergies. These investments typically take the form of:

- Investments through “Financial Intermediaries” that then on-lend to others. These Financial Intermediaries can be Banks, Energy Service Companies, or dedicated investment funds. They can establish credit lines or offer guarantees. This is the most common type of intervention that can support energy efficiency with building owners, small industries etc. Unfortunately there is limited information at the central level regarding the exact composition of the portfolio.
- Working directly with Electric Utilities as implementing agencies in demand side management approaches – addressing lighting or energy efficient appliances. This is for example the case of the Mexico Efficient Lighting and Appliances Project.
- More recently, supporting green procurement for municipalities, schools, hospitals – where an incentive is provided to base purchase decisions not only on least cost considerations, but also take into account life cycle considerations.
- And finally, projects still under preparation are developing approaches to provide incentives directly to manufacturers.

## **Conclusions and Recommendations**

36. The section will start by revisiting the opportunities and challenges of successful blending in light of the above, building on existing work on “Financing instruments for climate change”, but addressed more directly to the MP community. It will also take a broad view of the challenges with effecting ozone-climate synergies and would make tentative recommendations or options that stakeholders could consider in the process of shaping the various elements of the future climate financing architecture.

37. Conclusions will be informed by organizing broad discussions outside and within the Bank. As noted above, the climate change community will be engaged through a combination of the SBI, the GEF and the CCAC. Input from various units in the Bank will be sought through the climate financing thematic group when the work has advanced, but early enough to inform directions, and towards the end, to validate findings.

38. The section will highlight the key findings and recommendations and highlight “next steps” as appropriate – reminding readers of the role which broader financing for climate mitigation and energy efficiency as well as market based instruments/carbon finance can play in HCFC phase out.

## **ANNEX - RESOURCE MOBILISATION FOR HCFC PHASE-OUT CO-BENEFITS STUDY - CONCEPT SUBMITTED TO EXCOM; REVISED IN LINE WITH APPROVAL DECISION**

### **Summary**

The experience to date with developing strategies for the phase out of hydrochlorofluorocarbons (HCFCs) is that there is a need for additional funding to complement the amount traditionally provided under the Multilateral Fund of the Montreal Protocol (MLF), in particular to leverage financing for energy efficiency-related improvements. Therefore the Executive Committee of the Multilateral Fund at its 63rd meeting has approved a study to explore possibilities and mechanisms to increase leverage of climate financing, including upfront monetization of carbon credits.

The study will be submitted to the Executive Committee of the Multilateral Fund and shared with parties to the Montreal Protocol (MP). It will serve as a guide to develop projects funded by the MLF that can bank on, and therefore maximise, climate co-benefits. It will also familiarize the carbon market with the Montreal Protocol and the opportunities for generating carbon credits from the ozone depleting substances (which are not covered by Kyoto).

The study aims to generate model scenarios and provide concrete examples and "how-to" guides as to how a project addressing the phase out of HCFC could benefit upfront from the generation of future carbon credits expected from energy savings, thereby increasing the level and/or lowering the cost of financing for these projects. The study will build on preliminary work undertaken in collaboration with the Carbon Finance Unit and Treasury, and will continue to pursue collaboration with these units.

The main project output is a report to be submitted to the Executive Committee at its 69th meeting in April 2013 for further dissemination to Parties to the Montreal Protocol. The expected impact on operations is to provide developing countries with concrete options for maximising climate co-benefits from operations aimed at phasing out HCFCs.

### **Introduction**

The decision of the Parties to the Montreal Protocol to accelerate HCFC phase-out in 2007 held much promise for the environment; not only in terms of moving an impressive record of ozone protection measures to an earlier completion but also by recognizing the relationship of these measures to the climate. Part of Decision XIX/6 also assured countries operating under Article 5 that full incremental costs for accelerated HCFC phase-out would be covered. It is only now, four years later, as Article 5 countries are submitting their HCFC Phase-out Management Plans under the Multilateral Fund (MLF) and the Executive Committee's HCFC policies evolve, that the actual funding requirements are better understood.

One of the most prominent aspects of Article 5 country consumption of HCFC is the rate of growth in a relatively short period. This rate of growth is directly related to economic development in emerging economies which are rapidly building a consumer-base. Another critical aspect directly related to HCFC is the pattern of growth with China representing over 60% of Article 5 consumption and 90% of its production.

These trends may impact the level of MLF funding available as a whole for meeting incremental costs over a number of replenishment periods. This is further affected by a present mismatch between available funding and the Montreal Protocol reduction schedule on the one hand and the realities on the ground where a changeover to HCFC alternatives will in some cases lead to an unavoidable technology upgrade (linked to energy efficiency) or where HCFC phase-out can only be done on a sector basis, on the other hand. There is a risk therefore that opportunities for energy efficiency related improvements will be missed because of lack of funding. As a consequence, there is ongoing discussion in the MP community on possibilities and options for leveraging additional support to the MLF – if it becomes necessary for ensuring that countries can first and foremost meet their MP obligations and to assist countries that wish to include climate co-benefit considerations into their HCFC phase-out programs.

### **Bridging the Financing Gap**

There are two broad steps that could be pursued to leverage additional funding to complement the amount traditionally provided under the MLF. The first step is to circumspectly review and increase current donor commitment/replenishment estimates. The second step is to utilize market and other mechanisms to raise funding as required for project implementation. These two steps are not mutually exclusive. The World Bank had proposed to develop approaches addressing both: upfront monetization of future donor commitments similar to what was done under the Internal Finance Facility for Immunization (IFFIm); and project level activities including upfront monetization of carbon credits.

The ExCom by Decision 63/24 approved funding at the level of US\$ 180,000, plus agency support costs of US\$ 16,200, for resource mobilization activities related to the phase out of HCFCs. The discussions within the Committee led to dropping the first approach related to donor's commitments, and decision 63/24 therefore requests the Bank to focus solely on the project-level approach. Therefore the remainder of this note will focus on that aspect. Nevertheless it remains a possibility that the option to frontload future donor commitments can be explored at a later stage in time for future replenishments of the MLF.

### **Facilitating financing of HCFC co-benefits**

MP projects that aim to reduce Ozone Depleting Substances, in particular those dealing with refrigeration applications, will also generate energy saving benefits, given the very nature of replacing old CFC and HCFC cooling units with more modern and efficient technology. If these projects are also registered under one of the various Carbon

Finance mechanisms, then the energy savings could be turned into Carbon Assets. The problem is that whilst the Carbon market can provide a greater return on investment, it does not help address the upfront investment costs and address the financing barrier at the time a project is put together. Monetizing future carbon assets to finance the costs of climate-ozone benefits would seek to achieve that. Preliminary estimates show that cumulative CO<sub>2</sub> reductions generated by MP projects from years 2010 to 2040 will be about 19 million t/CO<sub>2</sub> from energy efficiency and 11,000 million t/CO<sub>2</sub> from energy substitution<sup>1</sup>. As an illustration of the potential (nominal) value of the carbon assets, assuming Certified Emission Reduction (CER) prices held constant at \$10 per t/CO<sub>2</sub>, the carbon assets<sup>2</sup> would be worth \$190Million from efficiency, and \$110 billion from substitution. Monetizing these assets would require discounting of the nominal value, but would nonetheless appear significant.

Once verified, carbon assets become entitlements to the project entity, and are redeemable in the future. Various mechanisms exist today to monetize these assets, such as primary market carbon funds and secondary market exchanges. However, these mechanisms do not directly address the need for increased project finance capital at an early stage of the project.

Carbon assets redeemable in the future could be used by the project entity to increase the financing available at an early stage of the project. It may be possible to advance financing (e.g.: commercial loans, bonds) against these future carbon assets to fund projects before the assets are generated, using the future stream of carbon revenues to repay the financing, over time.

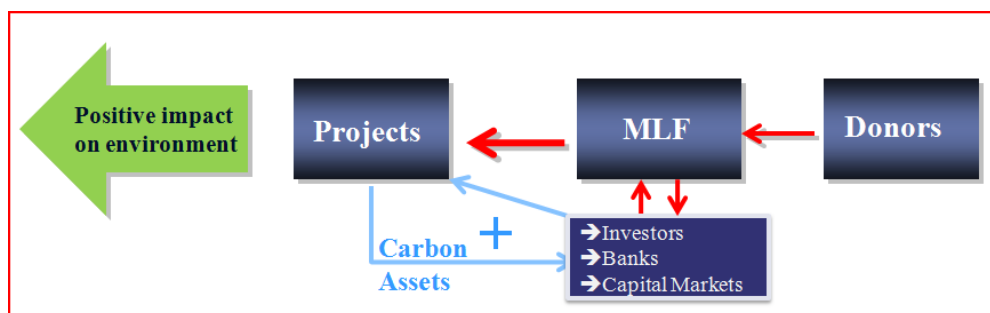
Furthermore, it may be possible to use carbon assets to enhance the creditworthiness of projects, which would enable financial entities (banks, investors or multilaterals) to improve the terms of financing (such as increased financing amounts, decreased cost of financing, increased loan maturity, etc.). As a credit enhancing instrument, carbon assets would be transferred or posted as collateral to the benefit of financiers, to reduce the potential loss in case of a default by the borrowing project entity.

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<sup>1</sup> These figures will be reviewed.

<sup>2</sup> These figures only for indicative purposes, and not valid as of October 2012

Figure : Financing HCFC Phase Out Co-Benefits



The above cannot be considered without looking at what sources of funding could be available broadly. There are a number of sources for grant financing and concessional or commercial lending as well that should be sought to complement MLF funding particularly where MP projects intersect with the climate agenda, in order to maximize ozone and climate benefits. These include the Global Environment Facility, bilateral, the Climate Investment Funds including the Clean Technology Fund, IBRD/IDA lending and the Green Climate Fund in the making, or even instruments such as green bonds.

However, while these sources of finance can in principle be pulled together<sup>3</sup>, in practice there are considerable barriers in doing so. These barriers that stem from different project cycles and information requirement include: (i) timing issues; (ii) transaction costs in general; (iii) and multiple decision makers in various sectors, at the country, agency, and funder level, with different short-term priorities.

Finally, a broad financing package should also take into account incentives to ensure that the potential climate change mitigation benefits from HCFC phase out are not diluted because of high GWP alternatives. In some limited instances, HCFC phase-out is leading to HFC phase-in where there are no other cost effective and available alternatives. The study would explore ways to leverage financing to effect a transition that would promote low GWP alternatives altogether.

### Crosscutting elements

When approving funding for this work, the Executive Committee in its decision highlighted a number of elements which are key principles that will be taken into account in pursuing all three avenues outlined above:

#### *(i) Additionality of the projects proposed*

In this context, “additionality” is understood as assurance that the set of activities that is promoted will bring environmental benefits beyond the baseline of Multilateral Fund supported interventions, and would not happen without additional push.

<sup>3</sup> See “Beyond the Sum of its Part Blending Financial Instruments to Support Low-Carbon Development”, Hosier et al, 2010, The World Bank

*(ii) Transparency and good governance, as well as covering the cash flow*

Transparency and good governance are key principles that underlie all World Bank operations and as such will be reflected in the Study as appropriate.

*(iii) Assurance that these projects would avoid perverse incentives for countries*

“Perverse incentives” in this context is understood at its most basic as a scheme that would be set up in such a way that the main beneficiary could have an incentive – monetary or otherwise – that would not be aligned with maximizing environmental benefits. To the extent that such perverse incentives can be difficult to uncover, the Study will proactively envisage possible misalignment of incentives.

*(iv) Exploring possibilities of profit-sharing, including return of funds to the Multilateral Fund*

This will be explored in the development of the Study, taking into account both legal aspects and financial/economic feasibility aspects.

*(v) Ensuring sustainability of the projects proposed*

This is fully in line with operational principles of the World Bank which would apply, and as such will be reflected in the Study as appropriate. In principle, the financial schemes considered that would involve the Bank’s Treasury would have to be intrinsically sustainable as that operation would transfer some of the medium to long term risks and uncertainty from the Project Entity to the Bank.

*(vi) Avoidance of duplication of similar projects*

In principle, priority efforts will be directed to developing different product lines or addressing different sectors or regions rather than duplicating similar projects.

*(vii) Information on transaction costs.*

This point relates to point number (ii) on transparency. The Study will provide Information on any fees for financial services that would be levied by the World Bank or by commercial enterprises as appropriate.

## **Outputs**

- (i) A detailed description of a scheme to monetize upfront Carbon Credits so as to address the barrier to initial capital investments costs;
- (ii) An analysis of options for “profit sharing”, including the feasibility of return of funds to the MLF;
- (iii) An analysis of the various concessional and commercial instruments available within the next five years for financing of energy efficiency measure related to HCFC phase-out, as well as an outline of approaches to promote low GWP alternatives;
- (iv) An description of specific mid-term investment opportunities, to the extent possible;



- (v) An analysis and recommendations to effect successful blending, including stakeholders and decision makers to involve and timing.

## **Appendix - Using Carbon Assets to enhance investments in Montreal Protocol Projects**

This appendix explores the possibility of using future Carbon Assets, which are being generated by Montreal Protocol (MP) projects, to increase the level and/or lower the cost of financing for these projects. MP Projects that aim to reduce ODS in refrigeration applications will also generate energy saving benefits, given the very nature of replacing old CFC and HCFC cooling units with more modern and efficient technology. If these projects are also registered under one of the various Carbon Finance mechanisms, then the energy savings could be turned into Carbon Assets.

Monetization of future Carbons Assets would offer two main benefits. From an environmental perspective, it would accelerate the implementation of HCFC and CFC reducing projects. From a financial stance, providing more capital and/or lowering its cost at the onset of the project would improve their financial viability and enable quicker ramp up of ODS reducing projects.

### *Carbon Assets as a credit enhancement tool for lending*

Carbon Assets generated by MP projects could potentially be used as collateral against lending<sup>4</sup>. For most sponsors, the collateral would be used to reduce the risk profile of the borrower, and would then enable the lender to decrease the cost of funding for these collateralized operations. Alternatively, for borrowers facing limitations with credit exposure headroom, the credit enhancing effect of the collateral could be used to increase the exposure limits, releasing additional funding sources. This proposal could utilize a range of carbon assets, such as CERs and VERs.

MP projects generating energy efficiency gains would need to register under the CDM or JI schemes. After registration, carbon assets would be transferred by means of an Emissions Reduction Purchase Agreement ( ERPA) or other arrangement, into the custody of a third party, which could use these assets as collateral to extend a loan to the country/project originating the assets, at the project construction phase. The collateral could be held on the balance sheets of the lender or in a separate facility that could be set up as a debt service facility with irrevocable payment instructions to pay off pre-determined debts.

The introduction of carbon assets to the MLF financial structure will induce the management of additional risks. Determining which parties bear what risks, and how these risks can be mitigated will become crucial elements of this proposal.

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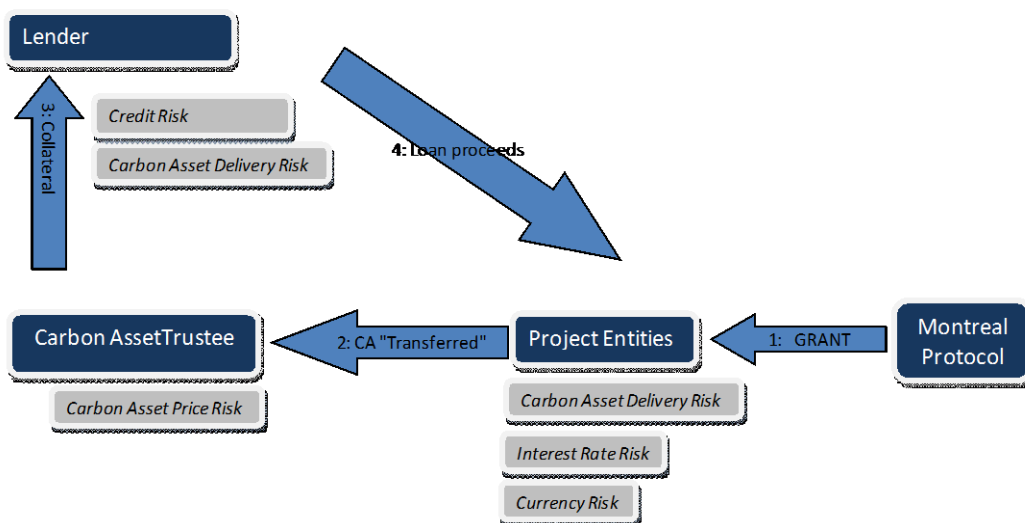
<sup>4</sup> The lending could be done by multilateral agencies, banks or other financial institutions.

Project Company: it would keep delivery risk, the risk of generating fewer carbon assets than expected.

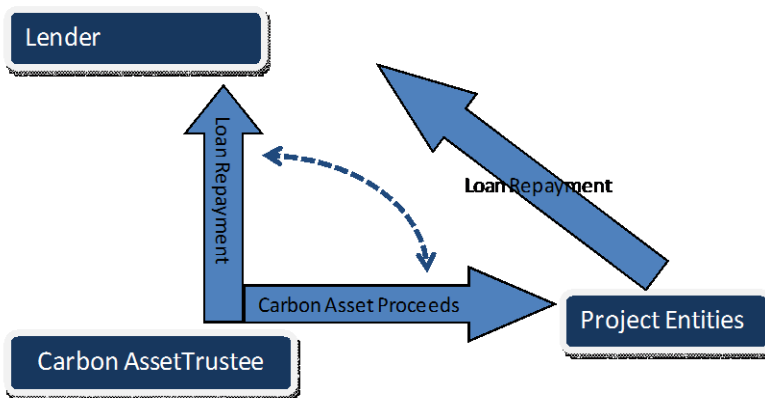
Carbon Credit Trustee: it would take carbon asset price risk if an ERPA is signed. Otherwise, it would stay with the Project Entity.

Lender: it would take the Borrower's Credit Risk in case of default by the project companies, though this risk would be reduced by the collateral. The Lender would also take Carbon Asset Delivery Risk indirectly, as the quality of the collateral is linked to the ability of the project company to deliver as planned. Of all risks, Delivery Risk remains the most difficult one to mitigate or transfer.

**Figure 1. Project's Process Flow**



**Figure 2. Illustration of flows as carbon assets are verified**



As the Carbon Assets are verified, they can be sold at spot market prices or settled through the ERPA at the pre-agreed price. Depending on the arrangements, the proceeds can be paid back to the lender as debt service, or to the project entity. The host government could stand as a guarantor and / or consolidator.

To enhance the collateralized lending concept, guarantee mechanisms could be used to mitigate certain risks. For instance, it may be possible to strip out the credit risk and delivery risk components out of the Carbon Assets, using new or existing mechanisms (IFC's Carbon Delivery Guarantee Mechanism is one such illustration), thereby enhancing the monetization potential of the Assets<sup>5</sup>.

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<sup>5</sup> See IFC Carbon Finance information page: <http://ifcnet.ifc.org/intranet/carbonfinance.nsf/>.

## Annex II

### PROGRESS REPORT ON THE IMPLEMENTATION OF THE EXECUTIVE COMMITTEE DECISION 66/15 ON THE INSTITUTIONAL STRENGTHENING PROJECT OF DPR KOREA 22 October 2012

#### Background

The 64th meeting of Executive Committee (25-29 July 2011) discussed the submission of DPR Korea's Institutional Strengthening project (ISP) renewal. In the margins of that meeting, UNEP met with the Committee member that expressed interest in this topic to provide additional clarifications. During that informal side meeting, the member raised the following specific issues:

- The salary level of the Ozone Officer and the modalities of salary payment under the ISP: It was noted that the cost of the salary is high and not in line with local salaries and the payment to the Ozone Officer through the Government needs more transparency. As an alternative, it was suggested whether it was possible for UNDP Pyongyang to pay the Ozone Officer with a reduced salary level.
- The UNEP delegation was provided with a document that had details about UNDP's new Internal Control Framework for implementation of projects in DPR Korea. UNEP was asked to explore to which extent the ISP project could be implemented in light of such a framework.
- Possibility for the Ozone Officer to be located in UNDP's Pyongyang office.

In the deliberations at the 64th meeting of Executive Committee, "*concern was expressed about the lack of transparency and difficulties in monitoring the exact use of any institutional strengthening funding in the Democratic People's Republic of Korea*" (UNEP/OzL.Pro/ExCom/64/53, para 86). The Committee then took the following decision:

*"The Executive Committee decided:*

- (a) To defer consideration of the request for phase VI of the institutional strengthening project for the Democratic People's Republic of Korea to its 66th meeting; and*
- (b) To request the Secretariat and UNEP, as implementing agency, to propose alternative methods of disbursement, organizational structures and monitoring procedures to the Executive Committee by its 66th meeting"*

**(Decision 64/20)**

Following that decision and the informal discussions, UNEP's Compliance Assistance Programme (CAP) informed DPR Korea's National Coordinating Committee for Environment (NCCE) about the Executive Committee Decision 64/20, and sent a formal letter to the UNDP Representative in Pyongyang through the Director of UNEP's Regional Office for Asia and the Pacific (ROAP) to initiate the consultation. It was later agreed that the consultation would be conducted in Pyongyang during a joint UNIDO/UNEP mission for the country's HPMP preparation from 28 November to 1 December 2011.

UNEP prepared a draft report based on the consultations with DPR Korea and UNDP in Pyongyang and circulated it to the Multilateral Fund Secretariat for review and comment. UNEP also kept relevant Executive Committee delegations informed of these consultations. Based on the comments received, UNEP finalized the report and submitted it to the 66<sup>th</sup> meeting of the Executive Committee for consideration.

The Executive Committee reviewed the progress report, and a number of members applauded the work done to improve transparency and suggested that, as a next step, UNEP should provide additional

information to increase transparency even further, consult with other implementing agencies that might have suggestions, and resubmit the report. Accordingly, The Executive Committee decided:

*“(k) With regard to Democratic People's Republic of Korea:*

*(i) To take note of the report submitted by UNEP on the implementation of Executive Committee decision 64/20 on the institutional strengthening project for the Democratic People's Republic of Korea; and*

*(ii) To request UNEP and other interested implementing agencies to further develop proposed alternative methods of disbursement, organizational structures and monitoring procedures, taking into account the experience of other agencies working on the ground in the country, for consideration by the Executive Committee at its 68th meeting.”*

**(Decision 66/15)**

As a follow up, UNEP discussed the matter with NCCE, DPR Korea in the margin of the joint network meeting of the Joint South Asia and South-East Asia Regional Network Meeting in Bhutan during 15-19 May 2012. UNEP then consulted UNDP and UNIDO, the only other implementing agencies that have on-going programmes in DPR Korea, for their views and advice in further developing alternative methods of disbursement, organizational structures and monitoring procedures. UNEP updated the present report with the results of those additional consultations, for the consideration of the 68<sup>th</sup> meeting of the Executive Committee.

The following three parts describe (a) the current implementation modality of the ISP in DPR Korea, (b) the consultation process in Pyongyang and Bhutan, and (c) the proposed alternative methods for disbursement, organizational structure and monitoring procedures as requested by Executive Committee Decisions 64/20 and 66/15.

#### **A. Current methods of disbursement, organizational structures and monitoring procedures for the implementation of the ISP**

##### Disbursement

Under the current financial system, UNEP has been transferring the approved funds under the ISP to DPR Korea through Small Scale Fund Agreements (SSFAs). Following the signature of an SSFA between DPR Korea and UNEP with the agreed work plan, the first payment is made as a cash advance to support the NOU to conduct the agreed planned activities. Upon receipt of a satisfactory interim progress report and financial reports and confirming that 80% of first payment has been spent, UNEP proceeds with making the second payment. UNEP uses this same modality for all ISPs for which UNEP is the responsible Multilateral Fund Implementing Agency.

The cash advance and the later reimbursement will be diverted to the National Ozone Unit, NCCE through UNDP Pyongyang in local currency.

##### Organizational structure

The National Ozone Unit (NOU) of DPR Korea was established in December 1996 as part of the Institutional Strengthening project funded by the Multilateral Fund under the authority of the NCCE.

NCCE is coordinating all the policies and compliance activities for environmental protection with regard to the cooperation with International Organizations in the field of environment including the implementation of the Montreal Protocol.

NCCE is chaired by the Vice-Minister in charge of international organizations in the Ministry of Foreign Affairs, vice-chaired by the Vice-Minister of the Ministry of Land and Environment Protection and composed of the representatives from relevant line Ministries and Organizations such as State Planning Commission, State Commission of Science and Technology, Ministry of Chemical Industry, Nature Conservation Union, etc.

The NOU, being supported by project officers and coordinators who oversee the activities relating to the Montreal Protocol, coordinates the daily implementation of the Montreal Protocol, prepares and supervises the implementation of the Multilateral Fund projects including RMP and NPP, and fulfils reporting requirement to the Ozone Secretariat and the Multilateral Fund. All staff working in the NOU are appointed by their respective organs and approved by NCCE.

#### Monitoring procedures

As specified in the SSFA, the NOU needs to submit regular progress reports on the implementation of the agreed work plan, as well as interim and final financial reports, for UNEP's review. The NOU also provides UNEP with copies of final information and outreach products such as newsletters, posters, etc. that were produced under the ISP. UNEP maintains regular contact with the NOU through UNDP Pyongyang for any queries and/or clarifications. Furthermore, from time to time UNEP, in most cases jointly with UNIDO undertakes supervision and inspection missions to visit Pyongyang, in combination with the implementation of other approved activities under the Multilateral Fund. UNEP has also participated in some major awareness activities organized by the NOU under the ISP, such as celebrations of the International Day for the Preservation of the Ozone Layer (Ozone Day) in Pyongyang.

### **B. Consultation process in Pyongyang and Bhutan**

#### Meeting with NCCE/NOU

UNEP and the DPR Korea NCCE jointly reviewed the Decision 64/20 in Pyongyang from 28 November to 1 December 2011, and identified possible alternative methods of disbursement, organizational structures and monitoring procedures that the Government could consider. During the further consultations between UNEP and the NCCE representative at the Network meeting in Bhutan, the following issues were highlighted:

#### *General issues*

- The NCCE first raised concerns about the impact of the delayed approval of the ISP for the country's compliance with Montreal Protocol obligations, and NCCE requested UNEP to convey a similar message that was recorded in the final report of the Joint Meeting of the South Asia-South East Asia Regional Network of ODS Officers in Pokhara during 17-19 October 2011, i.e. "Network countries felt that the IS funding is essential for successful implementation of the Montreal Protocol and Executive Committee should be informed of countries concerns of difficulties that may face if any disruption or delay in funding of IS projects".
- The NCCE further stated that it would fully cooperate with UNEP and the Multilateral Fund Secretariat to explore any possible alternatives as requested by the Executive Committee, even though it was not convinced that it should be singled out for such a treatment.
- The possibility of transferring DPR Korea's ISP to another Implementing Agency was discussed. Although the NOU prefers that UNEP continues implementing the ISP considering its long-term cooperation with UNEP for more than 20 years, and national stakeholders' familiarity with UNEP's reporting requirements and procedures, the NCCE is open to work with any other Implementing Agency if the Executive Committee so decides.

- The NCCE requested UNEP to convey to the Executive Committee the message that the continuous deferral of the ISP renewal for DPR Korea is negatively affecting the normal operation of the NOU, including the preparation of the country's HCFC Phase out Management Plan (HPMP).
- For the proposed alternative methods of disbursement, organizational structure and monitoring procedures, following carefully review of each of all the earlier proposals to the 66<sup>th</sup> meeting of Executive Committee, it is jointly concluded by NCCE and UNEP that the proposed options to the 66<sup>th</sup> meeting of Executive Committee would be the best and viable ones in consideration of the constraints of UNEP's administrative framework.
- There are three full-time Ozone Officers among the staff of NOU that have been paid under the IS project directly. If Executive Committee is not in a position to approve the IS project, NCCE would have to convert them to work on the Montreal Protocol matter on a half-time basis, therefore, it can be justified for the Government to pay their salary. The similar arrangement will also be made for the other NOU staff. The NCCE has done its best to keep the NOU operating, but it may still affect the smooth implementation of the Montreal Protocol as well as the HPMP if approved.

#### *Disbursement*

- The option to stop advance payments under the current system was discussed. This means that following the signing of the SSFA, the NOU would need to organize the planned activities by using funding from other internal Government resources outside of the Multilateral Fund support, and upon the submission of the progress report, the financial report and the receipts UNEP would reimburse the cost accordingly through UNDP Pyongyang. The NCCE expressed concern about that without advance payments under the ISP, the planned activities may not be organized as originally planned, as they will depend on the availability of the funding in the other resources, which might most likely delay the project implementation. The NCCE advised it would be more efficient to continue the current advance payment system, but instead strengthen the management and monitoring on the use of the advance payments.

#### *Organizational structure*

- Concerning staff recruitment in the NOU, the NCCE was flexible for local people to be contracted by a UN organization following the established procedures of UNDP, and to make payments to those staff directly.

#### *Monitoring procedures*

- Regarding the monitoring of the activities under the ISP, the NCCE agreed to coordinate with UNEP more closely, to enable UNEP staffs who are visiting DPR Korea for other activities to participate in these activities. The NOU further agreed to provide UNEP with a separate report for each event they organized under the ISP within two weeks of completing the activity.

#### Meeting with UNDP, Pyongyang Office

UNEP has engaged in discussions with the UNDP DPRK Country Office ("UNDP Pyongyang"), in the latter's capacity as a common office serving the entire UN system. It is important to draw the distinction between the role of that Country Office, with its broader support role for UN operations in DPRK, and that of UNDP as an Implementing Agency of the Multilateral Fund. UNEP limited its discussion with UNDP Pyongyang with issues related to the Country Office role.

UNDP Pyongyang has been extremely cooperative, and further showed its support to the work UNEP is carrying out in DPRK under the Multilateral Fund and expressed its readiness to further extend its support, if the working environment permits.

UNDP in DPRK has a special Internal Control Framework and signed a Memorandum of Understanding (MoU) with the DPR Korea Government, specifying those special operating arrangements under finances, banking, human resources, procurement and reporting.

UNDP is directly implementing its projects under the Direct Implementation Modality (DIM). For an example, no advance payments are allowed under DIM, and UNDP should implement all the activities and make payments directly to the vendors for the goods and services and pay in local currency to their local bank accounts of the vendors. UNDP national personnel should be hired under UNDP contracts and are considered UNDP staff. The procurement of goods and services follow the same strict regime and controls, UNDP verify each requisition for goods and services against the lists of Items Prohibited for Export to and Import from DPRK pursuant to UN Security Council Resolutions (UNSCR) 1695 (2006), 1718 (2006) and 1874 (2009) including checking the items against the category “double use items” and accordingly UNDP requests vendors to provide export licenses for goods containing at least 10% of United States- or Japanese-made components or technology.

As the Implementing Agency responsible for DPRK’s IS project, UNEP could engage UNDP Pyongyang to execute the project under UNDP DIM. For the purposes of the Multilateral Fund UNEP would remain the responsible Agency, however the project will be completely managed under UNDP rules and regulations, and the complete budget should be transferred to UNDP Pyongyang to execute the project and not only part of it, this includes managing the staff and resources, activities and payments. UNDP Pyongyang for that will charge its fixed General Administration fee of 7% as well as the Implementation Support Services for DIM projects, which should be added to the total budget of the project.

UNEP is open to any alternatives decided by the Executive Committee, including transfer of DPR Korea’s ISP to another Implementing Agency. Any such arrangement would require prior consultations and agreement between UNEP and the other Implementing Agency, and between the DPR Korea government and the related Implementing Agencies. However, UNEP also recognized that the country’s preference of continuing with UNEP should be respected. In addition, if the ISP is to be transferred, the financial implications to the Multilateral Fund due to the charging structure for programme support cost (PSC) for the ISP, also needs to be considered (note: as per Decision 26/41(d) UNEP receives 0% PSC for ISPs it implements).

UNEP noted that as per the salary level determined by International Civil Service Commission (ICSC), the current salary level of the NOU staff under the ISP is considered reasonable. Currently, the proposed salary level for the 3 staff of the NOU is about USD 520/month per person on average. For comparison, the salary level of local professional working on other projects for UNDP is about USD 900-1,000/month as per the established salary level by ICSC. If UNEP needs to hire the local staff directly, as per UNDP’s procedure the salary level for the NOU staff would need to be increased.

For the physical location of the NOU staff, UNDP Pyongyang informed UNEP that it currently has space constraints and in fact one of its project offices is located outside of UNDP compound in Pyongyang. Therefore, to house the 3 staff of NOU in UNDP Pyongyang’s office would be difficult. Also it recognized that due to the nature of the work of NOU, it might not be efficient for NOU to be located in UNDP compound.

UNDP Pyongyang also advised UNEP to contact other agencies which are operating in DPR Korea to understand their execution modalities. UNEP did so and later the United Nations Children’s Fund



(UNICEF) confirmed that “UNICEF has a full fledged office here in Pyongyang, DPR Korea and manages its activities like any other country office does.”

#### UNEP’s consultation with UNDP and UNIDO

Following Executive Decision 66/15 as well as the consultation with NCCE representative in the margins of the Bhutan Regional Network meeting, UNEP contacted both UNDP and UNIDO that have on-going programmes in DPR Korea to seek their advice about how to manage the implementation of DPR Korea’s ISP in light of the specific consideration of the Executive Committee on the fund disbursement, organizational structures and monitoring procedures. Further, in recognition that due to UNEP’s constraints and administrative structure, it would be practically difficult for UNEP and DPR Korea to find any viable alternative methods within UNEP that would satisfy the Executive Committee’s expectations, UNEP also proposed to introduce to both UNDP and UNIDO the possibility that one of their agencies could better serve DPR Korea for its ISP needs.

Both UNDP and UNIDO provided the following responses to UNEP’s request for advice:

- **UNDP:** Although it has a country office in Pyongyang, UNDP has no Montreal Protocol-related portfolio in DPR Korea therefore with only one small ISP project the quality of implementation would be impacted negatively unless they would be able to strengthen the local capacity at the country office level. However, this would be difficult due to the limited level of fees available in one single project. In conclusion, UNDP recommends that an Implementing Agency with more than one project should be selected to implement the ISP. The operational arrangements in UNDP involve the coordination of the entire Montreal Protocol programme by UNDP’s Montreal Protocol Unit in New York (MPU) with all country offices through delegated authority from the Administrator of UNDP and the head of the Bureau. It is therefore not possible to transfer the IS project to UNDP CO without discussion and a workable arrangement between UNDP MPU and UNDP DPRK. Having consulted with the head of UNDP MPU, additional discussions would be needed between UNDP/MPU and UNDP DPRK regarding capacities and cost recovery as well as UNDP MPU coordination role, before any decision could be reached regarding whether the project can be transferred.
- **UNIDO:** Following consultations with its Administration Department, UNIDO informed that it faces similar problems as that experienced by UNEP, therefore UNIDO would not be able to accommodate the requirement of the Executive Committee for the management of the ISP.

For the proposed alternative methods of disbursement, organizational structures and monitoring procedures, both UNDP and UNIDO reviewed reports; however, they acknowledged that it would be difficult for them to offer any advice due to the different administration and management systems.

#### UNEP’s internal consultations

UNEP consulted UN Economic and Social Commission for Asia and the Pacific (ESCAP) that is providing administrative service to UNEP ROAP to determine whether it would be administratively possible for UNEP to directly contract the local staff working for DPR Korea’s NOU. ESCAP advised that it would not be able to contract the Ozone Officer without daily supervision in Pyongyang. Therefore, UNEP would not be a position to recruit the local staff.

UNEP is also in consultation with its legal office in Nairobi on the implementation modality taking into account the UNSCR 1695 (2006), 1718 (2006) and 1874 (2009).

### **C. Proposed alternative methods of disbursement, organizational structures and monitoring procedures**

#### ***Fund disbursement approach under the ISP***

All activities under the ISP would be undertaken locally, such as public awareness events, UNEP and NCCE would sign a financial agreement (SSFA) to clearly define all activities and the respective costs. UNEP, as per the financial agreement, would make advance payments in the local currency (Korean Won) through UNDP Pyongyang after a detailed workplan for the year has been submitted listing the activities that will be conducted. However, the advance payment would not be spent for any of these activities unless the NOU submits a separate further detailed Terms of Reference (TOR) for each of the planned activities at least one month before the activity, for endorsement by UNEP. It was also agreed that within two weeks following the completion of the activity, the NOU would submit to UNEP a detailed report of the activity undertaken against the endorsed TOR with expenditure reports as well as original receipts for UNEP's review and monitoring. For any activities that are organized without UNEP's pre-endorsement, UNEP would not agree to cover the cost under the ISP.

#### ***Organization structure***

The NOU staff would be recruited by the Government, and would be physically based in NOU office located at the Environment and Development Centre. UNEP, UNIDO and their consultants could easily visit the NOU office during their missions, and the NOU staff would be invited to the meetings of the Regional Networks of Ozone Officers as well as other relevant meetings concerning the implementation of the Montreal Protocol.

#### ***Monitoring procedures***

As agreed with NCCE, in addition to the semi-annual progress report that is required for any country as per UNEP procedures, the NOU of DPR Korea would conduct each planned activity as per pre-endorsed TOR following the above-mentioned procedure and submit the activity report within two weeks after completion of the activity. In addition, UNEP would coordinate with the NOU on the timing of the organization of any activity to maximize UNEP staff's physical participation in ISP activities. UNEP is responsible for implementing other projects with DPR Korea beyond those of the Multilateral Fund, therefore frequent visits of other UNEP ROAP staff (i.e. they do not work in UNEP's Compliance Assistance Programme) to Pyongyang will also be utilized for such monitoring. UNEP CAP will also try its best to organize visits to the NOU twice a year for coordination, advice and review of ongoing ODS phaseout activities implemented by UNEP in DPR Korea.

The NCCE would like to invite UNEP to major events and activities under IS project and also agrees that UNEP will have unhindered access to project sites, as necessary for the implementation, monitoring and oversight of the UNEP-implemented projects.