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执行蒙特利尔议定书 多边基金执行委员会 第五十七次会议 2009年3月30日至4月3日,蒙特利尔

# 工发组织 2009 年工作方案

# 基金秘书处的评论和建议

- 1. 工发组织请执行委员会核准其2009年工作方案所需的1,774,847 美元以及机构支助费用134,614 美元。
- 2. 工发组织 2009 年工作方案所提案的活动列示于下表 1:

表 1: 工发组织工作方案

国家	活动/项目	活动/项目		
A 节:建议一揽	子核准的活动		<u>.</u>	
A1. 延长体制建				
前南斯拉夫的马	马 体制建设项目 (第四阶段)		132,347	132,347
其顿共和国				
		A1 小计:	132,347	132,347
	汰管理计划(HPMP)额外的项目编制:		<u></u>	
阿尔巴尼亚	氟氯烃淘汰管理计划的额外供资项目		55,000	55,000
		A2 小计:	55,000	55,000
	汰管理计划额外的项目编制(投资项目):			
阿根廷	空调制造业的投资项目编制		80,000	80,000
克罗地亚	泡沫塑料制造业的投资项目编制		40,000	40,000
		A3 小计:	120,000	120,000
A4. 氟氯烃淘汰	t管理计划编制(HPMP):			
危地马拉	氟氯烃淘汰管理计划编制		75,000	75,000
缅甸	氟氯烃淘汰管理计划编制		42,500	42,500
		A4 小计:	117,500	117,500
A5. 甲基溴项目	<b> </b> 编制			
智利	土壤熏蒸剂甲基溴淘汰项目编制		50,000	50,000
		A5 小计:	50,000	50,000
A6. 溶剂行业	的技术援助项目:			
柬埔寨	溶剂行业的技术援助项目		40,000	40,000
肯尼亚	溶剂行业的技术援助项目		40,000	40,000
		A6 小计:	80,000	80,000
A7. 最终淘汰 <sup>1</sup>	管理计划核查:			
阿曼	最终淘汰管理计划核查		20,000	20,000
		A7 小计:	20,000	20,000
		A 节合计:	574,847	574,847
B 节:建议个别	审议的活动:			
B1. 体制建设项	5目(新):			
亚美尼亚	体制建设项目 (第一阶段)		120,000	*

国家	活动/项目	请求数额 (美元)	建议数额(美元)
	B1 小计:	120,000	*
B2. 氟氯烃示范	项目的项目编制:		
中国	室内空调制造业的示范项目编制	60,000	*
中国	压缩机制造业的示范项目编制	30,000	*
印度尼西亚	泡沫塑料业示范项目编制	60,000	*
乌拉圭	商用制冷设备制造业示范项目编制(2 个企业的示范)	60,000	*
	B2 小计:	210,000	
B3. 消耗臭氧层物		<u>.</u>	
智利	消耗臭氧层物质销毁试点项目	60,000	*
中国	消耗臭氧层物质销毁试点项目	100,000	*
克罗地亚	消耗臭氧层物质销毁试点项目	30,000	*
朝鲜民主主义人	消耗臭氧层物质销毁试点项目	40,000	*
民共和国			
伊朗	消耗臭氧层物质销毁试点项目	60,000	*
前南斯拉夫的马	消耗臭氧层物质销毁试点项目	30,000	*
其顿共和国			
尼加拉瓜	消耗臭氧层物质销毁试点项目	40,000	*
巴基斯坦	消耗臭氧层物质销毁试点项目	40,000	*
塞尔维亚	消耗臭氧层物质销毁试点项目	40,000	*
土耳其	消耗臭氧层物质销毁试点项目	60,000	*
委内瑞拉	消耗臭氧层物质销毁试点项目	70,000	*
	B3 小计:	570,000	
B4 . 资金筹措技	术援助项目:		
全球项目	氟氯烃淘汰和气候共同利益资金筹措项目	300,000	*
	B4 小计	300,000	
	B 节合计:	1,200,000	
A 节和 B 小计:		1,774,847	574,847
机构支助费用 (7.	5%用于项目编制和体制建设以及超过 250,000 美元的	134,614	44,614
其他项目;9%用	于其他 250,000 美元以下的项目):		
共计:		1,909,461	619,461

<sup>\*</sup> 供个别审议或待决项目。

## A 节: 建议一揽子核准的活动

## A1. 延长体制建设项目:

前南斯拉夫的马其顿共和国(第四阶段): 132,347美元

## 项目说明

3. 工发组织提交了延长前南斯拉夫的马其顿共和国的体制建设项目的申请。本文件的 附件1列示了该国的申请说明。

## 秘书处的评论和建议

4. 基金秘书处建议在本文表 1 所示供资水平上一揽子核准延长前南斯拉夫的马其顿共和国的体制建设项目的申请。谨建议执行委员会,向前南斯拉夫的马其顿共和国政府发表如下评论:

"执行委员会已审议所提交的有关延长前南斯拉夫的马其顿共和国的体制建设项目的报告,并赞赏地注意到,该国的报告表明,该国 2007 年氟氯化碳的消费量为零,提前实现了 2010 年度完全淘汰氟氯化碳计划的目标。谨建议执行委员会,为该国政府在中东亚国家消耗臭氧层物质干事网络中发挥的领导作用而向该国政府致谢。因此,谨建议执行委员会,在今后两年内,前南斯拉夫的马其顿共和国应继续努力执行消耗臭氧层物质淘汰活动并取得突出成绩"。

## A2. 氟氯烃淘汰管理计划(HPMP)额外的项目编制:

阿尔巴尼亚: 氟氯烃淘汰管理计划的额外供资项目: 55,000 美元

#### 项目说明

5. 工发组织为阿尔巴尼亚提交了总额达 55,000 美元的氟氯烃额外项目编制资金申请。在第五十五次会议上,根据第 55/13 号决定,据阿尔巴尼亚报告,该国在当时的氟氯烃消费量为零,因此,阿尔巴尼亚收到了氟氯烃淘汰管理计划编制资金 30,000 美元。据阿尔巴尼亚根据《蒙特利尔议定书》第 7 条规定所报告的 2007 年度数据,该国 2007 年 HCFC-22 消费量为 2.5 ODP 吨,因此提交了这项申请。

#### 秘书处的评论

6. 秘书处注意到,这项申请是根据第 55/13 号决定提交的;第 55/13 号决定指出,"如果新的数据表明该国消费了氟氯烃,那么原来的氟氯烃消费量为零的国家可以提交氟氯烃淘汰管理计划编制额外供资申请"。阿尔巴尼亚根据《蒙特利尔议定书》第 7 条规定所报告的 2007 年度数据支持这项申请。

### 秘书处的建议

7. 基金秘书处建议在本文表 1 所示供资水平上一揽子核准阿尔巴尼亚氟氯烃淘汰管理 计划编制额外供资申请。

## A3. 氟氯烃淘汰管理计划投资项目的额外项目编制

阿根廷:空调制造业投资项目编制:80,000美元

## 项目说明

- 8. 工发组织提交了一份空调制造业行业计划编制供资申请;为此,工发组织已被阿根廷指定为负责机构。
- 9. 为了支持这项申请,工发组织指出,所申请的资金将会涵盖阿根廷 10 家空调制造企业的投资项目编制。在该项目编制中,共计消费 1,138 公吨(56.9 ODP 吨)HCFC-22。本文还指出,该行业的氟氯烃淘汰将极大地促进阿根廷履行 2013 年和 2015 年度的氟氯烃承诺。

## 秘书处的评论

- 10. 在第 56/16 号决定中, 执行委员会决定,2007 年氟氯烃消费量达到 500 ODP 吨的 国家有资格为该国的氟氯烃淘汰管理计划的投资项目的额外项目编制获得最高达 250,000 美元的资金;该投资项目是氟氯烃淘汰管理计划的一部分。根据阿根廷按照《蒙特利尔议定书》第 7 条规定所报告的数据,阿根廷的氟氯烃消费量为 342.5 ODP 吨。
- 11. 在审议这项申请时,秘书处注意到,工发组织是阿根廷氟氯烃淘汰管理计划编制的牵头机构,工发组织需要与阿根廷紧密合作,编制涉及所有行业的、能够使阿根廷落实2013年和2015年控制措施的综合氟氯烃淘汰管理计划。秘书处还注意到,工发组织已经提供了秘书处要求提供的行业信息。
- 12. 秘书处还注意到,在这份供资申请中,阿根廷氟氯烃淘汰管理计划投资项目符合资助条件的剩余资金不超过 170,000 美元。在本次会议上,没有其他机构提交阿根廷氟氯烃淘汰管理计划投资项目的额外项目编制申请。

#### 秘书处的建议

13. 基金秘书处建议,如果执行委员会没有核准用于落实 2013 年和 2015 年空调制造业控制措施的其他项目编制供资,那么,在本文表 1 所示供资水平上一揽子核准工发组织关于阿根廷氟氯烃淘汰管理计划的投资项目编制的申请。

克罗地亚:泡沫塑料制造业投资项目编制:40,000美元

#### 项目说明

- 14. 工发组织提交了一份克罗地亚泡沫塑料业的行业计划编制供资申请;该行业计划是克罗地亚氟氯烃淘汰管理计划的一部分。
- 15. 为了支持这项申请,工发组织指出,所申请的资金将涵盖克罗地亚淘汰聚氨酯泡沫塑料制造业中约 40 公吨 HCFC-141b 的投资项目编制。本文还指出,该行业 HCFC-141b 的淘汰将会极大地促进克罗地亚履行 2013 年和 2015 年的氟氯烃承诺。

### 秘书处的评论

- 16. 在第 56/16 号决定中,执行委员会决定,2007 年氟氯烃消费量达到 100 ODP 吨的国家有资格为该国的氟氯烃淘汰管理计划的投资项目的额外项目编制获得最高达 100,000 美元的资金;该投资项目是氟氯烃淘汰管理计划的一部分。根据克罗地亚按照蒙特利尔议定书第 7 条规定所报告的数据,克罗地亚的氟氯烃消费量为 7.7 ODP 吨。
- 17. 在审议这项申请时,秘书处注意到,工发组织提供了秘书处要求提供的行业信息。 工发组织还证实这项申请将全面涵盖泡沫塑料行业的第一阶段,这些项目将会归并到最终 的氟氯烃淘汰管理计划中。
- 18. 秘书处还注意到,在这项供资申请中,克罗地亚氟氯烃淘汰管理计划投资项目符合 资助条件的剩余资金不超过 60,000 美元。在本次会议上,没有其他机构提交克罗地亚氟氯 烃淘汰管理计划投资项目的额外项目编制申请。

## 秘书处的建议

19. 基金秘书处建议,如果执行委员会没有核准用于落实 2013 年和 2015 年泡沫塑料业控制措施的其他项目编制供资,那么,在本文表 1 所示供资水平上一揽子核准工发组织关于克罗地亚氟氯烃淘汰管理计划的投资项目编制的申请。

#### A4. 氟氯烃淘汰管理计划编制:

(a) 危地马拉 氟氯烃淘汰管理计划编制 75,000 美元

(b) 缅甸 氟氯烃淘汰管理计划编制 42,500 美元

### 项目说明

20. 工发组织提交了两份关于氟氯烃淘汰管理计划编制的新申请。如下表所示,这些国家报告了氟氯烃的消费量;

国家	2007 年氟氯烃消费量 (ODP 吨)		建议核准额 (美元)
	HCFC141-b HCFC-22		
危地马拉	1.2320	4.6244	75,000
缅甸	0	2.37	42,500

## 秘书处的评论

21. 秘书处注意到,氟氯烃淘汰管理计划编制申请是由工发组织与联合国环境规划署联合编制的;这些申请涵盖这两个国家剩余的氟氯烃淘汰管理计划编制资金;这些信息载于UNEP/OzL.Pro/ExCom/57/19 号文件环境规划署工作方案中。秘书处注意到,这些申请是根据第 56/16 号决定提交的。

## 秘书处的建议

22. 基金秘书处建议在本文表 1 所示供资水平上一揽子核准以上所示的危地马拉和缅甸氟氯烃淘汰管理计划的项目编制申请。

#### A5. 甲基溴项目编制:

智利: 土壤熏蒸剂甲基溴淘汰项目编制: 50,000 美元

#### 项目说明

- 23. 工发组织代表智利政府提交了一份智利甲基溴淘汰投资项目的项目编制申请。该项目旨在淘汰智利为了生产草莓而使用的剩余的土壤熏蒸剂甲基溴。
- 24. 工发组织指出,所申请的这些资金将构成该国全面淘汰甲基溴的资金,未来将不再为该行业申请其他资金。

## 秘书处的评论

25. 智利的甲基溴基准消费量为 212.5 ODP 吨。2007 年,智利的甲基溴消费量为 168 ODP 吨。秘书处注意到,虽然已经核准了智利甲基溴行业的许多项目,但是,没有一个项目是以草莓生产的土壤熏蒸为目标的。智利是该地区草莓的主要生产国;未经考虑合适的替代技术和替代物就淘汰该行业的甲基溴对该国的农业经济是有害的。

26. 在与工发组织讨论该项目的时候,秘书处被告知,在提交该项目的时候,智利政府同意这将是该国甲基溴淘汰项目的最后供资,该国不会再为甲基溴寻求未来的任何援助。

### 秘书处的建议

27. 基金秘书处建议在本文表 1 所示供资水平上一揽子核准该项目,条件是这将构成智利甲基溴项目的最后供资。

### A6. 溶剂行业的技术援助项目:

- (a) 柬埔寨:溶剂行业的技术援助项目: 40,000 美元
- (b) 肯尼亚:溶剂行业的技术援助项目:40,000 美元

#### 项目说明

28. 工发组织申请分别为柬埔寨和肯尼亚核准 40,000 美元的资金外加机构支助费用,以便为淘汰低消费量的四氯化碳提供技术援助,并支持其他消耗臭氧层物质溶剂的淘汰。工发组织指出,这将是这两个国家为溶剂业寻求的唯一供资。

## 秘书处的评论

- 29. 据柬埔寨和肯尼亚的报告,两国在 2007 年的四氯化碳消费量分别为零和 0.1 ODP 吨,两国在 2007 年的三氯乙酸消费量分别为 0.3 和 0.1 ODP 吨。两国的四氯化碳基准消费量分别为零和 65.9 ODP 吨,两国的三氯乙酸基准消费量分别为 0.5 和 1.1 ODP 吨。
- 30. 工发组织所提交的申请与最近为了建立能够解决第 5 条国家溶剂业的低消费量问题的程序而付出的努力是一致的。但是,秘书处注意到,联合国环境规划署履约协助方案向甲基溴和溶剂消费量较低或为零的国家提供履约协助方案的特别援助。秘书处询问工发组织是否已与联合国环境规划署讨论了这些提案以及已经向这些国家提供了哪些类型的援助。工发组织阐明这些国家已经申请了技术援助;这些国家认为,虽然他们很感谢履约协助方案提供的援助,但是,有必要举办只能由该计划提供的该行业的特别活动。
- 31. 工发组织指出,所申请的资金将用于识别出这些数量较少的剩余消费量以及有关国家举办技术交流会。

### 秘书处的建议

32. 考虑到上述各点,秘书处建议在本文表1所示供资水平上一揽子核准这些申请。

## A7. 最终淘汰管理计划核查:

阿曼: 最终淘汰管理计划核查: 20,000 美元

#### 项目说明

33. 在第 45/54 号决定中,执行委员会要求每年核查一次从低消费量国家正在进行的最终淘汰管理计划中随机选择的 10%的样品。秘书处随机选择了许多已核准的最终淘汰管理计划,进行核查,而阿曼是被选中的国家之一。作为负责实施阿曼的最终淘汰管理计划的机构,工发组织被邀提交一项核查供资申请,以便在 2009 年工作方案的背景下在本次会议上加以审议。工发组织正在申请核准用于核查的 20,000 美元。

### 秘书处的评论和建议

- 34. 工发组织发给秘书处的通知中称申请的数额是符合实际费用的,与执行委员会在以前的会议上为类似的核查所核准的资金额是一致的。
- 35. 秘书处建议在本文表 1 所示供资水平上一揽子核准这项申请。

## B 节: 建议个别审议的活动

B1. 体制建设项目(新):

亚美尼亚: 体制建设项目第一阶段: 120,000 美元

#### 项目说明

- 36. 工发组织代表亚美尼亚政府申请为亚美尼亚的体制建设供资。所提交的这项申请是为两年期的初始阶段的体制建设申请 120,000 美元外加机构支助费用。
- 37. 亚美尼亚共和国以前是维也纳公约和 1999 年蒙特利尔议定书的非第 5 条缔约方。作为一个经济转型国家,亚美尼亚收到了全球环境基金(全环基金)的援助,以便编制国家履约方案;亚美尼亚国家履约方案的编制于 2001 年完成。在《蒙特利尔议定书》缔约方第十四次会议上,考虑到亚美尼亚严峻的经济形势,亚美尼亚的类别被改为按照《蒙特利尔议定书》第 5 条行事的发展中国家。目前,亚美尼亚已经认可了蒙特利尔议定书的所有修正案和调整案。
- 38. 亚美尼亚设有一个用体制建设资金和全环基金的能力建设资金建立起来的国家臭氧机构;根据工发组织提供的数据,当前的项目将会在2009年3月完成,因此,作为一个第5条国家,亚美尼亚正在寻求多边基金的援助,以便继续为该国的国家臭氧机构的运行提供资金。和本申请一起提交的提案对所申请的体制建设资金的主要目标概述如下:
  - (a) 为了继续监控消耗臭氧层物质的进口和消费、以及他们的应用和报告;

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- (b) 为了协调目前的消耗臭氧层物质淘汰项目以及实施机构的工作;
- (c) 为了在地区性和国际性讨论会中代表亚美尼亚政府。
- 39. 除了所申请的体制建设资金以外,该提案还包括亚美尼亚政府承诺每年向该国的国家臭氧机构提供价值为 50,000 美元的实物捐助。

## 秘书处的评论

- 40. 亚美尼亚政府致力于继续进行国家臭氧机构发起的工作,以履行其在《蒙特利尔议定书》下的义务。秘书处注意到,他们的提案包括即将在所申请的阶段从事的活动的详情。秘书处还注意到已顺利地在亚美尼亚得以实施的活动的数量以及该国一直遵守蒙特利尔议定书规定的控制措施。
- 41. 在第五十一次会议上,工发组织把编制亚美尼亚最终淘汰管理计划的申请纳入其业务计划。在第 51/5 号决定关于机构的综合业务计划的决定中,委员会决定把编制亚美尼亚最终淘汰管理计划的申请和新的体系建设项目的申请逐项纳入三年业务计划项下的"预算外额外供资计划"。这个计划根据以履约为导向的范本设定非履约活动获得未分配资金的优先权。
- 42. 秘书处还注意到,与执行委员会对情形和亚美尼亚相似的土库曼斯坦(即,曾经是全环基金供资的非第5条国家被重新分类为第5条国家)做出的决定相符,第46/21号决定核准了土库曼斯坦体系建设项目的资金。同样地,亚美尼亚也符合体制建设供资的条件。

#### 秘书处的建议

43. 考虑到以上各点, 谨建议执行委员会考虑核准亚美尼亚为期两年的体系建设项目第一阶段的申请, 供资水平为 120,000 美元外加机构支助费用 9,000 美元。

### B2. 氟氯烃示范项目的项目编制

- (a) 中国:室内空调制造业示范项目编制:60,000 美元
- (b) 中国: 压缩机制造业的示范项目编制: 30,000 美元

## 项目说明

- 44. 工发组织提交了编制中国空调和压缩机制造业示范项目的两份申请。上述提案所提供的信息概述如下:
  - (a) 中国是世界上最大的室内空调生产国。有 100 多家公司从事室内空调制造。 目前,在室内空调制造业中,尚没有最终替代技术可以替代 HCFC-22,最有 前途的技术是碳氢化合物、氢氟烃化合物和二氧化碳。工发组织将编制两个

室内空调制造业示范项目,以便研究两个企业(青岛海尔和广州美的)改用 HFC-410A和HC-290 后产生的技术和财务影响。这两家公司 2007年 HCFC-22 的总消费量达 12,000 公吨(600 ODP 吨)。

- (b) 工发组织收到了中国递交的编制室内空调制造业示范项目的申请;该项目把压缩机生产线转换成非基于氟氯烃的技术。该项目将研究这一转换产生的技术和财务影响。该项目是为上海海立(集团)股份有限公司编制的;上海海立是一家压缩机制造商;其 2007 年产量达到 12,660,000 台,其中占年产量10%的压缩机用于出口。该项目将证明 HC-290 的可行性。
- 45. 工发组织指出,项目编制资金将用于制定个人投资方案;个人投资方案将研究为该公司选择的技术和技术援助的技术可行性,并研究如何计算因使用所提案的技术而节省的营运费。

### 秘书处的评论

- 46. 秘书处注意到,为了支持中国上述示范项目的项目编制申请,工发组织提供了相关信息。这些信息部分符合第 56/16(i)号决定的要求; 第 56/16(i)号决定指出,编制资金申请应当包括国别、行业、项目简述、要淘汰的 ODP 吨数、涉及的企业以及这些企业开始经营的日期(如果相关)等等内容,并提供为什么执行委员会应该选择这个项目的令人信服的理由。所提交的提案没有包含为什么执行委员会应该把这些项目选为符合上述决定的示范项目的令人信服的理由。此外,为压缩机制造公司提出的申请没有详细说明该项目要淘汰的氟氯烃的数量。
- 47. 工发组织解释说,这些申请是为了响应第 55/43(f)号决定;在第 55/43(f)号决定中,执行委员会邀请机构提交把制冷和空调次级行业中的氟氯烃转换成低全球变暖潜势(GWP)技术的、有限数量的示范项目,以确定所需的所有步骤并评估其相关费用。这些申请也是为了响应中国政府需要示范每项应用技术的申请。这些技术应用的结果会帮助中国政府和空调业就这些行业中的氟氯烃淘汰后的可用替代技术做出决定。
- 48. 秘书处还注意到, 这三家公司都是在 1995 年 7 月以前开始经营的; 这符合第 17/7 号 决定关于 1995 年 7 月 25 日之后成立的企业的接受资助的资格的规定。

#### 秘书处的建议

- 49. 谨建议执行委员会,按照第 55/43 (f)号决定和第 56/16 (i)号决定以及以上提供的信息,审议中国的以下两个示范项目的项目编制申请。
  - (a) 中国两家空调制造公司的示范项目的编制;供资水平为 60,000 美元外加机构 支助费用 4,500 美元。

(b) 中国一家压缩机制造公司的示范项目的编制;供资水平为 30,000 美元外加机构支助费用 2,250 美元。

印度尼西亚:泡沫塑料业两个示范项目的项目编制:60,000美元

## 项目说明

- 50. 工发组织提交了编制印度尼西亚泡沫塑料行业的两个示范项目的申请。该提案是编制聚氨酯泡沫塑料业的不同次级行业(硬质聚氨酯泡沫塑料夹心板和软质模塑泡沫塑料)的两个项目;这两个项目均运用非氟氯化碳的、低全球变暖潜势的技术。
- 51. 一个项目是为 PT Airtekindo Prima 编制的;该公司成立于 1993 年,是一家生产硬质聚氨酯夹心板的公司。2008 年,该公司消费了 60 公吨的 HCFC-141b。该示范项目将研究家用环戊烷的使用;这包括对碳 5 馏分新技术的验证。碳 5 馏分是由印度尼西亚当地的石化生产商提供的。
- 52. 第二个项目是为 PT Universal Furnitech Industry 公司编制的;该公司成立于 1996 年,是一家生产铁制和木制椅子的公司;椅子的扶手、座套和头枕是用泡沫塑料制成的。该公司 2008 年的 HCFC-141b 消费量预估为 12 公吨。目前,该公司仍然使用高压泡沫注入机来制作模子,并继续使用人工搅拌技术制作较小的扶手和头枕模子。和以前的项目类似,即将用于示范的替代物是环戊烷。这些技术对印度尼西亚来说是新技术。
- 53. 工发组织指出,所申请的两个项目的资金包括该公司编制项目所需的专家费和差旅费。

## 基金秘书处的评论

- 54. 秘书处注意到,工发组织为了支持上述示范项目的项目编制申请而提供的信息符合第 56/16(i)号决定的要求;第 56/16(i)号决定指出,编制资金申请应当包括国别、行业、项目简述、要淘汰的 ODP 吨数、涉及的企业以及这些企业开始经营的日期(如果相关)等等内容,并提供为什么执行委员会应该选择这个项目的令人信服的理由。但是,所提交的提案没有包含为什么执行委员会应该把这些项目选为符合上述决定的示范项目的令人信服的理由。
- 55. 工发组织解释说,这些申请是为了响应第 55/43 号决定;在第 55/43(e)号决定中,执行委员会邀请机构提交有限数量的示范项目。但是,秘书处注意到,在泡沫行业中,第 55/43(e)号决定明确要求系统室和/或化工供应商示范项目必须涉及使用非 HCFC 发泡剂的化工系统的发展、优化和验证。以上所提交的项目并不属于泡沫塑料行业这一特定范畴。但是,秘书处注意到,工发组织指出,这些示范项目将示范具有低全球变暖潜势的替代技术,这一技术是新技术,在使用之前需要在该国进行进一步验证。

56. 秘书处还注意到,两家公司中,有一家公司是在1995年7月之后开始经营的,这不符合第17/7号决定关于1995年7月25日之后成立的企业的接受资助的资格的规定。

### 秘书处的建议

57. 考虑到该项目显然不符合第 55/43(e)号决定,秘书处无法建议核准所申请的资金。 谨建议执行委员会按照上述评论审议该项目。

乌拉圭: 商用制冷设备制造业示范项目编制(2个企业的示范): 60,000美元

## 项目说明

- 58. 工发组织提交了编制乌拉圭商用制冷设备制造业的两个示范项目的申请。该提案是编制位于蒙得维的亚市的制冷设备制造公司的两个项目。所提议的示范项目可以除去约10公吨乌拉圭制冷设备制造业所使用的氟氯烃。该申请指出,两家于1995年7月以前成立的未指明名称的公司将做好采用某些替代技术的准备。
- 59. 即将在准备活动中予以考虑的替代技术是能够适应该公司的条件和系统的制冷剂。 将测试效率和能源消耗量。工发组织指出,所申请的两个项目的资金包括该公司编制项目 所需的专家费和差旅费。

## 秘书处的评论

- 60. 秘书处注意到,工发组织为了支持上述示范项目的项目编制申请而提供的信息不符合第 56/16(i)号决定的要求,因为工发组织没有提供公司的名称、每家公司的消耗臭氧层物质估算消费量、即将示范的特定技术。该申请没有包含秘书处提出建议所需的信息。工发组织必须提供符合第 56/16 号决定的必需信息,但是,以上所示的此类数据是不完整的。此外,这两个项目没有提供为什么执行委员会应该把这些项目选为示范项目的令人信服的理由。
- 61. 秘书处还注意到,所提交的申请指出,这两家未指明名称的公司在 1995 年 7 月以前开始经营,这符合第 17/7 号决定关于 1995 年 7 月 25 日之后成立的企业的接受资助的资格的规定。

## 秘书处的建议

62. 考虑到上述各点,秘书处无法建议核准所申请的资金。谨建议执行委员会按照上述评论审议该项目。

## B3. 消耗臭氧层物质销毁项目编制

智利:消耗臭氧层物质销毁试点项目:60,000美元

中国: 消耗臭氧层物质销毁试点项目: 100,000 美元

克罗地亚: 消耗臭氧层物质销毁试点项目: 30,000 美元

朝鲜民主主义人民共和国: 消耗臭氧层物质销毁试点项目: 40,000 美元

伊朗: 消耗臭氧层物质销毁试点项目: 60,000 美元

前南斯拉夫的马其顿共和国:消耗臭氧层物质销毁试点项目:30,000美元

尼加拉瓜:消耗臭氧层物质销毁试点项目:40,000美元

巴基斯坦: 消耗臭氧层物质销毁试点项目: 40,000 美元

塞尔维亚: 消耗臭氧层物质销毁试点项目: 40,000 美元

土耳其: 消耗臭氧层物质销毁试点项目: 60,000 美元

委内瑞拉: 消耗臭氧层物质销毁试点项目: 70,000 美元

### 项目说明

- 63. 工发组织提交了编制十一个消耗臭氧层物质销毁试点项目的申请。这些试点项目是 为以上所列的国家提出的。
- 64. 在所提交的申请中,工发组织指出,这些试点项目将通过以下活动来说明可供销毁的消耗臭氧层物质的总库存:
  - 无用的消耗臭氧层物质的总量
  - 收集和运输
  - 对技术进行筛选并选择销毁方法
  - 为了支持销毁活动而对法律法规做出的修正
  - 培训需求和培训计划,以便培养该国应对消耗臭氧层物质销毁问题和无用的消耗臭氧层物质的未来库存问题的能力
  - 考虑可能不同的供资来源(例如,清洁发展机制、自愿性市场或者其他金融工 具)

65. 每个国家即将销毁的消耗臭氧层物质的预计数概述如下:

国家	即将销毁的消耗臭氧层物质的总数 (ODP 吨)
智利	60.0
中国	100.0
克罗地亚	15.0
伊朗	30.0
朝鲜民主主义人民共和国	10.0
前南斯拉夫的马其顿共和国	10.0
尼加拉瓜	10.0
巴基斯坦	50.0
塞尔维亚	50.0
土耳其	14.0
委内瑞拉	200.0

#### 秘书处的评论

- 66. 在第 XX/7 号决定第 2 段中,缔约方会议要求多边基金执行委员会把开始实施涉及消耗臭氧层物质的收集、运输、储存和销毁的试点项目视为紧急事项。虽然执行委员会同意在第五十一次会议上把消耗臭氧层物质销毁项目纳入机构的业务计划,但是,委员会还没有制定出评估该项目的影响的方法,目前还没有编制此类项目的指导方针。此外,第五十一次会议将是委员会审议第 XX/7 号决定第 2 段关于供资业务的含义的第一个机会。
- 67. 尽管没有指导方针,但是,秘书处请工发组织对所提交的申请做出解释,问明将要示范的试点项目的活动类型以及所申请的资金将包括哪些费用。工发组织没有为所提交的申请提供具体细节。但是,综述了作为项目编制组成部分的活动以及整个项目将要研究的内容。以上第64段包含了这一信息。秘书处还注意到,除了整理国家库存、筛选并测试销毁技术、进行培训以外,提案还将研究供资形式,并寻找可通过清洁发展机制或其他自愿性市场达成共同出资目的的机会。
- 68. 在审核工发组织为每个国家申请的费用时,秘书处认为这些费用均处于这些类型的项目的项目编制的历史费用水平以下。工发组织指出,这项费用将包括项目编制所需的正常的专家费和差旅费。

#### 秘书处的建议

69. 谨建议执行委员会考虑以上信息,包括缺乏消耗臭氧层物质销毁项目的指导方针。 谨建议执行委员会按照以上信息审议是否给工发组织提出的上列 11 个国家的项目编制申请提供资金。

### B4. 技术援助项目

全球项目: 氟氯烃淘汰和气候共同利益资金筹措项目: 300,000 美元

#### 项目说明

- 70. 工发组织提交了一份资金筹措技术援助项目申请,以便在 300,000 美元的供资水平上最大化氟氯烃淘汰带来的气候效益。该申请附有一个描述了该项目的目标、活动和预期结果的概念性注解。
- 71. 根据本提案,项目会形成概念和方法,以计算多边基金即将承担的额外费用。这和引入会产生气候共同利益的替代技术或实践相关。此类额外费用可能主要和制造期间能效的改进有关,并且随后会在运行期间实现设备的更高能效。本研究通过多边基金范围内的一个特殊基金,例如全球环境基金(全环基金),探索该基金是如何承担额外费用的,以便可以在不危及目前的补充基金项下的有限资金的情形下核准更多具有气候共同利益的淘汰项目。
- 72. 该技术援助项目的预期结果包括: (1)如果在选择氟氯烃替代技术的时候充分考虑技术的气候效益,那么,可以形成用于计算即将承担的额外费用的方法; (2)形成如何计算因适当地管理和销毁无用的消耗臭氧层物质而带来的气候共同利益的方法。工发组织还计划把这些方法应用于其在约旦的两个试点项目以及一个关于消耗臭氧层物质销毁的示范项目。
- 73. 下表提供了工发组织申请的 300,000 美元的明细表。

国际顾问费	72,000
国内顾问费	48,000
差旅费	30,000
设备费	100,000
管理、监测和培训费	50,000
合计	300,000

#### 秘书处的评论

- 74. 在第五十四次会议上,执行委员会批准了编制氟氯烃淘汰管理计划的一系列指导方针;在第五十五次和第五十六次会议上,执行委员会核准了 115 个国家氟氯烃淘汰管理计划的资金。
- 75. 第 54/39 号决定批准了氟氯烃淘汰管理计划编制指导方针。指导方针包括第 5 条国家可考虑出台财政激励的条款以及可在最终氟氯烃淘汰管理计划中共同出资的机会。这可能和按照缔约方第 XIX/6 号决定第 11(b)段的条款确保氟氯烃淘汰成果有关。

- 76. 秘书处注意到,当 100 多个第 5 条国家都编制氟氯烃淘汰管理计划的时候,工发组织所提议的研究成果可以帮助各国考量是否选择共同出资。此外,秘书处还注意到,执行委员会尚未指导如何计算氟氯烃淘汰带来的气候效益,亦未指导这些费用是否可以被视为多边基金项下的增支费用。秘书处还注意到,工发组织的提案描述了从全环基金处获得可能的共同出资的方法。
- 77. 在审议为该项目申请的费用时,秘书处注意到,工发组织把 100,000 美元的设备费纳入预算。在阐述增加设备元件的情形时,工发组织告知秘书处,该提案包括一个或两个企业的试点项目实施情况,以示范将要制订的方法;在试点阶段,此类设备是必须的。
- 78. 秘书处还注意到,这是执行机构第一次提交这种性质的提案,之前尚未有执行机构提交此类提案,亦没有可供他们考量的指导方针。秘书处还注意到,该项目显然没有构成第10条所示的、在《蒙特利尔议定书》缔约方第四次会议上核准的《增支费用类别指示性清单》中定义的增支费用,因此,该项目不符合供资资格。但是,谨建议执行委员会仔细研究工发组织提交的详细提案,基于该提案可能对综合氟氯烃淘汰管理计划做出的积极贡献,审议该提案是否值得讨论。

### 秘书处的建议

79. 谨建议执行委员会,按照以上提供的信息在讨论议程项目 14 来自贷款和其他资源的额外收入的融资机制时审议该提案。

#### Annex I

## INSTITUTIONAL STRENGTHENING PROJECT PROPOSALS

## Armenia: Renewal of institutional strengthening

Summary of the project and country profile	
Implementing Agency:	UNIDO
Amounts previously approved for institutional strengthening (US \$):	0
Amount requested (Phase I) (US \$):	120,000
Amount recommended for approval for Phase I (US \$):	120,000
Agency support costs (US \$):	9,000
Total cost of institutional strengthening Phase I to the Multilateral Fund (US \$):	129,000
Equivalent amount of CFC phase-out due to institutional strengthening Phase I at US \$12.1/kg (ODP tonnes):	n/a
Date of approval of country programme:	n/a
ODS consumption reported in country programme (insert year) (ODP tonnes):	n/a
Baseline consumption of controlled substances (ODP tonnes):	
(a) Annex A Group I (CFCs) (Average 1995-1997)	196.5
(b) Annex A Group II (Halons) (Average 1995-1997)	0.0
(c) Annex B Group II (Carbon tetrachloride) (Average 1998-2000)	0.0
(d) Annex B Group III (Methyl chloroform) (Average 1998-2000)	0.0
(e) Annex E (Methyl bromide) (Average 1995-1998)	0.0
Latest reported ODS consumption (2007) (ODP tonnes) as per Article 7:	
(a) Annex A Group I (CFCs)	25.0
(b) Annex A Group II (Halons)	0.0
(c) Annex B Group II (Carbon tetrachloride)	0.0
(d) Annex B Group III (Methyl chloroform)	0.0
(e) Annex E (Methyl bromide)	0.0
(f) Annex C Group I (HCFCs)	4.4
Total	29.4
Year of reported country programme implementation data:	2007
Amount approved for projects (US \$):	97,000
Amount disbursed (as at insert month year ) (US \$):	0
ODS to be phased out (ODP tonnes):	n/a
ODS phased out (as at insert month year) (ODP tonnes):	

## 1. Summary of activities and funds approved by the Executive Committee:

	Summary of activities	Funds approved (US \$)
(a)	Investment projects:	0
(b)	Institutional strengthening:	0
(c)	Project preparation, technical assistance, training and other non-	97,000
	investment projects:	
	Total:	97,000

## Former Yugoslav Republic of Macedonia: Renewal of institutional strengthening

Summary of the project and country profile	
Implementing Agency:	UNIDO
Amounts previously approved for institutional strengthening (US \$):	
Phase I: oct-96	152,900
Phase II: mar-00	101,950
Phase III: dec-01	101,950
Phase IV: apr-04	132,347
Phase V: apr-06	132,347
Total	621,494
Amount requested for renewal (Phase VI) (US \$):	132,347
Amount recommended for approval for Phase VI (US \$):	132,347
Agency support costs (US \$):	9,926
Total cost of institutional strengthening Phase VI to the Multilateral Fund (US \$):	142,273
Equivalent amount of CFC phase-out due to institutional strengthening Phase VI at	n/a
US \$12.1/kg (ODP tonnes):	
Date of approval of country programme:	1995
ODS consumption reported in country programme (1995) (ODP tonnes):	72.8
Baseline consumption of controlled substances (ODP tonnes):	
(a) Annex A Group I (CFCs) (Average 1995-1997)	519.7
(b) Annex A Group II (Halons) (Average 1995-1997)	32.1
(c) Annex B Group II (Carbon tetrachloride) (Average 1998-2000)	0.1
(d) Annex B Group III (Methyl chloroform) (Average 1998-2000)	0.0
(e) Annex E (Methyl bromide) (Average 1995-1998)	12.2
Latest reported ODS consumption (2007) (ODP tonnes) as per Article 7:	
(a) Annex A Group I (CFCs)	0.0
(b) Annex A Group II (Halons)	0.0
(c) Annex B Group II (Carbon tetrachloride)	0.0
(d) Annex B Group III (Methyl chloroform)	0.0
(e) Annex E (Methyl bromide)	0.0
(f) Annex C Group I (HCFCs)	1.2
Total	1.2
Year of reported country programme implementation data:	2007
Amount approved for projects (US \$):	4,755,247
Amount disbursed (February 2009 ) (US \$):	4,517,526
ODS to be phased out (ODP tonnes):	574.4
ODS phased out (February 2009) (ODP tonnes):	539.4

2. Summary of activities and funds approved by the Executive Committee:

	Summary of activities	Funds approved (US \$)
(a)	Investment projects:	3,319,677
(b)	Institutional strengthening:	621,494
(c)	Project preparation, technical assistance, training and other non-	814,076
	investment projects:	
	Total:	4,755,247

## Progress report

3. The Former Yugoslav Republic of Macedonia reported on a number of important initiatives it has undertaken during this last phase of the institutional strengthening project. These include the completion of some investment projects that were delayed, implementation of the TPMP in the country through the completion of training courses for refrigeration service technicians, approval of code of practice,

provision of training materials and equipment for vocational schools. The NOU has also continued timely reporting of ODS consumption, and initiated a series of awareness raising activities covering the whole country. The NOU of Former Yugoslav Republic of Macedonia is also an active member of the network for ODS officers in the ECA region and has provided advice and assistance to the younger members of the network.

#### Plan of action

4. Over the next two years Former Yugoslav Republic of Macedonia's action plan intends to focus on the completion of the remaining activities in the TPMP to ensure that they meet the 2010 CFC and halons phase-out. It will also continue awareness raising activities in the country, as well as initiate actions for the phase-out of HCFCs. These include the preparation of the HPMP and review of ODS regulations to include HCFCs.



## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

57th Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

UNIDO Work Programme

57<sup>th</sup> ExCom

## Work Programme - 57<sup>th</sup> ExCom Final (24 February 2009)

#### Introduction

This Work Programme for the year 2009 (57<sup>th</sup> ExCom) has been prepared based on ongoing and planned activities and following receipt of government requests. The Work Programme will support the implementation of UNIDO's three year Rolling Business Plan 2009-2011.

Priority was given to Article 5 countries needing immediate assistance to prepare the HCFC investments projects and management plans. The Business Plan is meant to provide an indication on where the UNIDO programme is moving in 2009, and to establish a financial resource estimate for implementing such a programme. Focus has been put on preparation of HCFC demonstration and investment projects.

The renewal of institutional strengthening support will be required for Macedonia.

Following the re-classification of Armenia as an Art.5 Country and completion of the previous IS components under the Country Programme implementation, the Government requested UNIDO to submit a new Project proposal to MLF, to cover the country needs for the compliance to Montreal Protocol and coordination of HCFCs phase-out related activities.

Furthermore, a number of project preparation activities for ODS disposal sector are foreseen.

The document comprises the following sections:

#### Section 1

Gives in a tabulated form by project types and country a consolidated list of activities foreseen for HCFC, MeBr, CTC/TCA and institutional strengthening.

Funding is requested as follows:

- Project preparation: US\$ 1,206,688 including 7.5% A.S.C.;
- Technical Assistance 9% A.S.C.: US \$109,000
- Funds mobilization proposal 7.5 %: US\$ 322,500 including
- Institutional strengthening: US\$ 271,273 including 7.5% A.S.C.;
- Total **US\$ 1,909,461** including A.S.C.

#### Section 2

Provides the corresponding project concepts indicating some details and funding requirements.

Work Programme - 57<sup>th</sup> ExCom Final (24 February 2009)

#### Section 1

Consolidated table giving project preparation and non-investment projects in all countries and sectors

Country	Тур е	Substance	Title of Project	Requested amount USD	A.S.C USD	Total (incl ASC) USD	A.S .C. %	P. D.	Coop. with IAs
			Institutional	Strengthenin	ng				
Armenia	INS	SEV	Institutional Strengthening, NEW.	120,000	9,000	129,000	7.5	24	
Macedonia FYR	INS	CFC	Institutional Strengthening, Renewal.	132,347	9,926	142,273	7.5	24	
			Institutional Strengthening Total	252,347	18,926	271,273			
			Technical	assistance		l			
Cambodia	TAS	TCA	Technical assistance solvent sector	40,000	3,600	43,600	9	12	
Kenya	TAS	CTC/TCA	Technical assistance in the solvent sector	40,000	3,600	43,600	9	12	
Oman	TAS	SEV	Verification audit of the TPMP	20,000	1,800	21,800	9	12	
			Total	100,000	9,000	109,000			
			MeBr project	preparation					
Chile	PRP	MBR	Fumigants	50,000	3,750	53,750	7.5	12	
			MeBr Total	50,000	3,750	53,750			
		Pr	oject preparation for	Demonstrati	on Projec	ts			
Indonesia	PRP	HCFC-141b	Foam sector	60,000	4,500	64,500	7.5	12	
China	PRP	HCFC-22	Room AC Manufacturing (RAC) sector	60,000	4,500	64,500	7.5	12	
China	PRP	HCFC-22	Compressor manufacturing	30,000	2,250	32,250	7.5	12	
Uruguay	PRP	HCFC-22	Commercial refrigeration manufacturing sector (demonstration for 2 enterprises)	60,000	4,500	64,500	7.5	12	
			PRP Total	210,000	15,750	225,750			
		Project	preparation for Inve	stment HPMP	Projects				
Argentina	PRP	HCFC-22	AC Manufacturing (RAC) sector	80,000	6,000	86,000	7.5	12	
Croatia	PRP	HCFC-141b	Foam sector	40,000	3,000	43,000	7.5	12	
				120,000	9,000	129,000			
		Ad	ditional funding for	HPMP prepara	tion (HPM	IP)		1	T
Albania	PRP	HCFC	Additional funding HPMP preparation	55,000	4,125	59,125	7.5	12	
			Additional funding for HPMP - Total	55,000	4,125	59,125			

Country	Тур е	Substan ce	Title of Project	Requested amount USD	A.S.C USD	Total (incl ASC) USD	A.S. C. %	P. D.	Coop. with IAs
		L	New req. for H	HPMP preparati	ion (HPMP)		I.	I	
Guatemala	PRP	HCFC	HPMP preparation	75,000	5,625	80,625	7.5	12	UNEP
Myanmar	PRP	HCFC	HPMP preparation	42,500	3,188	45,688	7.5	12	UNEP
			Funding for HPMP Plan Total	117,500	8,813	126,313			
	•		ODS Disposal	project prep	paration			•	
Chile	PRP	SEV	Pilot project for ODS destruction	60,000	4,500	64,500	7.5	12	
China	PRP	SEV	Pilot project for ODS destruction	100,000	7,500	107,500	7.5	12	
Croatia	PRP	SEV	Pilot project for ODS destruction	30,000	2,250	32,250	7.5	12	
DPRK	PRP	SEV	Pilot project for ODS destruction	40,000	3,000	43,000	7.5	12	
Iran	PRP	SEV	Pilot project for ODS destruction	60,000	4,500	64,500	7.5	12	
Macedonia	PRP	SEV	Pilot project for ODS destruction	30,000	2,250	32,250	7.5	12	
Nicaragua	PRP	SEV	Pilot project for ODS destruction	40,000	3,000	43,000	7.5	12	
Pakistan	PRP	SEV	Pilot project for ODS destruction	40,000	3,000	43,000	7.5	12	
Serbia	PRP	SEV	Pilot project for ODS destruction	40,000	3,000	43,000	7.5	12	
Turkey	PRP	SEV	Pilot project for ODS destruction	60,000	4,500	64,500	7.5	12	
Venezuela	PRP	SEV	Pilot project for ODS destruction	70,000	5,250	75,250	7.5	12	
			Funding for ODS disposal pilot projects	570,000	42,750	612,750			
	ı		Technical Assista	nce for Funds	Mobilizat	ion	T	ı	
Global	TAS	SEV	Funds mobilization	300,000	22,500	322,500	9	12	
			Total Funds Mobilization	300,000	22,500	322,500			
			GRAND TOTAL	1,774,847	134,614	1,909,461			

Work Programme - 57<sup>th</sup> ExCom Final (24 February 2009)

Section 2

Project concepts

Country: Armenia

Title: Institutional Strengthening for the

implementation of Montreal Protocol

in Armenia

Project Duration: 24 months

Project Budget: 129,000 (including US% 9,000

representing 7.5% Agency Support

Costs)

Implementing Agency: UNIDO

Coordinating Agency: Ministry of Nature Protection of

Armenia

#### Project Summary

The project aims at institutional strengthening and capacity building of the Ministry of Nature Protection and will ensure helping the Government meet its obligations under the Montreal Protocol on the substances that deplete the Ozone Layer.

In this context, the National Ozone Office will be assisted in monitoring and identification of Ozone-depleting substances consumption and up-dating the needed national policies and regulations.

The NOU will monitor all the project activities as per the Country Programme, including the collection of consumption data and reporting as required, with a specific view to HCFCs phase-out schedule for the Art. 5 countries.

Country: Argentina

Title: Preparation of investment projects for the

conversion of ten air-conditioning manufacturing

companies to non-HCFC based technologies

Project Duration: 12 months

Project Budget: 86,000 (including 7.5% Agency

Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: OPROZ, Ministry of Environment

#### Project Summary

UNIDO received an official Government request from Argentina to prepare investment projects for the phase-out of HCFCs in the air-conditioning manufacturing sector at ten companies.

Manufacturer	Production start	Units produced 2008	R-22 consumption 2008 [kg]
Audivic	2005	120,000	156,000
BGH	1982	259,567	243,000
Digital Fueguina (Garbarino)	2007	74,570	70,840
Electrofuegina (Fravega)	2005	123,409	81,200
Foxman Fueguina	2004	8,000	6,200
Good Cold	1996	980	2,040
Interclima (Mirgor)	2004	325,190	292,000
Multicontrol	1983	5,546	12,500
New Scan*	1999	157,850	147,400
RVF-SOMTEC-MEGASAT	1984	169,253	128,000
Total		1,244,365	1,139,180

<sup>\*: 55%</sup> local ownership (2008 production data based on local ownership only)

<u>Potential technology selection:</u> HFC-410A, and in some cases HFC-417 and HFC-404A. Final decision on alternative selection will be made during project preparation.

Country: Republic of Macedonia

Title: Extension of Institutional

Strengthening Project - Phase VI

Project Duration: 24 months

Project Budget: 142,273 (including US\$ 9,926

representing 7.5% Agency Support

Costs)

Implementing Agency: UNIDO

Coordinating Agency: Ministry of Environment and Physical

Planning - Republic of Macedonia

## Project Summary

UNIDO received an official Government request from the Ministry of Environment and Physical Planning - Republic of Macedonia for the renewal of the institutional strengthening support for Macedonia, Phase VI.

The project objective aims improved capacity of government structures responsible for Ozone Depleting Substances Phase-out with a specific view to achieve compliance to HCFCs phase-out.

Country: Cambodia

Title: Technical Assistance for the total

phase-out of CTC and TCA in solvent sector and compliance to Montreal

Protocol targets

Project Duration: 12 months

Project Budget: 43,600 US\$ ((including US\$ 3,600

representing 9% Agency Support

Costs)

Implementing Agency: UNIDO

Coordinating Agency: NOU - Ministry of Environment

#### Project Summary

The CTC and TCA consumption in the last 3 years is less than 2MT, and the solvent sector has not been covered by already approved TPMPs

The TA project will ensure support for monitoring activities and training to ensure the country compliance to the final elimination targets and in line with the Montreal Protocol commitments.

The Governments of Cambodia have specifically requested UNIDO's technical assistance to address the phase-out of the remaining CTC/TCA consumption. Both TAS requests are in line with ExCom Decision 45/14. In addition to possible CAP activities, UNIDO is planning to make a survey of the remaining CTC/TCA uses in the countries, will hold awareness raising workshops and provide tailor-made assistance to the end-users, and identify critical laboratory uses for which alternatives may not be available, for an effective and sustainable phase-out and for preparation of EUN in case required. This concept has already been successfully implemented by UNIDO in several countries in similar situation.

Country: Kenya

Title: Technical Assistance for the total

phase-out of CTC and TCA in solvent sector and compliance to Montreal

Protocol targets

Project Duration: 12 months

Project Budget: 43,600 US\$ ((including US\$ 3,600

representing 9% Agency Support

Costs)

Implementing Agency: UNIDO

Coordinating Agency: NOU - Ministry of Environment

#### Project Summary

The CTC and TCA consumption in the last 3 years is less than 2MT, and the solvent sector has not been covered by already approved TPMPs

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Country: Chile

Title: Elimination of MeBr in soil

fumigation (horticulture, mainly

strawberry sector)

Project Duration: 12 months

Project Budget: 53,750 US\$ (including 7.5% Agency

Support Cost

Implementing Agency: UNIDO

Coordinating Agency: Ministry of Environment (CONAMA)

#### Project Summary

Project preparation to submit an investment project to eliminate the 175 ODP tones before 2015, which still consuming by the country in soil fumigation, mainly in the strawberry production.

Country: China

Title: Preparation of two demonstration projects for the

conversion of two manufacturing lines to two non-HCFC based technologies in the room air-condition

sector

Project Duration: 12 months

Project Budget: 64,500 (including 7.5% Agency

Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: Ministry of Environmental Protection

#### Project Summary

China is the largest producer of room air conditioners worldwide. The sector consists of some 100 companies. Due to the climatic conditions of the country the use of room air conditioners is wide-spread in offices, medical educational institutions, households etc. Currently there are no final alternatives to replace HCFC-22 in the sector. The promising technologies are hydrocarbons hydrofluorocarbons (HFCs) and carbon dioxide (CO<sub>2</sub>). selection of the most appropriate alternatives has to be matched with the availability of the new refrigerant in China, its price, cost of conversion, cost of new components required, safety and environmental considerations, and market acceptance.

UNIDO received a government request from China to prepare two demonstration projects for the room air-conditioning manufacturing sector to study the technical and financial implications of the conversion to:

- a) HFC-410A and
- b) HC290 alternatives.

#### Company information:

#### 1) Qingdao Haier

- Established in 1984
- Start-up of production of room air-conditioners in 1992
- Total number of production lines: 16;

- Number of room air-conditioners produced in 2007: approximately 8,940,000 units, of which about 2,560,000 sets were exported;
- Total consumption of HCFC-22 in 2007: approximately 10,000 metric tons;
- Annual production level of the targeted demonstration production line: about 300,000 units;
- The annual consumption of this line is about 300 metric tons;
- Proposed alternative: HC-290.

#### 2) Guangzhou Midea

- Established in 1968
- Start-up of production of room air-conditioners in 1981
- Total number of production lines: 90;
- Total number of room air-conditioners produced in 2008: about 15,000,000 units;
- Total consumption of HCFC-22 in 2008: about 12,000 metric tons;
- Annual production level of the targeted demonstration production line is about 500,000 units;
- Annual consumption of this line is about 400 metric tons;
- Proposed alternative: HFC-410A.

The above demonstration projects will provide sufficient information required for the preparation for the sector plan including selection of medium-term alternative(s), technical and technological requirements, detailed costing of conversion (incl. ICC and IOC).

The project has also global implications in two sense:

- A) Since China is the biggest supplier of air-conditioners worldwide, early phase-out of the use of R-22 in the manufacturing of room ACs in China will benefit the phase-out efforts of other A5 countries.
- B) Lessons learned in the conversion can be utilized in other A5 countries manufacturing room ACs with R-22.

The alternative technology for each demonstration project will be finalized in the preparation stage.

Country: China

Title: Preparation of a demonstration project for the

conversion of a compressor manufacturing line to non-HCFC based technology in the room air-condition

sector

Project Duration: 12 months

Project Budget: 32,250 (including 7.5% Agency

Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: Ministry of Environmental Protection

#### Project Summary

China is the largest producer of room air conditioners worldwide. The selection of the most appropriate alternatives has to be matched with the availability of the new refrigerant in China, its price, cost of conversion, cost of new components required, safety and environmental considerations, and market acceptance.

UNIDO received a government request from China to prepare a demonstration project for the conversion of a compressor manufacturing line to non-HCFC based technology in the room air-conditioning manufacturing sector to study the technical and financial implications of the conversion.

#### Company information:

#### 3) Shanghai Haili - compressor manufacturer

- Established in 1954
- Start-up of production of room air-conditioners in 1986
- Total number of compressors produced in 2007: about 12,660,000 sets, of which about 1,660,000 sets were exported;
- Annual production at the targeted demonstration production line: about 100,000 compressors;
- The annual indirect consumption of this line is about 130 metric tons;
- Proposed alternative: HC-290.

Country: Indonesia

Title: Preparation of demonstration projects for

the conversion technology at two different sub-sectors of the polyurethane foam; rigid polyurethane sandwich panel production and flexible moulded foam production, to two non-HCFC and low GWP

based technologies.

Project Duration: 12 months

Project Budget: 64,500 (including 7.5% Agency

Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: Ministry of Environment

## Project Summary

Located at the cross-road of the Asian Pacific, between two oceans and two continents of Australia and Asia, Indonesia is the largest archipelago in the world consisting of about 17,000 islands with total area of 9.8 million square kilometers (7.9 million km2 sea and 1.9 million km2 land).

With an economic growth of 6.3 per cent in 2007 and a Gross Domestic Product (GDP) per capita of US \$1,858, Indonesia is emerging as one of the world's Middle Income Countries.

Almost 90% of global greenhouse gas (GHG) emissions come from five sources: energy (25.9%), industry (19.4%), forestry (17.4%), agriculture (13.5%) and transport (13.1%). Extensive use of fossil fuel, deforestation, agricultural practices, waste and other energy sources are responsible for much of global warming.

Indonesia is an Article 5 country with a large foam sector which includes all sub-sectors, flexible box foam, flexible slabstock, flexible moulded and integral skin, extruded polystyrene and polyethylene, phenolic foams and rigid plyurethane foam, being the largest in terms of foam produced and ODS consumed. Due to the climatic conditions of the country and energy saving efforts insulating materials play very important role for new designs in civil construction and

refrigeration sectors. Currently there are no final alternatives to replace HCFC-141b in the sector. The most promising technologies are hydrocarbons (HCs), methyl formate and carbon dioxide  $(CO_2)$ . The selection of the most appropriate alternatives has to be matched with the availability of the new blowing agents in Indonesia, its price, cost of conversion, capital investments and cost of new components required, safety and environmental considerations, and market acceptance.

UNIDO received a government request from Indonesia to carry out stand alone demonstration projects of HCFC phase-out in the foam industry.

## Company information:

#### 1) PT Airtekindo Prima

- Established in 1993
- The company has two continuous lines for the production of rigid PU sandwich panels. Two sides Al-sheet laminated panels are used mainly for the fabrication and installation of the ductworks.
- In 2008 the company produced almost 700 tonnes of sandwich panels and consumed more than 60 tonnes of HCFC 141b.
- Company opted for the conversion to low operational cost cyclopentane blowing. The company has its own premixing facility to prepare 10-component batches which should be replaced with accurate direct metering and dosing to multi component mixing head, to ensure economy in the use of components explosion safety and quality of end products.
- The company is ready to establish their converted technology on the use of domestic cyclopentane, thus validation of new technology for the use of C-5 fractions to be supplied by Indonesian petrochemical producer, Pertamina will be also subject of the demonstration project.
- The proposed technology is new to Indonesia.

## 2) PT Universal Furnitech Industry

- Established in 1996
- The company is producing seats and chairs made of steel and wooden structures.
- More than 15,000 chairs per month are normally produced.
- The company is currently using HP foam dispenser serving 11 mould and still also hand mix technique normally

serving four smaller moulds for armrests and other smaller components like head rests.

- Foam density varies from 40 55 kg/m³ depending on the typ of product (seat, back seat, armrest). Total consumption of HCFC-141b in 2008: about 12 metric tons;
- Proposed alternative technology liquid CO<sub>2</sub> blowing dosed directly to mixing head, complemented with minimal portion of CO<sub>2</sub> generated through water-isocyanate reaction to ensure optimal cell creation and thus homogenous flexible PU foam. The technology is new to Indonesia.

The above demonstration projects will provide sufficient information required for the preparation for the sector plan including selection of long term sustainable and energy saving alternatives with all climate concerns including no- (very low) global warming potential.

The technologies are new to Indonesia and therefore adaptability to local conditions as well as the use of locally made blowing agents will be also validated.

Lessons learned in the conversion can be utilized:

- in other sectors like domestic and commercial refrigeration,
- in other A5 countries to produce high quality insulating materials and high comfort durable sitting furniture.

The alternative technology for each demonstration project will be finalized in the preparation stage.

Country: Croatia

Title: Project preparation for the phase-

out of HCFC-141b in the PU Foam

Production

Project Duration: 18 months

Project Budget: 43,000 (including 7.5% Agency

Support Costs of US\$ 3,000)

Implementing Agency: UNIDO

Coordinating Agency: Ministry of Environment (MEPPPC)

## Project Summary

UNIDO received an official Government request for preparation of an investment project for the phase-out of approximately 40 MT of HCFC-141b in the PU Foam production in Croatia

## Name of the companies:

- Pavusin established in 1997
- Poli-Mix established in 1998

## HCFCs consumption:

Approximately 40 MT HCFC -141b

## Products:

- Sandwich panels hard PU Foam blocks, integral skin

Country: Uruguay

Title: Project preparation for a

demonstration to eliminate HCFC use in the refrigeration manufacturing

sector

Project Duration: 12 months

Project Budget: 64,500 (including 7,5% Agency

Support Cost

Implementing Agency: UNIDO

Coordinating Agency: Direction National de Medio

Ambiente, Ministry of Environment

## Project Summary

UNIDO received an official Government request for preparation of a demonstration project for the elimination of approximately 10 MT of HCFC use in the refrigeration manufacturing sector in Uruguay

Two manufacturing refrigerator chamber companies located in Montevideo would be ready to adopt some alternatives. Both companies have been established before July 1995.

Alternative technology to be considered under preparatory activities will be different refrigerants adapted to the condition and system of the companies. Test on efficiency, energy consumption will be carried out

#### Company information:

## 1) Company One

- Established in 1978
- Start-up of production of commercial refrigeration chambers in 1978
- Number of tailor made chambers produced in 2007: approximately 400 units for the local per unit about 15 kgs average.
- Total consumption of HCFC-22 in 2007: approximately metric tons;

- Annual production level of the targeted demonstration about 40 units;
- Proposed alternative: HFC Blend and Hydrocarbons blend including the necessary safety measures.
- Located in Montevideo

# Company information:

## 1) Company Two

- Established in 1984
- Start-up of production of commercial refrigeration chambers 1984
- Number of tailor made chambers produced in 2007: approximately 300 units for the local average of 13 Kg
- Total consumption of HCFC-22 in 2007: approximately 4 metric tons;
- Annual production level of the targeted demonstration about 30 units;
- Proposed alternative: HFC Blend and Hydrocarbons blend including the necessary safety measures.
- Located in Montevideo

Results of the demonstration will be disseminated through workshops, conferences and network meeting to interested Article 5 countries with emphasis to the region.

# Project Concept Additional funding for HPMPs preparation

Country: Albania, Guatemala and Myanmar

Title: Preparation HPMP

Project Duration: 12 months

Project Budget: as per the summary table above

Implementing Agency: UNIDO

Coordinating Agency: National Ozone Unit

## Project Summary

In response to Decision 56/16 UNIDO is submitting three funding requests for HPMP preparation.

Guatemala and Myanmar have not yet received HPMP preparation funding. These projects will be implemented in cooperation with UNEP as decided by the Governments concerned.

Albania received US\$ 30,000 for HPMP preparation at the 55<sup>th</sup> ExCom Meeting based on the zero HCFC consumption reported at that time. Since Albania has reported HCFC consumption in its 2007 data reporting, Albania is eligible for US\$ 85,000 for HPMP preparation funding in line with ExCom Decision 56/16. In light of the above US\$ 55,000 plus support cost is requested as additional HPMP preparation funding for Albania.

Country: Several (Chile, China, Croatia, DPR

Korea, Iran, Macedonia, Nicaragua,

Pakistan, Serbia, Turkey,

Venezuela)

Title: Preparation ODS disposal pilot

projects

Project Duration: 12 months

**Project Budget:** as per the table above

Implementing Agency: UNIDO

Coordinating Agency: National Ozone Unit

## Project Summary

Following the Decision XX/7 of the Meeting of the Parties to Montreal Protocol, related to the Environmentally sound management of banks of ozone-depleting substances, is requesting both IAs and MLF to consider as a matter of urgency commencing pilot projects that may cover the collection, transport, storage and destruction of ozone-depleting substances, UNIDO included in the work plan related preparatory related activities.

The future pilot projects for ODSs destruction will address the total available know stocks for destruction, by addressing the include the following activities:

- unwanted ODS inventory
- collection and transportation
- screening in technologies and selection of destruction methods
- up-date of national legislation and regulations to support destruction activities
- training needs and training programmes to develop the country capacity in dealing with ODS destruction issues and unwanted future ODS stockpiling
- consideration of potential different funding sources (as CDM and voluntary markets, or other financial instruments)

# Expected amount of ODSs to be destroyed:

# Country

	Sector / Sub-Sector	Total ODP tonnes
Chile China	Pilot project for the destruction of ODSs Pilot project for the destruction of ODSs	60.0 100.0
Croatia	Pilot project for the destruction of ODSs	15.0
Iran	Pilot project for the destruction of ODSs	30.0
Korea, DPR	Pilot project for the destruction of ODSs	10.0
Macedonia, FYR	Pilot project for the destruction of ODSs	10.0
Nicaragua	Pilot project for the destruction of ODSs	10.0
Pakistan	Pilot project for the destruction of ODSs	50.0
Serbia	Pilot project for the destruction of ODSs	50.0
Turkey	Pilot project for the destruction of ODSs	14.0
Venezuela	Pilot project for the destruction of ODSs	200.0

Country: Global

Title: Mobilizing additional funds through the special

facility under the MLF to count for the climate co

benefits of the HCFCs phase out projects

Project Duration: 12 months

Project Budget: 322,500 (including 7.5% Agency Support

Costs)

Implementing Agency: UNIDO

## Project Summary

# Reference: the MLF facility for resource mobilization funding

This proposal has reference to the resource mobilization funding that UNIDO included in its business plan.

The proposal takes into account the discussions about the issue held in Montreal during the coordination meeting on 26-27 Jan. 09. Furthermore, the below considerations have been taken into account in developing this proposal:

- GEF provides funding for projects in the thematic areas of interest, such as those relating to the UNFCCC, UNBDC and UNDCC. Projects aiming at energy saving and increase the energy efficiency are usually funded.
- GEF operates through national Focal Points (NFP) within governments and in most cases the projects proponents or counterparts are governmental entities (Energy Ministry, Agricultural Ministry, transportation Ministry, etc).
- GEF has limited access/experience in working with individual companies in the private sector especially if they are SMEs.
- GEF confounding requirements made more complex for developing countries to fully benefit from the GEF. And this is more apparent when SMEs were concerned.
- MLF has the mandate to provide funding and assistance for covering the incremental costs relating to the ODS phase out.
- MLF and IAs have a long history of successful cooperation with A5 countries conversion projects at national and

enterprise level (over than 5000) projects have been implemented so far). MLF has been successful in building partnership with A5 countries and in developing a good system to deal with big number of national and individual projects in a very smooth and cost effective manner.

- MLF has been successful in achieving remarkable results in the reduction of GHG emissions as a by-product of ODSs phase out projects. However, the generation of climate benefits is not mandated by the MP and therefore associated costs are not covered by MLF.
- Partnership between the GEF and MLF would serve the purposes of both bodies and make use of the strength of each other specifically in the HCFCs phase out era, taking into account the decisions of the MOP and ExCom to adopt alternatives that generate climate and environment co benefits where applicable.

## Proposal:

To develop a concept and methodology to calculate the additional costs to be born by the MLF corresponding to the introduction of alternatives or practices that generate climate co benefits. Such additional costs are mostly related to the improvements of the energy performance during manufacturing and subsequently increased energy efficiency of equipments during operation. This is due to the fact that in the refrigeration and A/C equipment, the indirect emissions are dominant in most cases.

Such additional costs could be then covered by the GEF through a special facility at the MLF to allow for more approvals of phase out projects with co climate befits without jeopardizing the limited funds under the current replenishment.

It is needless to mention that such additional costs will be definitely less compared to costs to be paid by GEF to achieve the same results through their current way of business to implement stand alone projects with the objective to increase the energy efficiency of production and equipments at a designated manufacturing facility (estimated at 15- 20% of the total project).

A conversion project funded by the MLF covers usually the remaining costs relating to activities that are required any way to enable manufacturing enterprises to improve their energy performance.

One should consider that in most developing countries, equipments manufacturers are not required to improve the energy efficiency of their products if it means additional costs to be born by them either due to modification of process or materials costs. As savings generated due to increased

energy efficiency would be usually beneficial to end-users and subsequently to developing countries governments due to reducing of required investments in power generation to meet the national growing demands.

UNIDO is therefore requesting 300,000 US\$ to workout the methodology and concept in collaboration with GEF and apply it to one of its pilot projects at PETRA Co. in Jordan.

The idea is to avoid the very complicated and lengthy procedure relating to the calculation of Co2 emission reductions and validating of CERs. The anticipated methodology should enable both UNIDO and GEF calculate the climate co benefits in an easy and straightforward manner and agree on the contribution to the special facility.

Similarly, UNIDO plans to use part of the above requested funds for developing a methodology for the calculation of climate co benefits (maybe in CERs form) resulted from the implementation of one of its pilot projects on proper environmental management and destruction of unwanted ODSs in A5 countries. The concept shall also streamline MLF funds with available funding from other institutions for similar activities (FAO funds for the proper management of unwanted chemicals: insecticides and pesticides).

The concepts and methodologies to be developed could be then used as model for replication with other similar activities and projects.

The application of the methodologies in two of UNIDO pilot projects is planned to apply in our HCFCs phase out project at Petra Co. in Jordan and on one of the management and destruction projects.

## Cost breakdown (in US\$):

International Consultants	72,000
National Consultants	48,000
Travel	30,000
Equipment (for demonstration)	100,000
Management, monitoring and training	50,000
Total	300,000