



# 联合国 球境规划署

Distr. GENERAL

UNEP/OzL.Pro/ExCom/83/43 18 April 2019

**CHINESE** 

**ORIGINAL: ENGLISH** 

执行蒙特利尔议定书 多边基金执行委员会 第八十三次会议 2019年5月27日至31日,蒙特利尔

## 制定第 5 条国家逐步减少氢氟碳化物的费用准则:供资标准草案 (第 82/84 号决定)

#### 背景

- 1. 缔约方第二十八次会议通过第 XXVIII/2 号决定,请执行委员会在两年内制定逐步减少氢氟碳化物(HFC)消费和生产的供资准则,包括成本效益阈值,并在执行委员会最终确定这些准则之前将其提交缔约方会议征求缔约方的意见和建议。<sup>1</sup>
- 2. 缔约方第三十次会议请执行委员会继续开展工作,制定逐步减少 HFC 消费和生产的供资准则,并介绍其中要点的最新进展,列入执行委员会向缔约方会议提交的年度报告。还请执行委员会向缔约方会议提交所制定的准则草案,以征求缔约方的意见和建议,最后由执行委员会确定这些准则(第 XXX/4 号决定)。
- 3. 自第七十七次会议以来,执行委员会一直在讨论第 5 条国家逐步减少 HFC 的相关事项,包括制定费用准则。<sup>2</sup> 截至第八十二次会议,执行委员会通过了一个模板草案,其中包括委员会为第 XXVIII/2 号决定某些要点商定的案文。根据第 80/76(b)号和第 81/67(f) 号决定,其他要点可酌情列入模板草案。模板草案载于本文件附件一。

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<sup>&</sup>lt;sup>1</sup> 第 XXVIII/2 号决定第 10 段。

<sup>&</sup>lt;sup>2</sup> UNEP/OzL.Pro/ExCom/77/70、UNEP/OzL.Pro/ExCom/78/5 和 Corr.1、UNEP/OzL.Pro/ExCom/79/46、UNEP/OzL.Pro/ExCom/80/55、UNEP/OzL.Pro/ExCom/81/53、UNEP/OzL.Pro/ExCom/82/67。

4. 表 1 摘要列报了执行委员会讨论费用准则要点的情况。

表 1. 第 5 条缔约国逐步减少 HFC 的费用准则要点现状

第 XXVIII/2 号决定要 点	段落	现状
缔约方在执行中拥有灵活性,自选行业和技术,自定战略和优先事项	13	案文已列入模板草案
符合条件的产能的截止 日期	17	案文已列入模板草案
第二次和第三次转换	18	案文已列入模板草案
其他费用 a	25	案文未列入模板草案
享有高环境温度豁免的 附件 F 物质的资格	35	案文已列入模板草案
<b>正在</b> 讨论		
持续总体削减消费和生产	19	案文已列入模板草案。有待制定设定持续总体削减起点的方法 <sup>b</sup>
符合条件的增量费用	15	
消费制造业	15(a)	符合条件的费用类别案文已列入模板草案。 有待根据核准的 HFC 淘汰投资项目的数据设 定成本效益阈值 <sup>c</sup>
生产行业	15(b)	符合条件的费用类别案文已列入模板草案
制冷维修行业	15(c)	符合条件的费用类别案文已列入模板草案。 成本效益阈值待定 <sup>d</sup>
能效	22	将在第八十三次会议议程项目 12(a)下讨论, 考虑文件包括:         • 运作第 XXVIII/2 号决定第 16 段和第 XXX/5 号决定第 2 段的方法

第 XXVIII/2 号决定要 点	段落	现状
已讨论		
安全问题能力建设	23	案文已列入模板草案。将根据依第80/76号决定 h 编写的制冷维修行业支持逐步减少 HFC 的各个方面的文件进行讨论(第 81/67(c)号 决定)
处置	24	将根据依第 79/18(e)号决定 <sup>1</sup> 编写的 ODS 物质 处置文件进一步讨论(第 81/67(d)号决定)

- a. "缔约方可查明因转用低全球升温潜能值替代品而需列入增支费用指示性清单的其他费用物项。"
- b. 执行委员会第八十二次会议审议了关于为设定《基加利修正案》下消费和生产行业持续总体削减起点制定方法的关键考虑因素的文件(UNEP/OzL.Pro/ExCom/82/66)。
- c. 根据第 81/53(b)号决定,投资项目可在第八十四次会议前获得批准。
- d. 执行委员会第八十二次会议审议了关于制冷维修行业支持逐步减少 HFC 的所有相关方面的初步文件 (UNEP/OzL.Pro/ExCom/82/64)。
- e. UNEP/OzL.Pro/ExCom/83/40.
- f. UNEP/OzL.Pro/ExCom/83/41 o
- g. UNEP/OzL.Pro/ExCom/83/42.
- h. UNEP/OzL.Pro/ExCom/82/64 o
- i. UNEP/OzL.Pro/ExCom/82/21 o
- 5. 执行委员会第八十二次会议决定在第八十三次会议上继续讨论第 5 条国家逐步减少 HFC 的费用准则(第 82/84 号决定)。
- 6. 根据第 80/76(b)号和第 81/67(f)号决定,本文件附件二载有待进一步讨论的未决问题清单。但是考虑到附件二已不再反映所有问题的讨论现状(例如它未列入执行委员会分开讨论的若干能效方面),执行委员会不妨考虑将为本文件编写的建议作为继续讨论费用准则的指南。

#### 逐步减少 HFC 的费用准则的未决问题

#### 设定总体削减起点的方法

- 7. 在第八十一次会议上,费用准则联络小组讨论了消费和生产总体削减起点方面的问题。一些成员建议按基线中的"HFC 组成部分"确定 HFC 的起点,另一些成员则建议以缔约方按《基加利修正案》设定的 HFC 基准(即"HFC 组成部分"加上"HCFC 组成部分")为起点。事后会议请秘书处编写一份初步资料文件,列出关键考虑因素,协助执行委员会制定设定持续总体削减起点的方法,同时考虑到会上进行的讨论(第 81/67(e)号决定)。
- 8. 秘书处应第 81/67(e)号决定的要求向第八十二次会议提交了UNEP/OzL.Pro/ExCom/82/66号文件。执行委员会以这一文件为基础,讨论了用于衡量削减量的单位和设定起点的方法。一些成员建议使用公吨,因为这一计量单位反映转型工厂

的实际产量。另一些成员提出用二氧化碳当量吨,以衡量转型对环境的影响。还有一些成员建议先两种都用,待搞清两者的利弊后再决定采用哪种。执行委员会还提出以下建议:将预混多元醇列入起点,谅解是此类消费量将由第5条国家监测和控制;逐步减少的尾部(第5条第1组国家20%,第5条第2组国家15%)不列入起点,因为该部分削减总吨数不是《蒙特利尔议定书》规定的。

9. 鉴于截至第八十二次会议尚未提出设定总体削减起点的总方法,执行委员会不妨在第八十三次会议上重点讨论这一事项,同时考虑到 UNEP/OzL.Pro/ExCom/82/66 号文件所述制定方法时的关键考虑因素。

#### 消费制造行业符合资助条件的增量费用

- 10. 第七十七次会议以来,执行委员会就淘汰 HFC 的成本效益阈值进行了几次讨论。 执行委员会注意到,淘汰 CFC 和 HCFC 的成本效益阈值不一定适用于 HFC; 多边基金在 某些行业淘汰 HFC 方面经验有限; 相关增量费用可能不同于淘汰其他受控物质的相关费 用。因此执行委员会认为需要有更多信息才能就符合条件的增量费用作出决定,并同意考 虑在顾及技术成熟度、可复制性和地理分布的基础上逐案核准少量独立 HFC 投资项目 (第 78/3 号和第 79/45 号决定)。3
- 11. 截至第八十二次会议,已经核准了十个独立投资项目<sup>4</sup>,总费用为 13,397,249 美元(外加机构支助费用),以在九个国家的空调、家用和商用制冷制造行业淘汰 1,110 公吨(163 万公吨二氧化碳当量) HFC。获得这些项目的结果以后,执行委员会不妨考虑设定成本效益阈值。

#### 制冷维修行业符合资助条件的增量费用

- 12. 执行委员会第八十次会议请秘书处与双边和执行机构合作,编写一份关于制冷维修行业支持逐步减少 HFC 的所有方面的初步文件,提交第八十二次会议<sup>5</sup>(第 80/76(c)号决定)。执行委员会第八十一次会议决定在第八十二次会议上以上述制冷维修行业文件为基础,审议技术援助和能力建设的优先次序问题,以解决所有行业低全球升温潜能值/零全球升温潜能值替代品的安全问题(第 81/67(c)号决定)。<sup>6</sup>
- 13. 根据第 80/76(c)号和第 81/67(c)号决定,执行委员会第八十二次会议审议了 UNEP/OzL.Pro/ExCom/82/64 号文件。在讨论中,来自第 5 条国家的成员举出了制冷维修行业已在执行的 HCFC 淘汰活动之外的其他活动,包括:易燃制冷剂风险评估和管理能力建设;装配和安装次级行业的活动;在安装和维修期间提高和/或保持能效;确保回收更

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<sup>&</sup>lt;sup>3</sup>项目可在第八十四次会议(包括第八十四次会议)之前提交,特别是第八十一次会议之前(包括第八十一次会议)核准项目未涵盖的行业和地区 (第 81/53(b)号决定)。

<sup>&</sup>lt;sup>4</sup> 已核准阿根廷、孟加拉国、中国、多米尼加共和国、约旦、黎巴嫩、墨西哥(两个)、泰国、津巴布韦的 HFC 投资项目。

<sup>&</sup>lt;sup>5</sup> 文件需要考虑以前的政策文件、案例研究、监测和评价审查以及在制定和执行培训和技术援助方案方面开展的工作;对制冷维修行业受资助的第5条国家的现有能力的分析,以及如何将这些能力用于逐步减少HFC;为维修技术人员和海关官员制定替代品过渡培训和资质认证方案和模块所需的信息。

<sup>6</sup> 第 XXVIII/2 号决定第 23 段。

多种类的制冷剂,因为可能要处置更大量的混合物。关于按照第 XXVIII/2 号决定第 16 段对在维修中取代 HCFC 的低消费量国家提高供资一事,委员会同意在与第 XXX/5 号决定有关的能效项下讨论这一事项。

- 14. 执行委员会不妨在第八十三次会议上根据 UNEP/OzL.Pro/ExCom/82/64 号文件所载信息,继续讨论制冷维修行业逐步减少 HFC 的符合条件的增量费用的供资水平和模式。特别是:
  - (a) 执行有利于淘汰 HCFC 和逐步减少 HFC 的活动所产生的机遇和协同作用;
  - (b) 查明大规模引进低全球升温潜能值替代品所面临的挑战;
  - (c) 第 5 条国家履行淘汰步骤所需的供资水平以及根据其消费量为战略性重点分配资金的灵活性(例如支持特定行业引进特定技术,解决组装厂家,优先淘汰特定制冷剂)。
- 15. 执行委员会在审议过程中不妨注意到,目前许多低消费量国家正在编制或将开始编制其 HCFC 淘汰管理计划的第二阶段,超过 35 个已批准《基加利修正案》的第 5 条国家将能够在 2019 年提交编写 HFC 逐步减少计划的供资申请。讨论制冷维修行业 HFC 消费量持续削减起点也将有利于大多数第 5 条国家,因为该行业似乎只消费 HFC。
- 16. 在第八十三次会议讨论结果出来之前,执行委员会不妨请秘书处编写一份文件,提供制冷维修行业供资水平和方式方面的信息。

#### 能效

- 17. 执行委员会第八十一次会议讨论了能效相关事项,并请秘书处向第八十二次会议提供缔约方不限成员名额工作组第四十次会议和缔约方第三十次会议审议技术和经济评估小组根据第 XXIX/10 号决定提交的能效相关问题报告的情况摘要(第 81/67(b)号决定)。
- 18. 秘书处按照第 81/67(b)号决定向第八十二次会议提交了 UNEP/OzL.Pro/ExCom/82/65 和 Add.1 号文件。在同次会议上,执行委员会选择将能效与逐步减少 HFC 的费用准则分开讨论。此外执行委员会同意在与第 XXX /5 号决定第 2 段相关的能效项下讨论按照第 XXVIII/2 号决定第 16 段对在维修中取代 HCFC 的低消费量国家提高供资的问题。7
- 19. 审议之后执行委员会除其他外决定在第八十三次会议上讨论(第82/83号决定):
  - (a) 关于如何运作第 XXVIII/2 号决定第 16 段和第 XXX/5 号决定第 2 段的文件;
  - (b) 关于在逐步减少 HFC 中可用资金和金融机构调动能效资源信息的文件;

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<sup>&</sup>lt;sup>7</sup> 第 XXX/5 号决定第 2 段请执行委员会在第 XXVIII/2 号决定第 16 段的范围内,考虑提高向低消费量国家的供资,帮助它们开展本决定第 1 段概述的活动(即制定和执行政策法规,防止低能效制冷、空调、热泵设备进入市场;促进这些行业获得高效能技术;为保持和提高能效开展认证、安全和标准、提高认识和能力建设定向培训)。

- (c) 如何运作第 XXVIII/2 号决定第 22 段和第 XXX/5 号决定第 5 和第 6 段;
- (d) 技术和经济评估小组关于第 82/83 号决定(e)分段所确定问题的能效事项的报告摘要。<sup>8</sup>
- 20. 秘书处根据第 82/83 号决定向第八十三次会议提交了所要求的文件,<sup>9</sup>将在议程项目 12(a)——《〈蒙特利尔议定书〉基加利修正案》相关事项:能效——下讨论。
- 21. 执行委员会不妨考虑是否在第 5 条国家逐步减少 HFC 的费用准则中列入在议程项目 12(a)下通过的能效决定。

#### 处置

- 22. 执行委员会第八十一次会议决定在第八十二次会议上,以秘书处根据第 79/18(e)号决定编写的处置 ODS 物质的文件为基础,审议为高效益地管理已用过的或不再需要的受控物质库存供资的相关问题(第 81/67(d)号决定)。
- 23. 秘书处根据第 81/67(d)号决定向第八十二次会议提交了 UNEP/OzL.Pro/ExCom/82/21 号文件。<sup>10</sup>在讨论期间,一些成员虽然认识到处置是重要的并且是第 XXVIII/2 号决定授权的,但认为处置不是履约所要求的,也不是增量费用,因此不应作为逐步减少 HFC 的费用准则的一部分进行讨论。另一些成员认为处置至关重要,特别是对低消费量国家而言,将其视为费用准则的一个组成部分。成员们还提出了其他事项,例如: ODS 物质处置综合报告的相关性,第五十八次会议核准的试点项目临时指南;旨在尽量减少不需要的制冷剂的管理政策。
- 24. 执行委员会不妨在第八十三次会议上继续讨论这一事项。

#### 与逐步减少 HFC 相关的其他一般事项

- 25. 提交第八十次会议的关于逐步减少 HFC 的费用准则文件包括扶持活动和目前正在 执行的独立 HFC 投资项目已经适用的总体方面<sup>11</sup> (这些方面载于本文件附件二第三部分)。然而执行委员会尚未就总体方面达成一致。
- 26. 鉴于总体方面正在获得适用,执行委员会不妨考虑是否将本文件附件二所载案文列入本文件附件一所载逐步减少 HFC 的费用准则模板草案,或者推迟对这些方面的进一步讨论,直至就费用准则的其他内容达成一致意见。

<sup>&</sup>lt;sup>8</sup> 在第八十三次会议上讨论如何运作第 XXVIII/2 号决定第 22 段和第 XXX/5 号决定第 5 和第 6 段,包括: (→) 保持和/或提高制冷、空调、热泵行业低全球升温潜能值/零全球升温潜能值替代技术的能效的相关举措,例如: a. 量化能效变化的方法; b. 保持和/或提高能效的相关技术干预; (□)与成本有关的问题,如相关增量费用、回报机会以及监测和核查费用; (□)可能的环境惠益,特别是与气候相关的惠益。

<sup>&</sup>lt;sup>9</sup> UNEP/OzL.Pro/ExCom/83/40、UNEP/OzL.Pro/ExCom/83/41、UNEP/OzL.Pro/ExCom/83/42。

 $<sup>^{10}</sup>$  文件基于  $^{11}$  个项目的执行情况,包括项目设计、与其他项目的协同作用、资源调动机会、成本效益和经验教训等相关问题。

<sup>11</sup> UNEP/OzL.Pro/ExCom/80/55 号文件第 43 段。

#### 建议

#### 27. 执行委员会不妨:

- (a) 注意到关于制定第 5 条国家逐步减少 HFC 的费用准则:供资标准草案的 UNEP/OzL。Pro/ExCom/83/43 号文件;
- (b) 在继续审议第5条国家逐步减少 HFC 的费用准则时:

#### 关于持续总体削减 HFC 的消费和生产

- (一) 根据 UNEP/OzL.Pro/ExCom/82/66 号文件所述关键考虑因素和第八十 三次会议对此事项的讨论,审议执行委员会成员提出的关于设定 HFC 持续总体削减起点的方法的具体建议:
- (二) 设定 HFC 持续总体削减起点的方法商定之后,列入本文件附件一, 删除本文件附件二中关于持续总体削减的案文;

#### 关于消费制造行业

- (三) 根据 HFC 投资项目的执行结果,考虑设定消费制造行业 HFC 逐步减少活动的成本效益阈值和增支经营费用阈值;
- (四) 消费制造行业 HFC 逐步减少活动的成本效益阈值和增支经营费用阈值商定之后,列入本文件附件一,删除本文件附件二所载请秘书处就消费制造行业进一步开展工作的案文;

#### 关于制冷维修行业符合资助条件的增量费用

- (五) 根据 UNEP/OzL.Pro/ExCom/82/64 号文件所载信息,讨论制冷维修行业逐步减少 HFC 的符合条件的增量费用的供资水平和方式,特别是执行有利于淘汰 HCFC 和逐步减少 HFC 的活动所产生的机遇和协同作用、查明的低全球升温潜能值替代品的挑战、所需的供资水平、以及第5条国家要求的根据消费情况向战略重点分配资金的灵活性;
- (大) 考虑是否请秘书处编写一份文件,分析制冷维修行业的供资水平和方式;
- (七) 制冷维修行业的成本效益阈值商定之后,列入本文件附件一,删除本文件附件二中的有关案文:

#### <u>关于能效</u>

- (八) 考虑是否将本次会议议程项目 12(a)下商定的能效相关决定列入本文件附件一;
- (九) 删除本文件附件二所载能效相关案文,包括奥地利政府向第八十次会议提交的会议室文件;

#### 关于处置

- (+) 在讨论处置问题时,以 UNEP/OzL.Pro/ExCom/82/21 号文件所载秘书 处根据第 79/18(e)号决定编写的关于处置 ODS 物质的文件为基础,考 虑到为高效益地管理——包括销毁——已用过的或不再需要的受控物 质库存供资的相关问题;
- (+-) 考虑是否将商定的处置相关决定列入本文件附件一, 删除本文件附件 二中的相关文本;

#### 关于与逐步减少 HFC 有关的其他一般事项

(+=) 考虑是否将附件二所载"<u>与逐步减少 HFC 有关的其他一般事项</u>"的 案文列入附件一,或将其审议推迟到以后的会议。

#### Annex I

### DRAFT TEMPLATE OF THE COST GUIDELINES FOR THE PHASE-DOWN OF HFCs (As of the 82<sup>nd</sup> meeting)

#### **Background**

1. The present Annex contains the draft cost guidelines for the phase-down of HFCs based on the relevant elements of decision XXVIII/2 agreed by the parties at their Twenty-Eighth Meeting. These draft cost guidelines contain elements agreed at the 78<sup>th</sup> and 80<sup>th</sup> meetings of the Executive Committee, and will be updated pursuant to further discussions at future meetings of the Executive Committee.

#### Draft cost guidelines for the phase-down of HFCs

### Flexibility in implementation that enables parties to select their own strategies and priorities in sectors and technologies

2. Article 5 countries will have flexibility to prioritize HFCs, define sectors, select technologies and alternatives and elaborate and implement their strategies to meet agreed HFC obligations, based on their specific needs and national circumstances, following a country-driven approach.

#### Cut-off date for eligible capacity

3. The cut-off date for eligible capacity is 1 January 2020 for those parties with baseline years from 2020 to 2022, and 1 January 2024 for those parties with baseline years from 2024 to 2026.

#### Second and third conversions

- 4. To apply the following principles for second and third conversion projects:
  - (a) First conversions, in the context of a phase-down of HFCs, are defined as conversions to low-global-warming potential (GWP) or zero-GWP alternatives of enterprises that have never received any direct or indirect support, in part or in full, from the Multilateral Fund, including enterprises that converted to HFCs with their own resources;
  - (b) Enterprises that have already converted to HFCs in phasing out CFCs and/or HCFCs will be eligible to receive funding from the Multilateral Fund to meet agreed incremental costs in the same manner as enterprises eligible for first conversions;
  - (c) Enterprises that convert from HCFCs to high-GWP HFCs, after the date of adoption of the Amendment, under HCFC phase-out management plans already approved by the Executive Committee will be eligible to receive funding from the Multilateral Fund for a subsequent conversion to low-GWP or zero-GWP alternatives to meet agreed incremental costs in the same manner as enterprises eligible for first conversions;
  - (d) Enterprises that convert from HCFCs to high-GWP HFCs with their own resources before 2025 under the Amendment will be eligible to receive funding from the Multilateral Fund to meet agreed incremental costs in the same manner as enterprises eligible for first conversions; and

(e) Enterprises that convert from HFCs to lower-GWP HFCs with Multilateral Fund support when no other alternatives are available will be eligible to receive funding from the Multilateral Fund for a subsequent conversion to low-GWP or zero-GWP alternatives if necessary to meet the final HFC phase-down step.

#### **Sustained aggregate reductions**

5. The remaining eligible consumption for funding in tonnage will be determined on the basis of the starting point of national aggregate consumption less the amount funded by previously approved projects in future multi-year agreement templates for HFC phase-down plans.

#### Eligible incremental costs

Consumption manufacturing sector

- 6. To make the following categories of costs eligible and to include them in the cost calculation associated with the phase-down of HFCs in the consumption manufacturing sector:
  - (a) Incremental capital costs (ICCs);
  - (b) Incremental operating costs (IOCs) for a duration to be determined by the Executive Committee;
  - (c) Technical assistance activities;
  - (d) Research and development, when required to adapt and optimize alternatives to HFCs with low or zero GWP;
  - (e) Costs of patents and designs, and incremental costs of royalties, when necessary and cost-effective; and
  - (f) Costs of the safe introduction of flammable and toxic alternatives.

Production sector

- 7. To make the following categories of costs eligible and to include them in the cost calculation associated with the phase-down of HFCs in the production sector:
  - (a) Lost profit due to the shutdown/closure of production facilities, as well as production reduction:
  - (b) Compensation for displaced workers;
  - (c) Dismantling of production facilities;
  - (d) Technical assistance activities;
  - (e) Research and development related to the production of low-GWP or zero-GWP alternatives to HFCs with a view to lowering the costs of alternatives;
  - (f) Costs of patents and designs or incremental costs of royalties;

- (g) Costs of converting facilities to produce low-GWP or zero-GWP alternatives to HFCs when technically feasible and cost-effective; and
- (h) Costs of reducing emissions of HFC-23, a by-product from the production process of HCFC-22, by reducing its emission rate in the process, destroying it from the off-gas, or by collecting and converting it to other environmentally safe chemicals; such costs should be funded by the Multilateral Fund to meet the obligations of Article 5 parties specified under the Amendment.

Refrigeration servicing sector

- 8. To make the following categories of costs eligible and to include them in the cost calculation associated with the phase-down of HFCs in the refrigeration servicing sector:
  - (a) Public awareness activities;
  - (b) Policy development and implementation;
  - (c) Certification programmes and training of technicians on safe handling, good practice and safety in respect of alternatives, including training equipment;
  - (d) Training of customs officers;
  - (e) Prevention of illegal trade of HFCs;
  - (f) Servicing tools;
  - (g) Refrigerant testing equipment for the refrigeration and air-conditioning sector; and
  - (h) Recycling and recovery of HFCs.

#### **Energy efficiency**

#### Capacity building to address safety

#### **Disposal**

#### Eligibility of Annex F substances subject to high-ambient-temperature exemptions

9. That amounts of Annex F substances that are subject to the high-ambient-temperature exemption are not eligible for funding under the Multilateral Fund while they are exempted for that party.

#### Annex II

### OUTSTANDING ISSUES FOR FURTHER DISCUSSION BY THE EXECUTIVE COMMITTEE ON THE COST GUIDELINES FOR THE PHASE-DOWN OF HFCs (As of the 82<sup>nd</sup> meeting)

#### I. IN RELATION TO THE COST GUIDELINES

#### Sustained aggregate reductions

- (a) To use the following methodology [to be proposed by the Executive Committee] for determining the starting point for sustained aggregate reduction in HFC consumption and production, noting that the starting point should be expressed in [[CO<sub>2</sub> equivalent] and/or [metric tonnes]]
- (b) [add text for production]

#### Eligible incremental costs

Refrigeration servicing sector

(c) [Consideration of paragraph 16 of decision XXVIII/2, [including consideration of maintaining energy efficiency in the servicing/end-user sector]]

#### **Energy efficiency**

(d) [To continue discussing how it wishes to develop cost guidance associated with maintaining and/or enhancing the energy efficiency of low-GWP or zero-GWP replacement technologies and equipment, when phasing down HFCs, [including in the servicing sector [and end-user sector],] after reviewing additional relevant information, including the information provided by the TEAP in its assessment of energy efficiency at the 40<sup>th</sup> OEWG meeting;]

#### Capacity building to address safety

#### Disposal

II. ADDITIONAL WORK TO BE REQUESTED FROM THE SECRETARIAT<sup>1</sup>

#### In relation to the consumption manufacturing sector

(a) [The Executive Committee decided to consider at a future meeting to request the Secretariat to undertake additional work, including to determine cost-effectiveness thresholds and thresholds for IOCs for HFC-phase-down activities in the consumption manufacturing sector once progress in the implementation of HFC investment projects has been made;]

<sup>&</sup>lt;sup>1</sup> Contained in paragraph 46 of document UNEP/OzL.Pro/ExCom/80/55.

#### In relation to energy efficiency

- (b) [To request the Secretariat to contract an independent consultant to:
  - (i) Prepare, for the [82<sup>nd</sup> meeting], a document on issues associated with maintaining and/or enhancing the energy efficiency of low-GWP or zero-GWP replacement technologies and equipment when phasing down HFCs, including:
    - a. Incremental costs for maintaining and/or enhancing energy efficiency in the manufacturing and servicing of refrigeration and air-conditioning equipment, including in situ manufacturing;
    - b. Pay-back periods and economic benefits associated with energy-efficiency improvements in the refrigeration and air-conditioning sector;
    - c. Possible modalities for funding, including operational modalities for co-funding with other institutions at the national and global level, in order to maintain and/or enhance energy efficiency and address associated challenges in the refrigeration and air-conditioning sector;
    - d. Requirements for establishing minimum energy-efficiency standards, including the testing and verification of energy efficiency in equipment;
    - e. The institutional and regulatory framework needed in Article 5 countries to support and monitor improvements in energy efficiency, including in the refrigeration and air-conditioning servicing sector;
  - (ii) Consider, when preparing the document, appropriate standards and directives, such as the four European Union directives for reducing greenhouse gas emissions in Europe on Energy Efficiency, Ecodesign, Energy Performance of Buildings and Industrial Emissions, to determine the best available technologies; and
  - (iii) Consider, when preparing the document, the Conference Room Paper submitted by the Government of Austria to the 80<sup>th</sup> meeting (Appendix I to the present Annex); and
- (c) To allocate US \$XXX for the preparation of the study.

#### III. OTHER GENERAL MATTERS RELATED TO HFC PHASE-DOWN<sup>2</sup>

- (a) To agree on the following prerequisites for an Article 5 country to access Multilateral Fund funding other than for enabling activities for the phase-down of HFC consumption and production:
  - (i) Ratification, acceptance, or accession to the Kigali Amendment;
  - (ii) Establishment of an agreed starting point for a sustained aggregate reduction in HFC consumption and production, on the understanding that any phase-down of HFCs resulting from any project that might be approved by the Executive Committee would be deducted from the country's starting point;

<sup>&</sup>lt;sup>2</sup> As contained in paragraph 43 of document UNEP/OzL.Pro/ExCom/80/55.

- (b) [To agree that institutions and capacities in Article 5 countries developed with Multilateral Fund assistance for the phase-out of ODS should be used to the extent possible for the phase-down of HFCs]; and
- (c) [To agree that the existing policies and guidelines of the Multilateral Fund [where applicable] for funding the phase-out of ODS would be applicable to the funding of HFC phase-down [unless decided otherwise] [as long as agreed upon] by the Executive Committee [taking into account in particular decision XXVIII/2];]

#### Appendix I

## TEXT FOR DISCUSSION RELATED TO THE DEVELOPMENT OF THE COST GUIDELINES FOR THE PHASE-DOWN OF HFCS IN ARTICLE 5 COUNTRIES: DRAFT CRITERIA FOR FUNDING (DECISIONS 78/3(i) AND 79/44(b)) (A Conference Room Paper submitted by the Government of Austria to the 80<sup>th</sup> meeting)

#### **Energy Efficiency**

- 1. The Executive Committee may wish to consider the following elements when requesting the Secretariat to do additional work on energy efficiency as proposed by the Government of Austria based on the summary document prepared by the Chair at the 78<sup>th</sup> meeting.
  - (a) Prepare, for the [81<sup>st</sup> meeting], a document on issues associated with maintaining and/or enhancing the energy efficiency of low-GWP or zero-GWP replacement technologies and equipment when phasing down HFCs, including:
    - (i) Inventory of energy efficiency activities already undertaken and /or funded by GEF and GCF and implementing agencies, in the refrigeration, heat-pump, and air-conditioning and production sectors; including typical level of funding, co-financing committed Pay-back periods and economic benefits associated with energy-efficiency and estimate or range of cost-effectiveness;
    - (ii) Cost guidance, methodologies, processes, monitoring, verification associated with energy efficiency interventions of other institutions, especially GEF and GCF;
    - (iii) Identification of costs for maintaining and/or enhancing energy efficiency in the manufacturing and servicing of refrigeration and air-conditioning equipment, including in situ manufacturing;
    - (iv) Possible modalities for funding, including operational modalities for co-funding and/or cooperation/coordination with other institutions at the national and global level, in order to maintain and/or enhance energy efficiency and address associated challenges and address associated challenges in the production sector and the refrigeration and air-conditioning sectors;
    - (v) Examples of minimum energy-efficiency standards and labelling, including the Requirements for establishing them and ensuring the testing and verification of energy efficiency in equipment;
    - (vi) The institutional and regulatory framework needed in Article 5 countries to support and monitor improvements in energy efficiency, including in the refrigeration and air-conditioning servicing sector; and
  - (b) To consider, when preparing the document, appropriate standards, such as LEED and BREEAM, and directives, such as the four European Union directives for reducing greenhouse gas emissions in Europe on Energy Efficiency, Eco-design, Energy Performance of Buildings and Industrial Emissions, to determine the best available technologies.

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