

行政院所屬各機關因公出國人員出國報告書
(出國類別：國際會議)

蒙特婁議定書第二十四次締約國會議
與會情形報告

服務機關： 行政院環境保護署

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派赴國家： 瑞士－日內瓦
(Geneva, Switzerland)

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摘要

管制破壞臭氧層物質 (Ozone Depleting Substances 簡稱 ODS) 的國際公約蒙特婁議定書 (Montreal Protocol) 第二十四次締約國大會，於 101 年 11 月 12 日至 11 月 16 日在瑞士—日內瓦 (Geneva, Switzerland) 舉行，行政院環保署特派楊技監兼能資方案室執行秘書慶熙代表與財團法人工業技術研究院以非政府組織 NGO (Non-governmental organization) 的方式率團出席會議，觀察議定書的管制發展並向國際宣揚我國努力成果。本團於會前還特別向臭氧秘書處申請於會場中舉辦一場周邊會議，積極與國際分享我國的管理經驗與成果。

本次會議有來自各國政府代表、聯合國相關機構、政府間組織、非政府組織及產業等，計有超過 550 位專家及代表與會。會議於 11 月 16 日晚上 10 點 5 分結束，共計產出 14 項實質性與 11 項程序性決議，重點包括：審議 2013 年必要用途 (Essential Use Exemptions) 與 2014 年關鍵用途 (Critical Use Exemptions) 豁免、溴化甲烷用於檢疫與裝運前處理 (Quarantine and pre-shipment, 簡稱 QPS)、外國籍船舶維修使用 ODS 之貿易管理、新增 ODS 替代品資訊、蒙特婁議定書財務機制提名與運作程序、科學評估小組 (Scientific Assessment Panel, SAP) 審議 RC-316c、原料用途等議題。

為向國際表達臺灣積極參與國際公約，且遵循蒙特婁議定書對已開發國家的管制規範，並已達成削減破壞臭氧層物質至僅餘 25% 之 HCFCs 的重要成果，我國代表團於本次締約國大會 MOP-24 會議期間，在會場中首次申請舉辦氟氯烴 (HCFCs) 減量管理與替代品推動策略會議 (HCFCs Phase-out Management and Alternatives Implementation Strategy)，該次會議有包括阿根廷、菲律賓、多明尼加、甘比亞、布吉納法索、海地、巴拿馬、帛琉、所羅門群島等國家約 10 多位外國人士參加，多位與會人士提出其國家推動破壞臭氧層物質管制削減與替代技術之問題，積極表示希望能與

臺灣合作，藉由該場會議之舉辦，我國已成功宣揚破壞臭氧層物質管制技術與管理策略。

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蒙特婁議定書第二十四次締約國會議與會情形報告

壹、 前言

- 一、 氟氯氫化物 (Chlorofluorocarbons) 於 1930 年開發後，因具有易揮發、不易殘留及較低的毒性等特殊性質，被各國廣泛應用在冷凍空調系統、工業製程洗淨溶劑、消防滅火藥劑、發泡劑及噴霧推進器等，直至 1974 年美國二位教授在 Nature 科學期刊提及，氟氯氫化物因生命週期穩定，當逸散至大氣中，上升至平流層經陽光紫外線分解逐漸釋出氯原子後，會與臭氧分子發生反應，使臭氧濃度降低。
- 二、 1985 年南極測站科學家觀察 1977 至 1984 年期間，春季時南極上空平流層臭氧減少約 40% 濃度，且急遽變化區域面積甚至已大於南極大陸（從 100 至 400 Dobson Unit，而厚度若在 220 Dobson Unit 以下），即稱為「臭氧洞」。
- 三、 臭氧層破壞導致陽光中過量的紫外線直接進入地球表面，將嚴重影響全球生態（如造成人類皮膚癌與白內障罹患率增高、植物生長受到抑制、水中生態系統平衡受到破壞及建築物等材料加速老化等）有鑒於此，聯合國環境規劃署 (United Nations Environment Program, UNEP) 於 1985 年邀集相關國家制訂保護臭氧層之「維也納公約 (Vienna Convention for the Protection of the Ozone Layer)」，並要求簽署公約之國家應採取相關因應措施減少臭氧層破洞逐年擴大，UNEP 並決議研擬更具有策略性之管制措施，以保護人類健康和環境受到影響，至今維也納公約已受到全球 197 個國家批准，2012 年最新加入的國家為南蘇丹。
- 四、 由於維也納公約並不具有實質管制約束力，因此 UNEP 後於 1987 年於加拿大蒙特婁市再邀集相關各國及歐洲經濟體簽署更具有管制效力之「蒙特婁議定書 (Montreal Protocol on Substances that Deplete the Ozone Layer)」，優先管制 CFC-11、-12、-113、-114、115 及 Halon-1211、

-1301、-2402 等 8 項化學品，列為附件 A 第一、二類管制物質。

五、為加速落實破壞臭氧層物質減量行動，各締約國採加嚴之削減時程與管制措施，增修蒙特婁議定書內容於「修正案 (Amendment)：用來新增管制方案或物質，需經一定數目的締約國批准後才具效力」及「調整案 (Adjustment)：用來調整現有管制措施內容，無管制項目之新增，以加嚴現有管制方案為主」。

六、目前蒙特婁議定書批准修正案包括，1990 年倫敦修正案、1992 年哥本哈根修正案、1997 年的蒙特婁修正案及 1999 年的北京修正案等四案，各修正案批准情形如表一：

(一) 倫敦修正案：1990 年 MOP2 於英國倫敦決議，新增 CFC-13、-111、-211、-212、-213、-214、-215、-216、及-217 等 10 項化學品，另管制四氯化碳及 1,1,1-三氯乙烷，列於附件 B 第一、二及三類管制物質，並決議議定書中五種 CFCs 及三種海龍(Halons)於 2000 年之前停止生產。此外，設立多邊基金 (Multilateral Fund) 促進議定書的推廣執行，用來資助開發中國家執行議定書減量方案時可能需承擔的成本與舉辦資訊擴散活動，至今計有 197 個締約國批准。

(二) 哥本哈根修正案：1992 年 MOP4 於丹麥哥本哈根決議，新增 HCFC-21、-22 及-21 等 40 與 HBFC-22B1 等 34 項化學品及其異構物，列為附件 C 第一及二類與附件 E 管制物質，至今計有 197 個締約國批准。

(三) 蒙特婁修正案：1997 年 MOP9 於加拿大蒙特市通過各國應採用 ODS 進/出口許可制度，決議未批准哥本哈根修正案的締約國進行溴化甲烷貿易限制，至今計有 193 個締約國批准。

(四) 北京修正案：1992 年 MOP11 於中國北京決議，納入管制

Bromochloromethane 與新增加入 HCFCs 生產管制，列為附件 C 第三類管制物質，至今計有 183 個締約國批准。

表 1、蒙特婁議定書及其修正案之批准情形

公約/修正案	批准之締約國總數
維也納公約	197
蒙特婁議定書	197
倫敦修正案	197
哥本哈根修正案	197
蒙特婁修正案	193
北京修正案	183

表 2、蒙特婁議定書管制物質種類

代號	蒙特婁議定書代稱	管制物質種類
A	附件 A 管制物質	CFC-11、-12、-113、-114、115 及 Halon-1211、-1301、-2402
B	附件 B 管制物質	其它 CFCs 等 10 項化學品、四氯化碳及 1,1,1-三氯乙烷
C-I	附件 C 第一類管制物質	HCFCs
C-II	附件 C 第二類管制物質	HBFCs
C-III	附件 C 第三類管制物質	一氯一溴甲烷
E	附件 E 管制物質	溴化甲烷

資料來源：

http://montreal-protocol.org/new_site/en/treaty_ratification_status.php

七、 聯合國環境規劃署臭氧秘書處於 2012 年 11 月 12-16 日在瑞士一日內瓦國際會議中心(Centre International de Conférences Genève (CICG), Geneva, Switzerland) 舉行蒙特婁議定書第 24 次締約國會議，包括各締

約國政府機關代表各國政府代表、聯合國相關機構、政府間組織、非政府組織及相關產業團體等，共計有超過 550 位專家及代表共襄盛舉。



圖 1、MOP24 會議地點 Centre International de Conférences Genève (CICG)

貳、 我國代表團

本次會議以財團法人工業技術研究院名義，非政府組織（NGO）身分參加，由本署楊慶熙技監兼能資方案室執行秘書率團，本署郭孟芸技正；外交部駐日內瓦辦事處黃正佳組長、條法司葉佳韻薦任科員；工業技術研究院胡耀祖副所長、楊斐喬研究員及連振安副研究員，共計 7 人與會，代表團成員及任務分工如表 3。

表 3、成員任務分工表簡要說明如下

單位	職稱	姓名	任務分工
行政院環境保護署	技監兼能資方案 室執行秘書	楊慶熙	團長/對外交流
	技正	郭孟芸	資訊蒐集/會議紀錄
外交部	組長	黃正佳	法律及對外交流
	薦任科員	葉佳韻	法律及對外交流
工業技術研究院 綠能與環境研究所	副所長	胡耀祖	對外交流/技術資訊
	研究員	楊斐喬	技術資訊/資訊蒐集
	副研究員	連振安	技術資訊/資訊蒐集

參、 出國行程

- 一、 會議時間：2012 年 11 月 12 日至 11 月 16 日。
- 二、 會議地點：瑞士日內瓦國際會議中心（CICG, Geneva, Switzerland）
- 三、 主辦單位：聯合國環境規劃署臭氧秘書處
- 四、 行程：
 - 11.12~11.13 臺北出發至瑞士日內瓦
 - 11.13~11.16 參加聯合國蒙特婁議定書第 24 次締約國會議
the Twenty-fourth Meeting of the Parties to the
Montreal Protocol on Substances that Deplete the
Ozone Layer
 - 11.17~11.18 瑞士日內瓦回臺北

肆、 與會目的

- 一、 藉由參與本會議，瞭解國際公約管制發展趨勢，並建立我國與其他國家管制與替代技術資訊分享管道，宣揚我國努力依循議定書管制規範和減少管制物質消費量的成果，表達我國保護臭氧層之決心。
- 二、 與各國保持聯繫及交流，迅速掌握臭氧層保護國際管制最新資訊，使我國得以妥為因應，將衝擊減至最低，對於本署國際環保業務之推動，極有助益。
- 三、 舉辦一場周邊會議，積極與國際分享我國的氟氯烴管理如何成功藉由核配制度達到削減與管理目標之經驗與成果。

伍、 會議議程

本年度蒙特婁議定書締約國會議於瑞士-日內瓦召開，2012 年 11 月 12-16 日為期 5 天的會議，分為 2012 年 11 月 12-14 日 3 天的預備會議及 11 月 15-16 日 2 天的高層會議。會議議程如下：

一、 預備會議（2012 年 11 月 12 日-14 日）

日期	行程
11/12 開會	<ol style="list-style-type: none">1. 預備會議開幕2. 組織事項(通過預備會議議程)3. 行政事務：2013 年蒙特婁議定書相關委員會名單、蒙特婁議定書基金與預算的財務報告4. 蒙特婁議定書第二章的豁免議題討論，包括必要用途、關鍵用途等
11/13 開會	<ol style="list-style-type: none">5. ODS 替代品的額外資訊6. TEAP 委員會運作的相關流程7. 以國外旗幟運行的船隻之 ODS 貿易與消費量計算方式8. 四氯化碳調查差異

日期	行程
	9. 蒙特婁議定書財務機制評估
11/14 開會	10. 控制 HCFC-22 生產副產物排放之清潔生產計畫 11. 為加速 HCFCs 削減但兼顧氣候議題，應擴大多邊基金之計畫 12. 檢討 HCFCs 生產設施的基金計畫 13. 檢視科學評估報告 RC-316c 14. 小島國家執行聯合國會議永續發展文件有關遵循蒙特婁議定書之議題 15. 蒙特婁議定書之修正案 16. 遵約與資料提報議題

二、 高階會議 (2012 年 11 月 15-16 日)

日期	行程
11/15 開會	1. 高級別會議開幕 2. 組織事項(安排工作) 3. 維也納公約、蒙特婁議定書及修正案的批准現況 4. 各專家技術委員會簡報 5. 多邊基金委員會簡報
11/16	6. 各代表團團長致辭 7. 預備會議共同主席的報告及審議建議締約國第二十四次會議通過的各項決定 8. 締約國第二十五次會議的日期及地點 9. 其他事項 10. 通過締約國大會第二十四次會議的各項決定 11. 通過締約國第二十四會議的報告 12. 會議閉幕

陸、 會議過程

本次會議地點為瑞士日內瓦國際會議中心，會議包括 11 月 12~14 日的 MOP-24 預備會議與 11 月 15~16 日的 MOP-24 高階會議。11 月 12 日預備會議召開序幕，由約旦籍的 Mr. Ghazi Odat 與荷蘭籍的 Mr. Gudi Alkemade 擔任共同主席。瑞士環境部部長 Mr. Bruno Oberle 代表瑞士政府讚許蒙特婁議定書在以科學基礎、各國政府的共同意願，以及多邊基金的迅速行動達到了蒙特婁議定書的偉大成就。藉此機會，他代表瑞士政府表達支持 HFCs 修正案的立場。臭氧秘書處執行秘書 Mr. Marco González 亦在致詞時強調議定書 25 年的成就與目前正面對的挑戰，如溴化甲烷的關鍵用途豁免、檢疫與裝運前處理豁免，以及 ODS 的原料用途等。Mr. Marco González 呼籲各締約國依照議定書的協商精神、科學證據的基礎、產業創新產品可取得性、以及共同但責任有別的原則（Common but differentiated responsibilities, CBDR）下，認真考慮並協商關於 HFCs 修正案的提案。高階會議於 11 月 15 日召開，由瑞士環境、運輸、能源及通訊部部長 Ms. Doris Leuthard 代表瑞士政府向各國代表致詞，除恭賀議定書簽署 25 週年慶以外，並表示全球 98% 的 ODS 已經達到削減是大家努力的成果。Mr. Marco González 除重申在預備會議時的內容外，並強調議定書有效的資料系統有助於管控各締約國的遵約情況。MOP-23 的主席 Syanga Abilio 表示 Article 5 締約國目前正逐漸朝向削減 HCFCs 的道路上，並讚許南蘇丹成為議定書的新成員。本屆會議由巴基斯坦籍的 Mr. Mahmood Alam 擔任主席，並由烏克蘭籍的 Dmytro Mormul，格瑞那達的 Leslie Smith 與比利時的 Alain Wilmart 擔任副主席，並針對各項議題進行討論，各評估小組及相關委員會討論情形如下：

一、 各技術委員會或單位報告

(一) 技術與經濟評估小組（TEAP）

TEAP 以下所屬之各技術選擇委員會目前正就 2014 年評估報告進

行編修，預計將有超過 150 位以上的專家參與。今年除了化學技術選擇委員會（CTOC）外皆有報告。

（二）醫療技術選擇委員會（MTOC）

MTOC 的報告聚焦在中國的必要用途豁免（Essential Use Nomination, EUN）申請審核上。中國提出希望保留對於計量式吸入器（MDIs）之 CFCs 作為傳統中藥用途（TCM）的活性添加物需求，中國方面共計提出了 9 公噸的 CFCs 豁免需求，包括用於生產 MDIs 的 *Datura metel extra/clenbuterol* 與 *ephedra/gingko/sophoroflavescens/radix scutellariae*。但是 MTOC 認為治療氣喘之替代的口服與注射式 TCM 在中國已經供應許久，除非有證據指出使用 CFCs 作為氣喘治療的 MDIs 較口服或注射式治療具有更佳的療效，否則並無明顯應提供豁免的理由。況且在有其他替代物質的狀況下，根據 IV/25 決議，MTOC 並未考慮通過其豁免。因此 MTOC 建議中方應該考慮在 2013 年對其生產項目進行核配，並尋求替代品。

（三）發泡技術選擇委員會（FTOC）

發泡技術選擇委員會報告中指出大部分的 HCFCs 削減管理計畫（HPMPs）已經經由多邊基金執委會完成並且通過。大多第一階段 HPMPs 計畫以 HCFC-141b 的削減做為優先項目。目前並沒有單一技術可以全面性取代 HCFC-141b 與其他的 HCFCs，但是已經有足夠的其他選擇性技術。針對中小型企業，其替代技術存在著技術與經濟層面的挑戰。報告中亦指出不飽和 HFCs（低 GWP）為隔熱用途增加了替代性選擇。預計在 2014 年，這些替代物質可以達到商業化量產的目標。

（四）海龍技術選擇委員會（HTOC）

HTOC 報告指出國際民航組織（ICAO）對其所有會員國提出了一

份關於蒙特婁議定書削減海龍的諮詢調查。第一個問題是瞭解會員國是否預期會有足夠的海龍庫存以滿足其國內民航需求；第二個問題是希望瞭解該會員國是否清楚知道該國內的海龍儲備數量以供應未來操作之需。結果 191 個會員國中，僅有 55 個會員國回覆，顯示答案尚有很大的不確定性。

另外，調查中也指出多個國家對於自身國家是否有充足的海龍供應並不清楚，或是機隊（可能同時經營國內外市場）委由海外供應商直接裝填海龍其滅火系統中，使得該國無法掌握可能的裝填數量。同時，部分國家也反應若航空公司在自身國家回收利用、裝填其滅火系統中的海龍，並不會收到業者的通知。因此可以瞭解到許多國家仰賴掌握在部分國家的海龍做為自身國家海龍的供應所需，而非自身國家所擁有的庫存。

因此，ICAO 考慮設立「貨運灣」以時程設定的方式（Cargo Bay timeframes）管控海龍替換的執行，將全球所需的海龍做成統一性的管理，但是需要先克服時程設定的問題。評估長期性的海龍需求、海龍的供應來源，以及如何讓締約國向蒙特婁議定書申報其庫存與使用。

（五） 溴化甲烷技術選擇委員會（MBTOC）

報告指出距離開發中國家（Article 5）之 2015 年削減期限，相較於其基準量（約為 15,866 公噸），Article 5 締約國已經削減 80% 的溴化甲烷。至於 Non-Article 5 締約國，相較於基準量（約為 56,083 公噸），僅有不到 1% 的數量被用來申請關鍵用途豁免。2014 年的豁免申請中，日本已經不再提出豁免申請，目前僅剩下美國（416 公噸）、加拿大（10 公噸）與澳洲（28 公噸）仍提出豁免申請，總計建議核可的數量為 454 公噸，較 2013 年通過的 611 公噸減少許多。Article 5 締約國預計自 2013 年起開始提出溴化甲烷關鍵用途豁免申請，並自 2015 年起生效，就目前收集到的資訊，開發中國家所遭遇的替代性困難與已開發國家的狀況

類似。根據 XXIII/5 決議，各締約國已獲邀請在 2013 年 3 月前提供更為詳盡的資訊，以利瞭解檢疫與裝運前處理（QPS）用途的使用狀況

另外，有鑑於原本設定作為溴化甲烷替代品的碘化甲烷因為具有較高的殘留性，使得多個國家如美國撤銷其使用許可（僅剩下日本保留），因此在尋找適當替代品上仍有迫切的需求。MBTOC 依據 XXIII/14 決議，也提供了 Article 5 締約國關鍵用途手冊以利他們自 2013 年起提出申請。

(六) 冷凍空調暨熱泵技術委員會（RTOC）

該委員會自 2010 年末以來已經完成多種冷媒的評估分析，包括 R-407F、R-442A、R-511A、R-512A 與 R-1234ze。至於 HFC-1234yf 是否能夠取代 HFC-134a 目前報告指出仍在努力之中。商用冷媒的部分，報告指出許多的超市使用跨臨界二氧化碳系統（Trans-Critical CO₂ Systems），尤其是在歐洲。二氧化碳串聯式系統（CO₂ Cascade Systems）目前正由多個 Article 5 國家採用，例如巴西目前有 31 套的裝設案例。數個國家也正採用汽電共生系統，藉由吸收式冰水機製冷。

RTOC 報告指出混合式冷媒（GWP 值小於 600）包含較低 GWP 值的 HFCs（如 HFOs）與飽和 HFCs 目前正被提出用來使用在部分的冷凍藏與空調設備之中。目前正有一個 Non-Article 5 締約國使用 HFC-32 作為空調冷媒（應為日本），預計在 2013 年將推廣至部分 Article 5 締約國。

至於車用空調冷媒的部分，Daimler（戴姆勒）/Volkswagen（福斯）/Mazda（馬自達）已經否決了 HFC-1234yf 使用於自產車輛空調的提案，因為考量其具有易燃性，未來將考慮其他低 GWP 值的替代品作為車用空調之用。歐盟刻正試圖修改含氟氣體的法規（F-Gas Regulation），其已於 2012 年 11 月提出在 2020 年時禁止使用 GWP 值大於 2,500 的

HFCs。這些規定預期將對全球使用高 GWP 值冷媒的用途產生衝擊性影響。

(七) 科技評估小組 (SAP)

科學評估小組由美國籍的 Paul Newman 報告 2014 年評估報告的準備工作進展，並表示內容將依據 XXIII/13 決議進行編修。報告中指出將對四氯化碳 (CTC) 在大氣中的生命週期數據進行修正，將其範圍限縮至 35~50 年，並逐步減少評估上的數據偏差。針對新式替代 CFC-113 的物質 RC-316c (C₄F₆Cl₂, 1,2-dichlorohexafluorocyclobutane) 進行了物理與化學性質介紹，並由實驗室觀測數據顯示其為強而有力的 ODS 物質，模擬平流層紫外光在波長 190~210nm 時，RC-316c 具有較高的可破壞斷面 (與 CFC-12 和 CFC-113 類似)，而此物質同時亦為會造成溫室效應的氣體。

根據 2D 的分子特性模擬實驗分析數據計算，RC-316c 的生命週期為 81 年，ODP 值為 0.46，100 年全球升溫潛勢值 (GWP) 為 4,300，ODP 值接近 CFC-11 或 12 的一半，GWP 值則接近 CFC-11。

(八) 環境影響評估小組 (EEAP)

環境影響評估小組由英國籍的 Nigel Paul 介紹該委員會的 2014 年環境影響評估報告準備工作狀況，包括臭氧層破壞與氣候變遷下之 UV 射線對於人類健康、陸地動植物系統、水中生物系統、材料的影響。同時也對 ODS 與其替代品進行相關議題的評估。2014 年的評估報告也將納入 UV 射線對於生物體之維他命 D 合成，以及人體免疫系統是否壓制進行其關係的評估。此外，那些會影響臭氧層的化學物質對於人類健康的風險評估也將納入報告之中。

二、 國際趨勢分析

今年 MOP-24 會議，多項具有爭議性的議題皆無結論，而將移至 OEWG-33 進行討論。會議共計通過 14 項實質性與 11 項程序性決議，包括審議 2013 年必要用途（Essential Use Exemptions）與 2014 年關鍵用途（Critical Use Exemptions）豁免、溴化甲烷用於檢疫與裝運前處理（Quarantine and pre-shipment, 簡稱 QPS）、外國籍船舶維修使用 ODS 之貿易管理、新增 ODS 替代品資訊、蒙特婁議定書財務機制提名與運作程序、科學評估小組（Scientific Assessment Panel, SAP）審議 RC-316c、原料用途等議題。

此外，自 2013 年起，Article 5 國家將開始溴化甲烷的關鍵用途申請，以利 2015 年生效，A5 締約國遭遇到的替代問題與非 A5 締約國的狀況相似，且全球 QPS 用途之溴化甲烷使用量大幅增加已受到關注，後續溴化甲烷的管制與替代進展值得關注。蒙特婁議定書今年亦與國際植物保護公約（IPPC）簽署合作備忘錄，強化未來替代技術與規則的建立合作。

另外，2015 年起，已開發國家的 HCFCs 將達 90% 削減，意味著 HFCs 的用量將會大幅度提升，讓關注 HFCs 管制之國家與 NGO 組織更積極希望國際公約重視此項管制提案。且歐盟亦在周邊會議會場公開介紹其委員會與議會課正審議中的含氟氣體管制修正案（F-Gas Regulation），預計對 HFCs 等含氟氣體訂定減量期程與申報作業，值得我國密切關注。臺灣近年 HFCs 用量亦呈大幅增加的趨勢，未來是否有其他可行的替代技術，以避免可能的管制，建議我國政府應展開相關評估與研擬因應方案。

研究數據發現近年來以 ODS 作為生產各類產品之原料用量已增加，但依據蒙特婁議定書規範，此類用途並未納入消費量管制。為避免此類問題擴大，造成 ODS 仍無限制生產，將要求 TEAP 對 ODS 作為原料用途進行研究，並預期增加的使用量和監控相關使用。本次會議決議請各締約國依照 Article 7 規範，申報原料用途之 ODS 數量、要求各締

約國減少 ODS 原料用途產生的排放、鼓勵締約國在技術可行的狀況下使用替代品、要求各締約國在 2014 年 1 月 31 日前報告各國國內使用 ODS 為原料之製程及使用狀況、要求各締約國在無機密的情況下回報新式可用的替代品資訊。目前這項資料的收集研究為自願性質，但我國應密切注意其發展，以研擬因應方案。

柒、 結論與建議

本次會議於 11 月 16 日晚上 10 點 5 分結束，大會共計產出 14 項實質性與 11 項程序性決議，重點包括：審議 2013 年必要用途(Essential Use Exemptions) 與 2014 年關鍵用途(Critical Use Exemptions) 豁免、溴化甲烷用於檢疫與裝運前處理(Quarantine and pre-shipment, 簡稱 QPS)、外國籍船舶維修使用 ODS 之貿易管理、新增 ODS 替代品資訊、蒙特婁議定書財務機制提名與運作程序、科學評估小組(Scientific Assessment Panel, SAP) 審議 RC-316c、原料用途等議題。重要議題說明如下：

一、 外國籍船舶維修使用 ODS 之貿易管理

(一) 為監控管理各締約國於其港口提供外國籍船舶購買或充填 ODS 之用量計算，本次會議希望建置統一機制，以掌控全球 ODS 流通資料。本次會議決議要求 TEAP 在 2013 年進度報告提交關於海運部門冷凍藏空調之冷媒需求使用更新資料、鼓勵各締約國與其各利益相關者於新造船舶上使用之 ODS 量達最少化，以環境友善與能源效率為考量尋找可行的替代品。

(二) 我國應密切注意蒙特婁議定書的要求時程並預作準備，展開國內廠商維修船隻之相關調查，以提供資訊給臭氧秘書處。另建議調查我

國造船廠是否仍有以舊式冷媒系統建造新式船隻的狀況。

二、 溴化甲烷檢疫與裝運前處理

(一) 締約國依據蒙特婁議定書 Article 7 申報 QPS 用途數據係採自願方式，對於目前數據顯示國際間 QPS 用途大幅增長問題，決議由技術與經濟評估委員會（Technology and Economic Assessment Panel, TEAP）於第 33 次不限成員工作小組會議(Open-Ended Working Group, OEWG-33)時，提出溴化甲烷 QPS 用途趨勢分析資料。此外，也邀集各締約國建立資料收集程序，於 2013 年 3 月 31 日前依秘書處規定格式，採自願方式提供相關資料。本次會議也特別邀請國際植物保護公約(International Plant Protection Convention, IPPC) 秘書處參與，並與臭氧秘書處簽訂合作備忘錄，共同為減少 QPS 溴化甲烷使用量努力。會議中 IPPC 秘書長表示，其既有之系統化申請方式有助於各國釐清需防治的病蟲害，從而鼓勵締約國減少或是回用溴化甲烷。

(二) 我國應密切注意臭氧秘書處與 TEAP 要求之溴化甲烷相關資料申報作業，考量依格式調查我國使用資料，除了可提供國際參考外，亦可藉由相關資料的蒐集，掌握國內狀況，以做為政府未來研擬管制方案時參考。

三、 必要用途與關鍵用途豁免：

(一) 今年締約國再次針對 2013 年 ODS 必要用途與 2014 年的溴化甲烷關鍵用途豁免進行審議，讓無技術及經濟可行的 ODS 在消費量與生產量管制下可繼續申請。

(二) 締約國大會決議核准 MTOC 所建議的 CFC 豁免數量，中國大陸 386.82 公噸，俄羅斯 212 公噸，並要求仍將提出豁免申請的締約國（如中國大陸與俄羅斯）需要提供 MTOC 相關的充足資訊，以作為日後評估之用。另外，希望締約國獲得 2013 年豁免者，應優先考慮使用庫存 CFCs，並應通知秘書處。取得豁免者也應審視其國內相關法令，以禁止販售含 CFCs 的 MDIs 達推廣新式產品目的。另外，秘書處也要求中方對於部分區域缺乏替代品，或是目前正在進行的替代技術努力等提供相關訊息，以利評估。

(三) 由美國、加拿大、澳洲提出的 2014 年溴化甲烷關鍵用途申請，MBTOC 報告目前的 CUNs 減少的態勢，主席 Ian Porter 指出澳洲、加拿大與美國的溴化甲烷豁免申請主要用在草莓等作物的生產上，在無適當替代物的狀況下，仍將在此項目上使用溴化甲烷。而 TEAP 共同主席 Ms. Marta Pizano 介紹了目前的溴化甲烷 CUN 手冊編修狀況，並刪除了經濟指標作為用途與分類的條文。歐盟則建議是否針對易遭病蟲害的作物如草莓採用無土壤栽種的方式替代。墨西哥則建議各締約國以現有的庫存作為使用為主，未來應以完全削減為目標。澳洲則要求彈性使用其 2014 年的 CUE 額度於 2013 年的包裝稻米燻蒸，並且稱這樣有助於該國提早一年轉換至其他的替代技術，並且不會有額外的溴化甲烷使用。加拿大表示 2015 年將不會對麵粉磨坊提出溴化甲烷燻蒸的豁免需求。締約國大會決議依照附錄內容同意 2014 年的關鍵用途豁免數量、同意澳洲的要求將 2014 年 CUE 中的 1.187 公噸溴化甲烷轉移至 2013 年用於燻蒸包裝稻米、要求美國、澳洲、加拿大提供 MBTOC 相關經濟可行的替代技術。

(四) 此項決議對我國影響較小，但我國仍應持續蒐集相關資訊，以作為未來廠商申請時之評估參考。

四、 作為 ODS 替代品之 HFCs 管制

(一) HFCs 作為 CFCs 與 HCFCs 的替代品，但也是造成全球暖化的溫室氣體之一。今年為討論 HFCs 是否納入蒙特婁議定書管制範圍的第四年，關於該修正案，美國再次強調締約國有義務逐步削減對環境不友善之物質，並提出建議的減量時程。另一方面，巴西、印度、南非及中國仍強烈反對有關 HFCs 的管制提案，認為 HFCs 物質應屬於京都議定書的管制範圍，於蒙特婁議定書對 HFCs 進行管制是僭越執行權力。因此，本次會議仍無法達成共識而未產生決議文件。不過，累計至今，全球已有 106 個締約國支持去年 MOP 中有關管制 HFCs 的峇厘宣言，且歐盟已提出含氟氣體管制修正案 (F-Gas Regulation) 送交委員會與議會審議，另各國也積極展開低全球暖化潛勢值(Global Warming Potential, GWP)替代品之研發，可見推動減少使用高 GWP 值之 HFCs 趨勢已於國際間展開，值得我國關注與因應。

(二) 我國目前 HFCs 主要使用於冷媒、滅火劑、PU 發泡劑、飲水機、除濕機等用途，種類包括 HFC-134a、HFC-227ea、R-410A 等。因 CFCs 與 HCFCs 削減管制，HFCs 使用量逐年增加，若 HFCs 遭納入管制，將會受到衝擊。且因我國的 HCFCs 於 2015 年將再自 25% 削減至 10%，後續 HFCs 使用量將持續增加，而我國因地處熱帶與亞熱帶，天氣較潮溼與炎熱，對冷凍空調產品依賴性較高，且有許多中小企業廠商，對於 HFCs 之管制實應持續關注。另建議政府應

展開相關研發工作，協助國內廠商轉為使用零或低 GWP 值的替代品。

五、原料用途之使用量增加

(一) 研究數據發現近年來以 ODS 作為生產各類產品之原料用量已增加，但依據蒙特婁議定書規範，此類用途並未納入消費量管制。為避免此類問題擴大，造成 ODS 仍無限制生產，將要求 TEAP 對 ODS 作為原料用途進行研究，並預期增加的使用量和監控相關使用。本次會議決議請各締約國依照 Article 7 規範，申報原料用途之 ODS 數量、要求各締約國減少 ODS 原料用途產生的排放、鼓勵締約國在技術可行的狀況下使用替代品、要求各締約國在 2014 年 1 月 31 日前報告各國國內使用 ODS 為原料之製程及使用狀況、要求各締約國在無機密的情況下回報新式可用的替代品資訊。目前這項資料的收集研究為自願性質。

(二) 我國應密切注意臭氧祕書處與 TEAP 要求之相關資料申報作業，考量依格式調查我國使用資料，除了可提供國際參考外，亦可藉由相關資料的蒐集，掌握國內狀況，以做為政府未來研擬管制方案時參考。

六、ODS 替代品資訊新增

(一) TEAP 目前正尋求其他專家進行 ODS 替代品與替代技術的相關資訊調查。TEAP 將於 OEWG-33 提交一份草擬的報告，並於 MOP-25 提出正式的報告。內容包括收集所有商業可行且技術可行的 ODS 替代品，且需在環境友善下考量其效果，包括對人體的健康、安全

等環境特性，並評估其成本效益，包含在高環境溫度與人口稠密城市下的替代；依據替代技術的發展提供 TEAP 先前報告的更新資料；確認環境友善替代物質的商業化發展障礙與限制；評估替代品對環境的可能負面影響；確認未來 HCFCs 之環境友善替代品之選擇性。其實此議題為北美國家嘗試將 HFCs 導入蒙特婁議定書管理的策略，藉由資訊的建立，讓日後的談判具有正當性。

(二) 我國應密切注意相關評估報告，分析整理以供國內相關研發單位參考，並建議多加宣導相關資訊，以推動國內零或低 GWP 值的替代品的研發與相關管理方案。

捌、 舉辦會議與各國交流活動

我國代表團於本次 MOP-24 締約國大會首次於邀請來賓參與本團舉辦之氟氯烴（HCFCs）減量管理與替代品推動策略會議（HCFCs Phase-out Management and Alternatives Implementation Strategy）。因開發中國家正要展開 HCFCs 的削減，對於電子業需使用 HCFC-141b 於製程清洗，發泡產品需使用 HCFC-141b，以及冷凍空調設備需使用 HCFCs 冷媒，臺灣有長足的推動 HCFCs 減量管理經驗，包括核配制度與禁用方案，控制每年的 HCFCs 消費量上限值。以及如何輔導與鼓勵廠商使用替代品的推動策略，成功自 1996 年至今已削減 75% 消費量，期望透過本次會議與開發中國家進行分享。此外，使用廣泛冷凍空調設備的臺灣，未來又需面對低 GWP 值替代品的挑戰，也期望藉由此次研討會與各界進行討論。

會議議程由工研院綠能所胡耀祖副所長與談「國內 HCFCs 核配機制與替代品推廣（HCFCs Allocation Mechanism and Alternatives Promotion in

Taiwan)」議題，討論臺灣 HCFCs 減量管理策略可提供給開發中國家的經驗，以及未來推動環境友善替代品的挑戰。來賓包括阿根廷、菲律賓、多明尼加、甘比亞、布吉納法索、海地、巴拿馬、帛琉、所羅門群島等國家約 10 多位外國人士參加，並於演講後紛紛提出該國推動破壞臭氧層管制物質削減與替代技術之問題，且積極表示希望能與臺灣合作，以解決其相關技術推廣問題，包括冷媒更換與填充之人員技術訓練及二手車冷媒更換問題，液化石油氣冷卻儲存問題等。因臺灣對於此類問題早已有經驗，也曾有接受國外人員來臺受訓經驗，未來可研擬推廣與合作工作，配合政府執行相關合作計畫。同時，來賓也針對我國如何成功藉由核配制度達到削減與管理目標與行政院環保署交換了寶貴的經驗。



圖 2、本次討論會議舉辦情形

本次除積極參加此次會議活動與舉辦會議外，並主動與各國代表交流，向國際表達臺灣積極參與國際公約，且遵循蒙特婁議定書對已開發國家的管制規範，達成削減破壞臭氧層物質的重要成果。本團在團長帶領下，於會議期間與 UNEP 臭氧秘書處秘書長 Mr. Marco González 會晤，除說明我國積極因應蒙特婁議定書的管制規範與成果外，並討論本次舉辦會議成果，秘書長表示後續我方與秘書處應有更多合作。另，本團亦與各國代表交流相關資

訊，包括：

- 與美國國務院負責環境與永續發展之副助理國務卿 **Mr. Danial A. Reifsnnyder** 會晤，除交流兩國在環境保護與永續發展的努力外，也感謝美方長期支持我國實質參與國際公約行動的協助。
- 與歐盟比利時氣候變遷部門臭氧層與氟氣體政策指導面談我方推動低碳與零碳永續家園工作與臭氧層保護進展，獲得讚賞並期待後續經驗交流與可能合作機會。
- 與歐盟代表 **Mr. Alexandros Kiriazis** 交流關於外國籍船舶於本國港口消費 ODS 維修的議題，因為我國船舶常常註冊多個國籍以便通行其他口岸與運河，未來消費量登記時如何認定所屬國籍，將是個嚴肅的議題。歐盟代表表示建議以船舶於入港當日填報入港的船舶資料為主，即申報資料當日所提交「國籍」為原則，這樣不僅符合國際海事規則，也便於管理。
- 與國際植物保護公約（IPPC）秘書長 **Mr. Yukio Yokoi** 討論溴化甲烷管理議題，並獲同意參與我國溴化甲烷專家平台會議。
- 與德國政府資助的研究單位 **GIZ** 討論 HCFCs 替代品發展，提供計畫主持人 **Ms. Linda Ederberg** 名片，希望我們後續可與其聯繫討論相關議題。

本次會議期間，會場有來自德國與日本等技術研究與推廣單位，積極推廣自然冷媒（包括碳氫化合物、CO₂ 及氨等），因此我國後續應展開分析國內使用 HFCs 冷媒於冷凍空調之相關資訊，並評估國際公約管制對國內冷凍空調產業之影響，以及自然冷媒於國內應用的相關因應措施。

玖、心得

- 一、我國雖非蒙特婁議定書締約國，但自始即遵守蒙特婁議定書對非第五條國家管制規範，包括，1994 年即廢除海龍，於 1996 年即廢除 CFCs 並計已削減超過 13 ODP 千公噸。而於 1996 年即開始削減 HCFCs，至 2010 年已削減 486 ODP 公噸，即 75% 消費量基準量，且自 2003 年即停止非 QPS 用途使用溴化甲烷等，相關成果已獲國際肯定。
- 二、本次會議再次受到各國強烈討論的是有關 HFCs 的議題，包括 HFCs 是否納入蒙特婁議定書管制，以及如何減少生產 HCFC-22 時副產品 HFC-23 之排放有關的資金補助、清潔生產等議題，雖然最後仍然遭到印度、俄羅斯、中國大陸、巴西、南非等國的反對，原因包括印度與中國大陸為主要 HFCs 生產國家以及 HFC-23 相關 CDM 計畫之碳額度產生國等。不過，去年 MOP 會議提出的峇里宣言（Bali Declaration）至今已獲 105 個國家簽署希望研擬高 GWP 值 HFCs 管制因應方案，且歐盟近期亦提出含氟氣體管制修正案（F-Gas Regulation）送交委員會與議會審議。此外，本次會議期間，會場有來自德國與日本等技術研究與推廣單位，積極推廣自然冷媒（包括碳氫化合物、CO₂ 及氨等）。雖然，今年仍未產生任何與 HFCs 有關之決議，但為避免我國產業持續廣泛使用 HFCs，我國後續應展開評估國內使用 HFCs 冷媒於冷凍空調之相關資訊，及國際公約管制對國內冷凍空調產業之影響，並研擬自然冷媒於國內應用的相關因應措施等資訊。
- 三、我國向國際表達我國積極參與國際公約，從配合國際管制時程，採取策略性目標、建置核配制度、逐步對蒙特婁議定書列管化學物質進行管控，已具有相當成效。

四、我國未來工作重點包括：研擬下一階段（104 年）HCFCs 削減之目標；推動既有設備運轉維修時應減少 ODS 物質不當洩漏的管理程序；減少溴化甲烷使用於 QPS 用途管制；ODS 物質庫的管理（包括使用中設備內的 ODS 與設備被銷毀的 ODS 等的回收、儲存、處理）；評估我國 HFCs 使用趨勢與國際管制之產業衝擊及因應方案；未來將持續派員參與國際公約相關會議，以拓展我國國際參與空間，掌握全球脈動，達到臭氧層保護之目標。

五、將持續與 UNEP 臭氧秘書處及各國專家建立聯繫合作，掌握國際動態，與各國共同重視臭氧層保護及相關氣候變遷等環境議題，展現我國在地球環境保護工作上的成果。

壹拾、附件

一、蒙特婁議定書第24次締約國大會會議議程

Provisional agenda of the Twenty-fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer

二、蒙特婁議定書第24次締約國大會會議報告書全文

Report of the Twenty-fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer

三、會議決議案

The Twenty-fourth Meeting of the Parties decides

四、ENB會議記錄

Earth Negotiations Bulletin : A Reporting Service for Environment and Development Negotiations, Published by the International Institute for Sustainable Development (IISD)



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**United Nations
Environment
Programme**

**Twenty-Fourth Meeting of the Parties to
the Montreal Protocol on Substances
that Deplete the Ozone Layer**
Geneva, 12–16 November 2012

Provisional agenda

I. Preparatory segment (12–14 November 2012)

1. Opening of the preparatory segment:
 - (a) Statements by representative(s) of the Government of Switzerland;
 - (b) Statements by representative(s) of the United Nations Environment Programme.
2. Organizational matters:
 - (a) Adoption of the agenda of the preparatory segment;
 - (b) Organization of work.
3. Administrative matters:
 - (a) Consideration of membership of Montreal Protocol bodies for 2013;
 - (b) Financial reports of the trust funds and budgets for the Montreal Protocol.
4. Issues related to exemptions from Article 2 of the Montreal Protocol:
 - (a) Nominations for essential-use exemptions for 2013;
 - (b) Nominations for critical-use exemptions for 2014;
 - (c) Quarantine and pre-shipment issues;
 - (d) Feedstock uses.
5. Additional information on alternatives to ozone-depleting substances.
6. Procedural issues related to the Technology and Economic Assessment Panel and its subsidiary bodies.
7. Proposal on trade of controlled substances with ships sailing under a foreign flag.
8. Investigation of carbon tetrachloride discrepancy.
9. Evaluation of the financial mechanism of the Montreal Protocol.
10. Proposal on clean production of HCFC-22 through by-product emission control.
11. Proposal on additional funding for the Multilateral Fund for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons.
12. Proposal on funding of production facilities for hydrochlorofluorocarbons.

13. Proposal on the review by the Scientific Assessment Panel of RC-316c.
14. Proposal on the implications of the outcome document of the United Nations Conference on Sustainable Development for small island developing States with regard to the implementation of the Montreal Protocol.
15. Proposed amendments to the Montreal Protocol.
16. Compliance and data reporting issues:
 - (a) Proposal on the differences between data reported on imports and data reported on exports;
 - (b) Presentation on and consideration of the work and recommended decisions forwarded by the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol.
17. Other matters.

II. High-level segment (15 and 16 November 2012)

1. Opening of the high-level segment:
 - (a) Statements by representative(s) of the Government of Switzerland;
 - (b) Statements by representative(s) of the United Nations Environment Programme;
 - (c) Marking the twenty-fifth anniversary of the Montreal Protocol;
 - (d) Statement by the President of the Twenty-Third Meeting of the Parties to the Montreal Protocol.
 2. Organizational matters:
 - (a) Election of officers for the Twenty-Fourth Meeting of the Parties to the Montreal Protocol;
 - (b) Adoption of the agenda of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol;
 - (c) Organization of work;
 - (d) Credentials of representatives.
 3. Status of ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol and the amendments to the Montreal Protocol.
 4. Presentations by the assessment panels on the status of their work, including the latest developments.
 5. Presentation by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund's implementing agencies.
 6. Statements by heads of delegation.
 7. Report by the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the Twenty-Fourth Meeting of the Parties.
 8. Dates and venue for the Twenty-Fifth Meeting of the Parties to the Montreal Protocol.
 9. Other matters.
 10. Adoption of decisions by the Twenty-Fourth Meeting of the Parties to the Montreal Protocol.
 11. Adoption of the report of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol.
 12. Closure of the meeting.
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**Twenty-Fourth Meeting of the Parties to
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**Annotations to the provisional agenda of the Twenty-Fourth
Meeting of the Parties to the Montreal Protocol**

I. Preparatory segment (12–14 November 2012)

A. Opening of the preparatory segment (item 1 of the provisional agenda for the preparatory segment)

1. The preparatory segment of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer will be opened by the co-chairs of the Open-ended Working Group of the Parties to the Montreal Protocol at 10 a.m. on Monday, 12 November 2012, at the Centre International des Conférences, Geneva. The meeting will be preceded by a seminar on Sunday 11 November at the same venue commemorating the twenty-fifth anniversary of the Montreal Protocol. Registration of participants will begin at 9 a.m. on Friday, 9 November 2012, at the meeting venue. Participants are encouraged to register well in advance of the meeting through the Ozone Secretariat's website (<http://ozone.unep.org> or <http://www.montreal-protocol.org>), and are urged to bring their own laptop computers to the meeting, which will be virtually paperless. The opening of the meeting will include celebratory activities and statements by representatives of the Government of Switzerland and the United Nations Environment Programme.

B. Organizational matters (item 2 of the provisional agenda for the preparatory segment)

1. Adoption of the agenda of the preparatory segment

2. The provisional agenda set forth in document UNEP/OzL.Pro.24/1 will be before the parties for adoption.

2. Organization of work

3. The meeting will be divided into two components: a three-day preparatory segment and a two-day high-level segment. Ms. Gudi Alkemade (Netherlands) and Mr. Ghazi Odat (Jordan) will co-chair the preparatory segment; the high-level segment will be led by a bureau selected by the parties attending. The parties may wish to conduct their work in plenary sessions and contact groups as appropriate. The co-chairs of the preparatory segment are expected to draw up a detailed timetable to cover the work on the agenda for that segment.

C. Administrative matters (item 3 of the provisional agenda for the preparatory segment)**1. Consideration of membership of Montreal Protocol bodies for 2013**

4. The preparatory segment of the meeting of the Parties is expected to recommend to the high-level segment draft decisions proposing 2013 membership for the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol and the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, as well as co-chairs of the Open-ended Working Group for 2013. Draft proposals designed to forward proposed members for the consideration of the high-level segment of the meeting can be found as draft decisions XXIV [BB], [CC] and [DD] in section III of document UNEP/OzL.Pro.24/8.

2. Financial reports of the trust funds and budgets for the Montreal Protocol

5. The financial reports and budgets of the Montreal Protocol are considered annually by the parties. The budget documents and the financial reports for the current meeting carry the symbols UNEP/OzL.Pro.24/7 and Add.1, respectively. Under this agenda item, the parties are expected to establish a budget committee during the preparatory segment to deliberate on and recommend a draft budget decision for formal adoption, as appropriate, during the high-level segment.

D. Issues related to exemptions from Article 2 of the Montreal Protocol (item 4 of the provisional agenda for the preparatory segment)**1. Nominations for essential-use exemptions for 2013**

6. The Meeting of the Parties is expected to discuss and take a decision on the nominations of China and the Russian Federation for essential-use exemptions for chlorofluorocarbons. Draft decisions on related issues which were discussed by the Open-ended Working Group at its thirty-second meeting can be found as draft decisions XXIV/[A] and XXIV/[B] in section II of document UNEP/OzL.Pro.24/8.

2. Nominations for critical-use exemptions for 2014

7. The Meeting of the Parties is expected to discuss and take a decision on the nominations of Australia, Canada and the United States of America for critical-use exemptions for methyl bromide. The Meeting of the Parties may also consider an update of the handbook on critical-use nominations prepared by the Technology and Economic Assessment Panel and its Methyl Bromide Technical Options Committee.

3. Quarantine and pre-shipment issues

8. At the thirty-second meeting of the Open-ended Working Group the parties discussed and formed a contact group to consider a draft decision on quarantine and pre-shipment uses of methyl bromide submitted by the European Union and Croatia. The parties are expected to engage in further discussion of that draft decision, which can be found as draft decision XXIV/[C] in section II of document UNEP/OzL.Pro.24/8.

4. Feedstock uses

9. At its thirty-second meeting, the Open-ended Working Group formed a contact group to consider a draft proposal from the European Union and Croatia on feedstock uses of ozone-depleting substances. The draft proposal emanating from that contact group, which the Working Group agreed to forward to the Twenty-Fourth Meeting of the Parties for further discussion, can be found as draft decision XXIV/[D] in section II of document UNEP/OzL.Pro.24/8.

E. Additional information on alternatives to ozone-depleting substances (item 5 of the provisional agenda for the preparatory segment)

10. At its thirty-second meeting, the Open-ended Working Group formed a contact group to consider the work of the Technology and Economic Assessment Panel and a draft proposal from the United States on additional information on alternatives to ozone-depleting substances. The draft proposal emanating from that contact group, which the Working Group agreed to forward to the Twenty-Fourth Meeting of the Parties for further discussion, can be found as draft decision XXIV/[E] in section II of document UNEP/OzL.Pro.24/8.

F. Procedural issues related to the Technology and Economic Assessment Panel and its subsidiary bodies (item 6 of the provisional agenda for the preparatory segment)

11. At its thirty-second meeting, the Open-ended Working Group heard a presentation by the Technology and Economic Assessment Panel on proposals related to the operation of the Panel. Subsequent to that presentation, the Working Group formed a contact group to consider the work of the Panel and a draft proposal by the United States on guidelines on recusal, guidelines on the appointment of co-chairs of the Panel, a revision of the number of members of each of the Panel's subsidiary bodies and an update of the terms of reference of the Panel and its technical options committees and temporary subsidiary bodies. The draft proposal emanating from that contact group, which the Working Group agreed to forward to the Twenty-Fourth Meeting of the Parties for further discussion, can be found as draft decision XXIV/[F] in section II of document UNEP/OzL.Pro.24/8.

G. Proposal on trade of controlled substances with ships sailing under a foreign flag (item 7 of the provisional agenda for the preparatory segment)

12. At its thirty-second meeting, the Open-ended Working Group formed a contact group to consider a draft proposal from the European Union on issues related to trade of controlled substances with ships sailing under a foreign flag. The draft proposal emanating from that contact group, which the Working Group agreed to forward to the Twenty-Fourth Meeting of the Parties for further discussion, can be found as draft decision XXIV/[G] in section II of document UNEP/OzL.Pro.24/8.

H. Investigation of carbon tetrachloride discrepancy (item 8 of the provisional agenda for the preparatory segment)

13. In accordance with decision XXIII/8, the Twenty-Fourth Meeting of the Parties is expected to hear an update from the assessment panels on the possible reasons for the identified discrepancies in top-down and bottom-up estimates of atmospheric abundance of carbon tetrachloride.

I. Evaluation of the financial mechanism of the Montreal Protocol (item 9 of the provisional agenda for the preparatory segment)

14. In accordance with decision XXII/2, the Open-ended Working Group at its thirty-second meeting considered the final draft of the independent evaluation of the financial mechanism and agreed upon a process for its finalization, including submission of comments by parties and consideration of those comments by ICF. The Meeting of the Parties is expected to discuss the final evaluation report and consider what recommendations, if any, it would like to make to the high-level segment of the Meeting of the Parties.

J. Proposal on clean production of HCFC-22 through by-product emission control (item 10 of the provisional agenda for the preparatory segment)

15. At its thirty-second meeting, the Open-ended Working Group formed a contact group to consider a draft proposal from Burkina Faso, Canada, the Comoros, Egypt, Mexico, Senegal and the United States on clean production of hydrochlorofluorocarbon-22 (HCFC-22) through by-product emission control. The draft proposal emanating from that contact group, which the Working Group agreed to forward to the Twenty-Fourth Meeting of the Parties for further discussion, can be found as draft decision XXIV/[H] in section II of document UNEP/OzL.Pro.24/8.

K. Proposal on additional funding for the Multilateral Fund for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons (item 11 of the provisional agenda for the preparatory segment)

16. At the thirty-second meeting of the Open-ended Working Group the parties discussed a draft decision submitted by Switzerland on additional funding for the Multilateral Fund to maximize climate benefits of the accelerated phase-out of HCFCs. The parties are expected to continue their deliberations on that draft decision, which can be found as draft decision XXIV/[I] in section II of document UNEP/OzL.Pro.24/8.

L. Proposal on funding of production facilities for hydrochlorofluorocarbons (item 12 of the provisional agenda for the preparatory segment)

17. At the thirty-second meeting of the Open-ended working Group, India put forward a draft decision on Multilateral Fund funding for facilities producing hydrochlorofluorocarbons. The parties are expected to continue their deliberations on that draft decision, which can be found as draft decision XXIV/[L] in document UNEP/OzL.Pro.24/8.

M. Proposal on the review by the Scientific Assessment Panel of RC-316c (item 13 of the provisional agenda for the preparatory segment)

18. At the thirty-second meeting of the Open-ended Working Group the parties discussed a draft decision from Australia, Canada, Norway, Switzerland, the United States and the European Union which called for the Scientific Assessment Panel to review the ozone-depletion potential and global-warming potential of RC-316c, a newly identified ozone-depleting substance. The parties are expected to continue their deliberations on that draft decision, which can be found as draft decision XXIV/[J] in section II of document UNEP/OzL.Pro.24/8.

N. Proposal on the implications of the outcome document of the United Nations Conference on Sustainable Development for small island developing States with regard to the implementation of the Montreal Protocol (item 14 of the provisional agenda for the preparatory segment)

19. At the thirty-second meeting of the Open-ended Working Group, the parties discussed a draft decision submitted by Saint Lucia and Trinidad and Tobago on the implications for small island developing State implementation of the Montreal Protocol of the outcome document of the United Nations Conference on Sustainable Development. The parties are expected to continue their deliberations on that draft decision, which can be found as draft decision XXIV/[K] in section II of document UNEP/OzL.Pro.24/8.

O. Proposed amendments to the Montreal Protocol (item 15 of the provisional agenda for the preparatory segment)

20. In accordance with paragraph 2 of article 9 of the Vienna Convention for the Protection of the Ozone Layer, the Government of the Federated States of Micronesia and the Governments of Canada, Mexico and the United States submitted proposals to amend the Montreal Protocol to control hydrofluorocarbons, among other things. Those proposals can be found in documents UNEP/OzL.Pro.24/5 and UNEP/OzL.Pro.24/6, respectively.

P. Compliance and data reporting issues (item 16 of the provisional agenda for the preparatory segment)

1. Proposal on the differences between data reported on imports and data reported on exports

21. At its thirty-second meeting, the Open-ended Working Group formed a contact group to consider a draft proposal on issues related to differences in data reported for imports and exports. The draft proposal emanating from that contact group, which the Working Group agreed to forward to the Twenty-Fourth Meeting of the Parties for further discussion, can be found as draft decision XXIV/[M] in section II of document UNEP/OzL.Pro.24/8.

2. Presentation on and consideration of the work and recommended decisions forwarded by the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol

22. The President of the Implementation Committee is expected to report on the status of ratification of the Vienna Convention, the Montreal Protocol and the amendments to the Protocol, in addition to issues considered at the Committee's forty-eighth and forty-ninth meetings. A draft decision recording the status of ratification is included as draft decision XXIV/[AA] in section III of document UNEP/OzL.Pro.24/8. Any compliance-related proposals for draft decisions emanating from the Committee's meetings are expected to be distributed to the parties on the second day of the preparatory segment. The parties are expected to consider the related issues and make recommendations for the high-level segment, as appropriate.

Q. Other matters (item 17 of the provisional agenda for the preparatory segment)

23. Under this item, the parties will consider other matters agreed at the time of the adoption of the agenda.

II. High-level segment (15 and 16 November 2012)

A. Opening of the high-level segment (item 1 of the provisional agenda for the high-level segment)

24. The high-level segment of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol is scheduled to be opened on 15 November at 10 a.m.

1. **Statements by representative(s) of the Government of Switzerland**
2. **Statements by representative(s) of the United Nations Environment Programme**
3. **Marking the twenty-fifth anniversary of the Montreal Protocol**
4. **Statement by the President of the Twenty-Third Meeting of the Parties to the Montreal Protocol**

25. Opening statements will be made by representatives of the Government of Switzerland and the United Nations Environment Programme and by the President of the Twenty-Third Meeting of the Parties.

B. Organizational matters (item 2 of the provisional agenda for the high-level segment)

1. **Election of officers for the Twenty-Fourth Meeting of the Parties to the Montreal Protocol**

26. In accordance with rule 21 of the rules of procedure, the parties must elect a president, three vice-presidents and a rapporteur. A representative of a party from the group of African countries presided over the Twenty-Third Meeting of the Parties, while a representative of a party from the group of Western European and other countries served as rapporteur. Following the principle of regional rotation agreed on by the parties, the parties may wish to elect a representative of a party from the group of Asian and Pacific countries to preside over the Twenty-Fourth Meeting of the Parties and to elect a representative of a party from the group of African countries as rapporteur. The parties may also wish to elect three additional vice-presidents, one each from the group of Western European and other countries, the group of Latin American and Caribbean countries and the group of Eastern European countries.

2. **Adoption of the agenda of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol**

27. The parties may wish to adopt the agenda for the high-level segment, including any items that they may agree to include under item 9, "Other matters".

3. **Organization of work**

28. The President of the Twenty-Fourth Meeting of the Parties is expected to outline a plan of work to enable the agenda items to be covered.

4. **Credentials of representatives**

29. In accordance with rule 18 of the rules of procedure, the credentials of representatives must be submitted to the Executive Secretary of the meeting, if possible not later than 24 hours after the opening of the meeting. In accordance with rule 19 of the rules of procedure, the officers of the meeting must examine the credentials and submit their report thereon to the parties.

C. Status of ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol and the amendments to the Montreal Protocol (item 3 of the provisional agenda for the high-level segment)

30. The parties will review the status of ratification of the instruments agreed under the ozone regime. A draft decision recording the status of ratification can be found as XXIV/[AA] in section III of document UNEP/OzL.Pro.24/8.

D. Presentations by the assessment panels on the status of their work, including the latest developments (item 4 of the provisional agenda for the high-level segment)

31. The assessment panels will make brief presentations on their work with a particular focus on any new developments.

E. Presentation by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund's implementing agencies (item 5 of the provisional agenda for the high-level segment)

32. The Chair of the Executive Committee of the Multilateral Fund will present the report of the Executive Committee to the parties, as circulated in document UNEP/OzL.Pro.24/9.

F. Statements by heads of delegation (item 6 of the provisional agenda for the high-level segment)

33. Heads of delegations will be invited to make statements.

G. Report by the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the Twenty-Fourth Meeting of the Parties (item 7 of the provisional agenda for the high-level segment)

34. The co-chairs of the preparatory segment will be invited to report on the progress made in reaching consensus on the substantive issues on the agenda.

H. Dates and venue for the Twenty-Fifth Meeting of the Parties to the Montreal Protocol (item 8 of the provisional agenda for the high-level segment)

35. The parties will be provided with any information available regarding the potential venue for the Twenty-Fifth Meeting of the Parties.

I. Other matters (item 9 of the provisional agenda for the high-level segment)

36. Any additional substantive issues agreed for inclusion on the agenda under item 2 (b), "Adoption of the agenda", will be taken up under this agenda item.

J. Adoption of decisions by the Twenty-Fourth Meeting of the Parties to the Montreal Protocol (item 10 of the provisional agenda for the high-level segment)

37. The parties will adopt the decisions to be taken at the current meeting.

K. Adoption of the report of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol (item 11 of the provisional agenda for the high-level segment)

38. The parties will adopt the report of the meeting.

L. Closure of the meeting (item 12 of the provisional agenda for the high-level segment)

39. The Twenty-Fourth Meeting of the Parties is expected to close by 6 p.m. on Friday, 16 November 2012.



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**Twenty-Fourth Meeting of the Parties to
the Montreal Protocol on Substances
that Deplete the Ozone Layer**
Geneva, 12–16 November 2012

Draft report of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer

Introduction

1. The Twenty-Fourth Meeting of the Parties to the Montreal Protocol was held at the Geneva International Conference Centre in Geneva from 12 to 16 November 2012. The meeting consisted of a preparatory segment from 12 to 14 November and a high-level segment on 15 and 16 November.

Part one: preparatory segment

I. Opening of the preparatory segment

2. The preparatory segment was opened by its co-chairs, Ms. Gudi Alkemade (Netherlands) and Mr. Ghazi Odat (Jordan) on Monday, 12 November 2012 at 10.10 a.m.

3. Opening statements were delivered by the representative of the Government of Switzerland, Mr. Bruno Oberle, Director of the Federal Office for the Environment, and Mr. Marco González, Executive Secretary of the Ozone Secretariat.

4. Mr. Oberle said that in the 25 years since the Montreal Protocol had been signed, much success had been seen; several ozone-depleting substances had been banned and the ozone layer was beginning to recover, although it would be at least 50 years until it again reached its original thickness. The success to date had largely been achieved because scientists had laid the foundations of the international community's understanding of the atmosphere and the ozone layer and Governments had understood the need to act quickly to offset the possible disastrous effects of the thinning of the ozone layer on the environment and public health. Also crucial to that success was the fact that developing countries had been greatly assisted in meeting their commitments under the Protocol through the Multilateral Fund for the Implementation of the Montreal Protocol.

5. The Montreal Protocol had also led to a reduction in greenhouse gas emissions. Although it had not been known at the time the Protocol was signed, ozone-depleting substances were also greenhouse gases. Despite the regulation of greenhouse gases under the Kyoto Protocol to the United Nations Framework Convention on Climate Change, the concentration in the atmosphere of one, hydrofluorocarbons (HFCs), was rising dramatically, threatening the climate benefits already gained. HFCs were being introduced primarily as alternatives to hydrochlorofluorocarbons (HCFCs), an ozone-depleting substance being phased out under the Montreal Protocol. The Government of Switzerland urged parties to halt their use of HFCs and to adopt other alternatives to HCFCs. Acknowledging that proposed amendments to the Protocol aimed at subjecting HFCs to the Montreal Protocol and phasing down their use were viewed critically by a number of parties, his Government proposed that the institutional, financial, and technical implications of the amendments be examined and that the

Executive Committee of the Multilateral Fund be asked to assess the feasibility of a funding window for minimizing their climate impact. He also suggested that parties could provide voluntary contributions to cover the costs associated with non-HFC alternatives to HCFCs with minimal climate impact.

6. In his remarks the Executive Secretary noted that to commemorate the twenty-fifth anniversary of the signing of the Montreal Protocol, in 1987, several events and activities had been organized by the Secretariat and by Governments. Of particular note was a seminar that had been held in Geneva on 11 November 2012 on the theme of “protecting our atmosphere for generations to come”, which had provided the opportunity to remember all that had been achieved under the ozone treaties and the lessons that could be learned and applied when responding to other environmental threats, including climate change.

7. The Secretariat had produced several materials for the anniversary, including a press kit and new editions of the Montreal Protocol and Vienna Convention handbooks and had also launched a global youth video competition.

8. Despite the achievements of the Montreal Protocol to date, many challenges remained, as could be seen from the items on the agenda of the current meeting. Several issues – such as essential-use and critical-use exemptions, quarantine and pre-shipment and feedstock uses – were often major items of discussion, while new issues continued to appear, demanding the attention of the parties. At the current meeting parties would again be discussing some difficult matters and he urged all delegates, regardless of the outcomes, to participate in the discussions with the bold spirit shown by those who had negotiated the Montreal Protocol twenty-five years earlier, remembering the obligation of all nations, large, small, rich or poor, to act together for the protection of the planet.

9. Following his remarks the Executive Secretary presented awards to Dr. Stephen Andersen and Dr. Lambert Kuijpers, the two longest serving co-chairs of any of the assessment panels under the Montreal Protocol, for their outstanding contributions to the protection of the ozone layer. The awards recognized the time and effort that the co-chairs had devoted over many years to the protection of the ozone layer and their significant role in the development and evolution of the Protocol.

II. Organizational matters

A. Adoption of the agenda of the preparatory segment

10. The following agenda for the preparatory segment was adopted on the basis of the provisional agenda contained in document UNEP/OzL.Pro.24/1:

1. Opening of the preparatory segment:
 - (a) Statements by representative(s) of the Government of Switzerland;
 - (b) Statements by representative(s) of the United Nations Environment Programme.
2. Organizational matters:
 - (a) Adoption of the agenda of the preparatory segment;
 - (b) Organization of work.
3. Administrative matters:
 - (a) Consideration of membership of Montreal Protocol bodies for 2013;
 - (b) Financial reports of the trust funds and budgets for the Montreal Protocol.
4. Issues related to exemptions from Article 2 of the Montreal Protocol:
 - (a) Nominations for essential-use exemptions for 2013;
 - (b) Nominations for critical-use exemptions for 2014;
 - (c) Quarantine and pre-shipment issues;
 - (d) Feedstock uses.
5. Additional information on alternatives to ozone-depleting substances.
6. Procedural issues related to the Technology and Economic Assessment Panel and its subsidiary bodies.
7. Proposal on trade of controlled substances with ships sailing under a foreign flag.

8. Investigation of carbon tetrachloride discrepancy.
9. Evaluation of the financial mechanism of the Montreal Protocol.
10. Proposal on clean production of HCFC-22 through by-product emission control.
11. Proposal on additional funding for the Multilateral Fund for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons.
12. Proposal on funding of production facilities for hydrochlorofluorocarbons.
13. Proposal on the review by the Scientific Assessment Panel of RC-316c.
14. Proposal on the implications of the outcome document of the United Nations Conference on Sustainable Development for small island developing States with regard to the implementation of the Montreal Protocol.
15. Proposed amendments to the Montreal Protocol.
16. Compliance and data reporting issues:
 - (a) Proposal on the differences between data reported on imports and data reported on exports;
 - (b) Presentation on and consideration of the work and recommended decisions forwarded by the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol.
17. Other matters.

11. During the adoption of the agenda for the preparatory segment the parties agreed to include under agenda item 6, "Procedural issues related to the Technology and Economic Assessment Panel and its subsidiary bodies", the nomination of experts to serve on the Technology and Economic Assessment Panel. The parties further agreed to discuss under agenda item 17, "Other matters", a request for information on existing and planned policies that influenced the phase-out of ozone-depleting substances; the process of recruiting a new Chief Officer of the Multilateral Fund for the Implementation of the Montreal Protocol; the status of ratification of the Beijing Amendment to the Montreal Protocol; and the status of the Bali Declaration on Transitioning to Low Global Warming Potential Alternatives to Ozone-Depleting Substances.

12. During the discussion of the agenda, one representative questioned the inclusion on the agenda of items 4 (d), "Feedstock uses"; 10, "Proposal on clean production of hydrochlorofluorocarbon 22 through by-product emission control"; 11, "Proposal on additional funding for the Multilateral Fund for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons"; and 15, "Proposed amendments to the Montreal Protocol". The representative, supported by several others, said that, for various reasons, those items did not fall within the purview of the Montreal Protocol and therefore should not be discussed by the Meeting of the Parties. Regarding item 4, he said that feedstock uses of ozone-depleting substance were not covered by the Montreal Protocol and that further measures regarding them should be eschewed out of concern for important economic and confidentiality issues. Regarding item 10, he acknowledged that a very small amount of hydrofluorocarbon-23 emissions were formed as a by-product of the production of hydrochlorofluorocarbon-22, but their emissions were already controlled under the Framework Convention on Climate Change and the Kyoto Protocol. As to item 11, he recalled decision XIX/6, which envisaged neither maximization of climate benefits nor additional funding for the Multilateral Fund and stated only that the funding available through the Multilateral Fund for accelerated HCFC phase-out should be "stable and sufficient". Concerning item 15, he said that hydrofluorocarbons were not ozone-depleting substances and that the proposed amendment on their phase-out was therefore not appropriate, as the Montreal Protocol did not provide for the phase-out of non-ozone-depleting substances.

13. In response, one representative said that while feedstock uses were excluded from the calculation of consumption and production they were nevertheless covered by the Montreal Protocol. A number of decisions had been taken on feedstocks at previous meetings of the parties and the item thus needed to remain on the agenda. Recalling that the importance of control of HFCs had been underscored during the seminar on protecting our atmosphere for generations to come, the representative also expressed strong support for maintaining the proposed amendments on the agenda and discussing them in a formal contact group.

14. The Co-Chair said that, as there was no consensus to remove them, items 4 (d), 10, 11, and 15 would remain on the agenda, although consideration could be given when they were taken up to the best way to undertake the discussions on them.

B. Organization of work

15. The parties agreed to follow their customary procedure and to establish contact groups as necessary.

III. Administrative matters

C. Consideration of membership of Montreal Protocol bodies for 2013

16. Introducing the sub-item, the Co-Chair requested the regional groups to submit nominations to the Secretariat for several positions in Montreal Protocol bodies for 2013.

17. *[To be completed]*

D. Financial reports of the trust funds and budgets for the Montreal Protocol

18. Introducing the item, the Co-Chair noted that it had been the practice of the parties at past meetings to establish a budget committee to review budget-related documents and prepare one or more draft decisions on budgetary matters for consideration by the Meeting of the Parties. In accordance with that practice the parties agreed to establish such a committee, chaired by Mr. Ives Salas (Mexico) and Ms. Klara Wajdvova (Czech Republic).

19. *[To be completed]*

IV. Issues related to exemptions from Article 2 of the Montreal Protocol

A. Nominations for essential-use exemptions for 2013

1. Metered dose inhalers

20. Introducing the sub-item, the Co-Chair recalled that the Technology and Economic Assessment Panel had presented its recommendations on the nominations for 2013 exemptions for essential uses of controlled substances at the thirty-second meeting of the Open-ended Working Group of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer. Based on its discussion of those recommendations, the Working Group had forwarded to the Twenty-Fourth Meeting of the Parties for its consideration a draft decision on essential-use exemption nominations (UNEP/OzL.Pro.24/8, draft decision XXIV/[A]). Since the meeting of the Open-ended Working Group, China had provided to the Panel additional information on its essential-use nomination for the use of CFCs in metered-dose inhalers containing traditional Chinese medicines. The results of the review of that information by the Medical Technical Options Committee were set in the addendum to volume 1 of the Technology and Economic Assessment Panel's May 2012 progress report.

21. Ms. Helen Tope, co-chair of the Medical Technical Options Committee, gave a presentation on the Committee's review of the additional information provided by China, a summary of which is set out in annex [] to the present report. The Committee had concluded that China's proposed use of CFCs was not essential under decision IV/25 owing to the availability of suitable alternatives and was therefore unable to recommend the nominated CFCs for use. For 2013, China might wish to consider allocating CFCs for the proposed use from its authorized quantity to allow time for patient transition to alternatives.

22. Following the presentation, the representative of China said that the party could accept exclusion of 7 of the 9 tonnes nominated for exemption, but exclusion of 2 tonnes manufactured by one company in a remote area of China would create economic, social and human health problems in the locality. China therefore hoped that the nomination for that amount could be accepted while alternatives were put in place.

23. The representative of the Russian Federation thanked the Medical Technical Options Committee for considering its nomination for the use of CFCs in metered-dose inhalers and for authorizing the requested amount, stating that the party was committed to undertaking the necessary activities to comply with the planned phase-out of CFCs.

24. The representative of Bangladesh drew attention to his party's success in complying with its commitment to phase out the use of CFCs in metered-dose inhalers in 2012.

25. One representative, while noting the progress being made by many parties in eliminating the use of controlled substances under essential-use exemptions, expressed the hope that the Technology and Economic Assessment Panel could take into consideration in its deliberations on the nominations the large global stocks of CFCs that already existed and that it explain the obstacles preventing their use for pharmaceutical purposes by parties requesting exemptions.

26. Addressing the issues raised, Mr. Ashley Woodcock, co-chair of the Medical Technical Options Committee, stressed that in considering the case of China the Committee had worked to avoid discriminating in favour of modern medicines and had accordingly based its assessment solely on the criteria set out in decision IV/25. On the matter of international stocks of CFCs, he agreed that such stocks were of critical importance during the phase-out process, and he said that the Technology and Economic Assessment Panel would present information on the barriers to their use in its next report.

27. Following the presentation and discussion, it was agreed that an informal group of interested parties would further discuss the draft decision on essential-use nominations for controlled substances for 2013 and report to the parties on its discussions.

28. *[To be completed]*

2. Aerospace applications

29. The Co-Chair then introduced a draft decision on the nomination for essential-use exemption for CFC-113 for aerospace applications in the Russian Federation (UNEP/OzL.Pro.24/8, draft decision XXIV/[B]). The nomination had been discussed at the thirty-second meeting of the Open-ended Working Group and the draft decision aimed to address the concerns raised by some parties at that meeting.

30. The parties approved the draft decision on the matter for consideration and adoption during the high-level segment.

3. Marine cooling and refrigeration equipment on naval ships

31. At the request of the Co-Chair Mr. Lambert Kuijpers of the Refrigeration and Technical Options Committee then introduced an essential-use nomination by the Russian Federation for the use of 130 tonnes of CFC-12 in 2013 for the operation of marine cooling and refrigeration equipment in the party's naval fleet. He said that the nomination previously submitted to the Secretariat had been reviewed by the Technology and Economic Assessment Panel during the thirty-second meeting of the Open-ended Working Group and that bilateral discussions had taken place in October 2012, as outlined in document UNEP/OzL.Pro.24/2/Add.1. Following that discussion additional information had been submitted to the Panel.

32. He said that the nomination had been evaluated by refrigeration experts, following which the Russian Federation had been asked to supply further information, including on whether recycled substances could be obtained on the international market. Insufficient evidence had been provided to justify an essential-use exemption for use of CFC-12 on board ships. Thus, the Technology and Economic Assessment Panel was unable to recommend the nomination. The representative of the Russian Federation said that his Government understood the reasons for rejection of the application and thanked the Panel for considering the nomination.

B. Nominations for critical-use exemptions for 2014

33. Introducing the sub-item, the Co-Chair recalled that the Methyl Bromide Technical Options Committee had presented the results of its initial review of the 2013 and 2014 critical-use nominations at the thirty-second meeting of the Open-ended Working Group. Since then, several nominating parties provided further information, which the Panel had considered in further assessing the nominations.

34. Three of the four co-chairs of the Methyl Bromide Technical Options Committee, Mr. Ian Porter, Ms. Michelle Marcotte and Ms. Marta Pizano, made a detailed presentation on critical-use nominations, including trends in nominations, party reporting on methyl bromide stocks and the final recommendations on the 2013 and 2014 nominations. A summary of the presentation prepared by the presenters is set out in annex [] to the present report.

35. During the ensuing discussion, one representative said that the use of methyl bromide was still important to many developing countries, especially those that relied heavily on exports of a limited range of agricultural products, and that the requests of those parties for critical-use exemptions should be considered in that light. In addition, he sought clarification on the extent to which existing stocks of methyl bromide were taken into account in the assessment of critical-use nominations. Another representative said that greater efforts should be made to use existing stocks of methyl bromide and that more evaluation of and exchange of information on phase-out measures undertaken by similar

enterprises operating under similar geographical conditions would assist efforts to eliminate methyl bromide use.

36. The representative of Australia said that his party was seeking flexibility by requesting approval for its use, in 2013, of some part of its 2014 critical-use exemption for fumigating packaged rice. That flexibility would allow phase-out to take place one year earlier than planned, following which Australia would submit no further critical-use nominations for methyl bromide in the rice sector. On the matter of his country's critical-use nomination for strawberry runners, he said that the 10 per cent reduction for 2014 proposed by the Methyl Bromide Technical Options Committee presented difficulties for the party, as there had been insufficient time to undertake trials on the efficacy of soilless systems for subsequent generations of runners and the withdrawal of the registration for methyl iodide meant that that alternative was no longer available. The party was investigating a combination treatment that had the same efficacy as methyl bromide and planned to begin phase-out of methyl bromide use in 2015, and accordingly requested the parties to approve its critical-use nomination for 2014. Finally, on the matter of the handbook on critical use nominations for methyl bromide, he questioned the suggested change in paragraph 3.6.1 whereby the sub-committees of the Methyl Bromide Technical Options Committee could make recommendations to the Meeting of the Parties, saying that any recommendations should come from the Committee itself.

37. The representative of the United States of America said that the party had made considerable progress in reducing its reliance on methyl bromide and that its present request for an essential-use exemption represented less than 2 per cent of its baseline consumption. The withdrawal of iodomethane from the United States market, however, meant that a significant alternative to methyl bromide had been lost, and as a consequence the party might have to submit a supplemental critical-use nomination for 2014. Regarding the Methyl Bromide Technical Options Committee's recommendations, the United States had concerns about the recommended cut in its nomination for artisanal ham, given that there were no feasible alternatives for that use, and the cut would make it difficult to comply with national food safety regulations. In addition, the recommended reduction in the nomination for use in strawberry fields with high pest pressures presented difficulties, given the lack of feasible alternatives to methyl bromide for that purpose. The United States would therefore be submitting a conference room paper containing a draft decision requesting parties to approve the full amount of the artisanal ham and strawberry nominations. Finally, regarding the handbook, he expressed concern about the alteration by the Methyl Bromide Technical Options Committee of the economic guidelines referred to in paragraph 6 of decision Ex.I/4 and contained in section 4 of annex I to the report of the Sixteenth Meeting of the Parties,¹ which had been carefully negotiated during an extraordinary meeting of the parties. He also expressed agreement with the representative of Australia that recommendations should emanate from the Committee rather than its sub-committees.

38. The representative of Canada said that the party was fully committed to phasing out critical-use nominations for methyl bromide where alternatives were registered, technically feasible and could be introduced into the country, and it was pleased to announce that it did not intend to put forward a nomination for flour mills for 2015. The party, however, could not accept the recommendation of the Methyl Bromide Technical Options Committee that it switch in the near future to soilless cultivation of strawberry runners, as that would mean a large change to production methods not yet proven in Canada, presenting significant technical challenges, adding greatly to costs and causing market disruption. The party acknowledged that other parties had phased out the use of methyl bromide for strawberry cultivation, but those parties benefited from regional alternatives not available to Canada. The party had developed an action plan aiming to resolve the issue, but in the meantime it requested that the parties approve the full nomination requested for that use.

39. One representative, speaking on behalf of a group of countries, said that all parties in his region had succeeded in achieving a total phase-out of methyl bromide use for strawberry runners and that other parties should work to develop solutions to the problems identified. He also urged parties to accept the recommendations of the Methyl Bromide Technical Options Committee, which were based on the professional judgement of respected scientists using robust science. He expressed agreement with those parties who said that the large existing stocks of methyl bromide should be taken into account in the assessment of critical-use nominations.

40. Mr. Porter said that he had listened to the concerns expressed and hoped that most could be resolved in bilateral discussions with the parties concerned. He added that the consideration of methyl bromide stocks was an issue for the parties and that stocks were not taken into account in the technical recommendations of the Methyl Bromide Technical Options Committee.

1 UNEP/OzL.Pro.16/17.

41. Following the presentation and discussion, the Co-Chair suggested that parties with further concerns should consult bilaterally with the Methyl Bromide Technical Options Committee.

42. *[To be completed]*

C. Quarantine and pre-shipment issues

43. The Co-Chair introduced the sub-item, recalling that the representative of the European Union had put forward a draft decision on quarantine and pre-shipment uses of methyl bromide for consideration at the thirty-second meeting of the Open-ended Working Group. A contact group had been set up to consider the draft decision but had not had time to complete its work. The Working Group had therefore requested interested parties to engage in informal consultations on the outstanding issues ahead of the Twenty-Fourth Meeting of the Parties. The draft decision was presented in document UNEP/OzL.Pro.24/8 (draft decision XXIV/[C]).

44. The representative of the European Union requested more time to finalize the draft decision, pointing out that one of the main issues to be resolved was that of dealing with zeros and blank cells in the reporting formats used by parties in reporting ozone-depleting substance data in accordance with under Article 7 of the Montreal Protocol. In response the Co-Chair noted that the issue of zeros in the data reporting formats had been addressed by the Implementation Committee at its forty-ninth meeting, which had approved a draft decision on the matter for consideration by the parties at the current meeting.

45. One representative stressed the importance to exporting and importing countries of considering quarantine and pre-shipment uses of methyl bromide in order to prevent the global spread of pests and diseases.

46. The parties agreed to establish a contact group, co-chaired by Mr. Augustin Sanchez (Mexico) and Ms. Alice Gaustad (Norway), to work further on the draft decision.

47. *[To be completed]*

D. Feedstock uses

48. Introducing the sub-item the Co-Chair recalled that the European Union had put forward a draft decision on feedstock uses of ozone-depleting substances at the thirty-second meeting of the Open-ended Working Group. The draft decision had been informally discussed and parties had been invited to provide additional comments to the proponents.

49. The representative of the European Union then introduced a revised version of the draft decision submitted by the European Union and Croatia (UNEP/OzL.Pro.24/8, draft decision XXIV/[D]). He said that in total more than 1 million tonnes of ozone-depleting substances were being used for feedstock and that that amount was expected to grow. Given that, without closer monitoring of the situation there was a risk that significant amounts of ozone-depleting substances could be diverted to uses that were restricted under the Montreal Protocol. Following the discussions at the Open-ended Working Group the proponents had revised their proposal to protect the confidentiality of some of the information being collected. Although that information would be aggregated, both the Technology and Economic Assessment Panel and the Ozone Secretariat would require some information in a disaggregated form.

50. One representative, recalling his statement during the adoption of the agenda, reiterated the view that there was no need to discuss feedstock uses as they were not controlled uses for the purposes of the Montreal Protocol. While he agreed that monitoring was an important activity he asked why the issue was being raised at the current time, after twenty-five years and after the phase-out of carbon tetrachloride. He asked for an explanation as to why the proponents of the draft decision considered that feedstock uses fell under the purview of the Montreal Protocol.

51. One representative suggested that feedstock uses should be reported, but another pointed out that the proposed draft decision had only been discussed by interested parties thus far and should be further discussed with regard to the issue of confidentiality, among others.

52. The representative of the European Union said that while controlled substances used entirely for feedstock were excluded from the definition of production under article 1 of the Protocol they were nevertheless controlled substances, and he recalled that the parties had in the past called for the reduction of emissions from feedstock uses. Given that the parties could adopt further decisions on feedstock uses to protect the ozone layer.

53. One representative said that substances being used for feedstock were not controlled substances within the meaning of the Protocol. The draft decision would call on parties to replace

ozone-depleting substances in feedstock uses with alternatives to the extent possible without regard to whether the alternatives were economically viable. The proposal would also request the Technology and Economic Assessment Panel to continue its work and provide, in its 2013 progress report, information as called for in decision XXI/8, in particular on the identification of alternatives to ozone-depleting substances for feedstock uses, and to assess the technical and economic feasibility of measures to assist parties to reduce or eliminate emissions from such uses. The Panel was being asked to identify alternatives to feedstock uses but the information being collected under decision XXI/8 referred only to the use of carbon tetrachloride. He reiterated that the ozone-depleting substances being used as feedstock were permitted under the Montreal Protocol. Furthermore, they were beneficial to society and there had only been a minimal increase in their use. That use was being monitored and there was no need to discuss the issue further.

54. The Co-Chair suggested that given the divergent points of view on the issue the proponents of the draft decision should further discuss the issue with the representatives of interested parties and report on the results of their discussions.

55. *[To be completed]*

V. Additional information on alternatives to ozone-depleting substances

56. Introducing the item, the Co-Chair recalled that the Technology and Economic Assessment Panel, in accordance with decision XXIII/9, had presented a report on alternatives to ozone-depleting substances at the thirty-second meeting of the Open-ended Working Group. The representative of the United States of America had subsequently put forward a draft decision aimed at enhancing available information on the matter, which had been considered in a contact group. Many issues had remained unresolved at the end of that meeting, however, and the Working Group had agreed to forward the draft decision (UNEP/OzL.Pro.24/8, draft decision XXIV/[E]), enclosed in square brackets to indicate a lack of consensus, to the Twenty-Fourth Meeting of the Parties for further consideration.

57. The parties agreed to establish a contact group, co-chaired by Ms. Anne Gabriel (Australia) and Mr. Leslie Smith (Granada), to work further on the draft decision.

58. *[To be completed]*

VI. Procedural issues related to the Technology and Economic Assessment Panel and its subsidiary bodies

59. Introducing the item, the Co-Chair recalled that the Meeting of the Parties had requested the Technology and Economic Assessment Panel to take a number of actions to improve its operation and the procedures for the nomination of experts to the Panel and its subsidiary bodies (decision XXIII/10). A task force set up by the Panel to implement the decision had presented its findings to the Open-ended Working Group at its thirty-second meeting, and the representative of the United States of America had put forward a draft decision on the matter at that meeting, which had subsequently been considered in a contact group. Despite making considerable progress, the contact group had been unable to complete its task and the Working Group had agreed to forward the draft decision (UNEP/OzL.Pro.24/8, draft decision XXIV/[F]), enclosed in square brackets to indicate a lack of consensus, for consideration by the parties at the current meeting. The task force had also been requested to prepare a matrix showing existing and needed expertise among members of the Panel and its technical options committees; to propose plans for reorganizing those committees, including their operating procedures; and to provide further clarification on the configuration and role of a possible conflict resolution body. Its works on those matters was presented in volume 3 of the May 2012 progress report of the Technology and Economic Assessment Panel.

60. The co-chair of the task force reported that the task force had prepared revised matrices of existing and needed expertise of Panel and technical options committee members, taking into account the comments made in the contact group at the thirty-second meeting of the Open-ended Working Group. It had also drafted a brief discussion paper providing the requested clarification on the proposed conflict resolution body. As for the reorganization plans and proposed operating procedures for the technical options committees, she said that the task force had been unable to complete its work and that it intended to continue striving to finalize a set of proposals to be presented to the parties in the near future. In the meantime, the task force stood ready to answer any questions raised by its report.

61. The parties agreed to establish a contact group, chaired by Mr. Javier Camargo (Colombia) and Ms. Masami Fujimoto (Japan), to work further on the draft decision.

62. [To be completed]

VII. Proposal on trade of controlled substances with ships sailing under a foreign flag

63. Introducing the item, the Co-Chair recalled that further to decision XXIII/11 the Technology and Economic Assessment Panel had presented an assessment of ozone-depleting substances used to service ships at the thirty-second meeting of the Open-ended Working Group; that the Secretariat had provided information on how parties regulated and reported on the use of ozone-depleting substance to service ships; and that the European Union had put forward a draft decision aimed, inter alia, at standardizing the treatment of those substances. The Working Group had set up a contact group to discuss the draft decision and, given that a number of issues had remained unresolved, had agreed to forward it (UNEP/OzL.Pro.24/8, draft decision XXIV/[G]), enclosed in square brackets to indicate a lack of consensus, for consideration by the parties at the current meeting. It had also requested members of the contact group to continue working to resolve the issues during the intersessional period.

64. The representative of the European Union introduced a conference room paper, submitted by the European Union and Croatia, setting out a revised version of the draft decision in document UNEP/OzL.Pro.24/8. It requested the Technology and Economic Assessment Panel to provide a range of additional information that could help to address the complex underlying issues at the national and global levels and to identify possible alternatives to the ozone-depleting substances used in the maritime sector. One representative expressed an interest in examining the revised version of the draft decision, suggesting that that the additional information requested from the Panel might be burdensome and unnecessary.

65. The parties agreed to establish a contact group, co-chaired by Ms. Marissa Gowrie (Trinidad and Tobago) and Mr. Philippe Chemouny (Canada), to consider the revised draft decision.

66. [To be completed]

VIII. Investigation of carbon tetrachloride discrepancy

67. Introducing the item, the Co-Chair recalled that the parties had decided, in decision XXIII/8, to request the Technology and Economic Assessment Panel to continue to investigate the reasons for the identified discrepancy between emissions estimates derived from reported production and consumption and those inferred from atmospheric measurements and to report on its work at the present meeting. He then invited Mr. Paul Newman of the Scientific Assessment Panel to report on the progress that had been made in that work.

68. Mr. Newman recalled that the amounts of carbon tetrachloride in the atmosphere continued to decrease but that there was a discrepancy of some 40 gigagrammes between the “bottom-up” emissions estimate derived from the data reported to UNEP, which were highly variable, and the “top-down” estimates inferred from atmospheric measurements. That discrepancy had been difficult to explain, but new information was available that helped to narrow that gap between the two estimates. Losses to the atmosphere of carbon tetrachloride during storage, transport, servicing and other operations had been less than believed and new information suggested that the lifetime of the substance in the atmosphere should be taken as 33 years instead of 26 years. In addition, an Australian study had suggested that the total global emissions of carbon tetrachloride from landfills could be some eight to twelve gigagrammes annually and that some small emissions could also be ascribed to the chlorination of water. Consequently the discrepancy between the “top-down” and the “bottom-up” estimates had been narrowed but not quite closed as a result of the new information.

69. One representative said that discrepancy of 40 gigagrammes was significant given that a number of the projects being approved were to phase-out hundreds of tonnes of ozone-depleting substances. He therefore welcomed the new information that narrowed the discrepancy and said that there was a need for a better understanding of the current state of knowledge as it related to carbon tetrachloride used as feedstock. He suggested that it would be important for representatives of the Scientific Assessment Panel and the Technology and Economic Assessment Panel to participate in the small group that was addressing the issue of feedstocks. Another representative supported that suggestion.

70. Another representative said that during the seminar on protecting our atmosphere for generations to come the representative of Switzerland had indicated that the use of carbon tetrachloride was trending upward; that assertion, he said, was contrary to the position of the Panel,

and he asked for an explanation of the discrepancy. In response the representative of the Scientific Assessment Panel said that the Swiss presentation had only addressed the situation in Europe, while the Panel had addressed the global usage of carbon tetrachloride as well as the new information explaining the conflict between the top-down and bottom-up estimates. Another representative said that the issue of feedstock uses should be kept separate from the issue of the discrepancy in the top-down and bottom-up estimates of emissions.

71. The Co-Chair suggested that interested parties should discuss the matter and report on the outcome of their discussions.

72. *[To be completed]*

IX. Evaluation of the financial mechanism of the Montreal Protocol

73. Introducing the item, the Co-Chair recalled that the parties had decided, in decision XXII/2, to conduct an evaluation of the financial mechanism of the Montreal Protocol and that they had considered the final draft report on that evaluation at the thirty-second meeting of the Open-ended Working Group. At that time they had also agreed on a process for the finalization of the report, which included the submission of further comments by the parties to the consultant, ICF International, that had undertaken the evaluation and prepared the report. An executive summary of the final report, in all six official languages of the United Nations, was set out in document UNEP/OzL.Pro.24/4, while the full report, in English only, was set out in document UNEP/OzL.Pro.24/INF/4.

74. Mr. Mark Wagner of ICF International gave an overview of the evaluation process, including the evaluation schedule and the parties interviewed. As a result of the comments received, sections 6.1, and 6.2 of the draft had been updated and an appendix had been added to the report to explain how the consultant had addressed the comments. Section 7.2 of the report, setting forth recommendations, had also been updated.

75. Section 6.1 had been updated to include key features of the Multilateral Fund that had been instrumental to its success, such as its compliance-oriented approach, its straightforward and relatively fast access to project funds, its consistent application of the principle of incremental costs, its transparent business planning model, its continued support for institutional strengthening and capacity-building efforts and its decision-making informed by comprehensive technical analysis.

76. Section 6.2 had been updated to provide lessons learned from the Global Environment Facility (GEF). They included the idea that private entity and government sustainability and commitment were critical drivers in the success of both GEF and the Multilateral Fund. Strong private sector involvement, including through the provision of co-financing, also contributed to the rapid and enduring phase-out of ozone-depleting substances. It had been learned that in countries with economies in transition, national ozone units had ceased to function once GEF support had ended, which might prevent the implementation of measures to address the remaining threats to the ozone layer, including the phase-out of HCFCs and destruction of ozone-depleting substances. It had also been observed that GEF operations had been less cost-effective than those of the Multilateral Fund, in part because GEF projects did not always adhere to incremental financing procedures.

77. All who spoke complimented the consultant on a comprehensive report. One representative, however, said that it was important to do more than simply take note of the report and that a way was needed to move forward with it, perhaps along the lines of decision XVI/36, to allow the Executive Committee of the Multilateral Fund to consider it. Another representative pointed out that previous reviews of the financial mechanism had only taken place on an ad hoc basis and said that a more regular process to evaluate the effectiveness of the financial mechanism was needed.

78. The representative of Brazil said that the report confirmed the value of the Multilateral Fund, which had allowed parties operating under paragraph 1 of article 5 of the Protocol to comply with their obligations through a country-driven approach. During the negotiations over the replenishment of the Multilateral Fund at the Twenty-Third Meeting of the Parties, however, parties not operating under that paragraph had shown little interest in providing the additional resources that the Technology and Economic Assessment Panel had said would be necessary to enable implementation of the Protocol.

79. Two representatives expressed agreement, with one saying that a lack of resources had made it impossible to undertake a more comprehensive review of the financial mechanism and that the parties should continue support for the national ozone units and the implementing agencies of the Multilateral Fund and provide greater resources to the Multilateral Fund.

80. Following the presentation and the discussion, the Co-Chair requested interested parties to consult informally with the aim of preparing a draft decision for the consideration of the parties.

81. [To be completed]

X. Proposal on clean production of HCFC-22 through by-product emission control

82. [To be completed]

XI. Proposal on additional funding for the Multilateral Fund for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons

83. [To be completed]

XII. Proposal on funding of production facilities for hydrochlorofluorocarbons

84. [To be completed]

XIII. Proposal on the review by the Scientific Assessment Panel of RC-316c

85. Introducing the item the Co-Chair recalled that at the thirty-second meeting of the Open-ended Working Group the representative of the United States of America had introduced a draft decision requesting parties to provide information on, and the Scientific Assessment Panel to review, the ozone-depleting and global-warming potential of RC-316c. That chemical had been identified by the Chemicals Technical Options Committee during the presentation on the 2012 progress report as a new CFC, not currently controlled by the Montreal Protocol, and the proposal had requested that the Scientific Assessment Panel provide a report on its findings to the Open-ended Working Group at its thirty-third meeting.

86. The representative of the Russian Federation said that the climate impacts of RC-316c had been investigated by an independent expert group in the Russian Federation. The group had evaluated how the chemical changed in the atmosphere, concluding that it was affected by light of certain wavelengths and took 150–160 years break down. Its ozone-depleting potential had also been examined and it had been found to be similar to that of CFC-12 or CFC-113. The Russian Federation was currently looking at alternatives to CFC-113 for its space industry, some of which were produced in the United States, and had been considering whether to use RC-316c as an alternative to CFC-113 in the cleaning process for rockets. In the light of the findings outlined above, however, the party had decided that it would not do so.

87. At the request of the representative of the United States for further information, the representative of the Scientific Assessment Panel said that the chemical had two isomers, whose atmospheric lifetimes and properties did not appear to differ significantly. The photolytic loss of RC-136c had been evaluated in laboratory studies and it appeared to occur mainly in the stratosphere, with ultraviolet radiation being the major cause. The substance was similar to CFC-12 and CFC-113 although it had a slightly higher cross section in the key “window” of 190 to 210 nanometres. Its lifetime was measured in the laboratory at 81 years, with an ozone-depleting potential of 0.46, both measures being roughly half of what had been observed by the researchers in the Russian Federation. Based on the laboratory data and calculated atmospheric lifetimes, RC-136c appeared to have a global-warming potential roughly half that of CFC-12 and comparable to that of CFC-11.

88. The representative of the United States said that in the light of the information presented by the Scientific Assessment Panel she would consult with the other proponents of the draft decision and report to the parties on their discussions. The representative of the Russian Federation said that although he did not object to the draft decision, in view of his country’s decision not to proceed with the use of RC-136c he suggested that there was no further need to discuss the draft decision.

89. One representative, saying that RC-316c was not controlled by the Montreal Protocol, asked whether the parties could request the Scientific Assessment Panel to carry out a study on it without amending the Protocol. He also said that it was important to consider intentional releases into the atmosphere and noted that in the past the global-warming-potential of CFCs, carbon tetrachloride and Halons had not been considered when evaluating those substances.

90. Following the discussion the Co-Chair asked the proponents and interested parties to consult informally and report to the parties on the results of their discussions.

91. [To be completed]

XIV. Proposal on the implications of the outcome document of the United Nations Conference on Sustainable Development for small island developing States with regard to the implementation of the Montreal Protocol

92. [To be completed]

XV. Proposed amendments to the Montreal Protocol

93. [To be completed]

XVI. Compliance and data reporting issues

94. [To be completed]

A. Proposal on the differences between data reported on imports and data reported on exports

95. [To be completed]

B. Presentation on and consideration of the work and recommended decisions forwarded by the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol

96. [To be completed]

XVII. Other matters

97. [To be completed]

Part two: High-level segment

I. Opening of the high-level segment

98. [To be completed]

II. Organizational matters

99. [To be completed]

III. Status of ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol and the amendments to the Montreal Protocol

100. [To be completed]

IV. Presentations by the assessment panels on the status of their work, including the latest developments

101. [To be completed]

V. Presentation by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund's implementing agencies

102. [To be completed]

VI. Statements by heads of delegation

103. [To be completed]

VII. Report by the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the Twenty-Fourth Meeting of the Parties

104. [To be completed]

VIII. Dates and venue for the Twenty-Fifth Meeting of the Parties to the Montreal Protocol

105. [To be completed]

IX. Other matters

106. [To be completed]

X. Adoption of decisions by the Twenty-Fourth Meeting of the Parties to the Montreal Protocol

107. [To be completed]

XI. Adoption of the report of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol

108. [To be completed]

XII. Closure of the meeting

109. [To be completed]



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the Montreal Protocol on Substances
that Deplete the Ozone Layer**
Geneva, 12–16 November 2012

Draft report of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer

Addendum

Part one: preparatory segment (continued)

I. Administrative matters (agenda item 3) (continued)

A. Consideration of membership of Montreal Protocol bodies for 2013 (agenda item 3 (c)) (continued)

1. Also under the agenda item, the representative of China introduced a conference room paper setting out a draft decision endorsing Mr. Shao Min (China) as the new co-chair of the Environment Effects Assessment Panel and thanking Ms. Tang Xiaoyan (China), the outgoing co-chair of the Environmental Effects Assessment Panel, for her long and outstanding service on behalf of the Montreal Protocol.

2. The parties approved the draft decision for consideration and adoption during the high-level segment.

3. *[To be completed]*

B. Financial reports of the trust funds and budgets for the Montreal Protocol (agenda item 3 (d)) (continued)

4. *[To be completed]*

II. Issues related to exemptions from Article 2 of the Montreal Protocol (agenda item 4) (continued)

A. Nominations for essential-use exemptions for 2013 (agenda item 4 (a)) (continued)

Metered dose inhalers (continued)

5. *[To be completed]*

B. Nominations for critical-use exemptions for 2014 (agenda item 4 (b)) (continued)

6. Subsequently, a conference room paper containing a draft decision on critical-use exemptions for methyl bromide for 2014 was submitted by Australia, Canada and the United States of America. Introducing the draft decision, the representative of Canada said that in addition to permitting specified levels of production and consumption of methyl bromide it also aimed to address the concerns of some parties by including an operative paragraph discouraging the accumulation of methyl bromide stocks.

7. [To be completed]

C. Quarantine and pre-shipment issues (agenda item 4 (c)) (continued)

8. [To be completed]

D. Feedstock uses (agenda item 4 (d)) [continued]

9. [To be completed]

III. Additional information on alternatives to ozone-depleting substances (agenda item 5) (continued)

10. [To be completed]

IV. Procedural issues related to the Technology and Economic Assessment Panel and its subsidiary bodies (agenda item 6) (continued)

11. The representative of the United States of America introduced a conference room paper setting out a draft decision on changes in the membership of the Technology and Economic Assessment Panel. He said that the recommendation would endorse the reappointment of five members of the Panel and the selection of Ms. Bella Maranion to replace Mr. Stephen O. Anderson as co-chair of the Panel. He also thanked Mr. Anderson for his long and outstanding service as co-chair of the Panel.

12. The parties approved the draft decision for consideration and adoption during the high-level segment.

V. Proposal on trade of controlled substances with ships sailing under a foreign flag (agenda item 7) (continued)

13. [To be completed]

VI. Investigation of carbon tetrachloride discrepancy (agenda item 8) (continued)

14. Following those consultations it was agreed that no further discussion of the item was required at the current meeting.

VII. Evaluation of the financial mechanism of the Montreal Protocol (agenda item 9) (continued)

15. Subsequently, one of the interested parties reported on progress in the consultations and presented a conference room paper setting out a draft decision. The parties agreed to establish a contact group, chaired by Ms. Annie Gabriel (Australia), to discuss the draft decision.

16. [To be completed]

VIII. Proposal on clean production of HCFC-22 through by-product emission control (agenda item 10)

17. The Co-Chair introduced a draft decision on clean production of hydrochlorofluorocarbon-22 through by-product emission control (UNEP/OzL.Pro.24/8, draft decision XXIV/[H]), recalling that it had been discussed at the thirty-second meeting of the Open-ended Working Group. The

representative of the United States of America, one of the proponents of the draft decision, added that parties had held informal consultations on the issue during the intersessional period.

18. The representative of the United States, responding to a request for clarification on a number of issues relating to the draft decision, said first that the term “clean production” was not intended to have a specific definition, but referred in general to the idea of avoiding undesirable impacts on the environment, such as releases of contaminants into the air or water, that might arise from industrial processes. Second, the proposal for demonstration projects to eliminate by-product emissions of HFC-23 during the production of HCFC-22 for facilities not earning emissions reduction credits under the Kyoto Protocol’s Clean Development Mechanism was not intended to result in deferral of the agreed accelerated HCFC phase-out; the purpose of the demonstration projects was to gather information to facilitate a better understanding of the implications of the phase-out of HFCs over the next two decades. Third, the Technology and Economic Assessment Panel and the Scientific Assessment Panel would not be asked to conduct a very broad study; the study would have a very narrow focus, looking at the costs, benefits and environmental implications of clean production of HCFC-22. Finally, he clarified that the proposal was not intended to further accelerate phase-out, but rather only to give greater consideration to what might be the unintended consequences of the continued production of HCFC-22 over the next two decades.

19. Responding, the representative that had requested those clarifications, supported by two others, said that the principles of the Vienna Convention and the Montreal Protocol focused on protecting the ozone layer and reducing ozone-depleting substances; the elimination of by-product emissions of HFC-23 should therefore not be addressed by the Meeting of the Parties as it was not an ozone-depleting substance and the proposed demonstration project was therefore not eligible for funding from the Multilateral Fund. Further, those emissions were already controlled under the Framework Convention on Climate Change and the Kyoto Protocol. The phase-out of HCFC-22, which did fall within the mandate of the Montreal Protocol, would in time naturally lead to a reduction in HFC-23; as such, the draft decision did not warrant further consideration by the parties.

20. Another representative added that under the Clean Development Mechanism much information was already available on mitigation of emissions and that there was therefore no added value to the proposed demonstration project. Furthermore, the Multilateral Fund had limited funds available and priority should be given to HCFC-22 phase-out.

21. Several representatives expressed the view that, as production of HCFC-22 would not be phased out for two decades, or longer if production plants converted to feedstock uses, consideration needed to be given to mitigating the by-product emissions of HFC-23. It was within the remit of the Meeting of the Parties to take up such a discussion as it was important to assess the cost-effectiveness of the measures available, particularly as it would not be economically feasible to accelerate further the phase-out of HCFC-22. Further, while converting production to feedstock uses could be one of the most cost-effective measures, the parties had a moral obligation to avoid taking any decisions that would have a detrimental impact on achievement of the objectives of the Kyoto Protocol or other multilateral environmental agreements. One representative added that the proposed study would provide valuable information that the Executive Committee of the Multilateral Fund could take into consideration when deciding on strategy for the phase-out of HCFC production by parties operating under paragraph 1 of article 5.

22. One representative proposed that further discussion of the item should be deferred until the parties had opened discussions on agenda item 12, on a proposal for the funding of production facilities for HCFCs, as both items related to the production of HCFCs.

23. As outlined in the section below on item 12, there was considerable discussion on the merits of one contact group dealing with items 10 and 12 together. At the end of that discussion it was agreed that an informal group, led by the United States of America, would continue the discussions on item 10.

24. *[To be completed]*

IX. Proposal on additional funding for the Multilateral Fund for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons (agenda item 11)

25. Introducing the item, the Co-Chair recalled that Switzerland had introduced, at the thirty-second meeting of the Open-ended Working Group, a proposal on additional funding for the

implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of HCFCs. The proposal would, among other things, request the Executive Committee to assess a number of options related to the establishment of a funding window to maximize climate co-benefits of the HCFC phase-out and agree on procedures and terms of reference for its functioning based on certain specified conditions. Following informal consultations, the Working Group had agreed to forward a draft decision (UNEP/OzL.Pro/24/8, draft decision XXIV/[I]) for consideration by the parties at the current meeting and to invite parties to provide comments to Switzerland to enable progress on the matter intersessionally.

26. The representative of Switzerland said that the interessional discussions had been fruitful and had provided an opportunity to clarify the issues raised and to achieve a better understanding of the viewpoints of various parties. Regarding the scope of the proposal, he said that it did not seek to create new obligations for, or reduce the present obligations of, those parties that contributed to the Multilateral Fund, but rather aimed to mobilize additional voluntary contributions for activities with minimal climatic impacts.

27. In the ensuing discussion, one representative, referring to decision XIX/6 on adjustments to the Montreal Protocol with regard to HCFCs, said that neither paragraph 5 nor paragraph 11 (b) of that decision, on the funding for parties operating under paragraph 1 of article 5 to comply with the accelerated HCFC phase-out schedule and the funding criteria for projects and programmes, referred to maximization of climate benefits or additional funding for the Multilateral Fund. Hence there was no need to discuss the draft decision further. Another representative said that the provisions under decision XIX/6 for stable and sufficient funding, including for projects and programmes that minimized impacts on the environment, including climate, should be adequate to ensure that finances were available for projects that took account of climate benefits, arguing that there was therefore no need for further measures that might make the work of the Multilateral Fund more complicated.

28. One representative said that while the proposal was very comprehensive it raised a number of practical difficulties, including with regard to the impact of the proposed funding window on the operations of the Multilateral Fund and the mobilization of voluntary contributions and the relationship with the Multilateral Fund Climate Impact Indicator, discussions on which were continuing. In summary, it was not clear how the proposal would strengthen the functioning of the Multilateral Fund or add to its cost-effectiveness. Another representative said that it was essential to be realistic about available financial resources, bearing in mind the difficulties that had attended the negotiation of the 2012–2014 replenishment of the Multilateral Fund. Several representatives said that any financial resources available to the Fund should be focused on current priorities, including the accelerated phase-out of HCFCs, and that care should be taken not to weaken efforts to protect the ozone layer by considering issues outside the Protocol's mandate.

29. Several other representatives, speaking in favour of the proposal, said that it offered an opportunity to reap climate co-benefits from the HCFC phase-out. On the wording of decision XIX/6, one representative said that while the relevant text did not specify maximization of climate benefits, it did say that minimization of impacts on climate should be taken into account by the Executive Committee when developing and applying funding criteria for projects and programmes. If that potential existed, then the parties had a mandate to explore it. In addition, article 10 of the Protocol, on the financial mechanism of the Protocol, included provision for voluntary funding, meaning that that form of financing had been envisaged at the time the Fund was set up. He agreed that setting up an additional funding window was complex, but said that any difficulties could be resolved through further discussion of the matter. Some representatives stressed that the voluntary funding being suggested was additional to existing funding and would not detract from funds for other purposes or compromise the work of the Multilateral Fund.

30. The parties agreed to establish an informal group, with Mr. Peter Enoh (Cameroon) and Mr. Phillipe Chemouny (Canada) serving as co-conveners, to discuss the proposal further and clarify the implications of its suggested provisions.

31. *[To be completed]*

X. Proposal on funding of production facilities for hydrochlorofluorocarbons (agenda item 12)

32. Introducing the item, the Co-Chair recalled that the proposal on funding of production facilities for HCFCs had been introduced by India at the thirty-second meeting of the Open-ended Working Group. The proposal, which referred to the funding provisions in decision XIX/6, urged the Executive Committee to finalize the discussions on the guidelines for funding of production facilities

and requested it to take into consideration proactive regulatory actions adopted by some parties to limit production. Following informal discussions, the Working Group had agreed to forward the draft decision (UNEP/OzL.Pro/24/8, draft decision XXIV/[L]) for further discussion at the current meeting.

33. Introducing the proposal, the representative of India said that by decision XIX/6 the parties had agreed that funding available through the Multilateral Fund should be stable and sufficient to meet all agreed incremental costs to enable parties operating under paragraph 1 of article 5 to comply with the accelerated phase-out schedule for both consumption and production of HCFCs. There was very little time left, he said, before the first control measures on HCFCs for those parties came into force, with a freeze at the baseline level to be implemented in 2013 and a 10 per cent reduction from the baseline in 2015, and the inadequate implementation of decision XIX/6, particularly with regard to funding, placed parties with production facilities at risk of non-compliance. Some of those parties, including India, had taken proactive regulatory actions to limit production of HCFCs in facilities in their countries beyond those required for compliance with the relevant control schedule, thus achieving a significant reduction of the potential impact of those substances on the ozone layer.

34. In the ensuing discussion, one representative, supported by others, said that the draft decision was not needed because there was no need to reiterate the elements of decision XIX/6, which had featured prominently in discussions during the current meeting and other meetings, and because the Executive Committee was already working hard to finalize the guidelines for funding of production facilities for HCFCs and other important tasks related to the production sector. In addition, proactive regulatory actions taken by parties to limit production of HCFCs did not come under the category of incremental costs eligible for funding. Another representative said that it was a misconception that funding for HCFC phase-out was dependent upon completion of the guidelines: nothing prevented the Executive Committee from considering applications for funding for the phase-out of HCFC production, although only one project had so far been submitted. Also, while proactive actions to comply with control measures were commendable, it was not part of the mandate of the Multilateral Fund to provide retroactive compensation for such measures.

35. One representative, supported by several others, said that the issues raised by the draft decision were of great relevance to the achievement of the HCFC phase-out targets for parties operating under paragraph 1 of Article 5 and should be given high priority, given the high social and economic implications of possible non-compliance.

36. One representative suggested that the present item could be dealt with in a contact group that also discussed agenda item 10, as both items dealt with production of HCFCs and how activities related to their regulation might be financed. The representative of India said that decision XIX/6 on accelerated phase-out of HCFCs in the production sector dated back to 2007, was considerably more urgent and should be accorded higher priority than clean production of HCFC-22, both in the Executive Committee and at the current meeting. The two issues, he stressed, were unrelated, and should not be addressed in the same forum. Another representative, supported by several others, said that the focus of agenda item 10 was HFCs, while the focus of item 12 was HCFCs, and that it was therefore inappropriate to place the two items together. Another representative, supported by several others, said that there was an overarching similarity of themes and that discussion of the two items in the same forum would present an equitable way forward.

37. The parties decided to establish an informal group, convened by India, to discuss agenda item 12 and, as described in section [] above, on agenda item 10, to establish a second informal group, convened by the United States of America, to discuss agenda item 10.

38. *[To be completed]*

XI. Proposal on the review by the Scientific Assessment Panel of RC-316c (agenda item 13) (continued)

39. Following those consultations the parties approved the draft decision for consideration and adoption during the high-level segment.

XII. Proposal on the implications of the outcome document of the United Nations Conference on Sustainable Development for small island developing States with regard to the implementation of the Montreal Protocol (agenda item 14)

40. Introducing the item, the Co-Chair recalled that a draft decision on Implications of the outcome document of the United Nations Conference on Sustainable Development for small island developing States with regard to the implementation of the Montreal Protocol, had been discussed at the thirty-second meeting of the Open-ended Working Group and put forward for further consideration by the parties at the current meeting.

41. The representative of Grenada, noting that the original proponents of the proposal – Saint Lucia and Trinidad and Tobago – were not in attendance at the current meeting, said that he had been asked to convey a request from Saint Lucia that discussion of the proposal be deferred to the next meeting of the Open-ended Working Group. The Co-Chair agreed that it would be beneficial to postpone discussion on the matter until the proponents were present.

42. One representative queried whether the item automatically qualified for insertion on the provisional agenda of the next meeting of the Open-ended Working Group under the rules of procedure for meetings of the Conference of the Parties to the Vienna Convention and Meetings of the Parties to the Montreal Protocol. The representative of the Secretariat clarified that, under rule 9, any item could be placed on the agenda whose inclusion had been agreed at a previous meeting. Further, as all parties had already discussed the proposal at the previous meeting of the Open-ended Working Group, the request to place it on the agenda of the next meeting did not have to come only from the original proponents, nor would they have to resubmit the text of the proposal.

43. The parties agreed to defer the discussion of the proposal and place it on the agenda of the next meeting of the Open-ended Working Group.

XIII. Proposed amendments to the Montreal Protocol (agenda item 15)

44. Introducing the item, the Co-Chair noted that two proposed amendments to the Montreal Protocol had been submitted to the Secretariat in accordance with the provisions of the Vienna Convention and the Protocol by the Federated States of Micronesia and by Canada, Mexico and the United States, respectively. He then requested the proponents to introduce their proposals briefly.

45. The representative of the Federated States of Micronesia said that his country's proposed amendment (UNEP/OzL.Pro.24/5) would effect a gradual phase-down of HFCs, an approach that had been supported at the recent United Nations Conference on Sustainable Development (Rio+20). Participants at that Conference had recognized that the phase-out of ozone-depleting substances had resulted in a rapid increase in the use and release of HFCs into the environment and had therefore supported a gradual phase-down in their consumption and production, as indicated in paragraph 222 of the Conference outcome document, *The future we want*. The Montreal Protocol, with its experience in efforts to phase out HCFCs and other ozone-depleting substances, had the necessary expertise and moral responsibility to deal with the issue. His delegation was open to other views as it was important to start a discussion on the matter, but it was also important to protect the poor and vulnerable groups that would suffer most from any failure to act.

46. The representatives of Canada, Mexico and the United States presented their proposed amendment (UNEP/OzL.Pro.24/6), drawing attention to frequently asked questions, and answers provided by the proponents, that had been compiled in an information document for the benefit of the parties at the current meeting (UNEP/OzL.Pro.24/INF/7).

47. The representative of the United States said that the proposal would generate 100 gigatonnes of carbon dioxide equivalents in direct climate benefits by 2050, while gains in energy efficiency through a reduction in the current reliance on high global-warming potential HFCs would enhance the benefits generated. While the decisions taken by the parties to the Protocol had meant that the ozone layer would recover by the middle of the present century, it was important to address the implications of those decisions for the climate system, as well as the potential of ozone-depleting substances to exacerbate the problem of climate change. The Montreal Protocol was well-suited to tackle the issue of HFCs. Its institutions had addressed other similar problems and served to ensure that policy choices were well informed and could do the same for HFC phase-down. It also had a successful model for addressing intentionally produced substances through a gradual reduction in their production and consumption.

48. The representative of Canada drew attention to document UNEP/OzL.Pro.24/INF/7 and highlighted some of the information provided by the proponents. He said that the Protocol could be amended according to paragraph 2 (b) of Article 2 of the Vienna Convention in order to harmonize policies on ozone-depleting substances and their substitutes. Actions taken under the Montreal Protocol would not interfere with those taken under the Kyoto Protocol or the United Nations Framework Convention on Climate Change, as the proposed amendments were intended to support the global goals of the climate system and did not affect the provisions of those two instruments. Both processes were complementary and there would be no interference with the work of the Framework Convention. As the Executive Committee of the Multilateral Fund had already approved stage one of HCFC phase-out management plans for many parties, it was important to assist those parties in making the right decisions when selecting alternatives by establishing a long-term framework for the control of HFC-consumption.

49. The representative of Mexico said that the proposal was based on the principles of the Montreal Protocol, which included the recognition of common responsibilities for all sectors. He expressed the hope that the discussion of the proposals would be fruitful and urged the parties not to wait until the issue became a race against time.

A. Questions to the proponents

50. Following the presentations by the proponents representatives posed a number of questions.

51. One representative requested clarification as to whether the proposed amendments would result in any changes to the ozone layer; whether the proponents were suggesting that bodies operating under the United Nations Framework Convention on Climate Change were lacking in relevant expertise; and whether the amendments were an attempt to preempt the action taken under the Framework Convention on Climate Change. He also asked why the decisions adopted at Rio+20 should be taken into account, given that they were not legally binding.

52. Responding, the representative of the United States said that the aim of the proposed amendments was not to protect the ozone layer but to address the link between efforts to do so and the effects of those efforts on the climate system, which was entirely consistent with the legal authority afforded by the Montreal Protocol. The proponents of the amendments were not suggesting that the Intergovernmental Panel on Climate Change, the Subsidiary Body on Scientific and Technological Advice and other such bodies lacked the necessary expertise in relation to HFCs. They could not, however, be expected to address the climate change implications of the accelerated phase-out of HCFCs, as they had neither the time nor experience nor to do so. In answer to the second question he said that the proposed amendments, if adopted, would promote action that was additional to, and that would in no way preempt or undermine, efforts to tackle HFCs under the Framework Convention on Climate Change. They went well beyond the scope of that Convention, calling for a structured, step-by-step, phase-down involving the gradual introduction of new technologies that would result in significant climate benefits. Furthermore, it would be wrong to suggest that the many States that had signed the agreements reached at Rio+20 would not take them seriously simply because they were not legally binding. The representative of the Federated States of Micronesia added that States were keen to observe them, as they were crucial to the future of the planet, and that the fact that emissions of HFCs were covered by the Kyoto Protocol did not preclude addressing their production and consumption under the Montreal Protocol.

53. One representative asked how the proposed amendments would affect the way in which the Montreal Protocol worked with the Framework Convention on Climate Change. The representative of the Federated States of Micronesia said in response that a compromise would ultimately need to be reached between the various approaches, and that that could be one of the subjects discussed in a contact group.

54. The representative of the United States, responding to a question about HFCs already in use in a number of sectors as a result of efforts to phase out HCFCs, said that the proposed amendment, if adopted, would comprehensively address all HFCs, including the existing base. It presented a number of challenges in terms of technology, which would have to be examined on a sector-by-sector basis. The proposed gradual phase-down would address those challenges, as it recognized that there were already some viable low global-warming-potential alternatives available, such as hydrofluoroolefins (HFOs) and other fluorinated and non-fluorinated substances, that could help to promote energy efficiency. It also sent a message to the private sector that there was a market for new technologies in those areas.

55. One representative asked how the proponents had calculated the cost-effectiveness of alternatives available in developing their proposed schedules for the phase-down of HFCs, requesting

further information on alternative substances, including when they might become available and how commercial considerations had been assessed. Responding, the representative of the United States said that one of the key considerations in preparing the proposal had been the availability of fluorinated and non-fluorinated alternatives and that a large amount of information had been provided in, among others, document UNEP/OzL.Pro.24/INF/7. Alternatives were already being used in the automobile, domestic refrigeration, air-conditioning, foams and other sectors. Some had been selected on the basis of their average global-warming potential. Those included relatively low-GWP HFCs and HFOs, which could be used and recycled, for example through refrigerant management practices, over a relatively long period of time. In terms of the cost-effectiveness of the transition, while energy-efficiency benefits in areas such as commercial refrigeration had often not been taken into account, the removal of high energy-consuming technologies was helping to decrease the electricity burden.

56. The representative of the Federated States of Micronesia, responding to a question on whether attention had been given to the need to assist developing countries in adopting high-technology alternatives to HFCs, drew attention to the document setting out his delegation's proposal, which included information on the technologies crucial to the phase-down of those substances.

B. General discussion

57. Following the questions and answers there ensued a general discussion in which the parties considered at length the question of whether the proposed amendments should be discussed at the present meeting and how that should be done. Some representatives expressed support for doing so but others were strongly opposed to any formal consideration of the issue.

58. The parties also engaged in an extensive discussion of whether HFCs could be addressed under the Montreal Protocol. Many representatives said that HFCs did not fall within the scope of the Protocol, which should be limited to matters that lay clearly within its own mandate. Several representatives said that there was a need for collaboration on the issue with the Framework Convention on Climate Change. Some warned that taking action on HFCs before they had been addressed by the parties to the Framework Convention might be seen as interfering with the latter's work. Other representatives, however, argued that article 2 of the Vienna Convention allowed the parties to coordinate their policies in managing the phase-out of HCFCs and the introduction of alternatives, including HFCs, and that action to phase down HFCs was clearly appropriate under the Montreal Protocol as the phasing in of those substances was the direct result of the HCFC phase-out implemented under the Protocol. The parties to the Montreal Protocol had a moral responsibility to address the issue and to avoid the adoption of HFCs as alternatives to ozone-depleting substances. One representative said that if the ozone layer were protected at the expense of the climate it would be a hollow victory.

59. Several representatives said that the priorities of the Montreal Protocol did not include climate protection and that the task of phasing out HCFCs was already stretching the resources of many parties operating under paragraph 1 of article 5 of the Protocol. One representative, however, said that the Protocol should ensure that parties, especially those not operating under paragraph 1 of article 5 of the Protocol, adopted domestic policies to introduce climate-friendly alternatives, while avoiding the phasing in of HFCs. Emphasis should also be placed on encouraging parties not operating under paragraph 1 of article 5 to provide additional technical, technological and financial support for the strengthening of the Multilateral Fund.

60. One representative said that while he understood the desire to use experience acquired under the Montreal Protocol in new areas by regulating the use of HFCs, there were currently no alternatives to a number of uses of HFCs, a situation that would continue for another 20 years. He said that a new and comprehensive global climate regime was required, and he suggested that an ad hoc group could be convened to give interested parties an opportunity to discuss the way forward. Several representatives supported that suggestion, together with the coordination of activities, in order to promote ambitious commitments in the post-Kyoto period based on shared responsibilities and the outcomes of Rio+20. It was suggested that scientifically based alternatives to the use of HFCs had to be found. One representative, however, expressed concern about the availability of alternative substances, saying that developing countries might have trouble introducing them owing to intellectual property rights.

61. One representative said that her country had sought to adopt alternative technologies that were environmentally friendly, such as natural refrigerants. In some cases, however, especially for small and medium-sized enterprises, there were no alternatives that were technically proven or environmentally safe. The recommendation of the Technical and Economic Assessment Panel on the budget for the periods 2015–2017 and 2018–2020 went well beyond the funding provided by the

parties operating under article 2 and it therefore did not seem reasonable to add more demands on parties operating under paragraph 1 of article 5 when the financial mechanism of the Protocol was short of funds. Furthermore, parties operating under paragraph 1 of article 5 were focused on the implementation of stage one of their HCFC phase-out management plans and on developing the next stage of those plans, meaning that the proposed amendments would subject them to additional challenges. The proposed amendments could be considered once the parties had implemented stage two of their plans and it was clear what resources remained. For the time being, the priority must be to meet the commitments already made under the Protocol.

62. One representative said that, in view of the difficult financial situation, the resources of the Multilateral Fund should be earmarked for efforts to meet the current commitment to reduce ozone-depleting substances and to provide support for least-developed countries and small-island developing States. Another representative said that while he shared the concern of the proponents that the continued increase in HFCs could become a major concern for the environment, the difficulties in mobilizing funds at the Twenty-Third Meeting of the Parties raised doubts as to how sufficient resources could be mobilized to fund the phase-down of HFCs.

63. Several representatives expressed support for the proposed amendments. One representative said that they showed that it was legally and technically feasible to address HFCs under the Montreal Protocol. Noting that the outcome document of the United Nations Conference on Sustainable Development expressed support for the phase-down of HFCs and the creation of the Climate and Clean Air Coalition, one representative said that his delegation supported the consideration of the proposed amendments in a contact group, bearing in mind that any decision should recognize the primacy of the Framework Convention on Climate Change.

64. Several representatives from countries vulnerable to the effects of climate change, particularly least-developed countries and small island developing States, emphasized that the risks posed and harm caused by climate change were already occurring. The Montreal Protocol had the expertise needed to address the issue, but it was also important to develop synergies between the Framework Convention on Climate Change and the Montreal Protocol. Resources had to be made available to fund the phase-out of HFCs. Developing countries needed scientific and financial support, which was an issue that the parties had a moral duty to address. The Secretariat and Multilateral Fund should work with parties to design a project to seek climate friendly alternatives.

65. One representative said that he had put three questions to the proponents and based on the responses HFCs clearly did not modify the ozone layer and should not be discussed at the current meeting. While the Montreal Protocol had expertise in dealing with ozone-depleting substances, the Framework Convention on Climate Change had expertise in the control of greenhouse gases. Neither mechanism had had such expertise when they had been formed and had only developed it over time. The outcomes of Rio+20 were not legally binding and therefore not relevant. If parties had concerns about HFCs they should raise them within the mechanism of the Framework Convention, as the mandate of the Montreal Protocol was to phase out ozone-depleting substances. He urged the parties to spend no more time in plenary discussing the issue and said that interested parties could, if they wished, discuss the issue in the margins of the meeting. Another representative, drawing attention to the situation of high ambient temperature countries and pointing out that there were currently no alternatives to HFCs in those countries, said that the Meeting of the Parties should confine itself to discussing issues related to compliance with the Montreal Protocol and ozone-depleting substances instead of using its time to discuss global warming-related issues, which were under the purview of the Framework Convention. Furthermore, HFCs represented just 2 per cent of the substances causing global warming and dealing with them in isolation would not be sufficient to address the problem.

66. Another representative said that while HFCs were covered under the Kyoto Protocol they could also be dealt with through phase-down/phase-out approach, which was not provided for under the Framework Convention. He said that the States participating in the second commitment period of the Kyoto Protocol produced less than 20 per cent of world emissions, meaning that a significant proportion of gases would not be covered in the period 2013–2020; nor would there be any phase-down/phase out or any focus on HFCs. Those issues might be addressed in the negotiations for the post-2020 period but no such proposals had yet been made, possibly because the financial mechanism was not conducive to the compliance-oriented approach of the Multilateral Fund. Stressing the need for mutual support between the Montreal Protocol and the Framework Convention, he asked whether a focus on the phase-down/phase-out approach would result in other gases that did not affect the ozone layer also being addressed under the Montreal Protocol. Regardless of the merits of the proposals, those issues needed further discussion.

67. One representative said that it was crucial to capitalize on every possible means of imposing stricter controls on greenhouse gases. The Montreal Protocol represented the most suitable framework for that purpose as it had extensive experience and expertise, as well as the mechanisms to provide parties operating under paragraph 1 of article 5 with the necessary technical and financial support. Many parties had expressed a need for further clarification and the current meeting of the Parties was an ideal opportunity to ascertain exactly what information was required to meet that need.

C. Discussion group

68. Following the discussion, the Co-Chair observed that many parties had expressed divergent views, both in favour of the amendments and the need to take action on the HFCs, and in opposition to the amendments for a variety of reasons. A number of questions had also been raised, including on the appropriate institutional framework for addressing increased emissions of HFCs and the possibility of a mutually supportive approach among the climate change and ozone layer protection regimes. Other questions concerned the need for further information on the costs of the proposals and on the availability of alternatives in different circumstances.

69. Various views had also been expressed on the best way forward in dealing with the issue. Arguments had been put forward both supporting and opposing the establishment of a contact group. Some parties had also expressed the wish to establish a panel or forum to discuss the questions raised regarding the proposed amendments and to address the need for an exchange views among the parties.

70. Considering all those factors, the Co-Chairs proposed to forgo the establishment of a formal contact group and instead to establish a discussion group to enable an exchange of views on the issues, including questions on the institutional framework, costs, financial support and the availability of alternatives, bearing in mind that many questions related to the availability of alternatives were already being discussed under other agenda items. Participation of parties in the proposed discussion group would in no event imply that they agreed with the ideas suggested by the proposed amendments, or the proposals themselves, and would not preempt any outcomes of the discussions under the climate regime. To enable the efficient use of time and a focused discussion, the discussions would be limited to two hours. In the first 10 minutes the group would select two convenors to moderate the discussions. The group would report briefly on its discussions to the parties.

71. Following some discussion on whether convenors were needed, the role they might play, and the correct terminology that might apply to them (convenors, moderators or facilitators), the parties agreed to the proposal of the Co-Chairs.

72. Subsequently one of the co-convenors of the discussion group gave the following account of the discussions in the discussion group, which the parties agreed should be reflected in the present report:

“The co-convenors suggested that the discussion would address four main themes in order to encourage and stimulate discussion. The themes presented were: availability of alternatives, scientific aspects, funding aspects and institutional aspects.

A few parties were not in agreement with having a structured discussion. Nonetheless the co-chairs were able to guide the discussions along the aforementioned themes.

On the issue of alternatives there were different perspectives from article 5 parties non-article 5 parties regarding the availability of alternatives.

However, the Parties generally felt that the workshop held in Bangkok had provided valuable information on where alternatives were readily available and where they were not.

It was mentioned that until recently non-article 5 parties had replaced ozone-depleting substances with HFCs in a relatively large proportion.

Issues relative to flammability and unsatisfactory performance of HFOs in the mobile air-conditioning sector were highlighted.

It was also mentioned that several non-article 5 parties and one regional economic organization had introduced controls and restrictions on the marketing and use of HFCs, including taxes and incentives, based on assessments of the availability of environmentally sound alternatives.

There were also different views expressed regarding the expectations for the development and penetration of non-HFC technologies. It was also indicated that in several HCFC phase-out management plans non-HFC alternatives had been identified for replacing HCFCs.

Some representatives offered to share their countries' experiences with policies that had been successfully implemented. Reference to information available on alternatives in particular from the European Union and the United States were made.

Scientific aspects

Regarding the scientific aspects, an interesting discussion took place involving the Scientific Assessment Panel about the evolution of emissions and concentrations of HFCs in the atmosphere. It was mentioned that the concentrations were still low but had increased very rapidly during the past years.

The Scientific Assessment Panel was called upon on occasion to offer clarifications and updates to several parties with respect to (1) scientific observations of HFCs (2) total global predictions over time relative to baseline data (3) future radioactive forcing and (4) atmospheric lifetime of HFCs.

Finance aspects

With limited time remaining, the group attempted to discuss financial issues. The Multilateral Fund Secretariat was called upon to provide information at the request of some parties, such as the number of parties that went to low-GWP alternatives in their HCFC phase-out management plans.

It was also mentioned that the Fund Secretariat was ably positioned to handle the phase-down and that the Clean Development Mechanism might not be equipped to provide comprehensive assistance.

In summary it was expressed by one member of the group that Aphase-down of HFCs would result in adverse effects on industry and countries economies.

(b) Another felt that there should be a collaborative approach between the Montreal Protocol and the Framework Convention on Climate Change in the handling phase-down of HFCs.

The group did not have enough time to discuss institutional issues

At the end the co-chairs were generally satisfied with the spirit of the group and the cordial manner in which the discussions took place."

XIV. Compliance and data reporting issues (agenda item 16)

A. Proposal on the differences between data reported on imports and data reported on exports (agenda item 16 (a))

73. Introducing the item, the Co-Chair recalled that at the thirty-second meeting of the Open-ended Working Group the European Union had put forward a draft decision with a view to reducing the burden of clarifying discrepancies between reports imports and exports of ozone-depleting substances and helping to identify illegal trade. The proposal had been discussed in a contact group and the Working Group agreed to forward the draft decision (UNEP/OzL.Pro/24/8, draft decision XXIV/[M]), including text enclosed in square brackets to indicate a lack of consensus, for consideration by the parties at the current meeting. The draft decision invited parties to use a revised reporting format for imports and exports, to improve data collection and help identify discrepancies in import and export data, and to consider participation in the "iPIC" informal prior informed consent mechanism. The Working Group had also agreed that interested parties could provide comments on the matter to the European Union before the current meeting.

74. The representative of the European Union said that those parties that had expressed views at the Open-ended Working Group had provided further suggestions intersessionally and that the co-convenors of the contact group had incorporated their suggestions into a revised text, which had been

circulated to interested parties. No comments had been received, and the revised draft decision was before the parties at the current meeting.

75. The parties agreed to establish a contact group on the matter, co-chaired by Mr. Arumugam Duraisamy (India) and Mr. Federico San Martini (United States of America), the co-chairs of the contact group established at the thirty-second meeting of the Open-ended Working Group, to work to finalize the draft decision.

76. *[To be completed]*

B. Presentation on and consideration of the work and recommended decisions forwarded by the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol (agenda item 16 (b))

77. Mr. W.L. Sumathipala (Sri Lanka), President of the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol, gave a presentation on the work of the Committee at its forty-eighth and forty-ninth meetings, which took place in Bangkok on 29 and 30 July 2012 and Geneva on 8 and 9 November 2012, respectively. The full report of the forty-eighth meeting was available on the Ozone Secretariat website, while that of the forty-ninth meeting would be available in due course. The Committee, at those meetings, had developed a total of six draft decisions, which had been forwarded for consideration by the parties at the current meeting.

78. The Implementation Committee, he said, had been pleased at the excellent progress of the parties in meeting the data reporting obligations of the Protocol, and only four parties of the 196 parties that should have reported data for 2011 had failed to do so, namely, Israel, Mali, Sao Tome and Principe, and South Africa. The first draft decision dealt with data reporting and urged those four parties to report the required data as soon as possible. The decision also noted with appreciation that 99 parties had reported their data by 30 June 2012 in accordance with decision XV/15, enabling the Committee to carry out much useful work at its July meeting, and encouraged parties to submit their data as early as possible. In addition, 173 parties had reported data by 30 September 2012, as required under Article 7 of the Protocol, an improvement on previous years.

79. The second draft decision dealt with requests from parties for the revision of their HCFC consumption baseline data for 2009, 2010 or both, in accordance with decision XIII/15. The Committee considered that there was sufficient evidence to approve the requests of Algeria, Ecuador, Equatorial Guinea, Eritrea, Haiti, Niger, the former Yugoslav Republic of Macedonia and Turkey.

80. The third draft decision concerned the reporting of zero in article 7 data reporting forms, and reflected concern in the Committee over some inconsistencies in the reporting of data for production, imports, exports and destruction of ozone-depleting substances in accordance with article 7 of the Montreal Protocol. The draft decision requested parties to enter a number in each cell in the data reporting forms that they submitted, including zero, where appropriate, rather than leaving the cell blank, and asked the Secretariat to request clarification from any party that submitted a reporting form containing a blank cell.

81. The fourth draft decision, on reporting of information on the use of process agents, noted with appreciation that 195 of the 197 parties to the Protocol had reported such information in accordance with decisions X/14 and XXI/3, and urged the two parties that had not submitted their information to do so as a matter of urgency. The Committee would review the situations of those parties at its fiftieth meeting.

82. The fifth draft decision, dealing with the status of the establishment of licensing systems under Article 4B of the Protocol, noted with appreciation that 191 of the 192 parties to the Montreal Amendment to the Protocol had established import and export licensing systems for ozone-depleting substances, as required by the amendment, and that 190 of those parties had provided disaggregated information on their licensing systems detailing which annexes and groups of substances under the Montreal Protocol were subject to those systems. The operative paragraphs of the draft decision congratulated South Sudan for having recently ratified all amendments to the Montreal Protocol and requested it to establish an import and export licensing system; asked Tajikistan and Gambia to undertake measures regarding their licensing systems; and encouraged Botswana to ratify the Montreal Amendment.

83. The final draft decision concerned non-compliance of Ukraine with the control measures of the Montreal Protocol for the consumption of HCFCs in 2010 and 2011. The draft decision recorded with appreciation the submission by Ukraine of a plan of action for reducing its consumption of HCFCs, returning to compliance in 2015 and attaining total phase-out by 2020, save for some consumption in the servicing of refrigeration and air-conditioning equipment until 2030. The Committee, he said, had

appreciated the attendance of the representatives of Ukraine at its forty-ninth meeting to discuss the matter.

84. The President of the Committee then turned to the issue of those parties that had yet to ratify one or more of the amendments to the Protocol, noting in particular the difficulties that might be faced by those parties that had not ratified the Beijing Amendment with regard to the trade restrictions on HCFCs that would become operative on 1 January 2013. Great efforts had been made by the Secretariat to encourage those parties to ratify, and he noted that some of those parties had submitted a draft decision on their situation for consideration by the parties at the current meeting.

85. In conclusion, he thanked all those who had assisted the Committee in its work during the previous year.

86. Following that presentation, the parties approved the draft decisions submitted by the Committee for further consideration and adoption during the high-level segment.

87. *[To be completed]*

XV. Other matters (agenda item 17)

A. Status of ratification of the Beijing Amendment: application of paragraph 8 of Article 4 of the Montreal Protocol with respect to the Beijing Amendment to the Montreal Protocol

88. The Co-Chair introduced the matter, drawing attention to a draft decision on the application to Bolivia (Plurinational State of), Ecuador, Haiti and Nicaragua of paragraph 8 of Article 4 of the Montreal Protocol with respect to the Beijing Amendment to the Montreal Protocol, which had been submitted by those parties in a conference room paper for consideration by the Meeting of the Parties.

89. The representative of Ecuador said that its purpose was to outline the current situation of the four parties listed with regard to ratification of the Beijing Amendment and to request that the exceptions provided for in paragraph 8 of Article 4 be applied to those parties. The representative of Nicaragua added that all four were at advanced stages in their national ratification processes and were working hard to complete them but were not in a position to do so before the trade restrictions of article 4 took effect in respect of HCFCs on 1 January 2013. The representative of Bolivia added the parties had already demonstrated that they were working in full compliance with the Beijing Amendment and had established the necessary HCFC controls, including licensing systems.

90. Several representatives welcomed the draft decision but indicated that they would require time to study it. It was agreed that interested parties would discuss the matter informally and report on the outcome of their discussions.

91. Subsequently the representatives of Kenya and Chad explained the situation in their countries and introduced a draft decision on the application paragraph 8 of Article 4 of the Protocol with respect to the Beijing Amendment to the Montreal Protocol to their countries. The representative of Kenya said that that his country was experiencing technical problems with the implementation of the Beijing Amendment and the representative of Chad said that his country expected to ratify the Beijing Amendment by the end of the current year.

92. The representative of Ecuador said that the two draft decisions were similar and informed the parties that he had consulted with the representative of Kenya during the informal consultations that had taken place on the draft decision that he had presented. Another representative said that it would be useful to merge the two draft decisions into a single document and suggested that the draft decision presented by Ecuador be the formal basis for discussion as some slight textual changes had already been made to it as a result of the informal consultations.

93. Several representatives expressed the wish to have their countries added to the draft decision and one representative said that he also wished to add the name of at least one country that was not present at the meeting.

94. One representative said that in principle the situations facing the proponents of the draft decisions should have been considered by the Implementation Committee before being addressed by the Meeting of the Parties. In the present case he did not object to considering the issue on an exceptional basis but suggested that in view of the large number of parties that wished to be covered by them he suggested that further discussion should take place in a contact group.

95. The parties agreed to establish a contact group to discuss the draft decisions further.

96. [To be completed]

B. Information on ozone-depleting substance transition policy measures

97. The Co-Chair introduced the sub-item, drawing attention to a conference room paper containing a draft decision on information on ozone-depleting substance transition policy measures, proposed by Australia, Canada, Croatia, the European Union, New Zealand and the United States of America.

98. The representative of the United States of America then summarized the draft decision and said that the proponents believed it would be valuable to compile all of the available information on approaches to the transition from ozone-depleting substances aimed to minimize the negative climate effects of that transition. Responding to a request for clarification, he said that the intention behind the draft decision was to provide parties with information on policy, control measures and other initiatives aimed at avoiding a transition from ozone-depleting substances to alternatives with high global warming potential. On the proposed coordination with the United Nations Framework Convention on Climate Change, he said that it could be beneficial but was not an integral part of the proposal and could be discussed further with interested parties.

99. In response, the representative who had sought clarification questioned the timing and equity of the proposal, noting that it came as the HCFC phase-out by parties not operating under paragraph 1 of article 5 of the Montreal Protocol was set to begin and saying that no such proposal had been contemplated for the phase-out by parties not so operating, many of whom had indeed adopted high-GWP alternatives. He also said that the proposal did not accord with decision XIX/6 and that he therefore had no mandate to agree to it. Should information of the sort contemplated by the proposal be collected, he continued, it should be collected from parties not operating under paragraph 1 of article 5 with the aim of facilitating the transfer of technology to parties operating under that paragraph.

100. Several representatives expressed support for the idea behind the draft decision but said that they would require time to study it. One said that it was a timely initiative while another said that her country would be happy to provide information on its own experiences and measures undertaken in the transition from ozone-depleting substances to alternatives.

101. At the suggestion of the Co-Chair, it was agreed that interested would meet informally to discuss the draft decision and then report to the parties on the outcome of their discussions.

102. [To be completed]

C. Tribute to Ms. Maria Nolan

103. The representative of the United States of America paid tribute to Ms. Maria Nolan, who would soon be retiring as Chief Officer of the Multilateral Fund. He said that the recent review of the Financial Mechanism had demonstrated that for the past twenty years the Multilateral had been an extremely effective and efficient institution. That was due in large measure to the staff of the Multilateral Fund, which had been ably led by Ms. Nolan. He said that it was important to ensure that the future of the Multilateral Fund was in good hands and he informed the parties that the process of selecting a new Chief Officer was already under way.

D. Update on the status of the Bali Declaration

104. Introducing the item, the representative of Indonesia recalled the Bali Declaration on Transitioning to Low Global Warming Potential Alternatives to Ozone Depleting Substances, which had been adopted at the combined ninth meeting of the Conference of the Parties to the Vienna Convention and Twenty-Third Meeting of the Parties to the Montreal Protocol. That declaration resulted from the understanding that the parties to the Montreal Protocol should not ignore the impact on the environment, including the climate system, of their efforts to protect the ozone layer.. She said that regardless of the outcome of the current debate on amending the Protocol, it was important to work toward a transition to low-GWP alternatives to ozone-depleting substances. A total of 105 parties had signed the Declaration to date, and a number of others had verbally indicated their support. That number was expected to increase in the future, and she encouraged all parties to support the move towards alternatives that had minimal effect on the environment.



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**United Nations
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**Twenty-Fourth Meeting of the Parties to
the Montreal Protocol on Substances
that Deplete the Ozone Layer**
Geneva, 12–16 November 2012

**Draft report of the Twenty-Fourth Meeting of the Parties to the
Montreal Protocol on Substances that Deplete the Ozone Layer**

Addendum

Part one: preparatory segment (continued)

- I. Administrative matters (agenda item 3) (continued)**
 - A. Consideration of membership of Montreal Protocol bodies for 2013 (agenda item 3 (a)) (continued)**
 1. *[To be completed]*
 - B. Financial reports of the trust funds and budgets for the Montreal Protocol (agenda item 3 (b)) (continued)**
 2. *[To be completed]*
- II. Issues related to exemptions from Article 2 of the Montreal Protocol (agenda item 4) (continued)**
 - A. Nominations for essential-use exemptions for 2013 (agenda item 4 (a)) (continued)**

Metered dose inhalers (continued)

 3. *[To be completed]*
 - B. Nominations for critical-use exemptions for 2014 (agenda item 4 (b)) (continued)**
 4. *[To be completed]*
 - C. Quarantine and pre-shipment issues (agenda item 4 (c)) (continued)**
 5. Subsequently, the co-chair of the contact group introduced a conference room paper setting out a revised version of the draft decision prepared by the contact group. The parties approved the draft decision for consideration and adoption during the high-level segment.

- D. Feedstock uses (agenda item 4 (d)) [continued]**
6. [To be completed]
- III. Additional information on alternatives to ozone-depleting substances (agenda item 5) (continued)**
7. [To be completed]
- IV. Proposal on trade of controlled substances with ships sailing under a foreign flag (agenda item 7) (continued)**
8. [To be completed]
- V. Evaluation of the financial mechanism of the Montreal Protocol (agenda item 9) (continued)**
9. [To be completed]
- VI. Proposal on clean production of HCFC-22 through by-product emission control (agenda item 10) (continued)**
10. [To be completed]
- VII. Proposal on additional funding for the Multilateral Fund for the Implementation of the Montreal Protocol to maximize the climate benefit of the accelerated phase-out of hydrochlorofluorocarbons (agenda item 11) (continued)**
11. [To be completed]
- VIII. Proposal on funding of production facilities for hydrochlorofluorocarbons (agenda item 12) (continued)**
12. [To be completed]
- IX. Compliance and data reporting issues (agenda item 16) (continued)**
Proposal on the differences between data reported on imports and data reported on exports (agenda item 16 (a)) (continued)
13. [To be completed]
- X. Other matters (agenda item 17) (continued)**
- A. Status of ratification of the Beijing Amendment: application of paragraph 8 of Article 4 of the Montreal Protocol with respect to the Beijing Amendment to the Montreal Protocol (continued)**
14. [To be completed]
- B. Information on ozone-depleting substance transition policy measures (continued)**
15. [To be completed]

Part two: high-level segment

I. Opening of the high-level segment

16. The high-level segment of the Twenty-Fourth Meeting of the Parties was opened at 10.30 a.m. on Thursday, 15 November 2012, with a performance of traditional Swiss music.

17. Opening statements were delivered by Ms. Doris Leuthard, Minister of Environment, Transport, Energy and Communications of Switzerland; Mr. Marco González, Executive Secretary of the Ozone Secretariat; Ms. Amina Mohamed, Deputy Executive Director of UNEP; and Mr. Syanga Abilio (Angola), President of the Twenty-Third Meeting of the Parties to the Montreal Protocol.

18. Ms. Leuthard welcomed the representatives to Geneva, describing the Montreal Protocol, which had been ratified by every country in the world and had contributed to the phase-out of 98 per cent of controlled ozone-depleting substances, as the most successful agreement in international environmental policymaking. In addition to harming the ozone layer, ozone-depleting substances were also potent greenhouse gases, meaning that the Protocol was also delivering significant climate benefits. It had shown how global problems could be resolved if all local stakeholders joined forces with a framework for clear, legally binding commitments and a financial mechanism that was directly linked to compliance. Lessons could be learned to overcome the obstacles to global legally binding instruments in other areas such as mercury and the post-2020 climate change regime. Care must be taken, however, to avoid undermining climate benefits through the use of high-global-warming-potential substances as replacements for ozone-depleting substances. Switzerland therefore supported the proposed amendments to the Protocol aimed at phasing down the production and consumption of HFCs adopted as alternatives to HCFCs. The reservations that some parties had expressed about such measures being a matter for action under other instruments were understandable, but every opportunity should be taken to achieve climate targets. Her Government, which remained committed to a strong chemicals-control regime, and whose chemicals industry had become a reliable partner to policymakers, was optimistic that the remaining barriers could be overcome. She wished the parties every success in their deliberations.

19. Mr. González thanked the Government of Switzerland for hosting the meeting. He recalled that the Montreal Protocol had been adopted twenty-five years previously in line with the precautionary principle to take firm, science-based action to protect the ozone layer, without waiting for incontrovertible evidence of the causes of its depletion or for alternatives to CFCs and halons to become available for all uses. The Protocol's commitment to the principle of common but differentiated responsibility, recognizing the different needs and circumstances of countries at differing stages of development, had been crucial, and its effective data collection and reporting system had made it possible to judge compliance and to provide assistance to parties experiencing difficulty in meeting their obligations. Having enabled the phase-out of the vast majority of ozone-depleting substances, the Protocol had done more to protect the climate system than any other international agreement and, with just 14 countries yet to ratify all four amendments to the Protocol, the spirit of cooperation among public and private-sector stakeholders had helped it to deliver major achievements for sustainable development. That spirit of cooperation, and the Protocol's continuing ability to innovate and adapt, would continue to enable it to meet and overcome new and emerging challenges, including those that had been the subject of discussions at the current meeting.

20. Ms. Mohamed began her statement by paying tribute to her predecessor, Ms. Angela Cropper, who had passed away on 12 November 2012. Ms. Cropper, she said, had been a morally upright, selfless soldier for the environment, fully committed to public service, until the day she died.

21. The Meeting of the Parties observed a minute's silence in memory of Ms. Cropper.

22. Commending the parties on the commitment and foresight that had contributed to the Montreal Protocol's success, she said that credit must be given to the Governments, private-sector companies, civil society organizations and academics that had worked hard in partnership with conviction and tireless dedication. At the current rate, the ozone layer would return to its pre-1980 state by 2050, thereby achieving the goal of protecting life on earth from harmful ultraviolet radiation. She urged all parties to continue to choose low-global-warming-potential alternatives wherever possible in order to ensure an ozone-safe world for future generations. Achieving such a world required intergenerational responsibility; application of the precautionary principle, based on sound science, and the principle of common but differentiated responsibility; and efforts to lay the foundations for a sustainable future, building on the outcomes of the United Nations Conference on Sustainable Development, held in Rio de Janeiro in June 2012. The lessons learned from the 25 years of the Protocol's history, the national and international governance and institutional structures established to implement it, and the

cooperation demonstrated by its parties had made the Protocol a model and an inspiration for tackling other global challenges. One major challenge, as had been recognized at the Conference on Sustainable Development, was the phase-down of HFCs, the subject of proposed amendments to the Montreal Protocol on the agenda for the current meeting. The negotiations had not been easy and would require the same global partnership and commitment that had led to the Protocol's adoption. UNEP pledged its continued commitment and support in the efforts needed to reach agreement on the proposed amendments and the many other critical issues on the agenda for the current meeting.

23. Mr. Abilio thanked the Government of Switzerland for hosting the meeting. Expressing his appreciation to the parties for having entrusted his country with the presidency, he said that the Bureau had met on 10 November 2012 to review implementation of the decisions adopted at the Twenty-Third Meeting of the Parties and that he had been pleased to see that those decisions had been implemented; the parties, the assessment panels, the Implementation Committee and the Secretariat were currently engaged in follow-up action. A key decision had been to replenish the Multilateral Fund for the next three years, and the parties operating under paragraph 1 of Article 5 of the Montreal Protocol were about to begin implementing the first measure to accelerate the phase-out of HCFCs, based on the adjustments agreed in 2007.

24. Congratulating the world's newest State, South Sudan, for having become a party to the Protocol in January 2012 and for having ratified all four amendments in October, he expressed the hope that the other parties, the Executive Committee of the Multilateral Fund and the implementing agencies would all work together to assist it in complying with its obligations. He wished the parties every success in their deliberations.

Video message from the Queen of Bhutan

25. The Executive Secretary recalled that Her Majesty, the Queen of Bhutan, had earlier in the year undertaken to mobilize support for ozone layer protection, to promote the Montreal Protocol and to support parties in their implementation of the Protocol, in particular through the Ozone Officers Network. Since then she had been recognized by all countries in the Asia and the Pacific regional networks as an ambassador for the ozone layer. In a video message to the Meeting of the Parties, the Queen expressed her gratitude for the recognition of her work and reiterated her commitment to the cause of ozone layer protection.

II. Organizational matters

A. Election of officers for the Twenty-Fourth Meeting of the Parties to the Montreal Protocol

26. At the opening session of the high-level segment, in accordance with paragraph 1 of rule 21 of the rules of procedure, the following officers were elected, by acclamation, to the Bureau of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol:

President:	Mr. Mehmood Alam	Pakistan (Asia and Pacific)
Vice-Presidents:	Mr. Alain Wilmart	Belgium (Western Europe and others)
	Mr. Dmytro Mormul	Ukraine (Eastern Europe)
	Mr. Leslie Smith	Grenada (Latin America and the Caribbean)
Rapporteur:	Mr. Wylbur Simuusa	Zambia (Africa)

B. Adoption of the agenda of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol

1. Opening of the high-level segment:
 - (a) Statements by representative(s) of the Government of Switzerland;
 - (b) Statements by representative(s) of the United Nations Environment Programme;
 - (c) Marking the twenty-fifth anniversary of the Montreal Protocol;
 - (d) Statement by the President of the Twenty-Third Meeting of the Parties to the Montreal Protocol.
2. Organizational matters:

- (a) Election of officers for the Twenty-Fourth Meeting of the Parties to the Montreal Protocol;
 - (b) Adoption of the agenda of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol;
 - (c) Organization of work;
 - (d) Credentials of representatives.
3. Status of ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol and the amendments to the Montreal Protocol.
 4. Presentations by the assessment panels on the status of their work, including the latest developments.
 5. Presentation by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund's implementing agencies.
 6. Statements by heads of delegation.
 7. Report by the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the Twenty-Fourth Meeting of the Parties.
 8. Dates and venue for the Twenty-Fifth Meeting of the Parties to the Montreal Protocol.
 9. Other matters.
 10. Adoption of decisions by the Twenty-Fourth Meeting of the Parties to the Montreal Protocol.
 11. Adoption of the report of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol.
 12. Closure of the meeting.

C. Organization of work

27. The parties agreed to follow their customary procedures.

D. Credentials of representatives

28. *[To be completed]*

III. Status of ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol and the amendments to the Montreal Protocol

29. The President said that since the previous Meeting of the Parties there had been much progress in the status of ratification of the Vienna Convention, the Montreal Protocol and the amendments to the Protocol. He drew attention to the draft decision on the status of ratification of the Vienna Convention, the Montreal Protocol and the London, Copenhagen, Montreal and Beijing amendments to the Montreal Protocol (see UNEP/OzL.Pro.24/8), which was a standard decision of the kind that was usually taken by the Meeting of the Parties to record the status of ratifications and to encourage further ratifications.

IV. Presentations by the assessment panels on the status of their work, including the latest developments

30. Under the item presentations were made by representatives of the Scientific Assessment Panel, the Environmental Effects Assessment Panel and the Technology and Economic Assessment Panel and its Halons Technical Options Committee.

31. Mr. Paul Newman outlined the status of the 2014 assessment of the Scientific Assessment Panel and summarized the topics that would be addressed therein. He also provided a summary of new information on carbon tetrachloride and on the chlorofluorocarbon RC-316c.

32. Mr. Nigel Paul presented an update on the status of the 2014 assessment of the Environmental Effects Assessment Panel and outlined the topics that it would cover.

33. Mr. Lambert Kuijpers gave an overview of the status of the 2014 assessment of the Technology and Economic Assessment Panel and presented an update on the work of the Flexible and Rigid Foams Technical Options Committee, the Methyl Bromide Technical Options Committee and the Refrigeration, Air-Conditioning and Heat Pumps Technical Options Committee. Mr. Daniel Verdonik then reported on the work of the Halons Technical Options Committee and its cooperation with the International Civil Aviation Organization with regard to the phase-out of halon production.

34. Summaries of the presentations prepared by the presenters are set out in annex [] to the present report.

35. The parties took note of the information provided.

V. Presentation by the Chair of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol on the work of the Executive Committee, the Multilateral Fund secretariat and the Fund's implementing agencies

36. Mr. Xiao Xuezhi (China), chair of the Executive Committee of the Multilateral Fund, delivered a presentation on the Committee's activities since the Twenty-Third Meeting of the Parties, encompassing the Committee's sixty-sixth and sixty-seventh meetings. He summarized the report (UNEP/OzL.Pro.24/9) and said that at its sixty-sixth and sixty-seventh meetings the Executive Committee had approved a total of 101 additional projects and activities with a planned phase-out of 522 ODP-tonnes of controlled substances. The funds approved for projects and activities had totalled \$40,379,077, including \$3,273,203 for agency support costs. He also reported that an agreement had been reached on a new administrative cost regime for the Multilateral Fund that would encourage implementing agencies to continue their engagement in the Montreal Protocol process and ensure the cost-effective and efficient implementation of phase-out projects in countries operating under paragraph 1 of Article 5.

37. Further progress had also been made regarding the outstanding contributions of the Russian Federation and, after further discussions, the Russian Federation stood ready to start paying, at the earliest from 2013, its pledges to the Multilateral Fund as soon as the financial processes and agreement had been finalized. He also drew the attention of the parties to annex II to the report of the Multilateral Fund (UNEP/OzL.Pro.24/9), which had been provided in response to decision XVI/36. He said that in view of the current evaluation of the Financial Mechanism that component of the annual report of the Executive Committee was considered to have been completed and that future annual reports of the Executive Committee would therefore no longer contain that annex.

38. Recognizing that the first control measure for HCFC reduction was fast approaching, the Executive Committee had focused its attention on ensuring that funding was provided for HCFC phase-out management plans in as many countries as possible. As of the sixty-seventh meeting, 126 parties operating under paragraph 1 of article 5 of the Montreal Protocol had put the infrastructure in place to implement those activities. Twenty of those HCFC phase-out management plans had been approved during the reporting period, and following the submissions to the sixty-eighth meeting of the Executive Committee there would remain only six outstanding stage 1 HCFC phase-out management plans to be funded.

39. The Executive Committee had also undertaken activities to implement decisions of the Twenty-Third Meeting of the Parties, some of which affected the efficient implementation of HCFC phase-out activities in developing countries. The Executive Committee had consequently taken a number of policy decisions, which were more fully described in document UNEP/OzL.Pro.24/9 and some of which are as described below.

40. The results of projects demonstrating low-cost alternatives to HCFCs in the foam sector had allowed the Executive Committee to examine potential replacements that appeared to be feasible solutions meeting the objective of a cost-effective, zero ozone-depleting potential and low-global-warming-potential replacement technology. In the case of hydrocarbons, however, additional investigation and the development of a costing concept on pre-blended hydrocarbon polyols was required. For enterprises in the foam sector that had received funding for moving away from CFCs, full funding of eligible incremental costs for second stage conversion to non-HCFC technology would be limited to new lines and equipment established before September 2007. Full funding for eligible incremental costs for second stage conversion to phase-out HCFC-141b in imported polyols would be considered on a case-by-case basis, provided that parties committed to banning the import of HCFC-141b in bulk or in fully formulated systems.

41. The Executive Committee had also looked at tracking projects that used HCFC-141b-based pre-blended polyols in order to avoid double counting them. The Executive Committee was considering ways of discounting the amount, or average amount of HCFC-141b contained in pre-blended polyols that countries exported for a given year or years, from its starting point for eligible consumption. Deliberations on that issue would be concluded at the sixty-eighth meeting of the Executive Committee. The Executive Committee had also concluded that, depending on the alternative technology selected, some costs related to retooling for manufacturing heat exchangers in the refrigeration and air conditioning sector might be eligible as incremental costs. The extent to which those costs were eligible and incremental, however, was still to be decided. Ways to maximize the climate benefits from the phase-out of HCFCs in the refrigeration servicing sector had also been considered, although more effective means of maximizing climate benefits in the refrigeration servicing sector needed to be agreed upon. Implementing agencies also continued to look for creative ways to mobilize resources for maximizing the climate benefit of the accelerated phase-out of HFCs.
42. Although there were still some policy issues pending for the HCFC production sector, discussions on the outstanding matters had taken place with the aim of finalizing the HCFC production sector guidelines, and the draft final report on the technical audit of China's HCFC production sector had been reviewed during the reporting period. Those were urgent issues that posed for the Government of China, and Chinese industry, the challenge of meeting the 2013 and 2015 HCFC control targets of the Montreal Protocol.
43. He then spoke on behalf of the implementing agencies. The United Nations Development Programme (UNDP) was operating a programme in over 106 countries that had resulted in the phase-out 65,495 ODP-tonnes of ozone-depleting substances and had a cumulative Multilateral Fund grant value of \$630 million, of which 87.4 per cent had been disbursed. UNDP continued to assist its partner countries to stay in, or return to, compliance, thus contributing to the effective implementation of the Montreal Protocol. UNDP had also been entrusted with the preparation of HCFC phase-out management plans for 42 countries, all of which were currently being implemented. It had also completed the assessment of the viability of different climate-friendly alternatives to blowing agents in the polyurethane and extruded polyurethane sectors.
44. UNEP was implementing the largest number of HCFC phase-out management plans for low-volume consuming countries. Under its Compliance Assistance Programme, UNEP continued to provide support to parties operating under paragraph 1 of article 5 of the Montreal Protocol for compliance-related issues and to build the capacity of national ozone units to implement their ozone programmes.
45. The United Nations Industrial Development Organization (UNIDO) had developed HCFC phase-out management plans for 69 countries operating under paragraph 1 of article 5 of the Protocol to help them meet the HCFC consumption freeze targets of 1 January 2013 and 1 January 2015. Since the Twenty-Third Meeting of the Parties, the Executive Committee had approved funding for 59 new projects to be implemented by UNIDO for the phase-out of 391.90 ODP-tonnes of controlled substances in 41 countries operating under paragraph 1 of article 5. It had also prepared and implemented projects, funded through the Multilateral Fund, on environmentally sound disposal of stockpiles of waste ozone-depleting substances and equipment containing ozone-depleting substances.
46. The World Bank, together with its partner countries, had phased out some 300,000 ODP-tonnes of ozone-depleting substances under the Multilateral Fund and a further 230,000 ODP-tonnes under the Global Environment Facility. The net phase-out of ozone-depleting substances, once the global-warming-potential impact of the alternatives being phased in was accounted for, was the equivalent of approximately 1.22 billion tonnes of carbon dioxide emissions averted. Since the Twenty-Third Meeting of the Parties, the World Bank had focused on the development of a new HCFC production phase-out management plan for China, as timely phase-out of HCFC production supply was critical for consumer countries operating under paragraph 1 of article 5 to meet the phase-out targets of stage 1 of their HCFC phase-out management plans.
47. In conclusion he said that all agencies had held significant celebrations in honour of the twenty-fifth anniversary of the Montreal Protocol and that as Chair of the Multilateral Fund he had been struck by the effective cooperation between the parties that was the hallmark of the Montreal Protocol. It was that spirit of cooperation that made the Montreal Protocol stand out from among the other multilateral environmental agreements.
48. The parties took note of the information presented.

VI. Statements by heads of delegation

49. [To be completed]

VII. Report by the co-chairs of the preparatory segment and consideration of the decisions recommended for adoption by the Twenty-Fourth Meeting of the Parties

50. [To be completed]

VIII. Dates and venue for the Twenty-Fifth Meeting of the Parties to the Montreal Protocol

51. [To be completed]

IX. Other matters

52. [To be completed]

X. Adoption of decisions by the Twenty-Fourth Meeting of the Parties to the Montreal Protocol

53. [To be completed]

XI. Adoption of the report of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol

54. [To be completed]

XII. Closure of the meeting

55. [To be completed]



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Addendum

Part two: High-level segment

Statements by heads of delegation (agenda item 6)

1. During the high-level segment statements were made by heads of delegation of the following parties, listed in the order in which they spoke: Madagascar, China, United States of America, the European Union and its member States, Zambia, Bolivia, Japan, Ukraine, Indonesia, Holy See, Burundi, Fiji, Cambodia, Zimbabwe, Nigeria, Brazil, Jordan, Venezuela (Bolivarian Republic of), Iran (Islamic Republic of), Kenya, Uganda, Maldives, Nepal, Sudan, Kiribati, Yemen, Guinea, Philippines, Mozambique, Croatia, Dominican Republic, Malawi, United Republic of Tanzania, Serbia, Timor-Leste, Canada, Bangladesh, Democratic Republic of the Congo, Pakistan, Iraq, Nicaragua, Malaysia, Mongolia, Palau, Panama, Côte d'Ivoire, Chile and India.
2. Statements were also made by the representative of the African group of countries and the representative of the World Meteorological Organization.
3. Representatives of all parties who spoke thanked the Government and people of Switzerland for their hospitality in hosting the current meeting. Many thanked UNEP and the Ozone Secretariat, the Multilateral Fund Secretariat and implementing agencies, industrial countries, the assessment panels, international organizations and other stakeholders for their roles in ensuring the success of the meeting and the successful development and implementation of the Protocol.
4. Many representatives reiterated their commitment to the objectives of the Protocol and amendments. Many described their countries' efforts to meet their obligations under the Protocol, outlining the policy, legislative, institutional and programmatic measures that they had put in place in order to support those efforts. Several representatives expressed their countries' pride in achieving the Protocol's phase-out milestones for various ozone-depleting substances, for example CFCs and halons, often ahead of the stipulated schedules, and indicated their determination to continue in the same vein, including with regard to the planned phase-out of HCFCs. In that regard, several parties said that their HCFC management plans were in place and operational. A wide range of initiatives to support the elimination of ozone-depleting substances were described, including the establishment of import/export licensing and quota systems, the enhancement of institutional coordination, training and capacity-building, the development of public-private partnerships, the establishment of funding mechanisms, and the raising of public awareness, including through the educational system. Several representatives indicated that their efforts to control ozone-depleting substances under the Protocol were part of a wider commitment to sustainable development and the protection of the environment

and human health, and some noted the need for a holistic approach by which environmental protection, including care of the ozone layer, was woven into the social, economic and aspirational fabric of society as a whole. Finally, several parties expressed gratitude to the international partners and donors who had assisted them in their endeavours.

5. There was fulsome praise and congratulations for the Montreal Protocol on the occasion of the twenty-fifth anniversary of the signing of the agreement on 16 September 1987. Many representatives highlighted the remarkable achievement of the Protocol in attaining universal ratification and putting in place a regulatory framework that had been impressively successful in achieving its aim of reversing the damage to the ozone layer, to the benefit of present and future generations. The degree of success had been such that the Protocol was held up as a model for the operation of other multilateral environmental instruments. There was broad recognition that robust science had underpinned the accomplishments of the Protocol, in which the role of the Protocol's assessment panels had been crucial. One representative highlighted the elements that had contributed to the Protocol's success, including the setting of legally binding commitments, while providing for flexibility; its dynamic structure, allowing for the accommodation of technological progress; and the operation of efficient compliance and financial support mechanisms.

6. Several representatives said that the past success of the Protocol should not cause the parties to the Protocol to drop their guard, as considerable work was still needed to ensure the continued protection of the ozone layer into the future. A number of representatives said that, in keeping with current institutional trends, activities under the Protocol should be increasingly coordinated with those of other instruments, including the United Nations Framework Convention on Climate Change, given the climate co-benefits that had been delivered by the phase-out of ozone-depleting substances and the growing urgency of the climate change threat.

7. Many representatives highlighted the role of the Multilateral Fund as a mechanism by which parties with developing or transitional economies could avail themselves of financing and other forms of assistance for phase-out projects. A number also praised the implementing agencies for their crucial work at the country level. Some representatives drew encouragement from the conclusions of an independent evaluation confirming the value of the Multilateral Fund as a key institution for the success of the ozone protection regime. Several representatives urged the developed countries to make greater efforts to ensure that the Fund, as a mainstay of the success of the Protocol, had sufficient resources at its disposal to support the objectives of the Protocol, particularly as the start of the accelerated phase-out schedule for HCFCs was imminent. One representative said that the economic conditions of individual countries should be taken into account in considering the cost of projects under the Multilateral Fund, rather than treating developing countries as a single large group.

8. A theme figuring prominently in many country statements was the next major objective of the Protocol, namely, the phase-out of HCFCs. A number of representatives of parties operating under paragraph 1 of article 5 of the Protocol expressed concern as to whether there was sufficient time and resources to comply fully with the imminent 2013 freeze and 10 per cent reduction of HCFCs by 2015 under the accelerated phase-out schedule. Several highlighted the need for such supportive elements as capacity-building, technology transfer and strengthening of national ozone units. In addition, it was crucial to ensure the adoption of environmentally friendly technologies that reduced ozone-depleting substances without causing harm to other components of the environment. One representative said that a sustained effort by Government and industry was essential, including in the promotion of new technologies and research into and development of alternatives. Another representative said that the existence of many small and medium-sized enterprises in developing countries was a particular challenge in the application of alternative technologies. Another representative said that the individual situation of parties should be taken into account, along with the economic and technical feasibility of alternatives, to ensure a realistic transition period. Several representatives stressed the continuing importance of the principle of common but differentiated responsibilities, while several urged donor countries to fulfil their responsibilities during the upcoming crucial period by ensuring the provision of stable and predictable resources.

9. Many representatives expressed concern at the contribution to global warming caused by the adoption of HFCs technologies in the conversion from HCFCs technologies. There were divergent views on the role of the Montreal Protocol in that regard, with one group of opinions urging the parties to accept their responsibilities and take relevant measures under the Protocol and, in cooperation with other instruments, to address the situation, while another group of opinions stated that substances with high global-warming potential came under the purview of the United Nations Framework Convention on Climate Change and its Kyoto Protocol and should be dealt with in that forum. One representative highlighted the Bali Declaration, an outcome of the Twenty-Third Meeting of the Parties, as embodying an approach to the issue that deserved attention, in that it promoted the use of alternatives

to ozone-depleting substances that had low global-warming-potential and were economically viable, environmentally benign, technologically feasible and readily available on the market. He added that discussion of the matter should not be confined to whether or not to amend the Protocol, but should focus on working more holistically to develop safer alternatives to ozone-depleting substances. One representative of a small island developing State said that such States were at the forefront of climate change impacts and were challenged enormously, with heightening environmental impacts giving rise to economic and social hurdles. Given the urgency of the matter, it was disheartening to hear parties brush off their responsibilities when strong co-benefits for the climate and the ozone layer could be realized through appropriate action.

10. A number of representatives spoke of the challenges that lay ahead for the Montreal Protocol. Among the specific issues raised were the urgent need to find alternatives for certain uses of methyl bromide, the continuing existence of large banks and stockpiles of ozone-depleting substances, the need to improve systems for recovery and recycling, the growing problem of illicit trade and dumping, the need for further institutional strengthening, the challenge of incorporating innovative solutions in the field of alternative technologies, and the problems faced by countries with hot climates in the refrigeration and air-conditioning sectors. Some representatives of small-island developing States drew attention to the consumption of HCFCs by foreign ships coming into their ports as a growing compliance-related challenge.

11. On a broader level, several representatives considered what might be the future role of the Protocol in a rapidly changing environmental, economic and social context. There was recognition of the importance of increased partnership, greater cooperation between international instruments and more effective regional cooperation. Sourcing finance and other resources for particular activities in an increasingly complex and crisis-ridden global environment was a matter of concern. One representative spoke of the crises currently facing the human family, including poverty, forced migration and sea-level rise, and urged environmental treaties and instruments, including the Montreal Protocol, to employ creative thinking to ensure that human rights issues were given full cognizance in their deliberations, including through adoption of a more synergistic approach involving a wide range of stakeholders.

12. The representatives of Côte d'Ivoire and Ukraine expressed their Governments' willingness to host the Twenty-Fifth Meeting of the Parties to the Montreal Protocol in 2013.

13. The representative of the World Meteorological Organization noted the effective collaboration that had taken place between the organization and the Montreal Protocol, and underlined the contribution of observation and research to the success of that collaboration. He said that the recently established Global Framework for Climate Services promised to be a powerful tool for the provision of climate services and the building of partnerships for coordinated and systematic action at different scales, from the global to the local.



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**Twenty-Fourth Meeting of the Parties to
the Montreal Protocol on Substances
that Deplete the Ozone Layer**

Item 10 of the agenda for the high-level segment

**Adoption of decisions by the Twenty-Fourth Meeting of the
Parties to the Montreal Protocol**

Compilation of draft decisions for adoption

The Meeting of the Parties decides:

A. Draft decision XXIV/[]: Status of ratification of the Vienna Convention, the Montreal Protocol and the London, Copenhagen, Montreal and Beijing amendments to the Montreal Protocol

1. To note with satisfaction the universal ratification of the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol on Substances that Deplete the Ozone Layer, the London Amendment to the Montreal Protocol and the Copenhagen Amendment to the Montreal Protocol, each with 197 parties;

2. To note also that, as at 16 November 2012, 193 parties had ratified the Montreal Amendment to the Montreal Protocol and 183 parties had ratified the Beijing Amendment to the Montreal Protocol;

3. To urge Bahrain, Bolivia (Plurinational State of), Botswana, Chad, Djibouti, Ecuador, Haiti, Iran (Islamic Republic of), Kazakhstan, Kenya, Libya, Mauritania, Papua New Guinea and Saudi Arabia to ratify, approve or accede to the Montreal and Beijing Amendments, taking into account that universal participation is necessary to ensure the protection of the ozone layer.

B. Draft decision XXIV/[...]: Quarantine and pre-shipment issues

Recalling the need for improved reporting on methyl bromide consumption for quarantine and pre-shipment uses,

Recalling also decision XXIII/5, in particular its paragraph 2, in which the Meeting of the Parties invited parties in a position to do so, on a voluntary basis, to submit information to the Ozone Secretariat by 31 March 2013 on:

- (a) The amount of methyl bromide used to comply with phytosanitary requirements of destination countries; and
- (b) Phytosanitary requirements for imported commodities that must be met through the use of methyl bromide,

Recalling further decision XXIII/5, in particular its paragraph 3, in which the Meeting of the Parties urged parties to comply with the reporting requirements of Article 7 and to provide data on the amount of methyl bromide used for quarantine and pre-shipment applications annually and invited parties in a position to do so, on a voluntary basis, to supplement such data by reporting to the Secretariat information on methyl bromide uses recorded and collated pursuant to the recommendation of the Commission on Phytosanitary Measures,

1. To consider at the thirty-third meeting of the Open-ended Working Group whether to ask the Technology and Economic Assessment Panel to undertake an analysis of trends in Article 7 data on methyl bromide use for quarantine and pre-shipment, taking into account the information submitted in accordance with decision XXIII/5 and how to improve the information;
2. To request the Ozone Secretariat to remind parties that they are invited to submit information by 31 March 2013, on a voluntary basis, in accordance with paragraph 2 of decision XXIII/5;
3. To invite parties that have not yet established procedures for data collection on methyl bromide use for quarantine and pre-shipment or wish to improve existing procedures to consider using the elements identified as essential by the Technology and Economic Assessment Panel in section 10.4.4 of its 2012 progress report;
4. To request the Ozone Secretariat to upload to its website the forms that have been provided as examples in section 10.4.2 of the 2012 progress report of the Technology and Economic Assessment Panel.

C. Draft decision XXIV[...]: Data and information provided by the parties in accordance with Article 7 of the Montreal Protocol

Noting with appreciation that 194 parties of the 196 that should have reported data for 2011 have done so, and that 99 of those parties reported their data by 30 June 2012 in accordance with decision XV/15,

Noting further that 173 of those parties reported their data by 30 September 2012 as required under Article 7 of the Montreal Protocol,

Noting with concern, however, that the following parties have not reported 2011 data: Mali, and Sao Tome and Principe,

Noting that their failure to report their 2011 data in accordance with Article 7 places those parties in non-compliance with their data-reporting obligations under the Montreal Protocol until such time as the Secretariat receives their outstanding data,

Noting also that a lack of timely data reporting by parties impedes effective monitoring and assessment of parties' compliance with their obligations under the Montreal Protocol,

Noting further that reporting by 30 June each year greatly facilitates the work of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol in assisting parties operating under paragraph 1 of Article 5 of the Protocol to comply with the Protocol's control measures,

1. To urge the parties listed in the present decision, where appropriate, to work closely with the implementing agencies to report the required data to the Secretariat as a matter of urgency;
2. To request the Implementation Committee to review the situation of those parties at its fiftieth meeting;
3. To encourage parties to continue to report consumption and production data as soon as figures are available, and preferably by 30 June each year, as agreed in decision XV/15;

D. Draft decision XXIV/[]: Requests for the revision of baseline data by Algeria, Ecuador, Equatorial Guinea, Eritrea, Haiti, Niger, the former Yugoslav Republic of Macedonia and Turkey

Noting that, in accordance with decision XIII/15, by which the Thirteenth Meeting of the Parties decided that parties requesting the revision of reported baseline data should present such requests to the Implementation Committee, which in turn would work with the Secretariat and the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol to confirm the justification for the changes and present them to the Meeting of the Parties for approval,

Noting also that decision XV/19 sets out the methodology for the submission of such requests,

1. That Algeria, Ecuador, Equatorial Guinea, Eritrea, Haiti, Niger, the former Yugoslav Republic of Macedonia and Turkey have presented sufficient information, in accordance with decision XV/19, to justify their requests for the revision of their consumption data for hydrochlorofluorocarbons for 2009, 2010 or both, which are part of the baseline for parties operating under paragraph 1 of Article 5;

2. To approve the requests of the parties listed in the preceding paragraph and to revise their baseline hydrochlorofluorocarbon consumption data for the respective years as indicated in the following table:

Party	Previous HCFC data				New HCFC data			
	(metric tonnes)		(ODP-tonnes)		(metric tonnes)		(ODP-tonnes)	
	2009	2010	2009	2010	2009	2010	2009	2010
1. Algeria	497.75	497.75	30.2	30.2	1061.6	1122.5	60.35	63.88
2. Equatorial Guinea	253	-	13.9	-	113	-	6.22	-
3. Eritrea	1.8	1.9	0.1	0.1	19.1	20.31	1.05	1.12
4. Haiti	35.308	33.41	1.9	1.8	70	62	3.85	3.41
5. Niger	660	-	36.3	-	290	-	15.95	-
6. Ecuador	379.89	261.8	20.7	14.3	469.01	386.45	25.74	21.24
7. The former Yugoslav Republic Of Macedonia ^a	57.332	-	4	-	41.632	-	2.29	-
8. Turkey	-	8 900.721	-	606.0	-	7 041.25	-	493.03

^a The request for a revision of baseline data from the former Yugoslav Republic of Macedonia only relates to excluding of HCFCs contained in imported pre-blended polyols from its HCFC consumption.

E. Draft decision XXIV/[]: Reporting of zero in Article 7 data reporting forms

Recalling the need for consistent reporting of production, imports, exports and destruction of ozone-depleting substances in accordance with article 7 of the Montreal Protocol,

Noting that the forms for reporting in accordance with article 7 submitted by parties sometimes contain blank cells, in which no numbers indicating quantities of ozone-depleting substances are entered,

Noting also that such blank cells could be intended by a party in a given case to indicate zero controlled substances or, alternatively, could represent non-reporting by that party in respect of those substances,

(a) To request parties, when reporting production, imports, exports or destruction, to enter a number in each cell in the data reporting forms that they submit, including zero, where appropriate, rather than leaving the cell blank;

(b) To ask the Secretariat to request clarification from any party that submits a reporting form containing a blank cell;

F. Draft decision XXIV/[]: Status of the establishment of licensing systems under Article 4B of the Montreal Protocol

Noting that paragraph 3 of Article 4B of the Montreal Protocol requires each party, within three months of the date of introducing its system for licensing the import and export of new, used, recycled and reclaimed controlled substances in Annexes A, B, C and E of the Protocol, to report to the Secretariat on the establishment and operation of that system,

Noting with appreciation that 191 of the 192 parties to the Montreal Amendment to the Protocol have established import and export licensing systems for ozone-depleting substances as required by the Amendment and that they have provided disaggregated information on their licensing systems detailing which annexes and groups of substances under the Montreal Protocol are subject to those systems,

Recognizing that licensing systems provide for the monitoring of imports and exports of ozone-depleting substances, prevent illegal trade and enable data collection,

Recognizing also that the successful phase-out of most ozone-depleting substances by parties is largely attributable to the establishment and implementation of licensing systems to control the import and export of ozone-depleting substances,

1. To congratulate South Sudan for having recently ratified all Amendments to the Montreal Protocol, and to request the party to establish an import and export licensing system for ozone-depleting substances consistent with Article 4 B of the Protocol and to report to the Secretariat by 30 September 2013 on the establishment of that system;
2. To urge Gambia, which operates a licensing system for ozone-depleting substances that does not include export controls, to ensure that that system is structured in accordance with Article 4 B of the Protocol and that it provides for the licensing of exports and to report thereon to the Secretariat;
3. To encourage Botswana, which is non-party to the Montreal Amendment to the Protocol and has not yet established a licensing system to control imports and exports of ozone-depleting substances, to ratify the Amendment and to establish such a licensing system;
4. To review periodically the status of the establishment of import and export licensing systems for ozone-depleting substances by all parties to the Protocol as called for in Article 4 B of the Protocol;

G. Decision XXIV/[]: Non-compliance with the Montreal Protocol by Ukraine

Noting that Ukraine ratified the Montreal Protocol on 20 September 1988, the London Amendment on 6 February 1997, the Copenhagen Amendment on 4 April 2002 and the Montreal and Beijing amendments on 4 May 2007 and is classified as a party not operating under paragraph 1 of Article 5 of the Protocol,

Noting also that the Global Environment Facility has approved funding in the amount of [\$] to facilitate Ukraine's compliance with its Montreal Protocol obligations;

Taking note of the consultations between the Implementation Committee and representatives of Ukraine regarding that party's non-compliance with its Protocol obligations,

Acknowledging with appreciation Ukraine's significant efforts to return to compliance with the Montreal Protocol,

1. That Ukraine's reported annual consumption for the controlled substances in Annex C, group I (hydrochlorofluorocarbons, or HCFCs) of 86.9 ODP-tonnes for 2010 and 93.3 for 2011 exceeds the party's maximum allowable consumption of 41.1 ODP-tonnes for those controlled substances for those years and that the party was therefore in non-compliance with the consumption control measures under the Montreal Protocol for HCFCs in 2010 and 2011,
2. To record with appreciation the submission by Ukraine of a plan of action to ensure its prompt return to compliance with the Protocol's HCFC control measures, under which, without prejudice to the operation of the Global Environment Facility, Ukraine specifically commits itself:
 - (a) To reducing its HCFC consumption to no greater than:
 - (i) 86.90 ODP-tonnes in 2013;
 - (ii) 51.30 ODP-tonnes in 2014;

- (iii) 16.42 ODP-tonnes in 2015, 2016, 2017, 2018 and 2019;
 - (iv) Zero by 1 January 2020, save for consumption restricted to the servicing of refrigeration and air-conditioning equipment between the period 2020 and 2030 as prescribed in the Protocol;
- (b) To implementing its system for licensing imports and exports of ozone-depleting substances and a quota system for such imports and exports, and to making it operational;
 - (c) To introducing as soon as possible a gradual ban on imports of equipment containing or relying on ozone-depleting substances and to monitoring its operation once introduced;
 - (d) To pursuing the passage of new legislation to more closely control ozone-depleting substances;
3. To note that the measures listed in paragraph 2 above should enable Ukraine to return to compliance with the Protocol's HCFC control measures in 2015, and to urge the party to work with the relevant implementing agencies to implement its plan of action to phase out its consumption of HCFCs;
4. To monitor closely the progress of Ukraine with regard to the implementation of each of the parts of its plan of action to phase out HCFCs, as outlined in paragraph 2 above. To the degree that the party is working toward and meeting the specific Protocol control measures, it should continue to be treated in the same manner as a party in good standing. In that regard, Ukraine should continue to receive international assistance to enable it to meet those commitments in accordance with item A of the indicative list of measures that may be taken by a Meeting of the Parties in respect of non-compliance;
5. To caution Ukraine in accordance with item B of the indicative list of measures that may be taken by a Meeting of the Parties in respect of non-compliance that, in the event that it fails to return to compliance, the parties will consider measures consistent with item C of the indicative list of measures. Those measures may include the possibility of actions available under Article 4, such as ensuring that the supply of the HCFCs that are the subject of non-compliance is ceased so that exporting parties are not contributing to a continuing situation of non-compliance.

H. Decision XXIV/[]: Endorsement of the new co-chair of the Environmental Effects Assessment Panel

- 1. To thank Ms. Tang Xiaoyan (China), who served as co-chair of the Environmental Effects Assessment Panel, for her long and outstanding service on behalf of the Montreal Protocol;
- 2. To endorse the selection of Mr. Shao Min (China) as the new co-chair of the Environmental Effects Assessment Panel.

I. Draft decision XXIV/[]: Membership of the Implementation Committee

- 1. To note with appreciation the work done in 2012 by the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol;
- 2. To confirm the positions of Lebanon, Poland, Saint Lucia, the United States of America and Zambia as members of the Committee for one further year and to select Bangladesh, Bosnia and Herzegovina, Cuba, Italy and Morocco as members of the Committee for a two-year period beginning 1 January 2013;
- 3. To note the selection of Mr. Janusz Kozakiewicz (Poland) to serve as President and of Ms. Azra Rogovic-Grubic (Bosnia and Herzegovina) to serve as Vice-President and Rapporteur of the Committee for one year beginning 1 January 2013.

J. Draft decision XXIV/[]: Membership of the Executive Committee of the Multilateral Fund

- 1. To note with appreciation the work done by the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol with the assistance of the Fund secretariat in 2012;
- 2. To endorse the selection of Belgium, Bulgaria, Canada, Finland, Japan, the United Kingdom of Great Britain and Northern Ireland and the United States of America as members of the Executive Committee representing parties not operating under paragraph 1 of Article 5 of the

Protocol and the selection of India, Kuwait, Mali, Nicaragua, Serbia, Uganda and Uruguay as members representing parties operating under that paragraph, for one year beginning 1 January 2013;

3. To note the selection of Ms. Fiona Walters (United Kingdom) to serve as Chair and Mr. Vladan Zdravkovic (Serbia) to serve as Vice-Chair of the Executive Committee for one year beginning 1 January 2013.

K. Draft decision XXIV/[]: Co-Chairs of the Open-ended Working Group of the Parties to the Montreal Protocol

3. To endorse the selection of Mr. Patrick McInerney (Australia) and Mr. Javier Camargo (Colombia) as Co-Chairs of the Open-ended Working Group of the Parties to the Montreal Protocol in 2013.



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that Deplete the Ozone Layer**

Item 10 of the agenda for the high-level segment

**Adoption of decisions by the Twenty-Fourth Meeting of the
Parties to the Montreal Protocol**

Compilation of draft decisions for adoption

The Meeting of the Parties decides:

**A. Draft decision XXIV/[]: Review by the Scientific Assessment Panel of
RC-316c**

The Twenty-Fourth Meeting of the Parties decides:

Recalling decisions IX/24, X/8, XI/19 and XIII/5 of the Meeting of the Parties pertaining to new substances,

Noting that the Scientific Assessment Panel has developed procedures for assessing the ozone-depletion potential of new substances,

1. To invite parties in a position to do so to provide environmental assessments of RC-316c (1,2-dichloro-1,2,3,3,4,4-hexafluorocyclobutane, CAS 356-18-3), a chlorofluorocarbon not controlled by the Montreal Protocol, and any guidance on practices that can reduce intentional releases of the substance;
2. To request the Scientific Assessment Panel to conduct a preliminary assessment of RC-316c and report to the Open-ended Working Group at its thirty-third meeting on the ozone-depletion potential and global-warming potential of the substance and other factors that the Panel deems relevant.



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Adoption of decisions by the Twenty-Fourth Meeting of the
Parties to the Montreal Protocol**

Compilation of draft decisions for adoption

The Twenty-Fourth Meeting of the Parties decides:

A. Draft decision XXIV/[]: Essential-use nominations for controlled substances for 2013

Noting with appreciation the work done by the Technology and Economic Assessment Panel and its Medical Technical Options Committee,

Mindful that, according to decision IV/25, the use of chlorofluorocarbons (CFCs) for metered-dose inhalers does not qualify as an essential use if technically and economically feasible alternatives or substitutes are available that are acceptable from the standpoint of environment and health,

Noting the Panel's conclusion that technically satisfactory alternatives to CFC-based metered-dose inhalers are available for some therapeutic formulations for treating asthma and chronic obstructive pulmonary disease,

Taking into account the Panel's analysis and recommendations for essential-use exemptions for controlled substances for the manufacture of metered-dose inhalers used for asthma and chronic obstructive pulmonary disease,

Welcoming the continued progress in several parties operating under paragraph 1 of Article 5 in reducing their reliance on CFC-based metered-dose inhalers as alternatives are developed, receive regulatory approval and are marketed for sale,

Taking into account the additional information provided to the parties by China during the 24th Meeting of the Parties concerning the use of CFC in Traditional Chinese Medicine in remote areas;

1. To authorize the levels of production and consumption for 2013 necessary to satisfy essential uses of CFCs for metered-dose inhalers for asthma and chronic obstructive pulmonary disease specified in the annex to the present decision;
2. To request nominating parties to supply to the Medical Technical Options Committee information to enable assessment of essential-use nominations in accordance with the criteria set out in

decision IV/25 and subsequent relevant decisions as set out in the handbook on essential-use nominations;

3. To encourage parties with essential-use exemptions in 2013 to consider sourcing required pharmaceutical-grade CFCs initially from stockpiles where they are available and accessible, provided that such stockpiles are used subject to the conditions established by the Meeting of the Parties in paragraph 2 of its decision VII/28;

4. To encourage parties with stockpiles of pharmaceutical-grade CFCs potentially available for export to parties with essential-use exemptions in 2013 to notify the Ozone Secretariat of such quantities and of a contact point by 31 December 2012;

5. To request the Secretariat to post on its website details of the potentially available stocks referred to in the paragraph 4 of the present decision;

6. That the parties listed in the annex to the present decision shall have full flexibility in sourcing the quantity of pharmaceutical-grade CFCs to the extent required for manufacturing metered-dose inhalers, as authorized in paragraph 1 of the present decision, from imports, from domestic producers or from existing stockpiles;

7. To request parties to consider domestic regulations to ban the launch or sale of new CFC-based metered-dose inhaler products, even if such products have been approved;

8. To encourage parties to fast-track their administration processes for the registration of metered-dose inhaler products in order to speed up the transition to chlorofluorocarbon-free alternatives;

9. To request China, if they should nominate again in 2013 the use of CFC to be used in Traditional Chinese Medicine in remote areas, to provide more information about the absence of alternatives in the region, the phase out efforts undertaken for this use and other relevant information necessary to allow MTOC to evaluate the case fully;

Annex

Essential-use authorizations for 2013 of chlorofluorocarbons for metered-dose inhalers

(Metric tonnes)

<i>Parties</i>	<i>2013</i>
China	388.82
Russian Federation	212

B. Draft decision XXIV/[...]: Essential-use exemption for chlorofluorocarbon-113 for aerospace applications in the Russian Federation

Noting that the Chemical Technical Options Committee has concluded that the nomination of the Russian Federation satisfies the criteria to qualify as essential use under decision IV/25, including the absence of available technically and economically feasible alternatives or substitutes that are acceptable from the standpoint of environment and health,

Noting also that the Chemical Technical Options Committee recommended the acceleration of efforts to introduce appropriate alternatives to investigate materials compatible with alternatives and the adoption of newly designed equipment to complete the phase-out of chlorofluorocarbon-113 (CFC-113) within agreed time schedule,

Noting that the Russian Federation provided in its essential-use exemption nomination a final phase-out plan and nominated 2016 as the final date for CFC-113 use in this application,

Noting also that the Russian Federation is continuing its efforts to introduce alternative solvents in order to gradually reduce consumption of CFC-113 in the aerospace industry to a maximum of 75 metric tonnes in 2015,

1. To authorize an essential-use exemption for the production and consumption in 2013 of 95 metric tonnes of CFC-113 in the Russian Federation for chlorofluorocarbon applications in its aerospace industry;
2. To request the Russian Federation to continue its efforts to follow up the CFC-113 final phase-out plan and explore further the possibility of importing CFC-113 of the required quality for its aerospace industry needs from available global stocks as recommended by the Chemical Technical Options Committee of the Technology and Economic Assessment Panel.

C. Draft decision XXIV/[...]: Critical-use exemptions for methyl bromide for 2014

Noting with appreciation the work of the Technology and Economic Assessment Panel and its Methyl Bromide Technical Options Committee,

Recognizing the significant reductions made in critical-use nominations for methyl bromide in many parties,

Recalling paragraph 10 of decision XVII/9,

Recalling also that all parties that have nominated critical-use exemptions are to report data on stocks using the accounting framework agreed to by the Sixteenth Meeting of the Parties,

Recognizing that the production and consumption of methyl bromide for critical uses should be permitted only if methyl bromide is not available in sufficient quantity and quality from existing stocks of banked or recycled methyl bromide,

Recognizing also that parties operating under critical-use exemptions should take into account the extent to which methyl bromide is available in sufficient quantity and quality from existing stocks of banked or recycled methyl bromide in licensing, permitting or authorizing the production and consumption of methyl bromide for critical uses,

Recognising also that Australia will not seek any further critical-use nominations of methyl bromide for use in the rice sector and therefore that the approval to use part of its 2014 allocation in 2013 is to be seen as exceptional and non-recurring;

Noting that soilless systems for strawberry runners are not yet fully economically or technically feasible throughout Australia and Canada;

Noting also that the Methyl Bromide Technical Options Committee has a “bottom up” approach for calculating the area concerned by methyl bromide in California in the United States of America and that the regulatory authorities have a ‘top down’ approach and that these varying approaches give rise to a difference of 150 hectares;

Acknowledging that the Technical and Economic Assessment Panel, and specifically its Methyl Bromide Technical Options Committee, produce reports that are science based, independent and robust and that all Parties should strive to respect the results of this work;

1. To permit, for the agreed critical-use categories for 2014 set forth in table A of the annex to the present decision for each party, subject to the conditions set forth in the present decision and in decision Ex.I/4 to the extent that those conditions are applicable, the levels of production and consumption for 2014 set forth in table B of the annex to the present decision, which are necessary to satisfy critical uses, with the understanding that additional levels of production and consumption and categories of use may be approved by the Meeting of the Parties in accordance with decision IX/6;
2. As part of a final transition out of the rice sector, to approve Australia bringing forward up to 1.187 tonnes of methyl bromide from its critical use exemption to 2013 for fumigating packaged rice, with any quantity brought forward to 2013 deducted from its allocation in 2014 and for Australia to ensure that this amount is reported in full transparency to the Ozone Secretariat;
3. That parties shall endeavour to license, permit, authorize or allocate quantities of methyl bromide for critical uses as listed in table A of the annex to the present decision;
4. To recognize the continued contribution of the expertise of the Methyl Bromide Technical Options Committee and to agree that in accordance with section 4.1 of the terms of reference of the Technology and Economic Assessment Panel the Committee should ensure that it develops its recommendations in a consensus process that includes full discussion among all available Committee members and should ensure that members with relevant expertise are involved in developing its recommendations;

5. That each party that has an agreed critical-use exemption shall renew its commitment to ensuring that the criteria in paragraph 1 of decision IX/6, in particular the criterion laid down in paragraph 1 (b) (ii) of decision IX/6, are applied in licensing, permitting or authorizing critical uses of methyl bromide, with each party requested to report on the implementation of the present provision to the Ozone Secretariat by 1 February for the years to which the present decision applies;

6. To request that Canada and Australia take all reasonable steps to explore further the possibility of transitioning to technically and economically feasible alternatives, including soilless culture in the case of strawberry runners and to ensure that the Methyl Bromide Technical Options Committee is fully aware of these efforts;

7. To request that the United States of America takes all reasonable steps to explore further the possibility of transitioning to technically and economically feasible alternatives in the case of strawberry fruits and to ensure that the Methyl Bromide Technical Options Committee is fully aware of these efforts;

8. To request the Technology and Economic Assessment Panel to ensure that its consideration of nominations analyse the impact of national, subnational and local regulations and law on the potential use of methyl bromide alternatives and to include a description of the analysis in the critical use nomination report;

9. To urge parties operating under critical-use exemptions to put in place effective systems to discourage the accumulation of methyl bromide produced under the exemptions.

Annex to decision XXIV/[x]

Table A

Agreed critical-use categories for 2014

(Metric tonnes)

Australia	Strawberry runners (29.760), rice (1.187)
Canada	Mills (5.044), strawberry runners (Prince Edward Island) (5.261)
United States of America	Commodities (0.740), mills and food processing structures (22.800), cured pork (3.730), strawberry – field (415.067)

Table B

Permitted levels of production and consumption for 2014

(Metric tonnes)

Australia	30.947
Canada	10.305
United States of America	442.337 ^a

^a Minus available stocks.

D. Draft decision XXIV/[...]: Feedstock uses

Recalling Article 7 of the Montreal Protocol, which mandates, inter alia, reporting on amounts of controlled substances used for feedstock,

Recalling paragraph 1 of decision VII/30, in which, inter alia, the parties specified that importing countries shall report the quantities of ozone-depleting substances imported for feedstock uses and that importers shall, prior to export, provide exporters with a commitment that the substances imported shall be used for this purpose,

Recalling also decision IV/12, in which the parties clarified that insignificant quantities of ozone-depleting substances originating from inadvertent or coincidental production during a manufacturing process, from unreacted feedstock, or from their use as process agents which are present in chemical substances as trace impurities, or that are emitted during product manufacture or handling, shall be considered not to be covered by the definition of an ozone-depleting substance contained in paragraph 4 of Article 1 of the Montreal Protocol,

Recalling further that in decision IV/12, the parties were urged to take steps to minimize emissions of such substances, including such steps as avoidance of the creation of such emissions and reduction of emissions using practicable control technologies or process changes, containment or destruction,

1. To encourage parties to exchange information on known alternatives being applied to replace ozone-depleting substances in feedstock uses;
2. To encourage parties with feedstock uses to exchange information on systems they have in place for qualifying a specific ozone depleting substance use as feedstock use and for identification and/or monitoring of containers placed on the market and intended for feedstock uses, for example reporting or labelling requirements;
3. To confirm that the use of carbon tetrachloride in the production of vinyl chloride monomer by pyrolysis of ethylene dichloride in the processes evaluated by the Panel in its 2012 progress report is considered to be a feedstock use;
4. To request parties with vinyl chloride monomer production facilities in which carbon tetrachloride is used and that have not yet reported the information requested by the parties in decision XXIII/7 to provide such information to the Panel before 28 February 2013 to allow it to clarify whether the use in a particular facility is a feedstock use or process agent use;

E. Draft decision XXIV/[...]: Additional information on alternatives to ozone-depleting substances

Recalling the report of the Technology and Economic Assessment Panel on alternatives to hydrochlorofluorocarbons in the refrigeration and air-conditioning sector in parties operating under paragraph 1 of Article 5 with high ambient temperatures and unique operating conditions, submitted to the Open-ended Working Group at its thirtieth meeting pursuant to decision XIX/8,

Noting with appreciation volume 2 of the 2012 progress report of the Technology and Economic Assessment Panel which responded to Decision XXIII/9,

1. To request the Technology and Economic Assessment Panel in consultations with experts from outside the Panel with the relevant expertise if necessary, to update information on alternatives and technologies in various sectors and prepare a draft report for consideration by the Open-ended Working Group at its thirty-third meeting and a final report to be submitted to the Twenty-Fifth Meeting of the Parties that would by end use:
 - (a) Describe all available alternatives to ODS that are commercially available, technically proven, environmentally-sound, taking into account their efficacy, health, safety and environmental characteristics, cost-effectiveness, and their use including in high ambient temperatures and high urban density cities;
 - (b) Update information provided by previous TEAP reports on alternatives under development;
 - (c) Identify barriers and restrictions to the adoption and commercial use of certain environmentally-sound alternatives to ODS;
 - (d) Estimate, if possible, the approximate amount of alternatives with negative environmental impacts that could be or could have been avoided or eliminated by both non-Article 5 and Article 5 parties in the process of phasing-out ozone-depleting substances;
 - (e) Identify the opportunities for the selection of environmentally-sound alternatives to HCFCs in the future;
2. To invite TEAP to take into account any information relevant for the report to be prepared under paragraph 1 of this decision provided by parties to the Secretariat.

E. Draft decision XXIV/[...]: Terms of reference, code of conduct and disclosure and conflict of interest guidelines for the Technology and Economic Assessment Panel and its technical options committees and temporary subsidiary bodies

Taking note of paragraph 17 of decision XXIII/10, in which the parties requested the Technology and Economic Assessment Panel to revise its draft guidelines on recusal, taking into account similar guidelines in other multilateral forums, and provide them to the Open-ended Working Group for consideration at its thirty-second meeting,

Taking note also of the terms of reference of the Panel as set out in annex V of the report of the Eighth Meeting of the Parties, as amended by decision XVIII/19,

Taking note further of decision XXIII/10, in which the parties requested the Technology and Economic Assessment Panel to propose an update to its terms of reference,

Recalling decision VII/34 on the organization and functioning of the Panel and specifically on efforts to increase the participation of experts from parties operating under paragraph 1 of Article 5 in order to improve geographical expertise and balance,

Noting that the Intergovernmental Panel on Climate Change has established a conflict of interest committee and the Stockholm Convention on Persistent Organic Pollutants Review Committee has adopted a procedure for dealing with conflicts of interest,

Bearing in mind that the role of the Panel, its technical options committees and its temporary subsidiary bodies makes it essential to avoid even the appearance of any conflict between individual members' interests and their duties as Panel members,

Bearing in mind also that it is in the interest of the Panel, its technical options committees and its temporary subsidiary bodies to maintain public confidence in its integrity by adhering closely to its terms of reference,

1. To request the Technology and Economic Assessment Panel to make recommendations on the future configuration of its technical options committees to the Open-Ended Working Group at its thirty-third meeting, bearing in mind anticipated workloads;
2. To approve the terms of reference and the conflict of interest and disclosure policy for the Technology and Economic Assessment Panel, its technical options committees and any temporary subsidiary bodies set up by those bodies set out in the annex to the present decision in place of the terms of reference set out in annex V to the report of the Eighth Meeting of the Parties, as amended;
3. To request that the Technology and Economic Assessment Panel and its technical options committees make available to the parties their standard operating procedures.

Annex to decision XXIV/[]

Terms of reference of the Technology and Economic Assessment Panel and its technical options committees and temporary subsidiary bodies

1. Scope of Work

The tasks undertaken by the Technology and Economic Assessment Panel (TEAP) are those specified in Article 6 of the Montreal Protocol in addition to those requested from time to time at Meetings of the Parties. TEAP analyses and presents technical information and recommendations when specifically requested. It does not evaluate policy issues and does not recommend policy. TEAP presents technical and economic information relevant to policy. Furthermore, TEAP does not judge the merit or success of national plans, strategies, or regulations.

To carry out its work programme, technical options committees (TOCs) are established and agreed to by a decision of the parties. TEAP may also establish temporary subsidiary bodies (TSBs), as needed. These bodies generally will not last for more than one year and are aimed at responding to specific requests made by the parties.

2.1 Size and Balance

2.1.0

The overall goal is to achieve a representation of about 50 per cent for Article 5(1) Parties in the TEAP and TOCs and appropriate representation of expertise in the different alternatives.

2.1.1 TEAP

The membership size of the TEAP should be about 18-22 members, including 2 or 3 co-chairs to allow it to function effectively. It should include the co-chairs of the TOCs; there should be two co-chairs per TOC and 2-4 Senior Experts for specific expertise not covered by the TEAP co-chairs or TOC co-chairs, taking into account gender and geographical balance.

At least one and preferably all of the TEAP co-chairs should not simultaneously serve as a TOC co-chair.

2.1.2 TOCs

Each TOC should have two co-chairs. The positions of TOC co-chairs must be filled to promote a geographical, gender and expertise balance. TEAP, through its TOC co-chairs, shall compose its TOCs to reflect a balance of appropriate and anticipated expertise so that their reports and information are comprehensive, objective and policy-neutral.

2.1.3 TSBs

TEAP, in consultation with the TSB co-chairs, shall compose its TSBs to reflect a balance of appropriate expertise so that their reports and information are comprehensive, objective and policy-neutral. TEAP, acting through the TSB co-chairs, shall provide a description in reports by TSBs on how their composition was determined. TSB members, including co-chairs, who are not already members of the TEAP, do not become members of the TEAP by virtue of their service on the TSB.

2.2 Nominations

2.2.1 TEAP

Nominations of members to the TEAP, including co-chairs of the TEAP and TOCs, must be made by individual Parties to the Secretariat through their respective national focal points. Such nominations will be forwarded to the Meeting of the Parties for consideration. The TEAP co-chairs shall ensure that any potential nominee identified by TEAP for appointment to the Panel, including co-chairs of TEAP and the TOCs, is agreed to by the national focal points of the relevant party. A member of TEAP, the TOCs or the TSBs shall not be a current representative of a party to the Montreal Protocol.

2.2.2. TOCs and TSBs

All nominations to TOCs and TSBs shall be made in full consultation with the national focal point of the relevant party.

Nominations of members to a TOC (other than TOC co-chairs) may be made by individual parties or TEAP and TOC co-chairs may suggest to individual parties experts to consider nominating.

Nominations to a TSB (including TSB co-chairs) can be made by the TEAP Co-chairs

2.3 Appointment of Members of TEAP

In keeping with the intent of the parties for a periodic review of the composition of the assessment panel, the Meeting of the Parties shall appoint the members of TEAP for a period of no more than four years. The Meeting of the Parties may re-appoint Members of the Panel upon nomination by the relevant party for additional periods of up to four years each. In appointing or re-appointing members of TEAP, the parties should ensure continuity, balance as well as a reasonable turnover.

2.4 Co-chairs

In nominating and appointing co-chairs of the TEAP/TOCs/TSBs, parties should consider the following factors:

- (a) Co-chairs should have experience or skills in managing, coordinating, and building consensus in technical bodies, in addition to possessing technical expertise in relevant areas;
- (b) The co-chairs of a TOC should not normally act as co-chairs of another TOC; and

- (c) The co-chairs of TEAP should not be co-chairs of a TOC.
- (d) The TEAP and TOC co-chairs may suggest to individual parties experts to consider nominating.

2.5 Appointment of Members of TOCs

Each TOC should have about 20 members. The TOC members are appointed by the TOC co-chairs, in consultation with TEAP, for a period of no more than four years. TOC members may be re-appointed following the procedure for nominations for additional periods of up to four years each.

2.6 Subsidiary Bodies

Temporary Subsidiary Technical Bodies (TSBs) can be appointed by TEAP to report on specific issues of limited duration. TEAP may appoint and dissolve, subject to review by the parties, such subsidiary bodies of technical experts when they are no longer necessary. For issues that cannot be handled by the existing TOCs and are of substantial and continuing nature, TEAP should request the establishment by the parties of a new TOC. A decision of the Meeting of the Parties is required to confirm any TSB that exists for a period of more than one year.

2.7 Termination of Appointment

Members of TEAP, a TOC or a TSB may relinquish their position at any time by notifying in writing as appropriate the co-chairs of the TEAP, TOC or TSB and the relevant party.

TEAP can dismiss a member of TEAP, the TOCs and the TSBs, including co-chairs of those bodies, by a two-thirds majority vote of TEAP. A dismissed member has the right to appeal to the next Meeting of the Parties through the Secretariat. The TEAP co-chairs will inform the relevant party if TEAP is dismissing members.

2.8 Replacement

If a member of TEAP, including TOC Co-chairs, relinquishes or is unable to function including if he or she was dismissed by TEAP, the Panel, after consultation with the nominating party, can temporarily appoint a replacement from among its bodies for the time up to the next Meeting of the Parties, if necessary to complete its work. For the appointment of a replacement TEAP member, the procedure set out in paragraph 2.2 should be followed.

2.9 Guidelines for Nominations and Matrix of Expertise

The TEAP/TOCs will draw up guidelines for nominating experts by the parties. The TEAP/TOCs will publicize a matrix of expertise available and the expertise needed in the TEAP/TOCs so as to facilitate submission of appropriate nominations by the parties. The matrix must include the need for geographic and expertise balance and provide consistent information on expertise that is available and required. The matrix would include the name and affiliation and the specific expertise required including on different alternatives. The TEAP/TOCs, acting through their respective co-chairs, shall ensure that the matrix is updated at least once a year and shall publish the matrix on the Secretariat website and in the Panel's annual progress reports. The TEAP/TOCs shall also ensure that the information in the matrix is clear, sufficient and consistent as far as is appropriate between the TEAP and TOCs and balanced to allow a full understanding of needed expertise.

3. Functioning of TEAP/TOCs/TSBs

3.1 Language

TEAP/TOCs/TSBs meetings will be held and reports and other documents will be produced only in English.

3.2 Meetings

3.2.1 Scheduling

The place and time of the TEAP/TOCs/TSBs meetings will be fixed by the co-chairs.

3.2.2 Secretariat

The Ozone Secretariat should attend the meetings of the TEAP whenever possible and appropriate to provide ongoing institutional advice on administrative issues when necessary.

3.2.3 Operating Procedures

Co-chairs of the TOCs should organize meetings in accordance with operating procedures developed by the TOCs in consultation with the Secretariat to ensure full participation of all members, sound and appropriate decision-making and record keeping. The procedures should be updated periodically and made available to the parties.

3.3 Rules of Procedure

The rules of procedure of the Montreal Protocol for committees and working groups will be followed in conducting the meetings of the TEAP/TOCs/TSBs, unless otherwise stated in these terms of reference for TEAP/TOCs/TSBs or other decisions approved by a Meeting of the Parties.

3.4 Observers

No observers will be permitted at TEAP, TOC or TSB meetings. However, anyone can present information to the TEAP/TOCs/TSBs with prior notice and can be heard personally if the TEAP/TOCs/TSBs consider it necessary.

3.5 Functioning by Members

The TEAP/TOCs/TSBs members function on a personal basis as experts, irrespective of the source of their nominations and accept no instruction from, nor function as representatives of Governments, industries, non-governmental organizations (NGOs) or other organizations.

4. Report of TEAP/TOCs/TSBs

4.1 Procedures

The reports of the TEAP/TOCs/TSBs will be developed through a consensus process. The reports must reflect any minority views appropriately.

4.2 Access

Access to materials and drafts considered by the TEAP/TOCs/TSBs will be available only to TEAP/TOCs members or others designated by TEAP/TOCs/TSBs.

4.3 Review by TEAP

The final reports of TOCs and TSBs will be reviewed by the TEAP and will be forwarded, without modification (other than editorial or factual corrections which have been agreed with the co-chairs of the relevant TOC or TSB) by TEAP to the Meeting of the Parties, together with any comments TEAP may wish to provide. Any factual errors in the reports may be rectified through a corrigendum following publication, upon receipt by TEAP or the TOC of supporting documentation.

4.4 Comment by Public

Any member of the public can comment to the co-chairs of the TOCs and TSBs with regard to their reports and they must respond as early as possible. If there is no response, these comments can be sent to the TEAP co-chairs for consideration by TEAP.

5. Code of conduct for Members of the Technology and Economic Assessment Panel and its bodies

Code of Conduct

Members of TEAP, the TOCs and the TSBs have been asked by the parties to undertake important responsibilities. As such, a high standard of conduct defined in accordance with the principles of transparency, predictability, accountability, trustworthiness, integrity, responsibility and disclosure is expected of members in discharging their duties. In order to assist members, the following guidelines have been developed as a Code of Conduct that must be followed by the members of TEAP, the TOCs and the TSBs.

1. This Code of Conduct is intended to protect Members of TEAP, the TOCs and the TSBs from conflicts of interest in their participation. Compliance with the measures detailed in these guidelines is a condition for serving as a Member of TEAP, the TOCs or the TSBs.
2. The Code is to enhance public confidence in the integrity of the process while encouraging experienced and competent persons to accept TEAP, TOC and/or TSB membership by:
 - Establishing clear guidelines respect to conflict of interest and disclosure while and after serving as a member; and

- Minimizing the possibility of conflicts arising between the private interest and public duties of members and by providing for the resolution of such conflicts, in the public interest, should they arise.
3. In carrying out their duties, members shall:
 - Perform their official duties and arrange their private affairs in such a manner that public confidence and trust in the integrity, objectivity and impartiality of TEAP, the TOCs and the TSBs are conserved and enhanced;
 - Act in a manner that will bear the closest public scrutiny, an obligation that is not fully discharged by simply acting within the law of any country;
 - Act in good faith for the best interest of the process;
 - Exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances;
 - Not give preferential treatment to anyone or any interest in any official manner related to TEAP, the TOCs or the TSBs;
 - Not solicit or accept significant gifts, hospitality or other benefits from persons, groups or organizations having or likely to have dealings with TEAP, the TOCs or the TSBs;
 - Not accept transfers of economic benefit, other than incidental gifts, customary hospitality or other benefits of nominal value, unless the transfer is pursuant to an enforceable contract or property right of the member;
 - Not represent or assist any outside interest in dealings before TEAP, the TOCs or the TSBs;
 - Not knowingly take advantage of, or benefit from, information that is obtained in the course of their duties and responsibilities as a member of TEAP, the TOCs and the TSBs, and that is not generally available to the public; and
 - Not act, after their term of office as members of TEAP, the TOCs or the TSBs in such a manner as to take improper advantage of their previous office.
 4. To avoid the possibility or appearance that members of TEAP, the TOCs or the TSBs might receive preferential treatment, members shall not seek preferential treatment for themselves or third parties or act as paid intermediaries for third parties in dealings with TEAP, the TOCs or the TSBs.

6. Conflict of Interest and Disclosure Guidelines for the Technology and Economic Assessment Panel, Its Technical Options Committees and Temporary Subsidiary Bodies

Definitions

1. For the purposes of these Guidelines:
 - (a) "Conflict of interest" means any current interest of a member, or of that member's personal partner or dependant which, in the opinion of a reasonable person does or appears to:
 - (i) Significantly impair that individual's objectivity in carrying out their duties and responsibilities for TEAP, the TOC or the TSB; or
 - (ii) Create an unfair advantage for any person or organization;
 - (b) "Member" means member including co-chairs of TEAP, the TOCs and/or the TSBs;
 - (c) "Recusal" means that a member does not participate in particular elements of TEAP, TOC or TSB work because of a conflict of interest; and
 - (d) "Conflict resolution advisory body" means the body appointed under paragraph 22.

Purposes

2. The overall purpose of these Guidelines is to protect the legitimacy, integrity, trust, and credibility of the TEAP, TOCS and TSBs and of those directly involved in the preparation of reports and activities.
3. The role of the TEAP, TOCs and TSBs demands that they pay special attention to issues of independence and bias in order to maintain the integrity of, and public confidence in, their products and processes. It is essential that the work of TEAP and its TOCs and TSBs is not compromised by any conflict of interest.
4. Written agreement to comply with these Guidelines is a condition for service as a Member.
5. These Guidelines are to enhance public confidence in the process, while encouraging experienced and competent persons to serve on the TEAP, TOC and/or TSB, by:
 - (a) Establishing clear guidance with respect to disclosure and conflict of interest while serving as a Member;
 - (b) Minimizing the possibility of conflicts of interest arising with respect to Members, and by providing for the resolution of such conflicts, in the public interest, should they arise; and
 - (c) Finding the balance between the needs:
 - (i) To identify the appropriate disclosure requirements, and
 - (ii) To ensure the integrity of the TEAP process.

6. These Guidelines are principle-based and do not provide an exhaustive list of criteria for the identification of conflicts.
7. TEAP, the TOCS, the TSBs and their members should not be in a situation that could lead a reasonable person to question, and perhaps discount or dismiss, their work because of the existence of a conflict of interest.

Disclosure

8. Members are to disclose annually any potential conflicts of interest. They must also disclose the source of any funding for their participation in the work of the TEAP, TOC and/or TSB. An illustrative list of other interests that should be disclosed is provided in Annex A to these Guidelines.
9. Members are to disclose any material change to previously submitted information within 30 days of any such change.
10. Notwithstanding paragraphs 8 and 9, a member may decline to disclose information related to activities, interests and funding where its disclosure would adversely and materially affect:
 - (a) Defence, national security or imminent public safety;
 - (b) The course of justice in prospective or current court cases;
 - (c) The ability to assign future intellectual property rights; or
 - (d) The confidentiality of commercial, government, or industrial information.
11. Members who decline to disclose information under paragraph 10 must declare that they are doing so in their disclosure of interest under paragraphs 8 or 9 and must be completely excluded from discussions and decisions on related topics.

Conflict of Interest

12. A member's strong opinion (sometimes referred to as bias), or particular perspective, regarding a particular issue or set of issues does not create a conflict of interest. It is expected that the TEAP, TOCs and TSBs will include members with different perspectives and affiliations, which should be balanced so far as possible.
13. These Guidelines apply only to current conflicts of interest. They do not apply to past interests that have expired, no longer exist and cannot reasonably affect current assessment. Nor do they apply to possible interests that may arise in the future but that do not currently exist, as such interests are inherently speculative and uncertain. For example, a pending application for a particular job is a current interest, but the mere possibility that one might apply for such a job in the future is not a conflict of interest.

Procedures

14. All of the bodies involved in advising on and deciding conflict of interest issues under these Guidelines should consult the relevant member where the body has concerns about a potential conflict of interest and/or where it requires clarification of any matters arising out of a member's disclosure. Such bodies should ensure that the relevant individuals and, where appropriate, the nominating Party, have an opportunity to discuss any concerns about a potential conflict of interest.
15. In the event that an issue regarding a potential conflict of interest arises, the relevant member and co-chairs should attempt to resolve the issue through consultations, including consultations with the advisory body. If the consultations reach an impasse, TEAP could request the Executive Secretary to select an outside mediator to assist in resolving the matter. The mediator should not be a member and should not otherwise have any current affiliation with the relevant individuals, bodies or issues.
16. At any point, the conflict resolution advisory body may be consulted by members or potential members regarding issues related to:
 - (a) Member disclosures;
 - (b) Potential conflicts of interest or other ethics issues; or
 - (c) Potential recusal of members.
17. The conflict resolution advisory body must promptly inform a member if it has been asked to advise on an issue regarding the member. Any information provided to and any advice provided by the conflict resolution advisory body will be considered confidential and will not be used for any purpose other than consideration of conflict of interest issues under these Guidelines without the express consent of the individual providing the information or requesting the advice, as appropriate.
18. If an issue under these Guidelines cannot be resolved through the procedures in paragraphs 14 through 17:
 - A TEAP member, including TEAP and TOC co-chairs, may be recused from a defined area of work only by a three-fourths majority of TEAP (excluding the individual whose recusal is at issue).

- A TOC or TSB member, excluding TEAP and TOC co-chairs, may be recused from a defined area of work by the co-chairs of the relevant TOC or, upon appeal, by a three-fourths majority of TEAP.
19. In the event of the procedure under the previous paragraph taking place, the Member whose recusal is at issue may not participate. In the event that the matter is brought to the TEAP consistent with paragraph 18, the Member whose recusal is under discussion, should be excluded from those discussions.

Recusal

20. When a conflict of interest is determined to exist with respect to a particular Member, the Member should, depending on what is appropriate in the circumstances, be:
- (a) Excluded from decision-making and discussions related to a defined area of work;
 - (b) Excluded from decision-making but may participate in discussions related to a defined area of work; or
 - (c) Excluded from participation in the matter in any other manner deemed appropriate.
21. A Member who is recused completely or partially from an area of work may nevertheless answer questions with respect to that work at the request of the TEAP, TOC or TSB.

Conflict Resolution Advisory Body

22. The conflict resolution advisory body is not envisioned as a body that will meet on any regular basis but will come together, physically or virtually, as needed to provide advice to members or potential members and assist with resolving issues. It shall consist of Co-Chairs of the Open-Ended Working Group and the President of the Bureau of the Meeting of the Parties, with the Ozone Secretariat providing logistical, technical legal and administrative support and advice to the body. No additional travel support or other financial support will be provided to members serving on the body.

Annex

The following is an illustrative list of the types of interests that should be disclosed:

- (a) A current proprietary interest of a member or his/her personal partner or dependent in a substance, technology or process (e.g., ownership of a patent) to be considered by the Technology and Economic Assessment Panel or any of its technical options committees or temporary subsidiary bodies;
- (b) A current financial interest of a member or his/her personal partner or dependent, e.g., shares or bonds in an entity with an interest in the subject matter of the meeting or work (but not shareholdings through general mutual funds or similar arrangements where the expert has no control over the selection of shares);
- (c) A current employment, consultancy, directorship or other position held by a Member or his/her personal partner or dependent, whether or not paid, in any entity which has an interest in the subject matter of the Technology and Economic Assessment Panel. This element of disclosure also includes paid consultancy efforts performed on behalf of an implementing agency to assist developing countries to adopt alternatives;
- (d) The provision of advice on significant issues to a government with respect to its implementation of the Montreal Protocol or engaging in the development of significant policy positions of a government for a Montreal Protocol meeting;
- (e) Performance of any paid research activities or receipt of any fellowships or grants for work related to a proposed use of an ozone-depleting substance or an alternative to a proposed use of an ozone depleting substance.

F. Draft decision XXIV/[...]: Controlled substances used on ships

Noting with appreciation the report provided by the Ozone Secretariat in response to decision XXIII/11;

1. To request the Technology and Economic Assessment Panel to provide together with its 2013 progress report an updated version of the information provided in its previous progress reports on transport refrigeration in the maritime sector;
2. To invite parties to encourage relevant stakeholders to minimize the use of controlled substances in newly built ships and to consider environmentally benign and energy-efficient alternatives wherever they are available;

3. To revisit the issue at the thirty-third meeting of the Open-ended Working Group.

G. Draft decision XXIV/[...]: Evaluation of the financial mechanism

Noting that the Multilateral Fund for the Implementation of the Montreal Protocol is an efficient and effective instrument for enabling compliance with the Protocol by parties operating under paragraph 1 of its Article 5,

Recognizing that parties consider periodic evaluations of the financial mechanism of the Montreal Protocol an important means of ensuring the continued efficiency and effectiveness of the Multilateral Fund,

Recognizing also the role of the Multilateral Fund as a cornerstone of the Montreal Protocol and as a key mechanism for the success of the ozone layer regime,

1. To note with appreciation the report on the 2012 evaluation of the financial mechanism of the Montreal Protocol;¹
2. To request the Executive Committee of the Multilateral Fund, within its mandate, to consider the report on the 2012 evaluation of the financial mechanism of the Montreal Protocol, as appropriate, in the process of continuously improving the management of the Multilateral Fund.

H. Draft decision XXIV/[...]: Differences between data reported on imports and data reported on exports

Noting differences in data on imports and exports of controlled substances submitted by the parties under Article 7 of the Montreal Protocol, and recognizing that while such shipments may have plausible explanations such as shipments over the end of a calendar year or the submission of incomplete data, they may also result from illegal trade activities or from not complying with domestic legislation without criminal intent,

Noting also that in the Article 7 data reporting format, as last revised by decision XVII/16, parties exporting controlled substances are requested to submit to the Ozone Secretariat information on countries of destination, while there is no request for parties importing controlled substances with regard to the country of origin,

Noting further that the absence of a request for importing countries to submit information on source countries makes the process of clarification of differences complex and burdensome for both importing and exporting countries,

Mindful that the further improvement of data reporting systems will facilitate the prevention of the illegal trade in controlled substances,

Recalling Decision IV/14 and IX/34 that provided some clarification on how to report transshipments and imports for re-export and thereby provided an indication on what country is to be considered as country of origin

3.
 1. To request the Ozone Secretariat to revise, before 1 January 2013, the reporting format resulting from decision XVII/16 to include in the Data Forms an annex indicating the exporting Party for the quantities reported as import, and noting that this annex is excluded from the reporting requirements under Article 7, and provision of the information in the annex would be done on a voluntary basis;
 2. To request the Ozone Secretariat to compile every January aggregated information on controlled substances by Annex and Group received from the importing/re-importing party and to provide this uniquely and solely to the exporting party concerned when requested, in a manner that will maintain information deemed to be confidential in accordance with Decision I/11;

¹ UNEP/OzL.Pro.24/INF/4, annex.

6. 3. To invite parties to enhance cooperation with the view to clarifying any differences in import and export data as provided by the Ozone Secretariat in accordance with paragraph 2 above.

7. 4. To invite Parties to consider participation in the informal Prior Informed Consent (iPIC) scheme as a means to improve information about their potential imports of controlled substances.

I. Decision XXIV/[]: Application to Bahrain, Bolivia (Plurinational State of), Chad, Ecuador, Haiti, Kenya and Nicaragua of paragraph 8 of Article 4 of the Montreal Protocol with respect to the Beijing Amendment to the Montreal Protocol

Considering paragraph 8 of Article 4 of the Montreal Protocol, which reads:

“Notwithstanding the provisions of this Article, imports and exports referred to in paragraphs 1 to 4 ter of this Article may be permitted from, or to, any State not party to this Protocol, if that State is determined, by a meeting of the Parties, to be in full compliance with Article 2, Articles 2A to 2I and this Article, and have submitted data to that effect as specified in Article 7”.

Acknowledging that Bahrain, Bolivia (Plurinational State of), Chad, Ecuador, Haiti, Kenya and Nicaragua have notified the Secretariat that their ratification processes of the Beijing Amendment are under way and that they will do all that is possible to complete the procedures as expeditiously as possible,

Expressing regret that despite their best efforts, Bahrain, Bolivia (Plurinational State of), Chad, Ecuador, Haiti, and Kenya will not be able to ratify the Beijing Amendment before the last day of the Twenty-Fourth Meeting of the Parties,

Noting that although the Implementation Committee has not specifically considered the situation of Bahrain, Bolivia (Plurinational State of), Chad, Ecuador, Haiti, and Kenya in the context of paragraph 8 of Article 4 of the Montreal Protocol, the report of the Implementation Committee to the Twenty-Fourth Meeting of the Parties indicates that all of those parties are in full compliance with Article 2, Articles 2A to 2I and Article 4 of the Protocol, including its Beijing Amendment, and have submitted data to that effect as specified in Article 7,

1. That on the basis of the data submitted under Article 7 of the Protocol, Bahrain, Bolivia (Plurinational State of), Chad, Ecuador, Haiti, Kenya and Nicaragua are in full compliance with Articles 2, Articles 2A to 2I and Article 4 of the Protocol, including its Beijing Amendment;

2. That the exceptions provided for in paragraph 8 of Article 4 of the Protocol shall apply to Bahrain, Bolivia (Plurinational State of), Chad, Ecuador, Haiti, Kenya and Nicaragua from 1 January 2013;

3. That the determination in paragraph 1 of the present decision and the exceptions referred to in paragraph 2 of the present decision shall expire at the end of the Twenty-Fifth Meeting of the Parties;

4. That the term “State not party to this Protocol” in Article 4, paragraph 9 applies to those States operating under Article 5, paragraph 1, of the Protocol that have not agreed to be bound by Beijing Amendment and that are not listed in paragraph 2 of the present decision, unless such a State has by 31 March 2013:

(a) Notified the Secretariat that it intends to ratify, accede to or accept the Beijing Amendment as soon as possible;

(b) Certified that it is in full compliance with Articles 2, 2A to 2I and Article 4 of the Protocol, as amended by the Copenhagen Amendment;

(c) Submitted data under subparagraphs (a) and (b) above to the Secretariat, in which case that State shall fall outside the definition of a “State not party to this Protocol” until the conclusion of the Twenty-Fifth Meeting of the Parties and the information so submitted will be posted by the Ozone Secretariat on its website within a week of receipt;

5. That the term “State not party to this Protocol” includes all other States that have not agreed to be bound by the Beijing Amendment;

6. That any State that has not agreed to be bound by the Beijing Amendment and that seeks an exception as provided for in paragraph 8 of Article 4 of the Protocol beyond the Twenty-Fifth Meeting of the Parties may do so by submitting a request to the Ozone Secretariat prior to the beginning of the meeting of the Implementation Committee that immediately precedes the Meeting of the Parties, that the Secretariat will notify the Committee of the request, that the Committee will review relevant data submitted in accordance with Article 7 and develop a recommendation for consideration by the parties and that such requests seeking the exception provided for in paragraph 8 of Article 4 will be considered on an annual basis.

J. Draft decision XXIV/[...]: Financial reports of the trust funds and budgets for the Montreal Protocol

Recalling decision XXIII/17 on financial matters,

Taking note of the financial report on the Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer for the biennium 2010-2011, ended 31 December 2011,

Recognizing that voluntary contributions are an essential complement for the effective implementation of the Montreal Protocol,

Welcoming the continued efficient management by the Secretariat of the finances of the Montreal Protocol Trust Fund,

1. To approve the revision of the 2012 budget in the amount of \$4,920,762 United States dollars and the budget of \$4,927,420 for 2013, as set out in annex [xx] to the report of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol;

2. To authorize the Secretariat to draw down \$643,829 in 2012 and \$650,487 in 2013, and to note the proposed drawdown of \$493,049 in 2014;

3. To approve, as a consequence of the drawdowns referred to in paragraph 2 above, total contributions to be paid by the parties of \$4,276,933 for 2012 and 2013, and to note the contributions of \$4,276,933 for 2014, as set out in annex [xx] to the report of the Twenty-Fourth Meeting of the Parties to the Montreal Protocol;

4. That the contributions of individual parties for 2012 and 2013 shall be listed in annex [xx] to the report of the Twenty-Fourth Meeting of the Parties;

5. To reaffirm an operating cash reserve at a level of 15 per cent of the annual budget to be used to meet the final expenditures under the Trust Fund;

6. To request the Secretariat to indicate, in future financial reports of the trust funds for the Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol, the amounts under “Total reserves and fund balances” which are associated with contributions that have not yet been received;

7. To encourage parties, non-parties and other stakeholders to contribute financially and with other means to assist members of the three assessment panels and their subsidiary bodies with their continued participation in the assessment activities under the Protocol;

8. To note with concern that a number of parties have not paid their contribution for 2011 and prior years, and to urge those parties to pay both their outstanding contributions and their future contributions promptly and in full;

9. To authorize the Executive Secretary to enter into discussions with any party whose contributions are outstanding for two or more years with a view to finding a way forward, and to request that the Executive Secretary report to the Twenty-Fifth Meeting of the Parties on the outcome of the discussions;

10. To reaffirm the importance of the full participation of non-Article 5 parties and Article 5 parties in the activities of the Meeting of the Parties;

11. To encourage parties that are still receiving hard copies of meeting documents to access such documentation through the Ozone Secretariat website instead.

Annex I

Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer

Approved 2012 and 2013 and proposed 2014 budgets

		w/m	2012 (US\$)	w/m	2013 (US\$)	2014 (US\$)
10	PROJECT PERSONNEL COMPONENT					
1100	Project personnel					
1101	Executive Secretary (D-2) (shared with the Vienna Convention, VC)	6	166,000	6	170,980	185,980
1102	Deputy Executive Secretary (D-1)	12	302,538	12	311,614	320,962
1103	Senior Legal Officer (P-5)	12	208,711	12	214,972	214,972
1104	Senior Scientific Affairs Officer (P-5) (shared with VC)	6	110,000	6	113,300	116,699
1105	Senior Administrative Officer (P-5) (paid by UNEP)		0		0	0
1106	Programme Officer (Information System & Technology - P-4)	12	154,618	12	159,257	164,035
1107	Programme Officer (Communication & Information - P-3) (paid from VC)	12	0	12	0	0
1108	Programme Officer (Monitoring and Compliance - P-4)	12	193,640	12	199,449	205,432
1109	Webmaster (P-2) ¹	12		12	0	0
1199	Sub-total		1,135,507		1,169,572	1,208,081
1200	Consultants					

		w/m	2012 (US\$)	w/m	2013 (US\$)	2014 (US\$)
	1201 Assistance in data-reporting, analysis and promotion of the implementation of the Protocol		75,000		75,000	75,000
1299	<i>Sub-total</i>		<i>75,000</i>		<i>75,000</i>	<i>75,000</i>
1300	Administrative Support					
	1301 Administrative Assistant (G-7) (shared with VC)	6	21,888	6	22,545	23,221
	1302 Administrative Assistant (G-6)	12	28,350	12	29,768	31,256
	1303 Programme Assistant (G-6) (paid from VC)	12	0	12	0	0
	1304 Programme Assistant (Data)(G-6) (shared with VC)	6	18,452	6	19,375	19,375
	1305 Research Assistant (G-6) (shared with VC)	6	16,295	6	16,295	16,295
	1306 Information Management Assistant (G-6)	12	28,387	12	29,239	29,239
	1307 Data Assistant (Computer Information Systems Assistant) (G- 7)	12	44,704	12	47,386	47,386
	1308 Administrative Assistant - Fund (G- 7) - paid by UNEP-(approved for upgrade to P-2 - Associate Administrative Officer) ²	12	0	12	0	0
	1309 Team Assistant/Logistics Assistant (G-4) (paid by UNEP)	12	0	12	0	0
	1310 Meetings Services Assistant/Bilingual Senior Secretary (G-6) (paid from VC)	12	0	12	0	0
	1320 Temporary Assistance		21,300		21,300	21,300
	1321 Open-ended Working Group Meetings		490,000		490,000	490,000

		w/m	2012 (US\$)	w/m	2013 (US\$)	2014 (US\$)
	1322					
			500,000		500,000	350,000
	1323		75,000		75,000	75,000
	1324		20,000		20,000	20,000
	1325		111,200		111,200	111,200
	1326		10,000		10,000	10,000
1399	Sub-total		1,385,575		1,392,107	1,244,272
1600	Travel on Official Business					
	1601		210,000		210,000	210,000
	1602		15,000		15,000	15,000
1699	Sub-total		225,000		225,000	225,000
1999	COMPONENT TOTAL		2,821,083		2,861,679	2,752,353
20	CONTRACTS					
	2300					
	2301		57,134		0	0
	2399		57,134		0	0
2999	COMPONENT TOTAL		57,134		0	0
30	MEETING/PARTICIPATION COMPONENT					
	3300					
	3301		400,000		450,000	420,000

		w/m	2012 (US\$)	w/m	2013 (US\$)	2014 (US\$)
	3302		350,000		350,000	350,000
	3303		300,000		300,000	300,000
	3304		20,000		20,000	20,000
	3305		125,000		125,000	125,000
	3306		10,000		10,000	10,000
3399	Sub-total		1,205,000		1,255,000	1,225,000
3999	COMPONENT TOTAL		1,205,000		1,255,000	1,225,000
40	EQUIPMENT AND PREMISES COMPONENT					
4100	Expendable Equipment (items under \$1,500)					
	4101		20,000		20,000	20,000
4199	Sub-total		20,000		20,000	20,000
4200	Non-Expendable Equipment					
	4201		5,000		5,000	5,000
	4202		5,000		5,000	5,000
	4203		5,000		5,000	5,000
	4204		5,000		5,000	5,000
	4205		10,000		5,000	5,000
4299	Sub-total		30,000		25,000	25,000
4300	Premises					

		w/m	2012 (US\$)	w/m	2013 (US\$)	2014 (US\$)
	4301		49,440		51,870	51,870
	4399					
	Sub-total		49,440		51,870	51,870
4999	COMPONENT TOTAL		99,440		96,870	96,870
50	MISCELLANEOUS COMPONENT					
	5100					
	5101		20,000		20,000	20,000
	5199					
	Sub-total		20,000		20,000	20,000
	5200					
	5201		20,000		25,000	25,000
	5202		10,000		10,000	10,000
	5203		5,000		5,000	5,000
	Sub-total		35,000		40,000	40,000
	5299					
	5300					
	5301		20,000		20,000	20,000
	5302		25,000		25,000	25,000
	5303		12,000		12,000	12,000
	5304		40,000		10,000	10,000
	5399					
	Sub-total		97,000		67,000	67,000
	5400					
	5401		20,000		20,000	20,000
	5499					
	Sub-total		20,000		20,000	20,000
5999	COMPONENT TOTAL		172,000		147,000	147,000
99	TOTAL DIRECT PROJECT COST		4,354,657		4,360,549	4,221,223
	<i>Programme support costs (13%)</i>		566,105		566,871	548,759
	GRAND TOTAL (inclusive of programme support costs)		4,920,762		4,927,420	4,769,982
	Operating cash reserve exclusive of PSC		0		0	0
	TOTAL BUDGET		4,920,762		4,927,420	4,769,982

	w/m	2012 (US\$)	w/m	2013 (US\$)	2014 (US\$)
Draw down ⁵		643,829		650,487	493,049
Contribution from the Parties		4,276,933		4,276,933	4,276,933

¹ For the substantive and technical operations, as well as the maintenance of the different web sites managed by the Secretariat for the delivery of essential communications services which is envisaged to be discharged by a dedicated webmaster, the Parties request the Secretariat to explore the possibility of collaborating with UNEP, other organizations in the United Nations system, as well as external services to deliver the required website services, and report the findings to the next meeting of the Open-ended Working Group of the Parties to the Montreal Protocol.

² The upgrade of this post from G-7 level to P-2 (Associate Administrative Officer) is not intended to set a precedent for future decisions.

³ In accordance with decision XXII/2, and under the decision created by that decision, the Secretariat entered into a contract with ICF International for the preparation of an evaluation of the financial mechanism.

⁴ Budgetline covers participation of Article 5 TEAP experts to enable the timely completion of the work requested by the Parties.

⁵ Draw down levels were set with a view to maintaining the level of contributions constant through 2013.

Explanatory notes for the approved 2012 and 2013, and proposed 2014 budgets of the Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer

Budget line	Comment
Personnel component 1101–1108	Indicative Professional salary costs applicable to the relevant duty stations have been used for the budget proposals. Where information on actual staff costs is available, however, the figures have been adjusted accordingly, as in budget lines 1102 and 1104. Unspent commitments normally revert to the Trust Fund for the Montreal Protocol.
1105	The post of the Senior Administrative Officer continues to be paid by UNEP from the 13 per cent programme support costs.
1109	Webmaster post – For the substantive and technical operations, as well as the maintenance of the different web sites managed by the Secretariat for the delivery of essential communications services which is envisaged to be discharged by dedicated webmaster, the Parties requested the Secretariat to explore the possibility of collaborating with UNEP, other organizations in the United Nations system, as well as external services to deliver the required website services, and report the findings to the next meeting of the Open-ended Working Group of the Parties to the Montreal Protocol.
Consultants – 1201	Assistance in data reporting, updating of publications, translation of essential features of the Ozone Secretariat website and the maintenance of a fully interlinked digital system at the Secretariat will continue to be required. Funds under this line may be transferred to line 1100 to create or support short-term Professional posts if necessary.
Administrative support/personnel 1301- 1309 1308	Standard General Service salary costs applicable to the Nairobi duty station have been used for the 2013–2014 budget proposals. The upgrade of this post from G-7 level to P-2 level (Associate Administrative Officer) is not intended to set a precedent for future decisions.
1310	The post of Bilingual Secretary is funded from the Vienna Convention Trust Fund.
Administrative support/Conference services – 1321–1326	Necessary funds may be transferred from the conference servicing budget lines (1321–1326) should such services be required, either through individual consultancies or corporate contracts. The current conference servicing costs have been based on the following reasons and assumptions: 1321: The budget proposed is for one meeting of the Open-ended Working Group to be held each year in 2013 and 2014 in Nairobi or at another United Nations venue, in the six official United Nations languages; 1322: The Montreal Protocol budget for 2014 will be shared with the Vienna Convention budget for the tenth meeting of the Conference of the Parties to the Vienna Convention;

The budgeted amount is based on the estimated cost of holding the Meeting of the Parties in Nairobi in 2013 and 2014, in the six official United Nations languages. Any additional costs arising from holding the meetings in a location other than Nairobi will be borne by the Governments hosting the meetings;

1323: The budget allocation in 2013 and 2014 will cover the costs of organizing annual meetings of the assessment panels and the Technology and Economic Assessment Panel's technical options committees, together with communication and other sundry costs related to the work of Panel members from developing countries and countries with economies in transition;

1324: One Bureau meeting is scheduled for each of the years 2013 and 2014, with provision for interpretation and document translation into the appropriate languages based on the membership of the Bureau;

1325: At least two Implementation Committee meetings of three days' duration are scheduled for each of the years 2013 and 2014, with interpretation and document translation as required, to be held back-to-back with the Open-ended Working Group meetings and the meetings of the parties in those years;

1326: At least one informal consultation meeting per year, expected to take place in Nairobi, is envisaged for 2013 and 2014 to facilitate the work of assisting the parties and promoting ratification of and compliance with the Montreal Protocol and its amendments.

Travel on official business – 1601–1602 Travel on official business for 2013 and 2014 is being maintained at the 2012 level.

Meetings/Participation component – 3300

Participation of representatives of developing countries

The participation of representatives of parties operating under paragraph 1 of Article 5 in the various Protocol meetings is budgeted at \$5,000 per meeting per representative, taking into account no more than one person's travel costs per country, using the most appropriate and advantageous economy-class fare and United Nations daily subsistence allowances.

3301

The budget provision requested in 2012 for travel of members and experts of the assessment panels and the technical options committees attending assessment panel meetings has been reduced by \$50,000 to reflect the expected level of expenditure for the year. Additional funds will be requested as required for the next assessment process.

3302

In 2014, the total participation costs based on some 80 participants attending the joint meetings of the Conference of the Parties to the Vienna Convention and the Meeting of the Parties to the Montreal Protocol, will be borne fully by the Trust Fund for the Montreal Protocol.

3303

Participation costs are based on some 60 participants attending the Open-ended Working Group meetings in both 2013 and 2014.

3304

Participation costs are based on one Bureau meeting per year for four Bureau members from developing countries or countries with economies in transition at each meeting.

3305

The participation costs for the two Implementation Committee meetings per year are based on eight members from developing countries and countries with economies in transition at each meeting and one representative each from three or four countries invited by the Implementation Committee at each meeting. Provision has also been made for travel by the Implementation Committee President or Vice-President from a country operating under paragraph 1 of Article 5 to attend three Executive

	Committee meetings a year.
3306	Funds have been allocated to finance the participation of two participants from developing countries and countries with economies in transition in informal consultations in 2013 and 2014 on critical issues relating to the Montreal Protocol. It is expected that these consultations will be held in Nairobi.
Equipment and premises component	.
Non-expendable equipment – 4203	A small amount has been allocated to provide for increased server capacity, as required, to cope with the demands of paperless meetings and to enable the Secretariat to replace equipment as required.
Premises (rent) – 4300	The allocation for rental of premises in 2013 and 2014 has been based on Nairobi rental rates imposed by the United Nations Controller.
Miscellaneous component	
Reporting costs (including editing, translation, duplication, publication and printing) – 5201–5203	General reporting costs for the Secretariat are provided for under these lines. Line 5201 is being reduced minimally in 2012 to reflect projected savings due to reduced duplication, publication and printing. Line 5202 is reserved for reporting of assessment panels. A small amount is allocated in line 5203 for any editing, translation, duplication, publication and printing related to Protocol awareness campaigns.
Sundry – Communications – 5301	Careful monitoring of telecommunications resources and the use of electronic mail instead of facsimile communications enable the Secretariat to maintain a relatively low budget provision under this line. Line 5301 is being reduced minimally in 2012 to reflect projected savings due to increased usage of communications facilities available within the computing systems.
Training – 5303	The provision for training will be maintained to meet evolving training needs and to cater for training schemes introduced by the United Nations as a result of its continuing human resources reform programme and guidelines for continuous training to encourage high performance delivery of staff.
Others (International Ozone Day) – 5304	The Ozone Secretariat will continue to provide assistance to specific countries during 2012 and 2013 to assist in their preparations for the celebration of the International Day for the Preservation of the Ozone Layer. In 2012, this line is being increased by \$30,000 from the originally approved level of \$10,000 to augment the funds required to support celebrations of International Ozone Day and the twenty-fifth anniversary of the Montreal Protocol at the national level.

Annex II

Trust Fund for the Montreal Protocol on the Substances that Deplete the Ozone Layer

Scale of contributions by the parties for 2012 and 2013 based on the United Nations scale of assessments

(General Assembly resolution 64/248 of 24 December 2009 with a maximum assessment rate of 22 per cent)

(United States dollars)

NAME OF PARTY	UN scale of assessment for years 2010-2012	Adjusted UN scale to exclude non-contributors	Adjusted UN scale with 22% maximum assessment rate considered	2012 & 2013 CONTRIBUTIONS BY PARTIES	INDICATIVE 2014 CONTRIBUTIONS BY PARTIES
Afghanistan	0.004	0.000	0.000	0	0
Albania	0.010	0.000	0.000	0	0
Algeria	0.128	0.128	0.128	5,465	5,465
Andorra	0.007	0.000	0.000	0	0
Angola	0.010	0.000	0.000	0	0
Antigua and Barbuda	0.002	0.000	0.000	0	0
Argentina	0.287	0.287	0.287	12,255	12,255
Armenia	0.005	0.000	0.000	0	0
Australia	1.933	1.933	1.930	82,537	82,537
Austria	0.851	0.851	0.850	36,337	36,337
Azerbaijan	0.015	0.000	0.000	0	0
Bahamas	0.018	0.000	0.000	0	0
Bahrain	0.039	0.000	0.000	0	0
Bangladesh	0.010	0.000	0.000	0	0
Barbados	0.008	0.000	0.000	0	0
Belarus	0.042	0.000	0.000	0	0
Belgium	1.075	1.075	1.073	45,901	45,901
Belize	0.001	0.000	0.000	0	0
Benin	0.003	0.000	0.000	0	0
Bhutan	0.001	0.000	0.000	0	0
Bolivia	0.007	0.000	0.000	0	0
Bosnia and Herzegovina	0.014	0.000	0.000	0	0
Botswana	0.018	0.000	0.000	0	0
Brazil	1.611	1.611	1.608	68,788	68,788
Brunei Darussalam	0.028	0.000	0.000	0	0
Bulgaria	0.038	0.000	0.000	0	0
Burkina Faso	0.003	0.000	0.000	0	0
Burundi	0.001	0.000	0.000	0	0

NAME OF PARTY	UN scale of assesment for years 2010-2012	Adjusted UN scale to exclude non-contributors	Adjusted UN scale with 22% maximum assessment rate considered	2012 & 2013 CONTRIBUTIONS BY PARTIES	INDICATIVE 2014 CONTRIBUTIONS BY PARTIES
Cambodia	0.003	0.000	0.000	0	0
Cameroon	0.011	0.000	0.000	0	0
Canada	3.207	3.207	3.202	136,935	136,935
Cape Verde	0.001	0.000	0.000	0	0
Central African Republic	0.001	0.000	0.000	0	0
Chad	0.002	0.000	0.000	0	0
Chile	0.236	0.236	0.236	10,077	10,077
China	3.189	3.189	3.184	136,167	136,167
Colombia	0.144	0.144	0.144	6,149	6,149
Comoros	0.001	0.000	0.000	0	0
Congo	0.003	0.000	0.000	0	0
Cook Islands	-	0.000	0.000	0	0
Costa Rica	0.034	0.000	0.000	0	0
Cote d' Ivoire	0.010	0.000	0.000	0	0
Croatia	0.097	0.000	0.000	0	0
Cuba	0.071	0.000	0.000	0	0
Cyprus	0.046	0.000	0.000	0	0
Czech Republic	0.349	0.349	0.348	14,902	14,902
Democratic People's Republic of Korea	0.007	0.000	0.000	0	0
Democratic Republic of Congo	0.003	0.000	0.000	0	0
Denmark	0.736	0.736	0.735	31,426	31,426
Djibouti	0.001	0.000	0.000	0	0
Dominica	0.001	0.000	0.000	0	0
Dominican Republic	0.042	0.000	0.000	0	0
Ecuador	0.040	0.000	0.000	0	0
Egypt	0.094	0.000	0.000	0	0
El Salvador	0.019	0.000	0.000	0	0
Equatorial Guinea	0.008	0.000	0.000	0	0
Eritrea	0.001	0.000	0.000	0	0
Estonia	0.040	0.000	0.000	0	0
Ethiopia	0.008	0.000	0.000	0	0
European Union	2.500	2.500	2.496	106,747	106,747
Fiji	0.004	0.000	0.000	0	0
Finland	0.566	0.566	0.565	24,168	24,168
France	6.123	6.123	6.113	261,445	261,445
Gabon	0.014	0.000	0.000	0	0
Gambia	0.001	0.000	0.000	0	0
Georgia	0.006	0.000	0.000	0	0
Germany	8.018	8.018	8.005	342,360	342,360

NAME OF PARTY	UN scale of assesment for years 2010-2012	Adjusted UN scale to exclude non-contributors	Adjusted UN scale with 22% maximum assessment rate considered	2012 & 2013 CONTRIBUTIONS BY PARTIES	INDICATIVE 2014 CONTRIBUTIONS BY PARTIES
Ghana	0.006	0.000	0.000	0	0
Greece	0.691	0.691	0.690	29,505	29,505
Grenada	0.001	0.000	0.000	0	0
Guatemala	0.028	0.000	0.000	0	0
Guinea	0.002	0.000	0.000	0	0
Guinea-Bissau	0.001	0.000	0.000	0	0
Guyana	0.001	0.000	0.000	0	0
Haiti	0.003	0.000	0.000	0	0
Holy See	0.001	0.000	0.000	0	0
Honduras	0.008	0.000	0.000	0	0
Hungary	0.291	0.291	0.291	12,425	12,425
Iceland	0.042	0.000	0.000	0	0
India	0.534	0.534	0.533	22,801	22,801
Indonesia	0.238	0.238	0.238	10,162	10,162
Iran (Islamic Republic of)	0.233	0.233	0.233	9,949	9,949
Iraq	0.020	0.000	0.000	0	0
Ireland	0.498	0.498	0.497	21,264	21,264
Israel	0.384	0.384	0.383	16,396	16,396
Italy	4.999	4.999	4.991	213,452	213,452
Jamaica	0.014	0.000	0.000	0	0
Japan	12.530	12.530	12.509	535,017	535,017
Jordan	0.014	0.000	0.000	0	0
Kazakhstan	0.076	0.000	0.000	0	0
Kenya	0.012	0.000	0.000	0	0
Kiribati	0.001	0.000	0.000	0	0
Kuwait	0.263	0.263	0.263	11,230	11,230
Kyrgyzstan	0.001	0.000	0.000	0	0
Lao People's Democratic Republic	0.001	0.000	0.000	0	0
Latvia	0.038	0.000	0.000	0	0
Lebanon	0.033	0.000	0.000	0	0
Lesotho	0.001	0.000	0.000	0	0
Liberia	0.001	0.000	0.000	0	0
Libya	0.129	0.129	0.129	5,508	5,508
Liechtenstein	0.009	0.000	0.000	0	0
Lithuania	0.065	0.000	0.000	0	0
Luxembourg	0.090	0.000	0.000	0	0
Madagascar	0.003	0.000	0.000	0	0
Malawi	0.001	0.000	0.000	0	0
Malaysia	0.253	0.253	0.253	10,803	10,803
Maldives	0.001	0.000	0.000	0	0

NAME OF PARTY	UN scale of assesment for years 2010-2012	Adjusted UN scale to exclude non-contributors	Adjusted UN scale with 22% maximum assessment rate considered	2012 & 2013 CONTRIBUTIONS BY PARTIES	INDICATIVE 2014 CONTRIBUTIONS BY PARTIES
Mali	0.003	0.000	0.000	0	0
Malta	0.017	0.000	0.000	0	0
Marshall Islands	0.001	0.000	0.000	0	0
Mauritania	0.001	0.000	0.000	0	0
Mauritius	0.011	0.000	0.000	0	0
Mexico	2.356	2.356	2.352	100,599	100,599
Micronesia (Federated State of)	0.001	0.000	0.000	0	0
Monaco	0.003	0.000	0.000	0	0
Mongolia	0.002	0.000	0.000	0	0
Montenegro	0.004	0.000	0.000	0	0
Morocco	0.058	0.000	0.000	0	0
Mozambique	0.003	0.000	0.000	0	0
Myanmar	0.006	0.000	0.000	0	0
Namibia	0.008	0.000	0.000	0	0
Nauru	0.001	0.000	0.000	0	0
Nepal	0.006	0.000	0.000	0	0
Netherlands	1.855	1.855	1.852	79,206	79,206
New Zealand	0.273	0.273	0.273	11,657	11,657
Nicaragua	0.003	0.000	0.000	0	0
Niger	0.002	0.000	0.000	0	0
Nigeria	0.078	0.000	0.000	0	0
Niue	-	0.000	0.000	0	0
Norway	0.871	0.871	0.870	37,191	37,191
Oman	0.086	0.000	0.000	0	0
Pakistan	0.082	0.000	0.000	0	0
Palau	0.001	0.000	0.000	0	0
Panama	0.022	0.000	0.000	0	0
Papua New Guinea	0.002	0.000	0.000	0	0
Paraguay	0.007	0.000	0.000	0	0
Peru	0.090	0.000	0.000	0	0
Philippines	0.090	0.000	0.000	0	0
Poland	0.828	0.828	0.827	35,355	35,355
Portugal	0.511	0.511	0.510	21,819	21,819
Qatar	0.135	0.135	0.135	5,764	5,764
Republic of Korea	2.260	2.260	2.256	96,499	96,499
Republic of Moldova	0.002	0.000	0.000	0	0
Romania	0.177	0.177	0.177	7,558	7,558
Russian Federation	1.602	1.602	1.599	68,404	68,404
Rwanda	0.001	0.000	0.000	0	0
Saint Kitts and Nevis	0.001	0.000	0.000	0	0

NAME OF PARTY	UN scale of assesment for years 2010-2012	Adjusted UN scale to exclude non-contributors	Adjusted UN scale with 22% maximum assessment rate considered	2012 & 2013 CONTRIBUTIONS BY PARTIES	INDICATIVE 2014 CONTRIBUTIONS BY PARTIES
Saint Lucia	0.001	0.000	0.000	0	0
Saint Vincent and the Grenadines	0.001	0.000	0.000	0	0
Samoa	0.001	0.000	0.000	0	0
San Marino	0.003	0.000	0.000	0	0
Sao Tome and Principe	0.001	0.000	0.000	0	0
Saudi Arabia	0.830	0.830	0.829	35,440	35,440
Senegal	0.006	0.000	0.000	0	0
Serbia	0.037	0.000	0.000	0	0
Seychelles	0.002	0.000	0.000	0	0
Sierra Leone	0.001	0.000	0.000	0	0
Singapore	0.335	0.335	0.334	14,304	14,304
Slovakia	0.142	0.142	0.142	6,063	6,063
Slovenia	0.103	0.103	0.103	4,398	4,398
Solomon Islands	0.001	0.000	0.000	0	0
Somalia	0.001	0.000	0.000	0	0
South Africa	0.385	0.385	0.384	16,439	16,439
Spain	3.177	3.177	3.172	135,654	135,654
Sri Lanka	0.019	0.000	0.000	0	0
Sudan	0.010	0.000	0.000	0	0
Suriname	0.003	0.000	0.000	0	0
Swaziland	0.003	0.000	0.000	0	0
Sweden	1.064	1.064	1.062	45,432	45,432
Switzerland	1.130	1.130	1.128	48,250	48,250
Syrian Arab Republic	0.025	0.000	0.000	0	0
Tajikistan	0.002	0.000	0.000	0	0
Thailand	0.209	0.209	0.209	8,924	8,924
The former Yugoslav Republic of Macedonia	0.007	0.000	0.000	0	0
Timor-Leste	0.001	0.000	0.000	0	0
Togo	0.001	0.000	0.000	0	0
Tonga	0.001	0.000	0.000	0	0
Trinidad and Tobago	0.044	0.000	0.000	0	0
Tunisia	0.030	0.000	0.000	0	0
Turkey	0.617	0.617	0.616	26,345	26,345
Turkmenistan	0.026	0.000	0.000	0	0
Tuvalu	0.001	0.000	0.000	0	0
Uganda	0.006	0.000	0.000	0	0
Ukraine	0.087	0.000	0.000	0	0
United Arab Emirates	0.391	0.391	0.390	16,695	16,695
United Kingdom	6.604	6.604	6.593	281,983	281,983

NAME OF PARTY	UN scale of assesment for years 2010-2012	Adjusted UN scale to exclude non-contributors	Adjusted UN scale with 22% maximum assessment rate considered	2012 & 2013 CONTRIBUTIONS BY PARTIES	INDICATIVE 2014 CONTRIBUTIONS BY PARTIES
United Republic of Tanzania	0.008	0.000	0.000	0	0
United States of America	22.000	22.000	21.964	939,375	939,375
Uruguay	0.027	0.000	0.000	0	0
Uzbekistan	0.010	0.000	0.000	0	0
Vanuatu	0.001	0.000	0.000	0	0
Venezuela (Bolivarian Republic of)	0.314	0.314	0.313	13,407	13,407
Viet Nam	0.033	0.000	0.000	0	0
Yemen	0.010	0.000	0.000	0	0
Zambia	0.004	0.000	0.000	0	0
Zimbabwe	0.003	0.000	0.000	0	0
Total	102.501	100.165	100.000	4,276,933	4,276,933

SUMMARY OF THE TWENTY-FOURTH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER: 12-16 NOVEMBER 2012

The twenty-fourth Meeting of the Parties (MOP 24) to the Montreal Protocol on Substances that Deplete the Ozone Layer took place in Geneva, Switzerland, from 12-16 November 2012. The meeting was attended by over 550 participants representing governments, UN agencies, intergovernmental and non-governmental organizations, academia, industry and the agricultural sector.

MOP 24 opened with a preparatory segment from Monday to Wednesday, 12-14 November, which addressed the MOP’s substantive agenda items and related draft decisions. This segment was followed by a high-level segment on Thursday and Friday, 15-16 November, which adopted the decisions forwarded by the preparatory segment. As the preparatory segment did not conclude its work by Wednesday, it reconvened several times during the high-level segment to address a number of outstanding issues.

MOP 24 adopted 14 substantive and 11 procedural decisions, including on: the review by the Scientific Assessment Panel (SAP) of RC-316c; procedural issues related to the Technology and Economic Assessment Panel (TEAP) and its subsidiary bodies; budget; and data and compliance issues. MOP 24 did not reach agreement on the draft decision on clean production of HCFC-22 through by-product emission control or on the draft decision to amend the Montreal Protocol to include hydrofluorocarbons (HFCs).

A BRIEF HISTORY OF THE OZONE REGIME

Concerns that the Earth’s stratospheric ozone layer could be at risk from chlorofluorocarbons (CFCs) and other anthropogenic substances first arose in the early 1970s. At that time, scientists warned that the release of these substances into the atmosphere could deplete the ozone layer, hindering its

ability to prevent harmful ultraviolet (UV) rays from reaching the Earth. This would adversely affect ocean ecosystems, agricultural productivity and animal populations, and harm humans through higher rates of skin cancers, cataracts and weakened immune systems. In response to this growing concern, the United Nations Environment Programme (UNEP) convened a conference in March 1977 that adopted a World Plan of Action on the Ozone Layer and established a Coordinating Committee to guide future international action on ozone protection.

VIENNA CONVENTION: In May 1981, the UNEP Governing Council launched negotiations on an international agreement to protect the ozone layer and, in March 1985, the Vienna Convention for the Protection of the Ozone Layer was adopted. The Convention called for cooperation on monitoring, research and data exchange, but did not impose obligations to reduce the use of ozone depleting substances (ODS). The Convention now has 197 parties.

MONTREAL PROTOCOL: In September 1987, efforts to negotiate binding obligations to reduce the use of ODS led to the adoption of the Montreal Protocol on Substances that Deplete the Ozone Layer. The Protocol introduced control measures for some CFCs and halons for developed countries

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<http://enb.iisd.mobi/>

(non-Article 5 parties). Developing countries (Article 5 parties) were granted a grace period allowing them to increase their ODS use before taking on commitments. The Protocol currently has 197 parties, which represents universal membership.

Since 1987, several amendments and adjustments to the Protocol have been adopted, adding new obligations and additional ODS, and adjusting existing control schedules. Amendments require ratification by a defined number of parties before they enter into force, while adjustments enter into force automatically.

LONDON AMENDMENT AND ADJUSTMENTS:

Delegates to the second Meeting of the Parties (MOP 2), which took place in London, UK, in 1990, tightened control schedules and agreed to add ten more CFCs to the list of ODS, as well as carbon tetrachloride (CTC) and methyl chloroform. To date, 197 parties have ratified the London Amendment. MOP 2 also established the Multilateral Fund (MLF), which meets the incremental costs incurred by Article 5 parties in implementing the Protocol's control measures and finances clearinghouse functions, including technical assistance, information, training and the costs of the MLF Secretariat. The Fund is replenished every three years and has received pledges of over US\$2.8 billion since its inception.

COPENHAGEN AMENDMENT AND ADJUSTMENTS:

At MOP 4, held in Copenhagen, Denmark, in 1992, delegates tightened existing control schedules and added controls on methyl bromide, hydrobromofluorocarbons and hydrochlorofluorocarbons (HCFCs). MOP 4 also agreed to enact non-compliance procedures and to establish an Implementation Committee (ImpCom). The ImpCom examines cases of possible non-compliance by parties, and makes recommendations to the MOP aimed at securing full compliance. To date, 197 parties have ratified the Copenhagen Amendment.

MONTREAL AMENDMENT AND ADJUSTMENTS:

At MOP 9, held in Montreal, Canada, in 1997, delegates agreed to a new licensing system for the import and export of ODS, in addition to tightening existing control schedules. They also agreed to ban trade in methyl bromide with non-parties to the Copenhagen Amendment. To date, 192 parties have ratified the Montreal Amendment.

BEIJING AMENDMENT AND ADJUSTMENTS:

At MOP 11, held in Beijing, China, in 1999, delegates agreed to controls on bromochloromethane and additional controls on HCFCs, and to reporting on methyl bromide for quarantine and pre-shipment (QPS) applications. At present, 182 parties have ratified the Beijing Amendment.

MOP 15 AND FIRST EXTRAORDINARY MOP:

MOP 15, held in Nairobi, Kenya, in 2003, resulted in decisions on issues including the implications of the entry into force of the Beijing Amendment. However, disagreements surfaced over exemptions allowing the use of methyl bromide beyond 2004 for critical uses where no technically or economically feasible alternatives were available. Delegates could not reach agreement and took the unprecedented step of calling for an "extraordinary" MOP. The first Extraordinary Meeting of the Parties to the Montreal

Protocol (ExMOP 1) took place in March 2004, in Montreal, Canada. Parties agreed to critical-use exemptions (CUEs) for methyl bromide for 2005, with the introduction of a "double-cap" concept distinguishing between old and new production of methyl bromide central to this compromise. Parties agreed to a cap on new production of 30% of parties' 1991 baseline levels, meaning that where the capped amount was insufficient for approved critical uses in 2005, parties were required to use existing stockpiles.

MOP 16 AND EX-MOP 2: MOP 16 took place in Prague, the Czech Republic, in 2004. Work on methyl bromide exemptions for 2006 was not completed and parties decided to hold a second ExMOP. ExMOP 2 was held in July 2005, in Montreal, Canada. Parties agreed to supplementary levels of CUEs for 2006. Under this decision, parties also agreed that: CUEs allocated domestically that exceed levels permitted by the MOP must be drawn from existing stocks; methyl bromide stocks must be reported; and parties must "endeavor" to allocate CUEs to the particular use categories specified in the decision.

COP 7/MOP 17: MOP 17 was held jointly with the seventh Conference of the Parties to the Vienna Convention (COP 7) in Dakar, Senegal, in December 2005. Parties approved essential-use exemptions for 2006 and 2007, supplemental CUEs for 2006 and CUEs for 2007, and production and consumption of methyl bromide in non-Article 5 parties for laboratory and analytical critical uses. Other decisions included a US\$470.4 million replenishment of the MLF for 2006-2008, and agreement on terms of reference for a feasibility study on developing a monitoring system for the transboundary movement of controlled ODS.

MOP 18: MOP 18 took place in New Delhi, India, from 30 October - 3 November 2006. Parties adopted decisions on, *inter alia*: future work following the Ozone Secretariat's workshop on the Special Report of the Intergovernmental Panel on Climate Change (IPCC) and the Technical and Economic Assessment Panel (TEAP); difficulties faced by some Article 5 parties manufacturing CFC-based metered dose inhalers (MDIs); treatment of stockpiled ODS relative to compliance; and a feasibility study on developing a system for monitoring the transboundary movement of ODS.

MOP 19: MOP 19 took place in Montreal, Canada, in September 2007. Delegates adopted decisions on: an accelerated phase-out of HCFCs; critical-use nominations for methyl bromide; and monitoring transboundary movements of, and illegal trade in, ODS. Parties also adopted an adjustment accelerating the phase out of HCFCs.

COP 8/MOP 20: MOP 20 was held jointly with COP-8 of the Vienna Convention in Doha, Qatar in November 2008. Parties agreed to replenish the MLF with US\$490 million for 2009-2011 and adopted other decisions concerning, *inter alia*: the environmentally sound disposal of ODS; approval of 2009 and 2010 CUEs for methyl bromide; and compliance and reporting issues.

MOP 21: MOP 21 took place in Port Ghalib, Egypt, in November 2009 and adopted decisions on: alternatives

to HCFCs; institutional strengthening; essential uses; environmentally sound management of ODS banks; methyl bromide; and data and compliance issues. Delegates considered, but did not agree to, a proposal to amend the Montreal Protocol to include hydrofluorocarbons (HFCs) submitted by the Federated States of Micronesia (FSM) and Mauritius.

MOP 22: MOP 22 took place in Bangkok, Thailand, in November 2010 and adopted decisions on, *inter alia*: the terms of reference for the TEAP study on the MLF replenishment and for the evaluation of the financial mechanism; and assessment of technologies for ODS destruction. Delegates considered, but did not agree to, two proposals to amend the Montreal Protocol to address HFCs, one submitted by the US, Mexico and Canada, and another submitted by FSM.

COP 9/MOP 23: COP 9/MOP 23 took place in Bali, Indonesia in November 2011 and adopted decisions on, *inter alia*, a US\$ 450 million replenishment of the MLF for the 2012-2014 period; issues related to exemptions; updating the nomination process and recusal guidelines for TEAP; the treatment of ODS to service ships; and additional information on alternatives. Delegates considered, but did not agree to, two proposed amendments to the Montreal Protocol to address HFCs, one submitted by the US, Mexico and Canada, and the other submitted by FSM.

CURRENT ODS CONTROL SCHEDULES: Under the amendments and adjustments to the Montreal Protocol, non-Article 5 parties were required to phase out production and consumption of: halons by 1994; CFCs, CTC, hydrobromochlorofluorocarbons and methyl chloroform by 1996; bromochloromethane by 2002; and methyl bromide by 2005. Article 5 parties were required to phase out production and consumption of hydrobromochlorofluorocarbons by 1996, bromochloromethane by 2002, and CFCs, halons and CTC by 2010. Article 5 parties must still phase out production and consumption of methyl chloroform and methyl bromide by 2015. Under the accelerated phase-out of HCFCs adopted at MOP 19, HCFC production and consumption by non-Article 5 parties was frozen in 2004 and is to be phased out by 2020, while in Article 5 parties, HCFC production and consumption is to be frozen by 2013 and phased out by 2030 (with interim targets prior to those dates, starting in 2015 for Article 5 parties). There are exemptions to these phase-outs to allow for certain uses lacking feasible alternatives.

SUMMARY OF MOP 24

PREPARATORY SEGMENT

The preparatory segment of MOP 24 was opened by Ghazi Odat (Jordan), who co-chaired the meeting with Gudi Alkemade (the Netherlands).

Bruno Oberle, Secretary of State for the Environment, Switzerland, highlighted the Protocol's scientific foundation, governments' willingness to act quickly and the Multilateral Fund (MLF) as factors contributing to the Protocol's success. He expressed Swiss support for the HFC amendment proposal.

Marco González, Executive Secretary, Ozone Secretariat, highlighted the Protocol's success and noted outstanding challenges, including decisions on, *inter alia*, critical-use exemptions (CUEs) and quarantines and feedstock uses. González called on delegates to discuss the HFC amendment proposals in the spirit of the Protocol's original negotiations, which based decisions on science, recognized industry's ability to innovate and accepted the principle of common but differentiated responsibilities (CBDR).

Awards were presented to Stephen Andersen (US) and Lambert Kuijpers (Netherlands) for their work as the longest serving Co-Chairs of the TEAPs.

ORGANIZATIONAL MATTERS: Co-Chair Alkemade introduced the provisional agenda (UNEP/OzL.Pro.24/1). The US suggested additions to the agenda, including: TEAP membership; improved information on policy and control measures of ODS transition; and transition of the MLF chief officer. India, supported by China, Bahrain and Kuwait, objected to raising the following issues, stating their belief that they do not fall within the mandate of the Montreal Protocol: feedstock uses; clean production of HCFC-22 through by-product emission control; additional funding for the MLF to maximize the climate benefit of the accelerated phase-out of HCFCs; and new HFC amendments. The European Union (EU) noted feedstock use is controlled by the Montreal Protocol and this item, as well as proposals for amendments, should be retained on the agenda.

Haiti, Indonesia, Bolivia, Ecuador, Bahrain and Nicaragua said that they have not yet ratified the Beijing Amendment. Indonesia proposed discussing the status of the Bali Declaration, which was introduced at MOP 23.

Co-Chair Alkemade proposed that issues related to TEAP membership, raised by the US and China, be added as a sub-item to the existing agenda item on TEAP procedures. Regarding the proposed amendments to the Protocol, Alkemade acknowledged that while this topic was discussed at previous meetings, no agreement was reached and thus it remains on the agenda.

Alkemade proposed, and parties agreed, to include several items under "other matters," including: policies and controls influencing transition of ODS; transition of the chief MLF officer; ratification status of the Beijing Amendment; and the status of the Bali Declaration.

OTHER MATTERS: Co-Chair Odat expressed gratitude to Paul Horwitz, the outgoing Deputy Executive Secretary of the Montreal Protocol, and Maria Nolan, outgoing chief officer of the MLF. The US also paid tribute to the outgoing officers.

HIGH-LEVEL SEGMENT

Doris Leuthard, Head of the Department of Environment, Transport, Energy and Communications, Switzerland, opened the high-level segment of MOP 24 on Thursday. She lauded the Montreal Protocol's twenty-fifth anniversary, noting that 98% of ODS have been phased out. She said Switzerland supports the proposed HFC amendments.

Marco Gonzalez, Executive Secretary, Ozone Secretariat, highlighted principles of the Montreal Protocol, *inter alia*: a

firm scientific foundation; the precautionary principle; common but differentiated responsibilities (CDR); cooperation; and an effective data system to monitor compliance. He expressed hope that these principles will contribute to overcoming current challenges.

Amina Mohamed, Deputy Executive Director, UNEP, asked for a moment of silence for Angela Cropper, former UNEP Deputy Executive Director and Special Advisor to the UNEP Executive Director. Mohamed highlighted the spirit of cooperation between governments, civil society, academia, NGOs and the private sector in implementing the Protocol and stressed inter-generational responsibility. She underscored UNEP's commitment to the Vienna Convention and the Montreal Protocol.

Syanga Abilio, MOP 23 President, said Article 5 parties are taking initial steps toward the accelerated phase-out of HCFCs, and lauded South Sudan for becoming a party to the Protocol.

ORGANIZATIONAL MATTERS: MOP 24 elected by acclamation Mahmood Alam (Pakistan) as President, Dmytro Mormul (Ukraine), Leslie Smith (Grenada) and Alain Wilmart (Belgium) as Vice Presidents, and Wilbur Simuusa (Zambia) as Rapporteur. Delegates also adopted the agenda (UNEP/OzL.Pro.24/1) with parties agreeing to follow customary procedures.

PRESENTATIONS BY THE ASSESSMENT PANELS ON THE STATUS OF THEIR WORK, INCLUDING THE LATEST DEVELOPMENTS: **SAP:** Paul Newman (US) presented the report on behalf of the SAP, including the status of the 2014 assessment report. He said the amount of time CTC remains in the atmosphere has been revised upward from 35 to 50 years, which has narrowed, but not closed, the discrepancy between top-down and bottom-up emission estimates. He noted that R-316C is a powerful ODS and greenhouse gas.

EEAP: Nigel Paul (UK) described the Environmental Effects Assessment Panel's (EEAP) work on examining the effects of ozone depletion and climate change on, *inter alia*, ultraviolet (UV) radiation in relation to human health, terrestrial and aquatic ecosystems, materials, and ODS and replacements. He highlighted a significant advance in understanding the relationship between UV radiation and key receptors, noting that UV can result in negative health effects but may have beneficial impacts on Vitamin D status.

TEAP: Lambert Kuijpers (Netherlands) presented the key conclusions of the TEAP. He said 80% of the methyl bromide use by Article 5 parties has been phased out from the aggregate baseline, in advance of the 2015 deadline. Daniel Verdonik reported on the Halons Technical Options Committee (TOC). He described an International Civil Aviation Organization study on the use of halons in the aviation industry, noting there is little evidence that states, civil aviation and ozone offices work together, and that it is not yet possible to determine long-term halon needs.

PRESENTATION BY THE CHAIR OF THE MLF EXECUTIVE COMMITTEE ON THE WORK OF THE MLF AND ITS RELATED BODIES: Delegates considered the report (UNEP/OzL.Pro.24/9). Xiao Xuezhi (China) highlighted

efforts to ensure funding for HCFC phase-out management plans, noted that 101 additional projects have been approved, and outlined a number of institutional efforts from the UN Development Programme (UNDP), UNEP, UN Industrial Development Organization (UNIDO) and the World Bank.

Additional information can be found at: <http://www.iisd.ca/vol19/enb1991e.html>.

STATEMENTS BY HEADS OF DELEGATION: A number of heads of delegation made statements during the high-level segment, highlighting, *inter alia*, national efforts to implement the Protocol, possible obstacles to implementation, and recent successes.

Several parties commended the MLF for its critical support in helping Article 5 parties to meet their obligations under the Protocol, including Nepal, Kiribati, Madagascar, Timor Leste and Côte d'Ivoire. New Zealand urged continued support for Article 5 countries. Tanzania, with India, commended the Protocol for being a model of cooperation between developed and developing countries, based on CBDR.

Mozambique and others provided overviews of national actions to raise awareness on and implement the Protocol. Bangladesh noted its active role in different committees of the Montreal Protocol and the Secretariat's recognition of its efforts. The Democratic Republic of Congo highlighted efforts to improve ODS monitoring and technical capacity. Guinea and Malawi noted efforts to eliminate HCFCs. Panama highlighted mechanisms to reduce HCFCs, *inter alia*, implementing annual import quotas and import monitoring. The Philippines described its efforts to phase-out ODS but noted compliance concerns related to illegal ODS trade and non-documented use of ODS in shipping and other sectors.

Sudan, Timor Leste and Croatia described national efforts to eliminate ODS use. Serbia described its efforts to phase-out HFCs, including its work to minimize illegal trade by cross-checking data as part of its licensing procedure. Mongolia described its progress on phasing out ODS and HCFCs. Palau stressed its commitment to phasing out ODS and reducing the illegal importation of ODS equipment and substances. Nicaragua said it has phased out CFCs and will now focus on phasing out HFCs. The Dominican Republic urged a smooth transition to substances that have a low Global Warming Potential (GWP).

On the proposed amendments, Kenya and others expressed their full support and favored cooperation between the Protocol and the United Nations Framework Convention on Climate Change (UNFCCC). Nepal said any process that creates new obligations for parties should be judged against their capacities to meet obligations. Canada recognized the many achievements of the Protocol while stressing the need to address new challenges, including the negative influence of HFCs on climate. Uganda and the Maldives stressed the need for affordable ozone-friendly and climate-friendly alternatives. Iraq, noting its high summer temperatures, asked that this concern be taken into account with regards to appropriate substitution technologies.

On obstacles to be addressed in the future, Nigeria and Bangladesh highlighted developing indigenous technologies

to address ODS. Pakistan expressed concern about the illegal cross-boundary movement of ODS. Benin, for the African region, identified technology concerns, especially for parties with hot climates, legal problems and fragile economic environments as challenges in implementing and achieving Protocol obligations. He expressed Côte d'Ivoire's interest in hosting the next meeting of the Protocol.

The International Plant Protection Convention (IPPC) said it had signed a Memorandum of Understanding with the Protocol to formalize mutual cooperation. Greenpeace, the Natural Resources Defense Council and the Environmental Investigation Agency (EIA) urged addressing HFC emissions.

A summary of the statements can be found at: <http://www.iisd.ca/vol19/enb1991e.html>.

DATES AND VENUE FOR THE TWENTY FIFTH MEETING OF THE PARTIES TO THE MONTREAL PROTOCOL: In the closing plenary, González announced that MOP 25 will be held in Ukraine, commencing in the last week of October 2013.

CLOSURE OF THE MEETING: On Friday, delegates adopted the reports of the meeting (UNEP/OzL.Pro.24/L.1, L.1/Add.1/, L.1/Add.2. and L.1/Add.3) with minor amendments. Delegates also adopted the decisions forwarded from the preparatory segment (UNEP/OzL.Pro.24/L.2, L.2/Add.1. and L.2/Add.3).

President Alam, in closing, noted the need to reflect not only on the achievements of the Montreal Protocol but also on the challenges ahead. He said that as improved technologies are widely-available and scientific evidence exists in the face of an increasingly dramatic environmental crisis, the Protocol needs to act and embrace its responsibility to deal with HFCs. He urged parties to join discussions on the availability of alternatives to HCFCs and HFCs.

President Alam closed the meeting at 10:05 pm.

MOP 24 OUTCOMES AND DECISIONS:

ADMINISTRATIVE MATTERS: Consideration of membership of Montreal Protocol bodies for 2013: The Secretariat introduced the item, noting that the preparatory segment will recommend the membership to the high-level segment.

Financial reports of the trust funds and budgets for the Montreal Protocol: The Secretariat introduced this item (UNEP/OzL.Pro.24/7 and 7/Add.1). A budget group was established to further discuss the documents and prepare a draft decision for consideration by the parties.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1989e.html> and <http://www.iisd.ca/vol19/enb1991e.html>.

Final Outcome: In its decision (UNEP/OzL.Pro.24/CRP.13), the MOP approves:

- a budget of US\$4,927,420 for 2013;
- total contributions to be paid by the parties of US\$4,276,933 for 2012 and 2013; and
- an operating cash reserve at 15% of the annual budget for meeting the final expenditures under the Trust Fund.

It further requests the Secretariat to indicate, in future financial reports, the amounts under “total reserves and fund balances” of contributions that have not yet been received and authorizes the Executive Secretary to enter into discussions with any party whose contributions are outstanding for two or more years.

ISSUES RELATED TO EXEMPTIONS FROM ARTICLE 2 OF THE MONTREAL PROTOCOL: Nominations for essential-use exemptions for 2013: Delegates considered draft decisions XXIV/[A] and XXIV/[B] on essential-use exemptions for 2013 (UNEP/OzL.Pro.24/8).

Discussions focused on, *inter alia*, the use of CFCs for manufacturing traditional Chinese medicine (TCM) MDIs. The TEAP said the Medical Technical Options Committee (MTOC) noted that the improved efficacy for the treatment of asthma using TCM MDIs was not proven and thus not considered an essential use. China said that refusing the nomination would have negative implications for Chinese companies and communities and requested reconsideration.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1989e.html>, <http://www.iisd.ca/vol19/enb1991e.html> and <http://www.iisd.ca/vol19/enb1992e.html>.

Final Outcome: In its decision (UNEP/OzL.Pro.24/CRP.15), the MOP:

- authorizes the levels of production and consumption for 2013 needed for using CFCs for MDIs as set out in the annex to the decision;
- requests nominating parties to supply the MTOC with information to assess essential-use nominations;
- encourages parties with essential-use exemptions in 2013 to consider sourcing required CFCs, initially from stockpiles;
- further encourages parties with potentially available stockpiles to notify the Ozone Secretariat of quantities and a contact point by 31 December 2012 and requests the Secretariat to post details on its website;
- further requests parties to consider domestic regulations to ban the launch or sale of new CFC-based MDIs; and
- requests China to provide more information about the absence of alternatives in the region, the phase-out efforts undertaken for this use, and other relevant information necessary to the MTOC for full evaluation of the case.

Nominations for critical-use exemptions for 2014: Delegates considered a draft decision put forward by the US, Canada and Australia on critical-use exemptions for 2014.

Discussions focused on, *inter alia*, methyl bromide exemption nominations put forward by the US, Canada and Australia.

The Methyl Bromide Technical Options Committee (MTOC) Co-Chairs presented their recommendations on methyl bromide critical-use nominations (CUNs). Co-Chair Ian Porter noted decreasing CUN trends and outlined nominations from Australia, Canada and the US for strawberry production. Co-Chair Marta Pizano described revisions to the CUN handbook including, *inter alia*, removal of the code of conduct and clarification of economic indicators.

The EU, highlighting soilless cultures available for strawberry runners, asked if bigger reductions are not possible for Australia and Canada. Mexico recommended using existing methyl bromide stocks and fully eliminating methyl bromide use in the future.

Australia requested flexibility to use its 2014 CUE for fumigation of packaged rice in 2013, noting this would allow Australia to complete its transition one year earlier and result in no additional methyl bromide use. Canada said it will not request an exemption for flour mills in 2015. The EU said parties should respect the MBTOC recommendations.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1989e.html>, <http://www.iisd.ca/vol19/enb1991e.html> and <http://www.iisd.ca/vol19/enb1992e.html>.

Final Outcome: In the decision (UNEP/OzL.Pro.24/CRP.4/Rev.1), the MOP:

- allows the agreed critical-use categories for 2014 set out in the annex for each party, subject to the conditions set forth in the decision and in decision Ex.I/4;
- approves Australia's request to bring forward up to 1.187 tonnes of methyl bromide from its 2014 CUE to 2013 for fumigating packaged rice, with any quantity brought forward to 2013 deducted from its allocation in 2014;
- recognizes the continued contribution of the expertise of the MBTOC; and
- requests Canada, Australia and the US to take steps to explore the possibility of transitioning to technically and economically feasible alternatives and ensure the MBTOC is aware of these efforts.

Quarantine and pre-shipment issues: Delegates considered draft decision XXIV/[C] on the QPS uses of methyl bromide (UNEP/OzL.Pro.24/8).

Discussions focused on, *inter alia*: QPS uses in trade; TEAP reporting; and methyl bromide exemptions.

On reporting of methyl bromide for QPS, TEAP and others noted that data provided under Article 7 (data reporting) is voluntary and insufficient to analyze or provide a conclusion on QPS and methyl bromide. Switzerland and the US suggested providing more regular TEAP reports, including trend data.

The IPPC explained their "system approach application" to tackle pests, where parties are encouraged to reduce or reuse methyl bromide. Japan noted methyl bromide use in trade to minimize pests and disease.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1989e.html>, <http://www.iisd.ca/vol19/enb1991e.html> and <http://www.iisd.ca/vol19/enb1992e.html>.

Final Outcome: In its decision (UNEP/OzL.Pro.24/CRP.11), the MOP invites the 33rd meeting of the Open-ended Working Group (OEWG 33) to request the TEAP to analyze trends in data provided under Article 7 (reporting of data) on methyl bromide use for QPS. It invites parties to establish data collection procedures for methyl bromide use in QPS. It also requests the Secretariat to remind parties that they are invited to submit information by 31 March 2013, on a voluntary basis, and make the forms available on its website.

Feedstock uses: Delegates considered draft decision XXIV/[D] on feedstock uses (UNEP/OzL.Pro.24/8).

Discussions focused on whether the TEAP should conduct a study on ODS use in feedstocks. The EU presented the proposal, noting anticipated increases and a need for monitoring. India, supported by China, stated that feedstocks are not controlled under the Montreal Protocol. The US, with the EU, and opposed by India, said this approach would be voluntary and provide opportunities for learning. Delegates also addressed inviting experts with additional expertise; and qualifying the characteristics of new alternatives to ODS, in particular, emerging, under development, or commonly available and environmental.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1989e.html>, <http://www.iisd.ca/vol19/enb1990e.html>, <http://www.iisd.ca/vol19/enb1991e.html> and <http://www.iisd.ca/vol19/enb1992e.html>.

Final Outcome: In its decision (UNEP/OzL.Pro.24/CRP.3), the MOP decides to, *inter alia*:

- remind parties that reporting on ODS quantities used as feedstock is obligatory under Article 7;
- urge parties to take steps to minimize ODS emissions in feedstock uses;
- encourage parties to replace ODS in feedstock uses with alternatives to the extent possible;
- request parties to report, by 31 January 2014, whether feedstock uses are taking place in their territory and to provide information on the processes identified; and
- invite parties to provide information to the Secretariat on new alternatives replacing any feedstock uses reported, where such information is not considered confidential.

ADDITIONAL INFORMATION ON ALTERNATIVES

TO ODS: Delegates considered draft decision XXIV/[E] on additional information on alternatives to ODS (UNEP/OzL.Pro.24/8).

The Co-Chairs introduced a shortened compromise text of the decision, which was taken as a basis for further negotiations. Discussions focused on whether the TEAP should conduct a study on ODS use in feedstocks. The EU presented the proposal, noting anticipated increases and a need for monitoring. India, supported by China, stated that feedstocks are not controlled under the Montreal Protocol. The US, with the EU, and opposed by India, said this approach would be voluntary and provide opportunities for learning. Discussion centered on: how to specify the terms of reference for TEAP to prepare a report, namely whether to establish a task force, which was supported by the US and the EU, but opposed by India; inviting experts with additional expertise; and how to define the characteristics of new alternatives to ODS.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1990e.html>, <http://www.iisd.ca/vol19/enb1991e.html> and <http://www.iisd.ca/vol19/enb1992e.html>.

Final Outcome: In its decision (UNEP/OzL.Pro.24/CRP.17), the MOP requests TEAP, in consultation with outside experts with relevant expertise, if necessary, to update information on

alternatives and technologies in various sectors and to prepare a draft report for consideration by OEWG 33 and a final report to be submitted to MOP 25. The report, taking into account any relevant information provided by parties, would:

- describe all available alternatives to ODS that are commercially available, technically proven, and environmentally-sound, taking into account their efficacy, health, safety and environmental characteristics, cost-effectiveness, and their use including in high ambient temperatures and high urban density cities;
- update information provided by previous TEAP reports on alternatives under development;
- identify barriers and restrictions to the adoption and commercial use of certain environmentally-sound alternatives to ODS;
- estimate the approximate amount of alternatives with negative environmental impacts that could be or could have been avoided or eliminated by both non-Article 5 and Article 5 parties in the process of phasing-out ODS; and
- identify the opportunities for the selection of environmentally-sound alternatives to HCFCs in the future.

PROCEDURAL ISSUES RELATED TO TEAP AND ITS SUBSIDIARY BODIES: Delegates considered draft decision XXIV/[F] in section II of document UNEP/OzL.Pro.24/8.

Delegates discussed the procedural issues related to the TEAP and its subsidiary bodies in a closed contact group, which considered, *inter alia*: the code of conduct; procedures to address conflicts of interest; and disclosure guidelines, including on advisory bodies. The guidelines include procedures to deal with conflicts of interest.

Final Outcome: In its decisions (UNEP/OzL.Pro.24/CRP.5, CRP.8, CRP.12 and CRP.14), the MOP, *inter alia*:

- endorses the selection of Shao Min (China) as the new Co-Chair of the EEAP;
- endorses the selection of Co-Chairs of TEAP, and its associated TOCs;
- approves the membership of the MLF Executive Committee;
- endorses the Co-Chairs of the OEWG;
- requests the TEAP to make recommendations on the future configuration of its TOCs to OEWG 33, bearing in mind anticipated workloads;
- approves the terms of reference and the conflict of interest and disclosure policy for the TEAP, its TOCs and any Temporary Subsidiary Bodies (TSBs) set up by those bodies, as contained in the annex to the decision; and
- requests that the TEAP and its TOCs make available to the parties their standard operating procedures.

The annex to the decision outlines, *inter alia*: the scope of work; the size and balance of TEAP and its TOCs and TSBs; nominations and appointments of members to TEAP and its TOCs and TSBs; termination of appointment; replacement; TEAP functioning, including language, meetings, scheduling, operating procedures, rules of procedure and observers; report of TEAP, TOCs and TSBs, including procedures, access, review,

public comment and code of conduct; conflicts of interest; disclosure; recusal; and conflict resolution advisory body.

PROPOSAL ON TRADE OF CONTROLLED SUBSTANCES WITH SHIPS SAILING UNDER A FOREIGN FLAG: Delegates considered draft decision XXIV/[G] in section II of document UNEP/OzL.Pro.24/8.

Delegates discussed, *inter alia*: monitoring issues, particularly when flag ships do not enter the waters of the party they are registered under; data discrepancies between reported export and import data; issues of prior informed consent; and monitoring. They also considered what type of information is already available and accessible and whether requests would be within or beyond the mandate of TEAP. Delegates requested additional time to discuss this issue at the next meeting.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1989e.html> and <http://www.iisd.ca/vol19/enb1991e.html>.

Final Outcome: In its decision (UNEP/OzL.Pro.24/CRP.2/Rev.1), the MOP, *inter alia*:

- requests the TEAP to provide an updated version of the information provided in its previous progress reports on transport refrigeration in the maritime sector with its 2013 progress report; and
- invites parties to encourage relevant stakeholders to minimize the use of controlled substances in newly built ships and to consider environmentally benign and energy-efficient alternatives wherever they are available.

INVESTIGATION OF CTC DISCREPANCY: The SAP reported that discrepancies between “top-down” and “bottom-up” estimates of CTC have narrowed but not closed, as a result of new information. They also stated that the atmospheric concentration of CTC is decreasing. Canada and Australia suggested that TEAP and SAP participate in the feedstocks contact group. India expressed doubt about the necessity of such action.

EVALUATION OF THE FINANCIAL MECHANISM OF THE MONTREAL PROTOCOL: Delegates discussed the final report of the evaluation of the financial mechanism of the Montreal Protocol (UNEP/OzL.Pro.24/INF/4).

Mark Wagner, ICF International, described the evaluation findings, noting that the final report incorporates comments from OEWG 32 and written submissions. Many delegates welcomed the report, with several noting that it recognizes the MLF as an effective and efficient funding mechanism for implementing the Protocol. Delegates also discussed, *inter alia*, implementing a more regular schedule of evaluations and developing clear terms of reference for future evaluations.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1989e.html> and <http://www.iisd.ca/vol19/enb1991e.html>.

Final Outcome: In its decision (UNEP/OzL.Pro.24/CRP.6/Rev.1), the MOP, *inter alia*:

- notes that the MLF is an efficient and effective instrument for enabling compliance with the Protocol by Article 5 parties;

- recognizes that parties consider periodic evaluations of the MLF an important means of ensuring its continued efficiency and effectiveness;
- recognizes also the role of the MLF as a cornerstone of the Protocol and a key mechanism for the success of the ozone layer regime;
- notes with appreciation the report on the 2012 evaluation of the MLF; and
- requests the MLF Executive Committee, within its mandate, to consider the report on the 2012 evaluation of the MLF in the process of continuously improving the MLF management.

PROPOSAL ON CLEAN PRODUCTION OF HCFC-22 THROUGH BY-PRODUCT EMISSION CONTROL:

Delegates discussed the draft decision XXIV/[H] in section II of document UNEP/OzL.Pro.24/8.

Participants discussed, *inter alia*: the continuation of HCFC-22 production for another two decades, and possibly longer as a feedstock; and prioritizing the phase-out of HCFC-22.

The US, supported by Mexico and Canada, recommended conducting demonstration projects on the costs, benefits, environmental implications and climate impacts of HCFC-22 production. Nigeria supported a study on HCFC-22 conducted by TEAP in consultation with SAP, but preferred delaying a decision on a demonstration project until after completion of the study. EIA said the Protocol has an obligation to ensure HCFC-22 production does not harm the global climate. India said the Protocol is not the appropriate forum for controlling by-product emissions. China said the Protocol is not mandated to cover HFC-23. India and China opposed forwarding the draft decision to the high-level segment.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1990e.html>.

Final Outcome: This topic will be taken up by parties at OEWG 33.

PROPOSAL ON ADDITIONAL FUNDING FOR THE MLF TO MAXIMIZE THE CLIMATE BENEFIT OF THE ACCELERATED PHASE-OUT OF HCFCs: Delegates considered draft decision XXIV/[I] on additional funding for the MLF to maximize the climate benefit of the accelerated phase-out of HCFCs (UNEP/OzL.Pro.24/8).

Discussions addressed, *inter alia*: the voluntary nature of the funding; that it would be additional to the MLF financial assistance; and funding sources.

Colombia, Brazil, China and others asked if this would influence existing MLF replenishments. China, opposed by Japan, the EU and others, stressed that funding should come from non-Article 5 parties. Parties did not reach agreement.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1990e.html>, <http://www.iisd.ca/vol19/enb1991e.html> and <http://www.iisd.ca/vol19/enb1992e.html>

Final Outcome: This item will be taken up by parties at OEWG 33.

PROPOSAL ON FUNDING OF PRODUCTION FACILITIES FOR HYDROCHLOROFLUOROCARBONS: Delegates considered draft decision XXIV/[L] on funding of production facilities for HCFCs (UNEP/OzL.Pro.24/8).

Discussion focused on regulatory actions to limit HCFC production and 2013 deadlines for phase-outs. India proposed that the MLF expedite funding for HCFC phase-out in the production sector, noting ODS control schedules for Article 5 parties. Australia, the US and Japan questioned the decision. Parties differed concerning how many Annex 5 countries would be affected by this pending deadline. No consensus was reached on the draft document.

A summary of the discussion can be found at: <http://www.iisd.ca/download/pdf/enb1990e.pdf>.

Final Outcome: This issue will be forwarded to OEWG 33, for consideration by parties.

PROPOSAL ON THE REVIEW BY THE SCIENTIFIC ASSESSMENT PANEL OF RC-316C: Delegates considered draft decision XXIV/[J] in document UNEP/OzL.Pro.24/8, which called for the SAP to review the ozone depletion potential (ODP) and GWP of RC-316c, a newly identified ozone-depleting substance.

Delegates discussed the findings of two studies, one by the SAP and an independent study on which the Russian Federation reported, both of which verified the high ODP and GWP of RC-316c. The Russian Federation informed delegates these properties make RC-316c an unfeasible alternative for aerospace uses. He emphasized the Russian Federation is seeking new alternatives, including imported ones. India said this substance is not controlled by the Protocol, and that requests are not made to SAP to assess the GWP.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1989e.html> and <http://www.iisd.ca/vol19/enb1991e.html>.

Final Outcome: Following discussions and informal consultations, delegates welcomed the findings.

PROPOSAL ON THE IMPLICATIONS OF THE OUTCOME DOCUMENT OF THE UNCSD FOR SIDS WITH REGARD TO THE IMPLEMENTATION OF THE MONTREAL PROTOCOL: Delegates considered draft decision XXIV/[K] on the implications of the outcome document on the UN Conference of Sustainable Development (UNCSD or Rio+20) for small island developing states' (SIDS) implementation of the Montreal Protocol (UNEP/OzL.Pro.24/8).

Grenada, on behalf of St. Lucia and Trinidad and Tobago, introduced the document and proposed delaying discussion until OEWG 33. Following clarification questions on procedure and responses by the Secretariat, delegates agreed to defer the agenda item to OEWG 33.

Final Outcome: This issue will be forwarded to OEWG 33 for consideration by parties.

PROPOSED AMENDMENTS TO THE MONTREAL PROTOCOL: Delegates discussed proposals to amend the Montreal Protocol to control hydrofluorocarbons, among other

things, submitted by the Federated States of Micronesia (FSM) (UNEP/OzL.Pro.24/5) and Canada, Mexico and the US (UNEP/OzL.Pro.24/6).

The proponents of the amendments presented their proposals. The FSM proposed a gradual phase-down in the consumption and production of HFCs, noting that the Protocol has expertise in phasing down production and consumption of gases that are chemically similar to HFCs. The FSM emphasized that parties have a legal obligation to address adverse effects on the ozone layer and on the climate system, and further noted that UN experts have estimated that addressing HFCs would prevent 0.1 degree Celsius of warming by 2050. The US said the benefits of the North American proposal amount to nearly 100 gigatonnes of carbon dioxide equivalent in direct benefits. He stressed that decisions taken by the Protocol have implications for climate and urged action to avoid reducing the climate benefits achieved under the Protocol. Canada addressed frequently asked questions on the proposal (UNEP/OzL.Pro.24/INF/7). The US and Mexico said the Protocol is the appropriate institution to address this issue, and the US stressed the expertise of TEAP, SAP and the MLF. Mexico emphasized the Protocol's recognition of common responsibilities and called for urgent action.

Delegates discussed a number of questions about the proposed amendments, including, *inter alia*: availability of technologies; calculation of the costs and availability of alternatives; the effect of the proposals on modifying the ozone layer; and expertise within the Protocol and the UNFCCC and its subsidiary bodies.

The Russian Federation, Nigeria, Israel, Australia, Bangladesh, Japan, the Former Yugoslav Republic of Macedonia, the EU, Egypt, Morocco, Samoa, Norway, Switzerland, Maldives, Mozambique, Cameroon, Costa Rica, Colombia, Chile, Turkey and the Bahamas called for establishing a contact group to discuss the proposed amendment. Iran, Iraq and Tunisia expressed uncertainty in discussing the topic. Argentina, India, Cuba, Uruguay, Malaysia, Bahrain, China and others opposed establishing a contact group. India, China and Venezuela questioned whether the Montreal Protocol is the right legal framework to address HFCs. Bahrain noted ongoing use of HFCs in many processes, and Qatar stated that there are not yet clear alternatives. Following discussion on whether to form a contact group, Co-Chair Alkemade proposed establishing an informal discussion group, to which delegates agreed. Delegates then elected Grenada and Switzerland as co-conveners of this group.

The US said it proposed a phase-down due to alternatives not being available in every sector, such as for MDIs. He suggested that schedules could be adjusted later if alternatives are identified. The EU agreed that an HFC phase-down approach allows additional alternatives to emerge over time. He added that bans and taxes can push consumers and producers in the right direction. Canada highlighted commercialized alternatives available in the foam sector, noting there is still time for alternatives to emerge in other sectors.

Singapore said its primary concern is the availability of alternatives. India said there was uncertainty on emerging technologies. Japan said HFCs have varying levels of GWP and should not be grouped together, and expressed support for controlling GWP levels.

The FSM explained that because the Kyoto Protocol addresses "baskets of gases," the UNFCCC may not address HFCs if addressing carbon dioxide or other gases is cheaper. He stressed that the most mitigation would occur by using the Protocol as an additional approach. Canada requested that parties who advocate addressing HFCs under the climate regime provide details on how they propose to do so. South Africa outlined a number of policy issues, including: concerns that a phase-down would result in developing countries taking on quantified targets for the first time, albeit at a sector level; and issues of CBDR and capabilities and their interaction with the climate regime.

The SAP commented on observed increases of HFCs in the atmosphere, which are 10 to 15% per year. The SAP also said, *inter alia*, that observations are based on measurements at ground stations that are averaged to give global concentrations, and differences among different HFCs are calculated and reported.

New Zealand said current growth in HFC use indicates that action needs to be taken. India suggested that SAP projections are not valid as the penetration of HFCs has not occurred in the manner used by the SAP.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1990e> and <http://www.iisd.ca/vol19/enb1991e.html>.

COMPLIANCE AND DATA REPORTING ISSUES:
Proposal on the differences between data reported on imports and data reported on exports: Delegates discussed the draft decision XXIV/[M] in section II of document UNEP/OzL.Pro.24/8.

Delegates felt that the existing reporting system generally works well but noted there is room for improvement. Delegates also recognized multiple reasons for differences between data reported on imports and data reported on exports and discussed, *inter alia*, how to modify the current reporting system.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1990e.html>.

Final Outcome: In its decision (UNEP/OzL.Pro.24/CRP.18), the MOP, *inter alia*:

- notes differences in data on imports and exports of controlled substances submitted by parties under Article 7 (data reporting), and recognizes that while such shipments may have plausible explanations, such as shipments over the end of a calendar year or the submission of incomplete data, they may also result from illegal trade activities or from not complying with domestic legislation without criminal intent;
- notes also that in the Article 7 data reporting format, parties exporting controlled substances are requested to submit to the Ozone Secretariat information on countries of destination, while there is no request for parties importing controlled substances with regard to the country of origin;

- notes further that the absence of a request for importing countries to submit information on source countries makes the process of clarification of differences complex and burdensome for both importing and exporting countries;
- requests the Ozone Secretariat to revise, before 1 January 2013, the reporting format resulting from decision XVII/16 to include in the Data Forms an annex indicating the exporting party for the quantities reported as import, and noting that this annex is excluded from the reporting requirements under Article 7, and provision of the information in the annex would be done on a voluntary basis;
- requests the Ozone Secretariat to compile every January aggregated information on controlled substances by annex and group received from the importing/re-importing party and to provide this uniquely and solely to the exporting party concerned, when requested, in a manner that maintains confidentiality;
- invites parties to clarify any differences in import and export data as provided by the Ozone Secretariat; and
- invites parties to consider participating in the informal prior informed consent scheme as a means to improve information about their potential imports of controlled substances.

Presentation on and consideration of the work and recommended decisions forwarded by the Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol: Delegates considered the draft decision on the status of ratification included as draft decision XXIV/[AA] in section III of document UNEP/OzL.Pro.24/8.

Sri Lanka, on behalf of the ImpCom, presented the progress on data reporting, noting, *inter alia*, that 192 out of 196 parties have reported their consumption and production data for 2011. He also described efforts made by parties to ratify all amendments to the Protocol.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1990e.html>.

Final Decision: In its decision (UNEP/OzL.Pro.24/CRP.1), the MOP decides, *inter alia*:

- to urge Israel, Mali, Niger, Sao Tome and Principe, South Africa and Tajikistan to work closely with the implementing agencies to report the required data to the Secretariat as a matter of urgency;
- to request the ImpCom to review the situation of those parties at its fiftieth meeting;
- that Algeria, Ecuador, Equatorial Guinea, Eritrea, Haiti, Niger, the former Yugoslav Republic of Macedonia and Turkey have presented sufficient information to justify their requests for the revision of their consumption data for HCFCs for 2009, 2010 or both and approves the requests to revise their baseline;
- to request parties, when reporting production, imports, exports or destruction, to enter a number in each cell in the data reporting forms that they submit;
- to urge Bhutan, Democratic People's Republic of Korea, Marshall Islands, Qatar, South Africa and Yemen to submit information on process agent uses as a matter of urgency; and

- to record with appreciation the submission by Ukraine of a plan of action to ensure its prompt return to compliance with the Protocol's HCFC control measures.

OTHER MATTERS: Application of paragraph 8 of Article 4 of the Montreal Protocol with respect to the Beijing Amendment to the Montreal Protocol: Delegates considered the application of Article 4 (Control of Trade with non-parties) to parties that are in the process of ratifying the Beijing Amendment and are in full compliance with the Protocol's control measures. During discussion, participants noted the similarity between two draft decisions (UNEP/OzL.Pro.24/CRP.7) and (UNEP/OzL.Pro.24/CRP.10).

Canada, supported by the EU, proposed merging the documents by including Kenya and Chad in CRP.7. Participants discussed, *inter alia*: actions to ratify the Beijing Amendment; how to create a process that would allow countries that have not ratified it to submit something to avoid trade sanctions; and reviewing exceptions on an annual basis. Belarus expressed concern about allowing exceptions on an annual basis. Several delegations noted that time is needed to ratify amendments due to ratification procedures. Ecuador, Bolivia, Nicaragua, Kenya, Bahrain and others supported combining the two CRP documents, and delegates agreed to forward the document to the high-level segment.

A summary of the discussions can be found at: <http://www.iisd.ca/vol19/enb1990e.html> and <http://www.iisd.ca/vol19/enb1991e.html>.

Final Decision: In its decision (UNEP/OzL.Pro.24/CRP.7/Rev.1), the MOP, *inter alia*:

- acknowledges that Bahrain, Bolivia, Chad, Ecuador, Haiti, Kenya and Nicaragua have notified the Secretariat that their ratification of the Beijing Amendment is under way and that they will complete the procedures as expeditiously as possible;
- notes that Bahrain, Bolivia, Chad, Ecuador, Haiti, Kenya and Nicaragua are in full compliance with Articles 2A to 2I (Control Measures) and Article 4 (Control of Trade with non-Parties) of the Protocol, including its Beijing Amendment, on the basis of the data submitted under Article 7 (data reporting) of the Protocol;
- notes also that the exceptions provided for in paragraph 8 of Article 4 of the Protocol shall apply to Bahrain, Bolivia, Chad, Ecuador, Haiti, Kenya and Nicaragua from 1 January 2013 and will expire at the end of MOP 25; and
- notes further that any state that has not agreed to be bound by the Beijing Amendment and that seeks an exception beyond MOP 25 may do so by submitting a request to the Ozone Secretariat prior to the beginning of the ImpCom meeting that immediately precedes the MOP, that the Committee will review relevant data submitted in accordance with Article 7 and develop a recommendation for consideration by the parties and that such requests for exception will be considered on an annual basis.

Status of the Bali Declaration: Indonesia updated the meeting on the status of the Bali Declaration, which calls for the most effective means under the Protocol of achieving the transition to low GWP alternatives to ODS. She noted that 105 countries support the Declaration and several have given oral support. She encouraged others to join.

A summary of the discussions can be found at <http://www.iisd.ca/vol19/enb1991e.html>.

Information on ODS Transition Policy Measures:

Delegates considered draft decision (UNEP/OzL.Pro.24/CRP.9/Rev.1). The US said the informal group had agreed to delete “reporting systems” from the draft decision. Co-Chair Alkemade proposed to forward the document to the high-level segment, which India opposed. Canada, the EU, Australia, New Zealand, Norway and the US expressed concern and disappointment with India’s opposition, given that India did not participate in the discussions. They further stressed the voluntary nature of the information gathering exercise and emphasized ways in which the proposed activities would be useful. India responded that it is not required to participate in an informal group and said it did not understand the sense of collecting the information. The US said it was difficult to rationalize how working procedures can result in successful conclusions when countries that do not participate in discussion can block decisions, a sentiment supported in statements by several others. Brazil appreciated the positive spirit of discussion but noted the decision involves aspects of technical and political sensitivity, including possible overlap with reporting obligations in other fora. Brazil and China proposed considering the decision at the next meeting. Co-Chair Alkemade proposed intersessional discussions.

A summary of the discussions can be found at <http://www.iisd.ca/vol19/enb1992e.html>.

A BRIEF ANALYSIS OF MOP 24

On the Montreal Protocol’s twenty-fifth anniversary, participants had a chance to look back on the Protocol’s achievements; they also realized the serious difficulties it faces today. MOP 24 proved to be a watershed, both in terms of the Protocol’s future agenda of phasing down specific chemicals, and the generational change the ozone expert community is undergoing.

The Protocol is a uniquely successful international environmental agreement. Its membership of 197 countries is universal, which means that every nation in the world has agreed to implement its objectives. The Protocol’s record is no less impressive, as its original and regularly updated objectives illustrate. The Protocol set precise, time-bound targets and achieved practical results by eliminating entire classes of chemicals and vastly reducing emissions of ozone depleting substances (ODS). An impressive 98% of controlled substances have been destroyed or taken off the market. According to health experts, the Protocol has helped to avoid tens of millions of non-fatal skin cancers and cataracts, and will prevent millions of cancer deaths in this century, thus saving trillions of dollars for health-care services. Furthermore, the Protocol has achieved

these results by operating mostly on trust among parties, without an intrusive verification system to ensure parties’ compliance with their obligations. Finally, the Protocol’s Multilateral Fund (MLF) has provided necessary financial assistance in such an efficient and effective manner that some suggest it should serve as a financial model for future environmental conventions, including the mercury convention, which is currently being negotiated.

Despite these impressive achievements, the twenty-fourth Meeting of the Parties (MOP 24) shed light on some serious problems that will have to be addressed if the Protocol is to continue to represent a model agreement and contribute to environmental improvement. This brief analysis will focus on several controversial issues that came to the fore in the debates, and that pose new challenges for the Protocol and may serve as markers of its future successes. One of the most significant and controversial questions is whether the Protocol should take up a whole class of currently used chemicals—HFCs (hydrofluorocarbons)—a move that may lead the Montreal Protocol into uncharted territory.

AT A CROSSROADS

As in the previous three MOPs, the problem of controlling HFCs took center stage at MOP 24. Touted as an inexpensive and safe alternative to hydrochlorofluorocarbons (HCFCs) for use in refrigeration, foams, fire extinguishers and solvents, HFCs have turned out to pack a disturbingly high global warming potential (GWP), many times more than carbon dioxide. In fact, if no controls are introduced, HFC emissions into the atmosphere may negate the reductions of greenhouse gases pledged or anticipated under the UNFCCC. Thus, strictly speaking, HFCs are not ozone-depleting, but they have a direct bearing on the climate regime.

Many delegates point out that because the Montreal Protocol introduced HFCs as a substitute, parties have a responsibility to address the harmful climatic effects of these chemicals. One party cited Protocol text as justification, saying the Protocol obliges parties to “take appropriate measures to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer.” Others argue that tackling HFCs goes too far beyond the Protocol’s mandate.

The problem of HFCs emerged as the single most important and controversial issue of the meeting, to the extent that it overshadowed other debates at times. HFCs are now at the center of a tangled web of economic, political and technical issues. The US, Canada, Mexico and the Federated States of Micronesia (FSM) once again tabled their Protocol amendments to make HFCs a controlled substance. Supported by a sizable number of parties—one participant put the total of supporters at 106 parties and counting—proponents of the amendment emphasized the climate benefits of phasing down HFCs. They emphasized that since this group of chemicals originated from the Protocol’s agenda, phasing them down would be in line with the Protocol’s objectives and would not affect the UNFCCC and Kyoto Protocol mandates, nor preempt any measures the latter

might take. The proponents note that the Montreal Protocol has already phased out more ozone depleting greenhouse gases than the Kyoto Protocol. The FSM and the US also cited the Rio+20 Outcome Document, which recommended “a gradual phase-down in the consumption and production of HFCs.” Other parties made a number of additional arguments in support of the amendments, highlighting economic, environmental and moral concerns. Niger and the Maldives, for instance, stressed that parties have a moral imperative to take action, with the Maldives pointing out that if parties are committed to environmental protection and global safety, it is not moral not to address the challenge within the Protocol.

However, the case for phasing out HFCs, judged by the tenor of the debate and informal exchanges in the corridors, is not so straightforward. The opponents of the proposal, including the members of the BRICS group (Brazil, Russia, India, China and South Africa), produced counterarguments that drew on economic, financial, legal, social, and technological issues. Their main proposition was that HFCs are not ODS and thus do not fall under the Montreal Protocol’s mandate, and instead relate to the UNFCCC and Kyoto Protocol. One delegate wryly wondered why a country that is not among the ardent supporters of the Kyoto Protocol is now arguing for ambitious climate measures “through the backdoor of the Montreal Protocol.”

Some delegates quietly suggested in informal discussions that they harbored suspicions that the HFC proponents might be motivated by industry interests. For instance, 3M, Honeywell, DuPont and other multinational companies are at the cutting edge of new technology and chemical substances, and are in a position to reap profits from the expected transition, at least after an initial phase of heavy investment. In fact, these companies are already turning to new alternatives and technologies in advance of regulation they expect (and possibly hope for). A BRICS delegate recalled that some countries are still reeling from the shock of the destruction of whole industries based on CFCs, and said some parties’ hesitation regarding HFCs stems from concern that dealing with HFCs might siphon funds from the work to phase out HCFCs.

India was particularly vociferous in its opposition to the HFC amendments, and delegates highlighted several concerns. India repeatedly questioned the legality of addressing HFCs under the Montreal Protocol, emphasizing while HFCs have a high GWP, they are not an ODS. They referred to the huge investments made in their national industry, employing substances that would otherwise be earmarked for oblivion by the “chemically advanced” parties. India also pointed to what they viewed as inconsistencies, such as the continued use of HFCs in the US and the EU when no alternatives are available. Safety concerns were emphasized: alternatives like propane are flammable and toxic, and can pose major problems in high ambient temperature developing countries (noted for slack government regulation and lax safety standards). India, supported by fellow BRICS members, succeeded in blocking action on the HFC amendments as well as HFC-associated items, such as a proposal on clean production of HCFC-22, and one to compile voluntarily-

reported information on ODS transition policy measures, which led several parties to express deep disappointment in the final plenary sessions.

These outcomes might have been predicted, given that the amendment proposals have been tabled at several previous MOPs. Still, many suggested that this outcome is not the final decision on the HFC amendments. As weary delegates added up the results of the debate over HFCs, a shrewd observer of the proceedings expressed hope, saying “We are five yards closer to the walls of the fort...” Admittedly, some worried inhabitants peer over the walls and see a Trojan horse poised to outwit the fort defenders. It is still an open question whether chipping off the fort walls will take another year or two, or five, but the drive towards an HFC phase-out might gather speed, particularly if strong incentives are available. One participant suggested that if India’s fears of their companies losing a sizable chunk of the home market if HFCs are put under control could be dispelled, then it will move quickly. In this connection, Switzerland’s initiative to maximize climate benefits in the MLF will be an important factor, as will be the possibility of voluntary contributions.

Furthermore, the agreement to discuss the amendment during plenary and in an informal group represented progress, considering that India and others successfully blocked any discussion at MOP 23. But this time they conceded to informally “discussing” ODS alternatives, albeit under the title “Co-Conveners,” rather than Co-Chairs, which they regarded as a notch lower in formality. While Russia did not support the proposed amendments, its suggestion that a special group be established to address the issue was seen as an important development. China and Brazil, while ready to voice their solidarity with India in principle, also showed a willingness to engage in further discussions. Some detected signs that China, with its export-oriented economy, might be in the process of taking a long-term strategic look at HFCs.

A BIFURCATED HIGHWAY

The meeting was an occasion for lauding several distinguished scientists, whose role in the Protocol’s history was seminal. Stephen Andersen received a special award from the Russian government, and the outgoing chief officers of the ozone secretariat and the MLF were feted. But as congratulatory speeches were delivered, some veteran participants felt nostalgia. The Montreal Protocol is in transition and a change of guard is taking place, with some negotiators stating that they may not be around for the final ODS phase-out. As one delegate observed, the anniversary meeting in Geneva marked the passing of the torch to a younger generation. Against this background, there was poignancy in calls for maintaining the networks and the bonds built over the years among scientists and national institutions and focal points. Several participants recalled the comradeship and cooperation from previous years: the hard bargaining and the late night sessions in which delegates were driven by a commitment to compromise in order to reach agreement. Some thought this commitment to compromise was

evaporating, and expressed concern about too much politicization and intolerance in recent MOPs. However, optimists argued that the overhaul of membership on TEAP and its associated organs will inject the “new blood” that will be necessary to pull the Protocol through the difficult times ahead. At the end of the day, the new areas of substantial work, especially on HFCs, are the ones that will give the Protocol a new lease on life, posing critical decisions for delegates in the meetings ahead.

Several participants emphasized that the debate about HFCs should not obscure the Protocol’s original focus. Both the Scientific Assessment Panel and one NGO noted that the ozone layer recovery is yet to be detected: indeed, it might not be restored to 1980 levels before 2050. Funding for background observation stations, which do critical ozone monitoring, is running dangerously low, and some national ozone units have ceased functioning after World Bank grants petered out.

However, the biggest challenge lies in strategic decisions. The HFC dilemma has again demonstrated the interconnectedness of the global ecosystem; it has also shown the real-life synergies between multilateral environmental agreements, where problems spill over and beg to be resolved in a practical way, overcoming man-made legalistic restrictions.

This challenge was evident when the normally simple procedure of adopting the agenda resulted in debate among parties regarding the re-tabling of proposed amendments to the Protocol, as well as the addition of TEAP membership and improved information on policy and control of ODS transition. Much emphasis was placed on process and procedure by parties opposing the adoption of amendments to the Protocol. For instance, some parties argued that since previous discussions on the proposed amendments had not concluded with agreement, they should not be reopened. However, the current procedures allow for agenda items to be forwarded to the OEWG or the next MOP for further discussion. This allows intersessional work to reach agreement on contentious issues, such as those described above. At the same time, such a strategy raises the question about the point at which parties may decide to “call time” on an issue that is proving difficult to resolve.

Several participants described the Montreal Protocol as arriving at a crossroads, a sentiment that has been expressed with increasing frequency in recent years. One participant invoked the words of Robert Frost, noting that perhaps the Protocol will take “the road less traveled.” the amendments may not be achieved at MOP 25, but the long road of discussions and sometimes acerbic debates may enable delegates to discover a way to reach consensus. In a sense the Protocol is approaching a bifurcated highway, partly obscured by fog, and hard decisions will need to be taken. The HFC phase-down represents a historical opportunity for the Protocol to revitalize and renew its life span. The Protocol is a powerful driver for beneficial environmental change and it can once again show itself as a model agreement by imposing a concrete phase-out schedule, without preempting what the UNFCCC and the Kyoto Protocol can accomplish. In

fact, several parties emphasized the Protocol is already doing more than the climate regime to address climate change, torn as the mechanisms are by political strife.

It was indicative that in the closing minutes of the meeting MOP 24 President Mehmood Alam of Pakistan issued a call for strong and immediate action on climate change, saying “it is time to act on HFCs.” MOP 24 focused the parties’ attention on issues crucial for the Protocol; the vigorous debate in Geneva has bared the political fissures and alliances, and, consequently, the framework for upcoming negotiations. While delegates may not yet be ready to commit to addressing HFCs at MOP 25, in the view of majority of the participants, this issue provides the opportunity to define the future of the Montreal Protocol.

UPCOMING MEETINGS

UNFCCC COP 18: The 18th session of the Conference of the Parties (COP 18) to the UNFCCC and the eighth session of the Conference of the Parties serving as the Meeting of Parties to the Kyoto Protocol (CMP 8), among other associated meetings, are scheduled to take place in Doha, Qatar. **dates:** 26 November - 7 December 2012 **location:** Doha, Qatar **contact:** UNFCCC Secretariat **phone:** +49-228-815-1000 **fax:** +49-228-815-1999 **email:** secretariat@unfccc.int **www:** http://unfccc.int/meetings/doha_nov_2012/meeting/6815.php

World Climate Summit 2012: The third annual World Climate Summit, which is organized alongside UNFCCC COP 18, will bring together government leaders and representatives from the business and finance community to discuss issues related to a low-carbon economy and industrial, financial, political and innovation drivers to accelerate progress in mitigating and adapting to climate change. The meeting will focus specifically on Qatar and the Middle East. Topics of discussion include: public-private partnerships; renewable energy; agriculture and water; emission reductions; transportation; carbon pricing; and energy efficiency. **dates:** 1-2 December 2012 **location:** Doha, Qatar **contact:** Michael Mathres **phone:** +44-7427-307730 **email:** michael@wclimate.com **www:** <http://www.worldclimatesummit.org/>

68th Meeting of the Executive Committee of the Multilateral Fund for the Montreal Protocol: The Executive Committee will meet to approve projects and review implementation of existing projects. **dates:** 3-7 December 2012 **location:** Montreal, Canada **contact:** Multilateral Fund Secretariat **phone:** +1-514-282-1122 **fax:** +1-514-282-0068 **email:** secretariat@unmfs.org **www:** <http://www.multilateralfund.org/>

Joint Meeting of the Bureaux of the Conferences of the Parties (COPs) to the Basel, Rotterdam and Stockholm Conventions: The Joint Meeting will review arrangements for the extraordinary meeting of the COPs to the three conventions, the proposal for the organization of their secretariats, joint activities for the 2014-2015 biennium, the budget and possible necessary amendments to the budgets of the three conventions for the 2014-2015 biennium, and information received from the UNEP’s Executive Director on the outcome of the consultative

process on financing options for chemicals and wastes. **dates:** 13-14 December 2012 **location:** Geneva, Switzerland **contact:** Secretariat of the Basel, Rotterdam and Stockholm Conventions **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** synergies@unep.org **www:** <http://synergies.pops.int/>

Fifth Session of the INC to Prepare a Legally Binding Instrument on Mercury: This meeting is the last of five Intergovernmental Negotiating Committee (INC) meetings to negotiate a legally binding instrument on mercury. **dates:** 13-18 January 2013 **location:** Geneva, Switzerland **phone:** +41-22-917-8192 **fax:** +41-22-797-3460 **email:** mercury.chemicals@unep.org **www:** <http://www.unep.org/hazardoussubstances/MercuryNot/MercuryNegotiations/tabid/3320/language/en-US/Default.aspx>

Expert Meeting on POPS in Articles in Use and “POPS-Free” Initiative: Experts will provide input for a publication on POPs in articles in use and the Stockholm Convention’s POPs-free initiative. **dates:** 4-6 February 2013 **location:** Geneva, Switzerland **contact:** Stockholm Convention Secretariat **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** ssc@pops.int **www:** <http://www.pops.int>

Coordinated Ordinary and Extraordinary Meetings of the COPs to the Basel, Rotterdam and Stockholm Conventions: The ordinary and extraordinary meetings of the Conferences of the Parties (COPs) to the Basel, Rotterdam and Stockholm Conventions will convene in Geneva, Switzerland. **dates:** 28 April - 10 May 2013 **location:** Geneva, Switzerland **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** synergies@unep.org **www:** <http://synergies.pops.int/Implementation/ExCOPs/ExCOPs2013/tabid/2747/language/en-US/Default.aspx>

Eleventh International Conference on Mercury as a Global Pollutant: Convened under the theme “Science informing global policy,” the conference will celebrate the official launch of the UNEP Global Legally Binding Treaty on Mercury, and consider how to put the treaty into practice. The meeting aims to exchange information on the science of mercury behavior and release, and its effect on ecosystems. **dates:** 28 July - 2 August 2013 **location:** Edinburgh, United Kingdom **contact:** Marcus Pattison **phone:** +44-1727-858840 **fax:** +44-1727-840310 **email:** info@mercury2013.com **www:** <http://www.mercury2013.com/>

Ninth Meeting of the Persistent Organic Pollutants Review Committee (POPRC-9): POPRC-9 will review chlorinated naphthalenes, hexachlorobutadiene, hexabromocyclododecane, and pentachlorophenol and its salts and esters, as well as discuss other technical work such as the impact of climate change on the POPRC’s work and common issues in applying Annex E criteria. A joint meeting with the Rotterdam Convention’s Chemical Review Committee (CRC) may be held on 19 October 2013, if approved by the joint Basel/Rotterdam/Stockholm COPs. **dates:** 14-18 October 2013 **location:** Rome, Italy **contact:** Stockholm Convention Secretariat **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** ssc@pops.int **www:** <http://www.pops.int>

Ninth Meeting of the Rotterdam Convention CRC: This subsidiary body of the Rotterdam Convention reviews chemicals and pesticide formulations according to the criteria set out by the Convention in Annexes II and IV, respectively, and makes recommendations to the COP for listing these chemicals in Annex III. A joint meeting with the POPRC may be held on 19 October 2012, if approved by the joint Basel/Rotterdam/Stockholm COPs. **dates:** 21-25 October 2013 **location:** Rome, Italy **contact:** Rotterdam Convention Secretariat **phone:** +41-22-917-8296 **fax:** +41-22-917-8082 **email:** pic@pic.int **www:** <http://www.pic.int/>

25th Meeting of the Parties to the Montreal Protocol: MOP 25 is scheduled to consider a number of issues, including nominations for critical- and essential-use exemptions. **dates:** 28 October - 1 November 2013 **location:** Ukraine **contact:** Ozone Secretariat **phone:** +254-20-762-3851 **fax:** +254-20-762-4691 **email:** ozoneinfo@unep.org **www:** http://ozone.unep.org/new_site/en/historical_meetings.php

GLOSSARY

CBDR	Common but differentiated responsibilities
CFCs	Chlorofluorocarbons
COP	Conference of the Parties
CRP	Conference room paper
CTC	Carbon tetrachloride
CUEs	Critical-use exemptions
CUNs	Critical-use nominations
EEAP	Environmental Effects Assessment Panel
EIA	Environmental Investigation Agency
ExMOP	Extraordinary Meeting of the Parties
FSM	Federated States of Micronesia
GWP	Global Warming Potential
HFCs	Hydrofluorocarbons
HCFCs	Hydrochlorofluorocarbons
ImpCom	Implementation Committee
IPPC	International Plant Protection Convention
ODP	Ozone depletion potential
ODS	Ozone depleting substances
OEWG	Open-ended Working Group
MDIs	Metered dose inhalers
MLF	Multilateral Fund
MOP	Meeting of the Parties
MTOC	Medical Technical Options Committee
MBTOC	Methyl Bromide Technical Options Committee
QPS	Quarantine and pre-shipment
SAP	Scientific Assessment Panel
TEAP	Technology and Economic Assessment Panel
TOC	Technical Options Committee
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change