



**United Nations
Environment
Programme**

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/66/34
19 March 2012

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-sixth Meeting
Montreal, 16-20 April 2012

PROJECT PROPOSAL: CÔTE D'IVOIRE

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

Phase-out

- HCFC phase-out management plan (stage I, first tranche)

UNEP/UNIDO

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Côte d'Ivoire

| | |
|-------------------------------|--------------------|
| (I) PROJECT TITLE | AGENCY |
| HCFC phase out plan (Stage I) | UNEP (lead), UNIDO |

| | | |
|-----------------------------------|------------|--------------------|
| (II) LATEST ARTICLE 7 DATA | Year: 2010 | 65.90 (ODP tonnes) |
|-----------------------------------|------------|--------------------|

| (III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes) | | | | | | | | Year: 2010 | |
|---|---------|------|---------------|---------------|-----------|---------|---------------|------------|--------------------------|
| Chemical | Aerosol | Foam | Fire fighting | Refrigeration | | Solvent | Process agent | Lab Use | Total sector consumption |
| | | | | Manufacturing | Servicing | | | | |
| HCFC-123 | | | | | | | | | |
| HCFC-124 | | | | | | | | | |
| HCFC-141b | | | | | | | | | |
| HCFC-141b in Imported Pre-blended Polyols | | | | | | | | | |
| HCFC-142b | | | | | | | | | |
| HCF-C22 | | | | | 65.91 | | | | 65.91 |

| (IV) CONSUMPTION DATA (ODP tonnes) | | | |
|---|-------|--|-------|
| 2009 - 2010 baseline: | 63.80 | Starting point for sustained aggregate reductions: | 63.80 |
| CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes) | | | |
| Already approved: | 0.0 | Remaining: | 41.47 |

| (V) BUSINESS PLAN | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total |
|-------------------|----------------------------|---------|------|---------|------|---------|------|---------|------|---------|-----------|
| UNEP | ODS phase-out (ODP tonnes) | 3.2 | | 3.2 | | 0 | | 0 | | 0 | 6.4 |
| | Funding (US \$) | 283,000 | | 215,000 | | 170,000 | | 147,000 | | 210,000 | 1,023,000 |
| UNIDO | ODS phase-out (ODP tonnes) | 6.0 | | 0 | | 6.0 | | 0 | | 0 | 12.0 |
| | Funding (US \$) | 495,000 | | 0 | | 495,000 | | 0 | | 0 | 989,000 |

| (VI) PROJECT DATA | | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total |
|--|-------|---------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-----------|
| Montreal Protocol consumption limits | | | n/a | 63.80 | 63.80 | 57.42 | 57.42 | 57.42 | 57.42 | 57.42 | 41.47 | n/a |
| Maximum allowable consumption (ODP tonnes) | | | n/a | 63.80 | 63.80 | 57.42 | 57.42 | 57.42 | 57.42 | 57.42 | 41.47 | n/a |
| Project Costs requested in principle(US\$) | UNEP | Project costs | 250,000 | | 190,000 | | 150,000 | | 130,000 | | 185,740 | 905,740 |
| | | Support costs | 30,260 | | 22,998 | | 18,156 | | 15,735 | | 22,482 | 109,631 |
| | UNIDO | Project costs | 460,000 | | 0 | | 460,000 | | 0 | | 0 | 920,000 |
| | | Support costs | 34,500 | | 0 | | 34,500 | | 0 | | 0 | 69,000 |
| Total project costs requested in principle (US \$) | | | 710,000 | | 190,000 | | 610,000 | | 130,000 | | 185,740 | 1,825,740 |
| Total support costs requested in principle (US \$) | | | 64,760 | | 22,998 | | 52,656 | | 15,735 | | 22,482 | 178,631 |
| Total funds requested in principle (US \$) | | | 774,760 | | 212,998 | | 662,656 | | 145,735 | | 208,222 | 2,004,371 |

| (VII) Request for funding for the first tranche (2012) | | |
|--|-------------------------|-----------------------|
| Agency | Funds requested (US \$) | Support costs (US \$) |
| UNEP | 250,000 | 30,260 |
| UNIDO | 460,000 | 34,500 |

| | |
|--------------------------------------|---|
| Funding request: | Approval of funding for the first tranche (2012) as indicated above |
| Secretariat's recommendation: | Individual consideration |

PROJECT DESCRIPTION

1. On behalf of the Government of Côte d'Ivoire UNEP, as the lead implementing agency, has submitted to the 66th meeting of the Executive Committee stage I of the HCFC phase-out management plan (HPMP) at a total cost, as originally submitted, of US \$2,004,371, consisting of US \$905,740 plus agency support costs of US \$109,631 for UNEP, and US \$920,000 plus agency support costs of US \$69,000 for UNIDO. The HPMP covers strategies and activities to meet a 35 per cent reduction in HCFC consumption by 2020.

2. The first tranche for stage I being requested at this meeting amounts to US \$774,760, consisting of US \$250,000 plus agency support costs of US \$30,260 for UNEP, and US \$460,000 plus agency support costs of US \$34,500 for UNIDO, as originally submitted.

Background

3. Côte d'Ivoire is a West African country bordering the North Atlantic Ocean and bounded by Ghana to the East, Burkina Faso and Mali to the North, Guinea and Liberia to the West. The country covers a land area of almost 322,463 square kilometres. The climate is tropical in the south and semiarid in the North. The population is estimated at 21.504 million inhabitants. Fishing, tourism and agriculture are the main economic activities.

4. The Government of Côte d'Ivoire has ratified the Copenhagen Amendment to the Montreal Protocol. The ratification process for the Montreal and Beijing Amendments of the Montreal Protocol is underway.

ODS regulations

5. Côte d'Ivoire has regulations and a licensing system to control the import and export of ODS and ODS based-equipment including HCFCs. However, the quota system for HCFC imports will enter into force only from 2013. The sub-regional regulation for the "Union Economique et Monétaire de l'Ouest Africain" (UEMOA) harmonizes the regulations of member countries concerning the importation, marketing, use and re-export of substances that deplete the ozone layer and elimination of equipment using ODS, including HCFCs and HCFC-based equipment, thereby controlling movement among these countries.

6. The National Ozone Unit (NOU) under the authority of the Ministry of Environment is responsible for implementing, coordinating and monitoring the activities under the Montreal Protocol including the HPMP with the support of the Project Management Unit (PMU). It also has the responsibility for gathering and disseminating information, reporting to authorities and setting ODS import quotas on an annual basis. The parties involved in the management of the environmental issues include the Ministry of Environment, the Forestry Commission, the Ministry of Health and Public Hygiene, the Ministry of Industry and the Ministry of Trade.

HCFC consumption

7. The survey results showed that the country uses mostly HCFC-22 in servicing refrigeration equipment. It revealed that only 0.50 mt (0.06 ODP tonne) of HCFC-141b had been imported once in 2009 and used by a foam manufacturing company which was closed in 2010 without further import. The survey also found that some 0.50 mt (0.01 ODP tonne) of HCFC-123 had been imported in 2009 as an alternative for chillers but could not be used for this application. No further import of HCFC-141b and HCFC-123 had been made since then. The Government of Côte d'Ivoire is studying with a cement company in the country the possibility of destroying the total amount of HCFC-123 available.

8. Based on the survey results the HCFC consumption increased from 779.17 metric tonnes (mt) (42.85 ODP tonnes) in 2004 to 1,198.40 mt (65.91 ODP tonnes) in 2010. This places Côte d'Ivoire, formally a low-volume-consuming (LVC) country into the non-LVC category. No HCFCs were imported for stockpiling in 2008, 2009 and 2010. The survey methodology assessed the consumption level for the country through collecting data on existing HCFC equipment and servicing requirements. Data collection could not be based on import declaration forms alone to assess the consumption of HCFCs because all refrigerant imports were recorded in bulk. Table 1 presents the data on HCFC consumption reported under Article 7 as well as data extracted from the survey results. The Government of Côte d'Ivoire informed UNEP that the data reported under Article 7 prior to 2009 does not reflect the country's HCFC consumption and that the survey results are more accurate. Further to the request from the Government of Côte d'Ivoire the Ozone Secretariat has adjusted the Article 7 data up to 2008 as reflected in table 1.

Table 1: HCFC consumption from 2004 to 2011

| Year | Data from the survey HPMP | | | | | | | | Article 7 data | |
|-------|---------------------------|-------|-----------|------|----------|------|---------|-------|----------------|-------|
| | HCFC-22 | | HCFC-141b | | HCFC-123 | | Total | | | |
| | MT | ODP | MT | ODP | MT | ODP | MT | ODP | MT | ODP |
| 2004 | 779.17 | 42.85 | | | | | 779.17 | 42.85 | 779.17 | 42.85 |
| 2005 | 837.82 | 46.08 | | | | | 837.82 | 46.08 | 837.82 | 46.08 |
| 2006 | 900.88 | 49.55 | | | | | 900.88 | 49.55 | 900.88 | 49.55 |
| 2007 | 968.69 | 53.28 | | | | | 968.69 | 53.28 | 968.69 | 53.28 |
| 2008 | 1041.60 | 57.29 | | | | | 1041.6 | 57.29 | 1041.60 | 57.29 |
| 2009 | 1120.0 | 61.60 | 0.50 | 0.06 | 0.50 | 0.01 | 1121.0 | 61.67 | 1121.00 | 61.67 |
| 2010 | 1198.40 | 65.91 | | | | | 1198.40 | 65.91 | 1198.40 | 65.91 |
| 2011* | 1270.30 | 69.87 | | | | | 1270.30 | 69.87 | n/a | n/a |

* Estimated consumption

9. On the basis of the trends in consumption for past years, the HCFC consumption in Côte d'Ivoire is expected to grow on a yearly basis by 8 per cent using an unconstrained growth scenario from 2011 to 2020. Table 2 presents the forecast of HCFC consumption up to 2020.

Table 2: Forecast consumption of HCFCs

| Year | | 2011* | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| With constraint | mt | 1270.30 | 1270.30 | 1159.20 | 1159.20 | 1043.30 | 1043.30 | 1043.30 | 1043.30 | 1043.30 | 753.50 |
| | ODP | 69.87 | 69.87 | 63.76 | 63.76 | 57.38 | 57.38 | 57.38 | 57.38 | 57.38 | 41.44 |
| Without constraint | mt | 1270.30 | 1397.80 | 1509.60 | 1630.40 | 1760.80 | 1901.70 | 2053.80 | 2218.20 | 2395.60 | 2587.30 |
| | ODP | 69.87 | 76.88 | 83.03 | 89.67 | 96.84 | 104.59 | 112.96 | 122.00 | 131.76 | 142.30 |

(*) HCFC estimated consumption

Sectoral distribution of HCFCs

10. HCFCs in Côte d'Ivoire are used predominantly for servicing in the domestic and central air-conditioning and commercial/industrial refrigeration sectors. The annual need for servicing is estimated at 1,119.99 mt (61.61 ODP tonnes). Table 3 below presents the consumption of HCFCs in the country by the refrigeration servicing sector in 2010, the latest year for which such data was available in the proposal.

Table 3: Distribution of HCFC-22 in refrigeration systems in 2010

| Equipment type | Total units (estimated) | Charge (tonnes) (estimated) | | Resulting estimated servicing consumption/year (tonnes) | |
|---------------------------|----------------------------|--------------------------------|---------------|--|--------------|
| | | Metric | ODP | Metric | ODP |
| Domestic Air Conditioning | 1,447,454 | 1,999.61 | 109.98 | 559.77 | 30.79 |
| Central Air Conditioning | 31,032 | 434.45 | 23.89 | 201.58 | 11.09 |
| Commercial Refrigeration | 354,264 | 441.65 | 24.29 | 138.69 | 7.63 |
| Industrial Refrigeration | 16,744 | 476.85 | 26.23 | 219.95 | 12.1 |
| Total | 1,849,494 | 3,352.56 | 184.39 | 1,119.99 | 61.61 |

11. Table 3 shows that 49.97 per cent of the total consumption is used for servicing domestic air-conditioning systems, 18 per cent for central air-conditioning, 12.39 per cent for commercial refrigeration systems, and 19.64 per cent for industrial refrigeration equipment. The leakage rates are estimated at 27.99 per cent for servicing domestic air-conditioning systems, 46.40 per cent for central air-conditioning, 31.40 per cent for commercial refrigeration systems, and 46.13 per cent for industrial refrigeration equipment.

12. The current prices of HCFCs and alternative refrigerants per kilogramme in the country are: US \$8.95 for HCFC-22, US \$9.41 for HFC-134a, US \$15.29 for HFC-404A, US \$23.15 for HFC-407C, US \$24.69 for HFC-410A and US \$11.27 for R-600a. Due to the fact that the price of HCFC-22 is low and already used in installed systems, it is used for almost all servicing requirements.

Calculation of consumption baseline

13. The estimated baseline for compliance is 1,159.70 mt (63.80 ODP tonnes) using the average reported consumption of 1,121.00 mt (61.70 ODP tonnes) and 1,198.40 mt (65.90 ODP tonnes) for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol.

HCFC phase-out strategy

14. The Government of Côte d'Ivoire plans to freeze the consumption of HCFCs by 1 January 2013 at the level of 1,159.70 mt (63.80 ODP tonnes) and gradually reduce it from the baseline following the Montreal Protocol control measures to meet the 35 per cent reduction in 2020. Thereafter, HCFC phase-out will continue until reaching the overall consumption reduction rate of 97.5 per cent in 2030 while keeping an allowance of 2.5 per cent of the baseline consumption for meeting servicing needs until 2040.

15. In the framework of the HPMP, the Government of Côte d'Ivoire will develop and implement the following activities to meet its compliance targets:

- (a) Training of 600 customs and enforcement officers for monitoring and controlling the import and distribution of HCFCs;
- (b) Training of 1,000 technicians in good practices in refrigeration and air conditioning servicing to support the phase-out of HCFCs;
- (c) Providing equipment to the Abidjan main retrofit centre and to 3 satellite centres for hands-on demonstration of retrofit techniques to air conditioning service technicians;
- (d) Providing retrofit equipment kits to 300 leading refrigeration service workshops; and

- (e) Monitoring the implementation of the HPMP to ensure effectiveness of all activities proposed within the HPMP and periodic reporting.

16. The total cost of stage I of the HPMP is estimated at US \$1,825,740 plus agencies' support costs that amount to US \$178,631 to phase out 405.90 mt (22.33 ODP tonnes) by 2020. Table 4 presents the breakdown of the budget for stage I of the HPMP.

Table 4: Total cost of stage I of the HPMP

| Project component/activities | Agency | 2012 | 2014 | 2016 | 2018 | 2020 | Total (US \$) |
|--|--------|---------|---------|---------|---------|---------|---------------|
| Strengthening national capacities (customs, environment inspectors, department of commerce) for monitoring and controlling the import and distribution of HCFCs | UNEP | 80,000 | 60,000 | 40,000 | 30,000 | 60,000 | 270,000 |
| Strengthening technical capacity of refrigeration expert in good practices in refrigeration | UNEP | 120,000 | 90,000 | 70,000 | 60,000 | 70,000 | 410,000 |
| Strengthening of centres of excellence and major refrigeration workshops, and implementation of an incentive programme for conversion of refrigeration equipment | UNIDO | 460,000 | | 460,000 | | | 920,000 |
| Monitoring and evaluation of the implementation of HPMP | UNEP | 50,000 | 40,000 | 40,000 | 40,000 | 55,740 | 225,740 |
| TOTAL | | 710,000 | 190,000 | 610,000 | 130,000 | 185,740 | 1,825,740 |

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

17. The Secretariat reviewed the HPMP for Côte d'Ivoire in the context of the guidelines for the preparation of HPMPs (decision 54/39), the criteria for funding HCFC phase-out in the consumption sector agreed at the 60th Meeting (decision 60/44), subsequent decisions on HPMPs and the 2012-2014 business plan of the Multilateral Fund. The Secretariat discussed with UNEP technical and cost related issues, which were satisfactorily addressed as summarized below.

Issues related to HCFC consumption

18. The Secretariat reviewed the HCFC survey results and noted that they were consistent with data reported under Article 7 after 2004-2008 data had been adjusted by the Ozone Secretariat. The annual rate of increase in HCFC consumption is around 7 per cent from 2004 to 2010 (see Table 1).

Starting point for aggregate reduction in HCFC consumption

19. The Government of Côte d'Ivoire agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 63.80 ODP tonnes, calculated using actual consumption of 61.70 ODP tonnes and 65.90 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol.

Technical issues

20. The Secretariat raised the issue related to Côte d'Ivoire's non-ratification of the Beijing Amendment to the Montreal Protocol and explained that a non-party to the Beijing Amendment would not be able to import any newly produced HCFCs after 1 January 2013, except if the Meeting of the Parties determines that the non-Party is in full compliance with Article 2, Articles 2A to 2I and Article 4, and has submitted data to that effect as specified in Article 7 (paragraphs 8 and 9 of Article). In this regard, UNEP advised that the ratification of the Beijing Amendment to the Montreal Protocol is expected to be completed by the end of June 2012 and that the Government was sensitized to the need to expedite the ratification process.

21. The Secretariat sought clarification on the activities planned in the HPMP and how these would build upon similar ones already implemented under the TPMP. UNEP explained that the experience acquired under the TPMP will enable the country to select a group of technicians and engineers among the trainers already trained instead of organizing a full training programme on good practices in refrigeration and safety. However, a refresher training programme including retrofitting techniques will have to be implemented for the selected trainers. Moreover, the refrigeration association and the Abidjan centre of excellence supported under the TPMP will contribute to the implementation of the HPMP. The refrigeration association will have an advisory role while the centre of excellence will provide technical support and conduct retrofit demonstration activities. It should be recalled that 970 customs officers and 750 refrigeration technicians were trained, 15 multi-refrigerant identifiers delivered to customs officers, and 200 basic toolkits purchased and distributed under the TPMP. The equipment provided to customs officers and technicians that are still operating will also be used for phasing-out HCFCs. UNEP clarified that there is no funding balance from the TPMP and that the remaining TPMP activities are expected to be completed by July 2012.

22. The Secretariat noted that the retrofit training for technicians will focus on hydrocarbon (HC) and HFC-based retrofit techniques to replace HCFCs. In this context, additional information was requested on the availability of HCFC alternatives in the country and the Government's strategy to promote the importation of HCFC alternatives if required. UNEP indicated that HCFC alternatives are not well known in the country. However, a number of HC-based equipment is already in the local market. The Government of Côte d'Ivoire is encouraging refrigerant importers to import HC and other alternatives. As a result, several countries in the sub-region have started negotiating with an HC supplier in Ghana. The HCFC-22 prices in Côte d'Ivoire are expected to increase in the coming years. Subsequently, prices of alternatives to HCFCs are also expected to drop below HCFC-22 prices with the increasing availability of HC in the local market.

23. The Secretariat reviewed the equipment inventory and the leakage rates assigned to the equipment in Côte d'Ivoire. It appeared that the leakage rates of 27.99 per cent for the servicing domestic air-conditioning systems, 46.40 per cent for central air-conditioning, 31.40 per cent for commercial refrigeration systems, and 46.13 per cent for industrial refrigeration equipment are reasonable given the climate conditions in the country and the apparent typical status of the refrigeration equipment. The servicing frequency for the domestic and central air conditioning is every 6 months. As regard to the commercial and industrial refrigeration systems, the servicing frequency is every 4 months.

24. The Secretariat also reviewed the proposed end-user incentive programme and requested UNEP to explain the implementation modalities of this programme. UNEP indicated that the incentive programme will consist of providing sets of equipment, some amount of alternative refrigerant and spare parts to some large users of refrigerant against their commitment to retrofit the equipment during the regular service and subsequently convert them to alternative refrigerant. Under the TPMP, financial resources were provided to companies to retrofit their equipment, but this approach did not provide expected results. Hence, the implementation modalities were modified as proposed in the HPMP. As a result, the implementation of the TPMP incentive programme had significantly improved. UNEP and

UNIDO will organize a mission jointly to sharpen the HPMP incentive programme modalities and to develop the specification of tools and equipment as well as refrigerants to be procured.

Cost issues

25. The Secretariat drew UNEP's attention to the fact that the baseline of 1,159.70 mt (63.80 ODP tonnes) being higher than 360 mt, low-volume-consuming (LVC) limit set in decision 60/44, moved Côte d'Ivoire to the category of non-low-volume-consuming (non-LVC) countries, where eligible funding is available only to meet the 2015 phase-out targets and will be calculated at US \$4.5/kg of the consumption identified in the servicing sector. However, decision 62/11 also allows former LVC countries with HCFC consumption above 360 mt in the refrigeration servicing sector only to submit an HPMP to meet control measures up to 2020 on the understanding that the level of funding provided would be considered on a case-by-case basis.

26. The funding for the implementation of Côte d'Ivoire's HPMP has been agreed at US \$1,825,740 (excluding agency support costs) as shown in Table 4 above to meet the a 35 per cent reduction of the baseline by 2020. These resources will allow the country to phase out 405.90 mt (22.33 ODP tonnes) by 2020.

Impact on the climate

27. The proposed technical assistance activities in the HPMP, which include the introduction of better servicing practices and enforcement of HCFC import controls, will reduce the amount of HCFC-22 used for refrigeration servicing. Each kilogram (kg) of HCFC-22 not emitted due to better refrigeration practices results in the savings of approximately 1.8 CO₂-equivalent tonnes saved. A preliminary estimation of the impact on the climate as calculated by Côte d'Ivoire in its HPMP indicates that 720,153 CO₂-equivalent tonnes would not be emitted into the atmosphere if 35 per cent of the HCFC-22 consumption in the country is replaced by hydrocarbon or 202,860 CO₂-equivalent tonnes replaced by HFC-134a. This figure is higher than the potential climate impact of the HPMP indicated in the 2012-2014 business plan of 60,536 CO₂-equivalent tonnes. This is because the methodology used in the business plan is different from that used by the country. For countries with consumption solely in the servicing sector, the business plan considered that each ODP tonne of HCFC replaced by HCFC alternatives would result in approximately 3,290 CO₂-equivalent tonnes saved. Côte d'Ivoire, however, used the GWP data for each substance to estimate the potential climate impact.

28. A more precise forecast of the impact on the climate of the activities in the servicing sector is presently not available. The impact might be established through an assessment of implementation reports by, *inter alia*, comparing the levels of refrigerants used annually from the commencement of the implementation of the HPMP, the reported amounts of refrigerants being recovered and recycled, the number of technicians trained and the HCFC-22 based equipment being retrofitted.

Co-financing

29. In response to decision 54/39(h) on potential financial incentives and opportunities for additional resources to maximize the environmental benefits from HPMPs pursuant to paragraph 11(b) of decision XIX/6 of the Nineteenth Meeting of the Parties, UNEP explained that the Government's contribution will include staff time, office space, tax exemption and other government services. In addition, the Government is developing project proposals to be submitted to other funding sources including Global Environment Facility and Clean Development Mechanism.

2012-2014 Business plan of the Multilateral Fund

30. UNEP and UNIDO are requesting US \$1,825,740 plus support costs for implementation of stage I of the HPMP. The total value requested for the period 2012-2014 of US \$987,758 including support cost is within that contained amount in the draft business plan. Based on the estimated HCFC baseline consumption in the servicing sector of 1,159.70 mt, Côte d'Ivoire's allocation up to the 2020 phase-out should be US \$1,826,527 in line with decision 60/44.

Draft Agreement

31. A draft Agreement between the Government of Côte d'Ivoire and the Executive Committee for HCFC phase-out is contained in Annex I to the present document.

RECOMMENDATION

32. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the HCFC phase-out management plan (HPMP) for Côte d'Ivoire for the period 2012 to 2020 to reduce HCFC consumption by 35 per cent of the baseline, at the amount of US \$2,004,371, consisting of US \$905,740, plus agency support costs of US \$109,631 for UNEP, and US \$920,000, plus agency support costs of US \$69,000 for UNIDO;
- (b) Noting that the Government of Côte d'Ivoire had agreed to establish as its starting point for sustained aggregate reduction in HCFC consumption the baseline of 63.80 ODP tonnes, calculated using actual consumption of 61.70 ODP tonnes and 65.90 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol;
- (c) Deducting 22.33 ODP tonnes of HCFCs from the starting point for sustained aggregate reduction in HCFC consumption;
- (d) Approving the draft Agreement between the Government of Côte d'Ivoire and the Executive Committee for the reduction in consumption of HCFCs, as contained in Annex I to the present document;
- (e) Approving the first tranche of stage I of the HPMP for Côte d'Ivoire, and the corresponding implementation plan, at the amount of US \$774,760, consisting of US \$250,000, plus agency support costs of US \$30,260 for UNEP, and US \$460,000, plus agency support costs of US \$34,500 for UNIDO.

Annex I

DRAFT AGREEMENT BETWEEN THE GOVERNMENT OF COTE D'IVOIRE AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS

1. This Agreement represents the understanding of the Government of Cote d'Ivoire (the "Country") and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A ("The Substances") to a sustained level of 41.47 ODP tonnes by 1 January 2020 in compliance with Montreal Protocol schedules.
2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A ("The Targets, and Funding") in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances that exceeds the level defined in row 1.2 of Appendix 2-A as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances that exceeds the level defined in row 4.1.3 (remaining eligible consumption).
3. Subject to compliance by the Country with its obligations set out in this Agreement, the Executive Committee agrees, in principle, to provide the funding set out in row 3.1 of Appendix 2-A to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A ("Funding Approval Schedule").
4. The Country agrees to implement this Agreement in accordance with the HCFC phase-out sector plans submitted. In accordance with sub-paragraph 5(b) of this Agreement, the Country will accept independent verification of the achievement of the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A of this Agreement. The aforementioned verification will be commissioned by the relevant bilateral or implementing agency.
5. The Executive Committee will not provide the Funding in accordance with the Funding Approval Schedule unless the Country satisfies the following conditions at least eight weeks in advance of the applicable Executive Committee meeting set out in the Funding Approval Schedule:
 - (a) That the Country had met the Targets set out in row 1.2 of Appendix 2-A for all relevant years. Relevant years are all years since the year in which this Agreement was approved. Years for which no obligation for reporting of country programme data exists at the date of the Executive Committee meeting at which the funding request is being presented are exempted;
 - (b) That the meeting of these Targets has been independently verified, unless the Executive Committee decided that such verification would not be required;
 - (c) That the Country had submitted annual implementation reports in the form of Appendix 4-A ("Format of Implementation Reports and Plans") covering each previous calendar year; that it had achieved a significant level of implementation of activities initiated with previously approved tranches; and that the rate of disbursement of funding available from the previously approved tranche was more than 20 per cent;
 - (d) That the Country has submitted an annual implementation plan in the form of

Appendix 4-A covering each calendar year until and including the year for which the funding schedule foresees the submission of the next tranche or, in case of the final tranche, until completion of all activities foreseen; and

- (e) That, for all submissions from the 68th meeting onwards, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and, where applicable, production and exports is in place and that the system is capable of ensuring the Country's compliance with the Montreal Protocol HCFC phase-out schedule for the duration of this Agreement.

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A (“Monitoring Institutions and Roles”) will monitor and report on implementation of the activities in the previous annual implementation plans in accordance with their roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in paragraph 4 above.

7. The Executive Committee agrees that the Country may have the flexibility to reallocate the approved funds, or part of the funds, according to the evolving circumstances to achieve the smoothest reduction of consumption and phase-out of the Substances specified in Appendix 1-A:

- (a) Reallocations categorized as major changes must be documented in advance either in an annual implementation plan submitted as foreseen in sub-paragraph 5(d) above, or as a revision to an existing annual implementation plan to be submitted eight weeks prior to any meeting of the Executive Committee, for its approval. Major changes would relate to:
 - (i) Issues potentially concerning the rules and policies of the Multilateral Fund;
 - (ii) Changes which would modify any clause of this Agreement;
 - (iii) Changes in the annual levels of funding allocated to individual bilateral or implementing agencies for the different tranches; and
 - (iv) Provision of funding for programmes or activities not included in the current endorsed annual implementation plan, or removal of an activity in the annual implementation plan, with a cost greater than 30 per cent of the total cost of the last approved tranche;
- (b) Reallocations not categorized as major changes may be incorporated in the approved annual implementation plan, under implementation at the time, and reported to the Executive Committee in the subsequent annual implementation report; and
- (c) Any remaining funds will be returned to the Multilateral Fund upon completion of the last tranche foreseen under this Agreement.

8. Specific attention will be paid to the execution of the activities in the refrigeration servicing sub-sector, in particular:

- (a) The Country would use the flexibility available under this Agreement to address specific needs that might arise during project implementation; and
- (b) The Country and the bilateral and implementing agencies involved will take full account of the requirements of decisions 41/100 and 49/6 during the implementation of the plan.

9. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. UNEP has agreed to be the lead implementing agency (the “Lead IA”) and UNIDO has agreed to be the cooperating implementing agency (the “Cooperating IA”) under the lead of the Lead IA in respect of the Country’s activities under this Agreement. The Country agrees to evaluations, which might be carried out under the monitoring and evaluation work programmes of the Multilateral Fund or under the evaluation programme of any of the agencies taking part in this Agreement.

10. The Lead IA will be responsible for ensuring co-ordinated planning, implementation and reporting of all activities under this Agreement, including but not limited to independent verification as per sub-paragraph 5(b). This responsibility includes the necessity to co-ordinate with the Cooperating IA to ensure appropriate timing and sequence of activities in the implementation. The Cooperating IA will support the Lead IA by implementing the activities listed in Appendix 6-B under the overall co-ordination of the Lead IA. The Lead IA and Cooperating IA have reached consensus on the arrangements regarding inter-agency planning, reporting and responsibilities under this Agreement to facilitate a co-ordinated implementation of the Plan, including regular co-ordination meetings. The Executive Committee agrees, in principle, to provide the Lead IA and the Cooperating IA with the fees set out in rows 2.2 and 2.4 of Appendix 2-A.

11. Should the Country, for any reason, not meet the Targets for the elimination of the Substances set out in row 1.2 of Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Approval Schedule. At the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Approval Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next tranche of funding under the Funding Approval Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amount set out in Appendix 7-A (“Reductions in Funding for Failure to Comply”) in respect of each ODP kg of reductions in consumption not achieved in any one year. The Executive Committee will discuss each specific case in which the Country did not comply with this Agreement, and take related decisions. Once these decisions are taken, this specific case will not be an impediment for future tranches as per paragraph 5 above.

12. The Funding of this Agreement will not be modified on the basis of any future Executive Committee decision that may affect the funding of any other consumption sector projects or any other related activities in the Country.

13. The Country will comply with any reasonable request of the Executive Committee, the Lead IA and the Cooperating IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA and the Cooperating IA with access to the information necessary to verify compliance with this Agreement.

14. The completion of stage I of the HPMP and the associated Agreement will take place at the end of the year following the last year for which a maximum allowable total consumption level has been specified in Appendix 2-A. Should there at that time still be activities that are outstanding, and which were foreseen in the Plan and its subsequent revisions as per sub-paragraph 5(d) and paragraph 7, the completion will be delayed until the end of the year following the implementation of the remaining activities. The reporting requirements as per sub-paragraphs 1(a), 1(b), 1(d), and 1(e) of Appendix 4-A will continue until the time of the completion unless otherwise specified by the Executive Committee.

15. All of the conditions set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Montreal Protocol unless otherwise defined herein.

APPENDICES

APPENDIX 1-A: THE SUBSTANCES

| Substance | Annex | Group | Starting point for aggregate reductions in consumption (ODP tonnes) |
|-----------|-------|-------|---|
| HCFC-22 | C | I | 63.80 |

APPENDIX 2-A: THE TARGETS, AND FUNDING

| Row | Particulars | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total |
|-------|--|---------|-------|---------|-------|---------|-------|---------|-------|---------|-----------|
| 1.1 | Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes) | n/a | 63.80 | 63.80 | 57.42 | 57.42 | 57.42 | 57.42 | 57.42 | 41.47 | n/a |
| 1.2 | Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes) | n/a | 63.80 | 63.80 | 57.42 | 57.42 | 57.42 | 57.42 | 57.42 | 41.47 | n/a |
| 2.1 | Lead IA (UNEP) agreed funding (US \$) | 250,000 | 0 | 190,000 | 0 | 150,000 | 0 | 130,000 | 0 | 185,740 | 905,740 |
| 2.2 | Support costs for Lead IA (US \$) | 30,260 | 0 | 22,998 | 0 | 18,156 | 0 | 15,735 | 0 | 22,482 | 109,631 |
| 2.3 | Cooperating IA (UNIDO) agreed funding (US \$) | 460,000 | 0 | 0 | 0 | 460,000 | 0 | 0 | 0 | 0 | 920,000 |
| 2.4 | Support costs for Cooperating IA (US \$) | 34,500 | 0 | 0 | 0 | 34,500 | 0 | 0 | 0 | 0 | 69,000 |
| 3.1 | Total agreed funding (US \$) | 710,000 | 0 | 190,000 | 0 | 610,000 | 0 | 130,000 | 0 | 185,740 | 1,825,740 |
| 3.2 | Total support costs (US \$) | 64,760 | 0 | 22,998 | 0 | 52,656 | 0 | 15,735 | 0 | 22,482 | 178,631 |
| 3.3 | Total agreed costs (US \$) | 774,760 | 0 | 212,998 | 0 | 662,656 | 0 | 145,735 | 0 | 208,222 | 2,004,371 |
| 4.1.1 | Total phase-out of HCFC-22 agreed to be achieved under this agreement (ODP tonnes) | | | | | | | | | | 22.33 |
| 4.1.2 | Phase-out of HCFC-22 to be achieved in previously approved projects (ODP tonnes) | | | | | | | | | | 0 |
| 4.1.3 | Remaining eligible consumption for HCFCs | | | | | | | | | | 41.47 |

APPENDIX 3-A: FUNDING APPROVAL SCHEDULE

1. Funding for the future tranches will be considered for approval at the first meeting of the year specified in Appendix 2-A.

APPENDIX 4-A: FORMAT OF IMPLEMENTATION REPORTS AND PLANS

1. The submission of the Implementation Report and Plan for each tranche request will consist of five parts:

- (a) A narrative report, with data provided by calendar year, regarding the progress since the year prior to the previous report, reflecting the situation of the Country in regard to phase out of the Substances, how the different activities contribute to it, and how they relate to each other. The report should include ODS phase-out as a direct result from the implementation of activities, by substance, and the alternative technology used and the related phase-in of alternatives, to allow the Secretariat to provide to the Executive Committee information about the resulting change in climate relevant emissions. The report should further highlight successes, experiences, and challenges related to the different activities included in the Plan, reflecting any changes in the circumstances in the Country, and providing other relevant information. The report should also include information on and justification for any changes vis-à-vis the previously submitted Annual Implementation Plan(s), such as delays, uses of the flexibility for reallocation of funds during implementation of a tranche, as provided for in paragraph 7 of this Agreement, or other changes. The narrative report will cover all relevant years specified in sub-paragraph 5(a) of the Agreement and can in addition also include information on activities in the current year;
- (b) A verification report of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement. If not decided otherwise by the Executive Committee, such a verification has to be provided together with each tranche request and will have to provide verification of the consumption for all relevant years as specified in sub-paragraph 5(a) of the Agreement for which a verification report has not yet been acknowledged by the Committee;
- (c) A written description of the activities to be undertaken until and including the year of the planned submission of the next tranche request, highlighting the interdependence of the activities, and taking into account experiences made and progress achieved in the implementation of earlier tranches; the data in the plan will be provided by calendar year. The description should also include a reference to the overall plan and progress achieved, as well as any possible changes to the overall plan that are foreseen. The description should cover the years specified in sub-paragraph 5(d) of the Agreement. The description should also specify and explain in detail such changes to the overall plan. This description of future activities can be submitted as a part of the same document as the narrative report under sub-paragraph (b) above;
- (d) A set of quantitative information for all annual implementation reports and annual implementation plans, submitted through an online database. This quantitative information, to be submitted by calendar year with each tranche request, will be amending the narratives and description for the report (see sub-paragraph 1(a) above) and the plan (see sub-paragraph 1(c) above), the annual implementation plan and any changes to the overall plan, and will cover the same time periods and activities; and
- (e) An Executive Summary of about five paragraphs, summarizing the information of the above sub-paragraphs 1(a) to 1(d).

APPENDIX 5-A: MONITORING INSTITUTIONS AND ROLES

1. All the monitoring activities will be coordinated and managed through the National Ozone Unit, which is included within this HPMP.
2. The Lead IA will have a particularly prominent role in the monitoring arrangements because of its mandate to monitor ODS imports, whose records will be used as a crosschecking reference in all the monitoring programmes for the different projects within the HPMP. The Lead IA along with the Cooperating IA will also undertake the challenging task of monitoring illegal ODS imports and exports and advise the appropriate national agencies through the National Ozone Office.

APPENDIX 6-A: ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities, including at least the following:
 - (a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's HPMP;
 - (b) Assisting the Country in preparation of the Implementation Plans and subsequent reports as per Appendix 4-A;
 - (c) Providing independent verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the Implementation Plan consistent with Appendix 4-A;
 - (d) Ensuring that the experiences and progress is reflected in updates of the overall plan and in future annual implementation plans consistent with sub-paragraphs 1(c) and 1(d) of Appendix 4-A;
 - (e) Fulfilling the reporting requirements for the annual implementation reports, annual implementation plans and the overall plan as specified in Appendix 4-A for submission to the Executive Committee. The reporting requirements include the reporting about activities undertaken by the Cooperating IA;
 - (f) Ensuring that appropriate independent technical experts carry out the technical reviews;
 - (g) Carrying out required supervision missions;
 - (h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Implementation Plan and accurate data reporting;
 - (i) Co-ordinating the activities of the Cooperating IA, and ensuring appropriate sequence of activities;
 - (j) In case of reductions in funding for failure to comply in accordance with paragraph 11 of the Agreement, to determine, in consultation with the Country and the Cooperating IA, the allocation of the reductions to the different budget items and to the funding of each implementing or bilateral agency involved;
 - (k) Ensuring that disbursements made to the Country are based on the use of the indicators; and

- (l) Providing assistance with policy, management and technical support when required.
2. After consultation with the Country and taking into account any views expressed, the Lead IA will select and mandate an independent entity to carry out the verification of the HPMP results and the consumption of the Substances mentioned in Appendix 1-A, as per sub-paragraph 5(b) of the Agreement and sub-paragraph 1(b) of Appendix 4-A.

APPENDIX 6-B: ROLE OF THE COOPERATING IMPLEMENTING AGENCY

1. The Cooperating IA will be responsible for a range of activities. These activities are specified in the overall plan, including at least the following:
 - (a) Providing assistance for policy development when required;
 - (b) Assisting the Country in the implementation and assessment of the activities funded by the Cooperating IA, and refer to the Lead IA to ensure a co-ordinated sequence in the activities; and
 - (c) Providing reports to the Lead IA on these activities, for inclusion in the consolidated reports as per Appendix 4-A.

APPENDIX 7-A: REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 11 of the Agreement, the amount of funding provided may be reduced by US \$163 per ODP kg of consumption beyond the level defined in row 1.2 of Appendix 2-A for each year in which the target specified in row 1.2 of Appendix 2-A has not been met.
