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EXECUTIVE COMMITTEE OF  
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**DESK STUDY ON THE EVALUATION OF MULTI-YEAR AGREEMENTS**

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## EXECUTIVE SUMMARY

1. The desk study is the first phase of an evaluation of the effectiveness and results of the implementation of multi-year agreements (MYAs). Its purpose is to collect and analyze information from a variety of sources and to prepare the ground for the second phase of the evaluation, which will include data collection and analysis in the field level. The study examined documents from a sample of 36 MYAs in 32 countries. For some issues there was no available data from all countries in the sample; therefore the consultants used a smaller sample of countries. While conclusions and recommendations point out issues for further consideration the study also addresses lessons learned and good practices for the implementation of the HCFC phase-out management plans (HPMPs). Comments received between issuing the document and the meeting of the Executive Committee will be taken into account in preparing the case studies and the final evaluations.

### Findings of the study

2. Some of the findings of the desk study are listed below:

- The first compliance target, the freeze in the consumption and production of ozone-depleting substances (ODS), presents a bigger challenge than subsequent targets. The reason could be that countries face an inadequate level of preparation for the initial compliance obligations.
- The compliance assessment model implemented by the Multilateral Fund Secretariat is a good early warning mechanism and a complementary tool for resource planning. The penalty clause has worked as a deterrent against unsatisfactory performance. In four cases of non-compliance this could be indicative of inadequate cooperation between the National Ozone Units (NOUs) and CFC-producing companies in these countries.
- While in general MYAs are funded adequately, a more accurate assessment of ODS consumption in the MYA starting year is important; it would help determine necessary MYA budgets and better equality in allocation of Multilateral Fund resources among Article 5 countries.
- The set up of NOUs and Project Management Units (PMUs) helped the implementation of the MYAs. The commitment to fund NOUs until the CFC phase-out in 2010 sustains the results of the phase-out even if the PMU is terminated. The same arrangement should be considered for HCFC phase-out, taking into consideration the longer compliance schedule.
- There are significant differences in reporting legislation between country programme and verification reports. There is need for more information about the effectiveness of regulations banning import and sales of bulk quantities of controlled substances; their impact on reducing consumption; and what additional enforcement measures are required to ensure their implementation.
- The adoption of regulations banning imports and sales of used refrigeration equipment in a number of Article 5 countries had a positive effect in achieving CFC phase-out targets. The early introduction of similar legislation for HCFC-based refrigerants equipment should be considered in the development of HCFC phase-out strategies.
- The main cause for delayed submissions was the slow rate of disbursement of the existing tranches. Nevertheless, in almost all cases, the agencies indicated that these delays had no

negative impact on compliance because the countries had an operational licensing system that ensured compliance.

- Internal procedures of implementing agencies and requirements for some institutional arrangements can be too complex for recipient countries, leading to serious delays. The implementing agencies should be taking this into account in addressing HCFC phase-out in Article 5 countries.
- Annual implementation reports submitted by implementing agencies do not provide always accurate information. The Secretariat developed an on-line MYA reporting system which is not yet fully operational. The evaluation team should investigate these problems and propose remedial actions such as training sessions during networking meetings or other international events.
- Monitoring and reporting arrangements could be complex and expensive in some high-volume-consuming countries because of the many players involved. The evaluation team might investigate how to rationalize such systems. .

### **Issues for investigation during phase II of the evaluation**

3. The second phase of the evaluation consists of ten case studies. Information collected during field visits and findings from the desk study will be included in a synthesis report for consideration by the Executive Committee.

4. Phase II of the evaluation will undertake a more detailed investigation at the field level. The key questions for this second phase will focus on MYA implementation and on sustainability of MYA results with regard to the implementation of HPMPs.

5. In addition, the desk study identified specific issues that will be addressed during the field visits. Following are some of these issues:

- (a) Cooperation and coordination among national and international institutions;
- (b) Reasons that lead to discrepancies in estimated and actual ODS consumption in the starting year in some Article 5 countries;
- (c) The availability and skills of trained technicians in Article 5 countries who could contribute to the achievement of HPMP objectives;
- (d) The effectiveness of incentive schemes as a potential mechanism for HCFC phase-out under HPMPs;
- (e) Issues related to the implementation and functioning of licensing and permit systems;
- (f) The cooperation between customs and other agencies as well as existing enforcement and deterrence systems;
- (g) Issues related to regulatory procedures for ODS data collection;
- (h) Communication and awareness strategies that would facilitate timely HCFC phase-out in their respective countries.

## **Action expected from the Executive Committee**

6. The Executive Committee may wish to take note of the information provided in the desk study on the evaluation of multi-year agreements, as presented in document UNEP/OzL.Pro/ExCom/65/9 including the issues to be addressed during the second phase of the evaluation.

## **CONCLUSIONS OF THE DESK STUDY**

7. Because this a rather long document, for ease of reading, the main conclusions have been presented below. The main document, with the detailed analysis follows. The chapter numbering in the conclusions section has been kept the same as in the main document, to facilitate further reference if necessary.

## **II. Effectiveness in achieving objectives**

### **II.1 Enabling compliance with the Montreal Protocol**

#### **Conclusion**

8. The MYAs are effective in assisting Article 5 countries reduce the consumption and production of ODS in accordance with the control schedule of the Montreal Protocol. Experience seems to indicate that the first compliance target, which is usually the freeze on consumption and production of ODS, presents a bigger challenge to countries than the subsequent compliance targets. This could be due to an inadequate level of readiness of countries to face their initial compliance obligations.

#### **Implications for the management of the HCFC phase-out**

9. While for the CFC phase-out countries benefitted from almost a decade to implement the freeze obligations much less time has been allocated for the management of HCFCs. On the other hand, countries will benefit from the experience gained in managing the CFC phase-out process.

10. Stakeholders should therefore ensure that countries are prepared to implement the baseline for HCFCs in 2013. Prior to 2013 there should be a reinforced monitoring of enacted legal measures, as well as of the schedule for preparing and implementing phase-out projects and programmes.

### **II.2 Making funds available where there is need for compliance**

#### **Conclusions**

11. The compliance-driven programming implemented under the MYA process has been an effective tool in making funding available to meet the need for compliance. The compliance assessment model implemented by the Multilateral Fund Secretariat is a good early warning mechanism and a complementary tool for resource planning.

12. Out of 160 MYAs, only four non-compliance cases were recorded in relation to allowable consumption. Two of these cases are the ODS producing countries India and the Bolivarian Republic of Venezuela, where national consumption was determined by accounting for exports of stockpiled CFCs. In addition, Bangladesh exceeded its allowable CFC consumption stipulated in the Agreement attached to the national ODS phase-out plan in 2007 and 2008. The cause was attributable to a large extent to the CFC consumption associated with the manufacturing of CFC metered-dose inhalers (MDIs), for which a phase-out project had been approved only at the 52<sup>nd</sup> meeting in 2007. In 2004 and 2005 the Government

of Kenya reported a consumption that exceeded the allowable level under the Agreement. Verification activities in these four countries played a key role in identifying non-compliance.

13. The penalty clause seems to have worked as a deterrent against unsatisfactory performance as intended. The application of the clause however has been handled with sensitivity by the Executive Committee with emphasis on encouraging progress rather than on punishment.

14. Furthermore non-compliance could be indicative of inadequate cooperation between the NOUs and CFC-producing companies in these countries. The evaluation team might wish to investigate further this assumption.

### **Implications for managing HCFC phase-out**

15. The relatively short preparation time and the more challenging nature of freezing the HCFC consumption and production point to the importance of an effective compliance monitoring and early warning system and resource planning mechanism. There is probably need to review the indicators used in the compliance assessment model so that early warning could be done with greater accuracy.

## **III. Funding efficiency**

### **III.2 Comparison of starting MYAs and Article 7 consumption for the same year**

#### **Conclusions**

16. A number of factors could have contributed to the starting point data discrepancy. The starting point is usually calculated by extrapolating the Article 7 data in the few years before the preparation of the MYAs. In addition there could be a delay between the time of the survey for the MYAs and the first year of the MYAs. As a result, the first year of the MYAs could be a number of years removed from the years used for extrapolating the starting point.

17. The data discrepancy could also be caused by the difficulty in collecting data in the refrigeration servicing sector, considering the number of workshops of various sizes involved and the unpredictable level of ODS consumption by these small industries.

18. Notwithstanding all these complicating factors, the degree of variance, over 20 per cent, is still an issue which merits attention. Overstating the starting point could inflate the cost of the MYAs.

19. The calculation of the MYA cost-effectiveness is based on assessed targeted ODS phase-out which was at variance with the actual Article 7 consumption in the starting year. Therefore, in some cases MYA calculated cost-effectiveness may be inaccurate as long as it has not been discounted for the inflated MYA phase-out target in some countries.

### **Implications for the management of HCFC phase-out**

20. The identified increased consumption in the MYA starting year calls for more careful assessment of HCFC forecasted consumption in HPMPs agreements.

### **III.3 Assessing the impact of MYAs**

#### **Conclusions**

21. There seems to be a considerable discrepancy in accounting for the targeted impact of MYAs in relation to the Article 7 data. This is shown in the starting point level of ODS phase-out in the MYAs

against the reported ODS consumption under Article 7 of the Montreal Protocol in the first year of the MYA and the cumulative phase-out level from the MYAs against the cumulative reported consumption under Article 7 of the Montreal Protocol.

22. It is probably worthwhile to further examine the issue to pinpoint the reasons for such discrepancy and then introduce changes that could reduce this discrepancy. The evaluation team may investigate the reasons for such discrepancy in countries with the highest difference in data (Argentina, Brazil, India, Indonesia).

#### **III.4 Adequacy of funding**

##### **Conclusions**

23. Overall, MYAs are funded adequately. The uniformity of the CFC consumption profile (the refrigeration servicing sector) and the availability of substitute technologies and knowledge of their costing could have contributed to the accurate budgeting of the MYAs. More accurate assessment of ODS consumption in the MYA starting year, however, is important for the determination of necessary MYA budgets and better equality in allocation of Multilateral Fund resources among all participating Article 5 countries. The evaluation team might consider including the examination of the reasons that lead to discrepancies in estimated and actual ODS consumption in the starting year in some Article 5 countries.

##### **Implications for the management of the HCFC phase-out**

24. The two conditions that made possible the accurate budgeting of the CFC MYAs may not be present in the funding of HCFC MYAs. This because at the start of the funding of HCFC phase-out the consumption profile is quite diverse from country to country. In addition, substitute technologies are still being developed for a number of applications, while some others are going through optimization to further reduce the cost. These two conditions could make difficult cost standardization and budgeting accuracy.

25. The funding of HCFC phase-out is currently managed in phases. Phase I covers the duration till 2015 and aims at assisting countries in implementing the freeze and 10 per cent reduction. In some of the LVC countries, phase I extends to 2020, considering the limited size of the consumption and the impact on resources planning. This phased funding could provide time to allow for more development of substitute technologies and cost optimization and the accumulation of costing knowledge through practice.

26. Provisions have been included into the HCFC agreement which require that “Any remaining funds will be returned to the Multilateral Fund upon closure of the last tranche of the plan” (paragraph 7 of the Agreement). This intends to manage the unknown factors associated with HCFC phase-out funding in the current stage. It could, however, increase the burden of expenditure for monitoring of MYA tranches. For instance it may require collecting data on individual projects to know the planned and actual technology applied and cost incurred. Since some of substitute technologies are going through a development cycle, the HCFC phase-out plans may catch the higher end of the cost cycle and result in budget shortfalls. There may need further consideration of the issues associated with the uncertainties of the funding of HCFC MYAs.

27. The Secretariat needs to be observant of claimed HCFC consumption in the starting year in reviewing HPMP proposals, in order to ensure equality in allocation of Multilateral Fund resources.

### **III.5 Effectiveness of specific activities being implemented under MYAs**

#### **III.5.1 Training of refrigeration technicians**

##### **Conclusions**

28. Training programmes on good practices, including handling of HCFC and alternative refrigerants are included in most approved HPMPs. It is essential to understand how achievements in the implementation of MYA training programmes can be utilized in reduction of HCFC emissions under HPMPs. The evaluation team may examine how availability and skills of trained technicians in Article 5 can contribute to the achievement of HPMP objectives.

#### **III.5.2 Incentive schemes and subsidies**

##### **Conclusions**

29. The implementation of retrofit and the replacement of end-user equipment using incentive schemes is still going on in some countries. The completed projects contributed to achieving ODS phase-out targets, expanded the lifetime of refrigeration equipment and helped in coping with shortages in CFC-12 supply. However, the application of HCFC-22 and ternary blends containing HCFCs in retrofitting programmes was not sustainable under the new HCFC phase-out regulations. Therefore, the forthcoming evaluation should assess the effectiveness of incentive schemes as a potential mechanism for HCFC phase-out under HPMPs.

### **IV. Institutional effectiveness**

#### **IV.1 Single- versus multi-agency involvement**

##### **Conclusions**

30. The number of agency involvement does not seem to have a major impact on the smoothness of project implementation. However the presence of more than one agency creates an additional complexity to the management of the MYAs.

#### **Implications on the management of HCFC phase-out**

31. In the HCFC agreement a new paragraph 10 has been added to emphasize the need for coordination between the lead agency and the co-operating agencies. The responsibility of the lead agency “includes the necessity to co-ordinate with the co-operating agencies to ensure appropriate timing and sequence of activities in the implementation”. (Agreement between Republic of Maldives and the Executive Committee of the Multilateral Fund for phase-out of consumption of hydrochlorofluorocarbons) It is worth noting that it is mandatory to have formal understanding between the lead and co-operating agencies for the purpose of coordination: “The Lead IA and cooperating agencies have entered into a formal agreement regarding planning, reporting and responsibilities under this Agreement to facilitate a co-ordinated implementation of the plan, including the regular coordination meetings” (same Agreement as above).



## IV.2 NOUs versus PMUs

### Conclusions

32. The set up of NOUs and PMUs helped the implementation of the MYAs. The commitment to continue funding the NOU till the complete CFC phase-out ensures an institutional support for sustaining the results of the phase-out even for countries that finish earlier and where the PMU is terminated.

### Implications for the management of HCFC phase-out

33. Under the current phase of funding the HCFC phase-out, the double track of funding for NOUs and the capacity building as part of the MYAs has been maintained. The distribution of HCFC consumption in Article 5 countries is uneven, as most of it concentrates in a small number of countries. As a result, the probability of an early completion of the HCFC phase-out is high for a considerable number of countries with low consumption. In the case of CFCs, the commitment to extend the funding of the NOU was an incentive for countries to move faster and ensured the sustaining of the phase-out. This commitment is currently absent for HCFCs and would be hard to make in view of the long, 20 to 30 years compliance schedule.

34. NOUs are however important in achieving HCFC phase-out because they help enforce the legislation for the implementation of the Montreal Protocol, and comply with the reporting obligations. This was also stressed by the evaluation of management, monitoring and verification of national phase-out plans in non-LVC countries (UNEP/OzL.Pro/ExCom/54/12) “Another aspect of sustaining results was what will happen to the NOUs after 2010 when the IS project may end or reduced.... The NOUs are a key component of the Article 5 countries’ asset databases and centre of expertise on atmospheric environmental issues”.

35. Taking into consideration the longer compliance schedule of the HCFC phase-out as well as the need to further enhance the sense of ownership of the governments in the interest of sustainability, the evaluation should examine the current double track funding of capacity building under institutional strengthening projects and as part of MYAs; its implications on encouraging early phase-out; and sustaining the results of the Montreal Protocol till the completion of the HCFC phase-out and beyond.

## IV.3 MYAs and the government policy instruments

### IV. 3.1 Licences and quotas, financial incentives and policy enforcement measures

#### Conclusions

36. There is a significant discrepancy between CP and verification reports in reporting legislation. The evaluation team needs to investigate this matter further.

37. Most of the countries in the sample had adopted the legislation regulating ODS imports prior to approval of both MYAs and ratification of the Montreal Amendment. Ratification of the Montreal Amendment stimulated the adoption of ODS related legislation in nine of the countries in the sample. In these countries the average duration for establishing the licensing and permits systems was 3.5 years. Twelve Article 5 countries have not yet accepted the Montreal Amendment. Efforts should continue to encourage these countries to join the Montreal Amendment as part of preparation and implementation of HPMPs.

38. Licensing and permits systems were established within 2 to 5 years in Bahamas, Bosnia and Herzegovina, Kenya and the Bolivarian Republic of Venezuela following the signing of MYAs. The MYA evaluation team should further investigate the reasons that prevented these countries from

establishing licensing and permits systems at an earlier stage. In addition, the evaluation should inquire on how effective were the regulations banning import and sales of bulk quantities of controlled substances; on how they helped reduce the consumption of these substances; and on what additional enforcement measures are required to ensure the implementation of these regulations.

#### **IV.3.2 Import regulation measures**

##### **(a) Average price of CFCs and their alternatives**

###### **Conclusions**

39. Adoption of measures regulating imports, exports and sales of bulk ODS has been effectively implemented in the majority of countries reviewed. These regulations helped achieve MYA phase-out targets. Furthermore, the regulations resulted in reduced availability of controlled substances and subsequently in the rise of their prices encouraging the switch to alternatives. The evaluation team should examine the possibility of government-induced measures to change price relations that may lead to a decrease in the price difference between CFC-12 and HFC-134a and a decline in demand for CFCs.

##### **(b) Measures regulating import and sale of equipment containing ODS**

###### **Conclusions**

40. The adoption of regulations banning imports and sales of used refrigeration equipment in a number of Article 5 countries had a positive effect in achieving CFC phase-out targets in the refrigeration servicing sector in these countries. The early introduction of legislation banning import and sale of used refrigeration equipment containing HCFC-based refrigerants would have a similar effect and, therefore, needs to be considered as a target in development of HCFC phase-out strategies. It should take into account the maturity of local markets for refrigeration equipment with alternative refrigerants. The MYA evaluation should examine the experience of early adoption of such regulations (Examples: Thailand – 1997; Croatia – 1999; Brazil – 2000) as well as the reasons for which it has not been adopted yet in Argentina, Costa Rica, Mexico and Pakistan.

##### **(c) Enforcement of government regulations**

###### **Conclusions**

41. Illegal trade is recognized as a serious problem that hinders the achievement of CFC phase-out targets. Given the more intense HCFC phase-out schedule of the Montreal Protocol it is reasonable to anticipate the persistence of similar problems in Article 5 countries. Therefore, an early introduction of enforcement measures is critical to ensure proper functioning of HCFC licensing and quota systems. Improved reporting on the number and percentage of trainees as well as on the functioning of ODS identification kits and their specifications would help determine the scope and type of assistance needed in this area. The Secretariat might wish to seek this data from countries.

42. The MYA evaluation should investigate the cooperation between customs and other agencies as well as the existing enforcement and deterrence systems

#### **V. Delays in implementation of MYAs: causes and consequences**

###### **Conclusions**

43. The agenda item on annual tranche delays was very useful for monitoring the submission of funding tranches and addressing difficulties in meeting deadlines. 56.8 per cent of deferred tranches is a

high percentage. Most of the deferred tranches resulted from delayed actions and management drawbacks of implementing agencies. The main cause for delayed submission was the slow rate of disbursement of the existing tranches. In the course of preparation of the consolidated progress report the Secretariat asked implementing agencies if slow disbursement or implementation would have an impact on the country's ability to comply with the phase-out. In almost all cases, the agencies indicated that these delays would have no negative impact on compliance. The reason was that the respective country had an operational licensing system that should ensure compliance and it had already phased out consumption and had not received any imports for over a year.<sup>1</sup> That the remaining 13 delayed tranches have not been spent for the implementation CFC NPPs and TPMPs but were being integrated into HPMPs confirmed the implementing agencies' conclusion.

## **VI. Coordination among various parties**

### **Conclusions**

44. The internal procedures of implementing agencies as well as the requirements for some institutional arrangements can be too complex for recipient countries and can cause delays. The implementing agencies should be more selective in the formulation of such requirements to address HCFC phase-out in Article 5 countries.

45. The established working contacts between implementing agencies and institutions in Article 5 countries can be very useful in preparation and implementation of HPMPs. The continuity of involvement of the same implementing agencies should be encouraged bearing in mind lessons learned.

46. Delays in signing grant agreements and project documents by Article 5 governments may warrant corrections in implementation programmes and adjustments in funds allocated for project implementation and monitoring units. The evaluation team might include in its terms of reference discussion on the respective flexibility clause in the standard agreement.

47. Appendix 6-B: Role of cooperating implementing agencies does not fully reflect the distribution of responsibilities among cooperating agencies. The evaluation team might discuss with implementing agencies the ways to improve the situation.

48. UNEP has not included information on the supportive role of CAP in its planning and reporting documents and this prevented other participating agencies from accounting for CAP assistance in their phase-out activities

## **VII. Data collection and monitoring**

### **VII.1 Regulatory procedures for ODS data collection and reporting**

#### **Conclusions**

49. MYA evaluation needs to investigate the reasons for the absence of Regulatory procedures for ODS data collection and reporting in Mexico and Indonesia, and obtain definitive information from Ecuador and Burkina Faso. It is necessary to establish whether regulatory procedures for data collection and reporting monitor the functioning of the licensing system, including the incidence of infractions, seizures and penalties and the quantities of imported and seized goods.

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<sup>1</sup> UNEP/OzL.Pro/ExCom/58/10

## **VII.2 Monitoring, reporting, and quality of data**

### **Conclusions**

50. Annual implementation reports submitted by implementing agencies do not always provide full and accurate information. The Secretariat developed on-line MYA reporting system which is not fully operational. The evaluation team should investigate these problems and propose remedy actions such as training sessions which could be conducted as part of networking meetings or other international events.

51. Monitoring and reporting system arrangements could be complex and expensive in some high-volume consuming countries because of the many players involved. The evaluation team might investigate the ways and means of rationalizing such systems.

52. The verification report is useful but it requires further improvement such as uniform introduction of crosschecking ODS consumption data.

53. The Executive Committee has strengthened the language in the provision of implementation progress reports in HPMP multi-year agreements. To receive funding, the country has to achieve a significant level of implementation and the disbursement rate of funding of the previous tranche should be more than 20 per cent. The verification should ascertain that this provision is fulfilled. Some countries demonstrated feasibility in verifying the progress in implementing activities at moderate costs. The evaluation team might discuss this issue with implementing agencies and countries.

## **VIII. Communication and awareness-raising issues**

### **Conclusions**

54. Communication and awareness play an important role in promoting policies of Parties and of the Executive Committee among governments and industry decision-makers in Article 5 countries. The smooth implementation of HPMPs will depend on the active involvement of top government officials and industry representatives. The evaluation team should discuss with UNEP and other implementing agencies, NOUs and government representatives, elements of communication and awareness strategies that would facilitate timely HCFC phase-out in their respective country.

## **DESK STUDY**

### **I. Purpose of the desk study**

55. This desk study is carried out in compliance with decision 63/11 of the Executive Committee and examines the effectiveness of the MYAs as a modality in assisting the Article 5 countries in complying with the control schedules of CFCs and other controlled substances under the Montreal Protocol. The study analyzes the effectiveness of the funded programmes, in particular as compared with stand-alone projects, the contribution of national and international institutions in Article 5 countries as well as other issues of interest related to activities implemented under the MYAs.

56. The review of the past was done with the future in mind. The study examined how the experience in the approval, management and implementation of the completed or ongoing MYAs would serve for the funding and management of the HCFC phase-out. Therefore the report includes lessons learned and issues of interest for the HCFC phase-out. The Terms of Reference (Annex I) provides detailed information about the scope and objectives of the desk study.

#### **I.1 Methodology, sampling and sources of information**

57. Two consultants carried out the study and a third consultant peer-reviewed the draft report for a second opinion. The team analyzed existing documents and discussed, where necessary, with members of the Multilateral Fund Secretariat and implementing agencies. Narrative descriptions and quantitative analysis was used as appropriate, and the data organized in tables and diagrams to provide a better understanding.

58. The team reviewed a sample of 36 MYAs from 32 countries, out of the total of 160 MYAs funded until December 2010. The following considerations guided the selection of the 36 MYAs: type of agreement; sector and controlled substance covered by the agreement; geographical region; implementing agency involved; and the level of funding approved by the Executive Committee.

59. The team examined various sources of information such as: MYA project proposal documents, including agreements; annual work plans and progress reports; Article 7 data reported to the Ozone Secretariat; Implementation Committee reports and compliance decisions of Parties; reports on the implementation of Article 5 country programme; documents and decisions of the Executive Committee; statistical summaries using a comprehensive database created in the Multilateral Fund Secretariat based on progress reporting by the implementing agencies; the electronic database that had been recently introduced to check the status of implementation of specific activities included in MYA annual work programmes; and previous desk studies and evaluation reports on related topics.

#### **I.2 Background and overview of the MYAs**

60. The MYAs are tools used by the Multilateral Fund of the Montreal Protocol to finance the reduction and elimination of ODS in consumption and production sectors in Article 5 countries, in accordance with the mandatory schedules of the Montreal Protocol on Substances that Deplete the Ozone Layer (the "Montreal Protocol"). They are formal arrangements between the governments of the recipient countries and the Executive Committee of the Multilateral Fund that are implemented over a time span of more than one year, hence the term multi-year agreements. Since 1999, MYAs have become the predominant funding modality of the Multilateral Fund to assist Article 5 countries in achieving the ODS phase-out targets.

61. The MYA requires the recipient government to commit to a reduction schedule of ODS consumption or production which should be consistent with the compliance schedule in the Montreal Protocol. In exchange, the Executive Committee is bound to allocate funds to the respective government

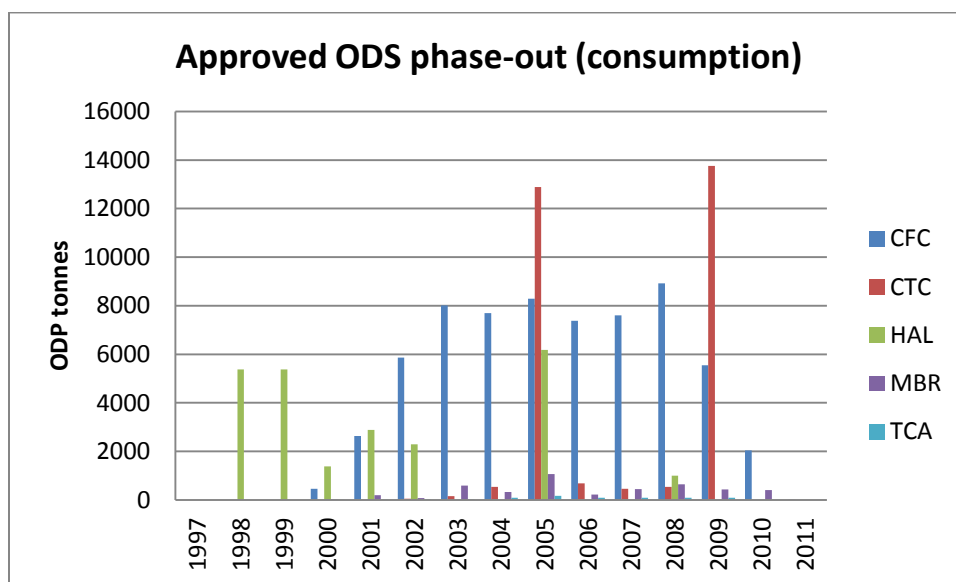
according to a disbursement schedule and according to several conditions. First, the achievement of the reduction target of the previous year has to be independently verified; second, the recipient government should submit a work programme reflecting the work of the previous year as well as a plan of activities for the year to come. The agreement includes a penalty clause for non-achievement of the annual reduction target, The clause which involves the reduction of funds by the Executive Committee in the amount of US dollars for each tonne of ODS short of the target. In addition the agreement also includes provisions for countries to readjust the allocations of funds to accommodate changes of circumstances in project implementation. These reallocations are reflected in the work programmes.

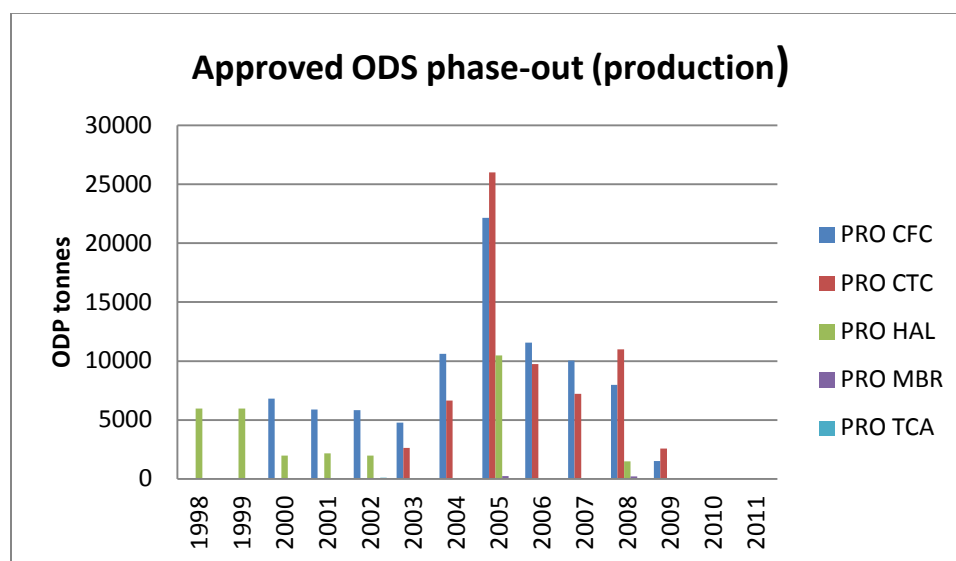
62. The Multilateral Fund started experimenting this modality in the late 1990's after funding stand-alone individual projects for almost a decade. The first MYA was the elimination of the consumption and production of halons in China approved in 1997. For the first time a project included not only conversion activities by industry but also a commitment by the government and a timetable to introduce policy instruments. In addition, it included activities to strengthen the government institutions in programme management. Soon MYA replaced stand-alone projects and became the predominant tool of funding of the Multilateral Fund at the beginning of the 21<sup>st</sup> century.

63. From the China halon sector plan in 1997 to the completion of phasing out of CFCs by the end of 2010, the Multilateral Fund financed a total of 160 MYAs in 119 Article 5 countries. The total commitment from the Multilateral Fund is US \$988.7 million of which US \$974.8 million was disbursed as of the end of 2010. These projects would remove 123,906 ODP/tonnes of ODS from consumption and 183,815 ODP/tonnes of ODS from production.

64. The MYAs include national phase-out plans which encompass all the controlled substances in a country under one umbrella agreement; substance-wide agreements on CFCs, CTC, TCA and methyl bromide; and sector-wide agreements on foams, refrigeration and ODS production. As can be seen from the figures below, the majority of these projects were approved between 2001 and 2009. Most of MYAs are CFC-related and are at various stages of completion. Figures 1 and 2 provide information on ODS to be phased out under MYAs in the consumption and production sectors.

**Figure 1: Approved ODS phase in MYAs for the consumption sector**



**Figure 2: Approved ODS phase in MYAs for the production sector**


## II. Effectiveness in achieving objectives

### II.1 Enabling compliance with the Montreal Protocol

65. The MYA objective is to enable Article 5 countries to comply with the ODS reduction targets of the Montreal Protocol. Achieving the targets reflects the degree of effectiveness of these agreements. Table 1 shows the performance of countries in the sample against the various compliance targets of the controlled substances under the Montreal Protocol. The detailed country-by-country listing is provided in Annex II.

**Table 1: Summary of performance of countries under the Montreal Protocol (with 2010 data as of October 2011)**

Substance	CFC		TCA		Methyl bromide		Halon		CTC	
	No. of non-compliance	% of total*	No. of non-compliance	% of total*	No. of non-compliance	% of total*	No. of non-compliance	% of total*	No. of non-compliance	% of total*
Freeze	6	19%	3	9%	2	6%	4	13%		
20% down					1	3%				
30% down			1	3%						
50% down	2	6%					0	0%		
70% down			0	0%						
85% down	2	6%							4	13%
100% down	0	0%					0	0%	0	0%

\*Total number of the countries in the sample is 32.

66. Data shows that the non-compliance ratio has been on a declining trend from the first compliance target to the subsequent targets for all the substances. For CFCs, the non-compliance rate went down from 6 (19%) for the freeze to 2 (6%) for 50% reduction, 2 (6%) for 85% reduction to 0 for complete phase-out; for CTC, 4 (13%) for 85% reduction to 0 for complete phase-out; for TCA, 3 (9%) for freeze, 1 (3%) for 30% reduction to 0 for 70% reduction; for methyl bromide, 2 (6%) for the freeze and 1 (3%) for 20% reduction; for halons, 4 (13%) for the freeze and 0 for 50% reduction and for complete phase-out.

67. The decreasing ratio of the non-compliance cases can be related to the effectiveness of the MYAs in assisting countries to achieve their objectives. The agreements became a predominant funding tool of the Multilateral Fund by the end of the 1990's while the first compliance target for the Article 5 countries under the Montreal Protocol was the freeze on consumption of CFCs in 1999. It was only natural that it would take a couple of years before the MYA impact on countries' ability to comply with the reduction targets would be visible.

68. There is a consistent higher ratio of non-compliance with the first reduction targets across all the substances. It indicates an uneven level of difficulty among targets, the first one being always more challenging. For some insight into the reasons for this uneven level of difficulty among reduction targets, a review of the non-compliance cases for CFC freeze was undertaken. Records of the Implementation Committee and reports of Meeting of the Parties show various levels of readiness of countries to face their initial compliance obligations. This relates to the absence of legislative control policies in many countries when the freeze obligation became due. To assist countries in enacting appropriate policy controls, the Implementation Committee and the Meeting of the Parties introduced a few standard paragraphs in the action plans in the early 2000's. These request: “ (to) establish import quotas to freeze imports at baseline; a ban on imports of ODS equipment; and policy and regulatory instruments that will enable progress in achieving phase-out”.

69. Using the approval of the MYAs as a point of reference, the study examined the duration between the approval of MYAs and the time that a country introduced its ODS import licensing system. For the sample of countries, the duration varies between -12 to 5 years, which means that some countries had their licensing system ready 12 years before the approval of the MYAs while some other countries did not have this system until 5 years after the approval of their MYAs.

70. Other cases of non-compliance show various inadequacies in managing their national phase-out programmes at the time their first compliance obligation. For example, Bangladesh reported delays in providing government clearance for Multilateral Fund projects for aerosols, and as a result production went up and pushed up the consumption of CFCs beyond the allowable level for freeze. UNDP, however, assisted the country in coming back to compliance in 2000. Brazil was in non-compliance with the freeze on CFC consumption, because it closed its CFC production in 1999 and built up its CFC stockpiles for subsequent years.

71. Furthermore, at the Meeting of the Parties, delegates cited “problems caused by the low prices for CFCs currently prevailing in the world markets. These led to reluctance on the part of industry to convert products to alternative substances, because they tended not to be competitive”<sup>2</sup>.

## **II.2 Making funds available where there is need for compliance**

72. One of the objectives of the MYAs is to balance the funding priority from sole emphasis on cost-effectiveness of phasing out ODS with meeting the needs of countries to comply with the Montreal Protocol. Compliance-driven programming ensures that countries, irrespective of their levels of ODS consumption, access funding when there is a demonstrated need for compliance.

73. Access to funding was an issue at the Executive Committee meetings in the 1990's. In particular access by low-volume-consuming (LVC) countries and small and medium-sized industries (SMIs) was problematic. This is because projects from these countries and industries were not as competitive as their counterparts from large-volume-consuming countries and large industries, when measured against the project cost-effectiveness thresholds. As a result they were not funded on a priority basis. Measures which

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<sup>2</sup> (UNEP/OzL.Pro.13/10, para. 96)



were taken to alleviate the situation included creating a funding window for LVC countries (decision at the 16<sup>th</sup> meeting in 1995) and applying special cost-effectiveness thresholds for SMIs (decision 25/56) (Annex III). Concern over non-availability of funding was mentioned at the Thirteenth Meeting of the Parties. It was stated that “In a number of cases, phase-out activities had been hampered by unanticipated delays in the preparation of projects for the Multilateral Fund or in their approval, or in the disbursement of funding by the implementing agencies. In all cases the Parties were confident that they would return to a situation of compliance in the near future” (UNEP/OzL.Pro.13/10).

74. Since the MYAs became the predominant funding modality, access to funding seems to have become a non-issue for the Executive Committee. Starting 2001 records of the Implementation Committee and the Meetings of the Parties do not include cases where countries justify their non-compliance by difficulties in accessing funds.

75. This is the result of the compliance-driven programming introduced by the Multilateral Fund. It is composed of two stages, the three-year mid-term programming and annual business planning. It is done on a rolling basis and the planning model is updated after each meeting of the Executive Committee by incorporating the new approvals from the previous meeting. The programming includes a compliance assessment model that estimates the likelihood of each party to meet the next compliance target; sounds the warning in advance; and guides the planning of the resources.

### **II.3 Placing governments in the centre of responsibility of managing national ODS phase-out programmes**

76. Another objective of the MYAs is to enable governments to take over the responsibility of managing national phase-out programmes. The MYAs provided capacity building support under institutional strengthening projects. These projects helped governments in various aspects of programme management, such as data collection and reporting, project initiation, implementation and monitoring. The study looked into a) the timely submission of Article 7 data and country programme implementation data; and b) project implementation delays caused by governments.

77. The study reviewed the records of Article 5 countries on reporting data under Article 7 of the Montreal Protocol since the beginning 2000 (data from the Ozone Secretariat is contained in Annex IV). Records show a continuously improving rate of data reporting. Using the September deadline for data reporting, the number of countries reporting went up from 71 in 2000 to 84 in 2002 and 120 in 2004. Since then the number has remained consistent at about 120.

78. On the other hand 92 funding tranches or 24.7 per cent of the total delayed tranches have not been submitted as scheduled because of the reasons associated with the lack of or inadequate government actions: government delays in signature of project documents or grant agreements; lack of licensing system; internal institutional rearrangement or unfavourable political situation (Annex V). The study was unable to collect data on delays in the implementation of specific project activities caused by governments. It is felt, however, that there is a room for improvement for governments in taking control of their national phase-out plans.

## **III. Funding efficiency**

### **III.1 Cost-effectiveness of MYAs**

79. The study examined the cost-effectiveness of all MYAs for national phase-out plans (NPPs), terminal phase-out management plans (TPMPs), sector phase-out plans (SPPs), methyl bromide phase-out plans, and production sector phase-out plans. Results are presented below.

**Table 2: Cost-effectiveness of MYAs**

Type of MYAs	Total funds approved (US \$)	Approved phase-out (consumption) (ODP tonnes)	Approved phase-out (production) (ODP tonnes)	Cost-effectiveness (US \$/kg ODP)	Cost-effectiveness of all MYAs (consumption) (US \$/kg ODP)
NPPs	193,399,707	38,957	0	4.96	
TPMPs	29,119,798	1,831	0	15.90	
Sector plan	381,480,835	77,997	93,201	4.89	
Methyl bromide	59,482,078	4,350	0	13.67	
Production	310,029,237	0	90,614	1.69	
<b>Grand total</b>	<b>973,511,656</b>	<b>123,135</b>	<b>183,815</b>		<b>5.39</b>

80. The cost-effectiveness values of NPPs and SPPs are close to and below US \$5/kg, since these are projects in the non-LVC countries with relatively high ODS consumption. In comparison, TPMPs which are projects in low and very low ODS consuming countries are considerably more costly (US \$15.90/kg) due to lower level of ODS consumption.

81. In addition, the study compared the 36 MYAs in the sample with individual stand-alone projects. The MYAs are grouped by sector and substance. For the sake of comparison, NPPs which cover substances in addition to CFCs such as CTC, TCA and CFC-113 are also included in the CFC group since in most cases the component of those substances is small in those plans. Cost-effectiveness values are calculated both for approved level of funding against approved level of ODS to be phased out and the actual level of disbursement and actual level of ODS phased out.

82. Cost-effectiveness values are also calculated for funded phase-out for stand-alone projects for similar groupings. Finally an overall value is calculated for all the MYAs and the individual projects. The study wishes to introduce a word of caution here. While MYA and individual projects are similar in terms of project components, there could be minor differences because of the different modalities of funding. Furthermore, it should be mentioned that the implementation of MYAs was in many respects hinged upon previous experience gained through demonstration and technology transfer projects and benefits from implemented training activities. The results are presented in the table 3.

**Table 3: Comparison of cost-effectiveness of MYAs versus individual projects**

MYA Sector	SELECTED COUNTRIES						Approved CE for selected countries	Actual CE for selected countries	Approved CE for individual investment projects	Actual CE for individual investment projects	Comments
	Total funds approved (US \$)	Total funds disbursed (US \$) (as of December 2010)	Consumption approved phase-out (ODP tonnes)	Consumption actual phase-out (ODP tonnes) (as of December 2010)	Production approved phase-out (ODP tonnes)	Production actual phase-out (ODP tonnes) (as of December 2010)					
CFC and ODS phase-out plan	146,392,796	129,728,893	28,781	24,625	0	0	5.09	5.27	6.28	6.19	Combined CFC and ODS phase-out plan
CTC phase-out plan	8,429,664	8,418,962	2,123	1,903	0		3.97	4.42	6.89	6.80	
Domestic Refrigeration	7,332,989	7,332,989	1,099	1,099	0		6.67	6.67	8.81	8.77	
Foam	53,846,000	53,412,500	14,143	10,872	0	0	3.81	4.91	5.34	5.29	
Halon	62,000,000	61,750,000	24,480	32,761	30,060	41,637	1.14	0.83	0.95	0.92	
Methyl bromide	9,652,820	8,792,905	728	577	0	0	13.26	15.24	12.03	12.53	
Production CFC	181,849,437	181,804,171	0	0	58,074	57,524	3.13	3.16	N/A	N/A	No individual production CFC project with phase-out approved
Tobacco	11,000,000	11,000,000	1,090	1,170	0		10.09	9.40	11.50	12.52	
<b>Total</b>	<b>480,503,706</b>	<b>462,240,419</b>	<b>72,444</b>	<b>73,007</b>	<b>88,134</b>	<b>99,161</b>	<b>2.99</b>	<b>2.68</b>	<b>5.71</b>	<b>5.61</b>	For 36 selected countries

83. In general, the MYAs achieve better cost-effectiveness than the cost-effectiveness thresholds that were approved at the 16<sup>th</sup> meeting of the Executive Committee in 1995 and the advantage of the MYAs in many cases is significant. For instance, the actual cost-effectiveness value of the MYAs for the domestic refrigeration sub-sector is US \$6.67, while the value in the 1995 decision is US \$13.76; for foam in the general category the comparison is US \$4.91 for the actual of MYAs, against US \$9.53 value in the decision (The cost-effectiveness thresholds approved at the 16<sup>th</sup> meeting are provided in Annex III). The values from the 16<sup>th</sup> meeting do not include methyl bromide since these projects were not funded at the time.

84. Compared with the stand-alone projects, MYAs also come out better in all cases except in methyl bromide where the value of the individual projects is US \$12.53 against US \$15.24 for the MYAs actual value. However, the advantage of the MYAs is not as significant as that between the cost-effectiveness values of the MYAs and the cost-effectiveness thresholds agreed by the 16<sup>th</sup> meeting. In most cases, the difference is between US \$1 to US \$2.

85. Two issues are worthy to note. First, the cost-effectiveness values of the MYAs and those of the individual projects are close. That seems to indicate that the MYAs were funded at their real cost at the time because the cost of the individual projects was usually the result of careful project review performed by the Multilateral Fund Secretariat. The review took into consideration the maturity and the cost of the technologies prevailing at the time.

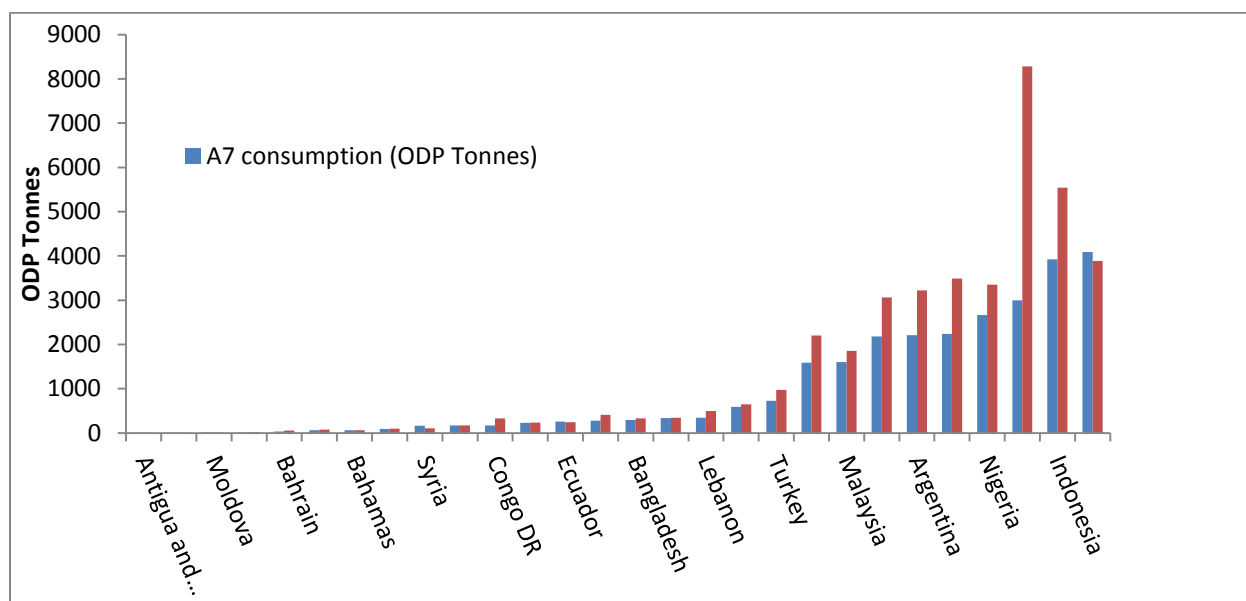
86. Second, the cost-effectiveness thresholds approved at the 16<sup>th</sup> meeting of the Executive Committee are significantly more expensive than both the values of the MYAs and the stand-alone projects. That could be attributable to the continuing evolution of the substitute technologies since the 16<sup>th</sup> meeting in 1995 and the resulting reduction in the cost of phase-out since then.

87. The MYAs are funded with reasonable cost efficiency and are comparable to the individually funded projects. The cumulative knowledge of funding phase-out projects over more than a decade and the decreasing cost of phase-out resulting from technology advancement contributed to the efficiency of the MYAs.

### **III.2 Comparison of starting MYAs and Article 7 consumption for the same year**

88. The cost-effectiveness is reversely correlated to the level of targeted phase-out of ODS consumption: the higher the level of consumption, the lower the value of the cost-effectiveness. The assessment of the starting ODS consumption and targeted phase-out was overstated in several MYAs. Annex VI compares levels of ODS to be phased out as the starting point against the reported ODS consumption under Article 7 in the first year of the MYAs in a sample of 29 countries. In 26 of the 29 countries, the starting point consumption level is higher than the reported consumption under Article 7 in the first year of the MYAs. Expressed as a percentage of Article 7 data to the MYAs starting point, the ratio is ranged between 36 to 106 per cent, with the average being 78 per cent, which means the starting point consumption level exceeded the reported Article 7 data in the first year of the MYAs by 22 per cent on the average. The comparison is presented in Figure 3.

**Figure 3: Comparison of allowable MYAs and Article 7 consumption for the starting year**

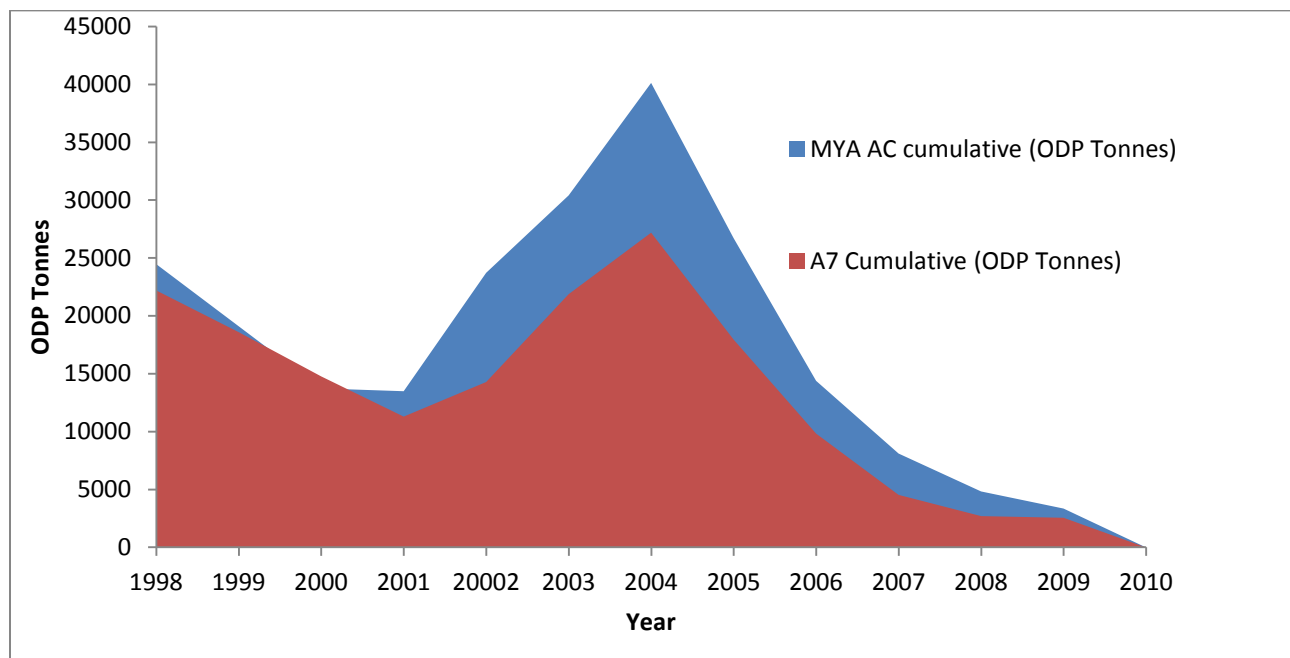


### III.3 Assessing the impact of MYAs

89. The study compared the cumulative targeted ODS phased out during as allowable consumption against the cumulative ODS consumption reported under Article 7 for the same duration of the MYAs. Results of the analysis are contained in Annex VII. In 24 cases of the sample of 27 countries with MYAs in CFC and halon phase-out, the cumulative consumption in the MYAs exceeded the cumulative Article 7 data for the same time period of the MYAs within the range from 62.4 to 3 per cent. In three countries, Article 7 consumption exceeded MYA consumption by 7 per cent, 14 per cent and 16 per cent. In average, the cumulative consumption in the MYAs exceeded the cumulative Article 7 data for the same time period of the MYAs by 28 per cent.

90. According to Article 7 data, the overall consumption (emissions) of 27 countries was by 54,670 ODP tonnes or 25 per cent lower than overall MYA targeted consumption for the duration of MYAs. Figure 4 demonstrates the cumulative difference in targeted and actual consumption (emission).

**Figure 4: MYA cumulative allowable consumption against the cumulative ODS consumption reported under Article 7**



#### III.4 Adequacy of funding

91. CFC-related MYAs are by far the largest number and are currently in various stages of completion. Financial completion which requires the closing of the accounts on these projects could take longer than the operational completion. The former needs all the disbursements and obligations cleared. However financial data collected in the database of the Secretariat as of December 2010, makes it possible to estimate whether an MYA will complete financially with a budget shortfall or with a surplus. The data base includes data as of December 2010 on the fund balance, as well as the obligations entered in 2010. If the difference between the two is positive, it means that the MYA still has funds available in 2011, which could either be a budget surplus if all the planned activities have been completed or the remaining fund balance to complete the unfinished project activities. If the difference between the fund balance and the obligations by December 2010 is negative, the MYA could have a budget shortfall. Annex VIII presents the financial status of the MYAs in the sample as of December 2010.

92. The table in Annex VIII shows that the MYAs in the sample will be able to implement the planned activities within the budget approved. All have either a zero balance or a favourable fund balance in 2011. It is still too early to determine whether these favourable balances are a surplus because they may already have been obligated to finish the remaining activities. However it does not seem that any of the MYAs will experience budget shortfalls.

93. Considering that the MYAs have a minimum a life of five years and that the total level of funding was determined at the time of their approval, it is a significant achievement that the budgets have proved to be sufficient to accomplish the tasks designed. Three factors could have contributed to the sufficient budgeting of the MYAs.

- (a) Uniformity of the task to be addressed. The CFC MYAs fall broadly into two groups, terminal phase-out management plans (TPMPs) for LVC countries and national phase-out plans for non-LVC countries (NPP). TPMPs which are the extension of refrigerant

management plans (RMPs) contain nothing more than the refrigeration servicing sector. For the non-LVC countries, data shows that after 10 years of funding stand-alone projects, the remaining consumption in these countries is mostly in the refrigeration servicing sector and the component of the manufacturing sector is usually small. The following table presents the profile of the remaining CFC consumption at the time of MYA approval in some of the non-LVC countries in the sample.

**Table 4: Profile of remaining CFC consumption in non-LVC countries**

Country	Category (LVC/non-LVC country)	Servicing sector (ODP/tonne)	Manufacturing sector (ODP/tonne)
Argentina	Non-LVC	1,701	741
Bangladesh	Non-LVC	190	11
Brazil	Non-LVC	4,995	753
Lebanon	Non-LVC	335	82
Malaysia	Non-LVC	1,552	545
Nigeria	Non-LVC	945	1,652
Serbia	Non-LVC	342	70
Thailand	Non-LVC	2,053	1,288
Turkey	Non-LVC	871	190
Venezuela (Bolivarian Republic of)	Non-LVC	1,680	352

- (b) The uniformity of the CFC consumption profile across the countries lends itself for standardization of the costing of the MYAs.
- (c) Maturity of the substitute technology. By early 2000 when the MYAs became the predominant funding model, substitute technologies for most of the CFC applications were known and tested and their costs already went through optimization and were stabilized. That made it possible to standardize the costing of the remaining component of the industrial conversion activities.

94. While in general MYA budgets have been determined quite adequately this was not the case in some countries. The assessed starting ODS consumption in Article 5 countries was the major factor determining the required MYA budgets. The comparison of assessed targeted consumption and factual Article 7 consumption in the starting year demonstrated that the former was overstated in some countries. Therefore it could be possible that some of the surpluses over 2010 obligated funds could be attributed to overstated starting points in these countries.

### **III.5 Effectiveness of specific activities being implemented under MYAs**

#### **III.5.1 Training of refrigeration technicians**

95. Training programmes on good practices in refrigeration aim to reduce the emissions of ozone-depleting refrigerants during servicing, maintenance, installation, commissioning or decommissioning of refrigeration and air-conditioning systems. The implementation of training activities started as part of RMPs and continued in NPPs, SPPs and TPMPs using MYA modality. The Secretariat reported to the Executive Committee at its 64<sup>th</sup> meeting that a total of 77,502 refrigeration servicing technicians have been trained, 60,375 have been certified (about 78 per cent), and 3,627 refrigeration

technician trainers have been trained. These statistics are taken from the latest data reported for 2006-2010 combined together with that from previous years' reports.<sup>3</sup>

96. In 2006, the Executive Committee adopted decision 49/6 requiring mandatory certification of technicians performing professional activities in refrigeration servicing. In the selected sample of 14 countries, 9 countries or 64 per cent adopted legislation requiring mandatory certification of trained refrigeration technicians (Annex IX).

### III.5.2 Incentive schemes and subsidies

97. The Executive Committee approved the incentive programmes as individual activities under existing or new RMPs in 20 Article 5 countries. UNDP was the implementing agency for all these programmes. According to a 2007 evaluation report presented at the 52<sup>nd</sup> meeting<sup>4</sup>, many NPPs and TPMPs have incorporated a component addressing CFC consumption in the end-user refrigeration sub-sector through conversion and retrofitting of end-user refrigeration equipment applying incentive schemes. Seven countries out of 14 in the selected sample in Annex IX, reported 597 cases of converted or retrofitted end-user equipment as part of their MYA activities. The major share of these cases (575) was reported by three countries (Brazil, Costa Rica and Turkey). In some instances, HCFC-22 and refrigerant blends with HCFCs were used in retrofits of end-user equipment which undermined the sustainability of such retrofits.

98. Allocation of subsidies was another form of increasing the sense of ownership of beneficiaries of Multilateral Fund. Subsidies were provided to owners of servicing workshops in procurement of servicing equipment in the Philippines and Thailand

## IV. Institutional effectiveness

### IV.1 Single- versus multi-agency involvement

99. Annex X presents two groups of MYAs. Group one includes MYA implemented by one agency and group two includes cases where more than one agency is involved. For each group submission delays of funding tranches are provided and summarized in the following table.

**Table 5: Delays in submitting funding tranches of MYAs in the sample**

Grouping	MYA with single agency	MYA with multi-agency	Total
Total number	21	15	36
Number with implementation delays	12	10	
Delays as % of total	57%	66%	

100. In absolute numbers, MYAs implemented by a single agency exceed those with multi agency involvement (21 vs. 10). In percentage, however MYAs with multi-agency involvement performs worse (66 per cent vs. 57 per cent). This means that MYAs with multi-agency involvement could have a higher chance of experiencing delays although the difference is not significant.

101. Nevertheless, agency coordination does not come out as the cited reason for the delays in projects with multi-agency participation. As seen from Annex X, of ten cases of delays for this group, six recorded either non-completion of verification or inadequate verification as the main reason.

<sup>3</sup> UNEP/OzL.Pro/ExCom/64/6

<sup>4</sup> UNEP/OzL.Pro/ExCom/52/8

102. Previous evaluations examined the involvement of agencies in the implementation of MYAs, in particular the impact of multi-agency involvement. For instance, the final report on the evaluation of management, monitoring and verification of NPPs in non-LVC countries (UNEP/OzL.Pro/ExCom/54/12) recorded the following “Inter-agency coordination would be particularly needed when several implementing agencies and bilateral agencies are involved. While form and frequency of exchanges between agencies vary, no country reported serious difficulties with regard to implementing agency coordination”.

## **IV.2 NOUs versus PMUs**

103. NOUs and PMUs are local institutions involved in the implementation of national ODS phase-out programmes. The former was established when the country started preparing the country programme and subsequently became the national focal point for implementation of the Montreal Protocol. The NOU is responsible for collecting and reporting data, coordinating the various national stakeholders and assisting in the preparation of national legislation on the control of ODS consumption and production.

104. PMUs came onto the scene with the introduction of MYAs and are not present in each country. Non-LVC countries tend to have a PMU set up while in LVC countries individual consultants carry out the duties of the PMUs when necessary. This could be the result of the difference in workload between an MYA in an LVC country versus an MYA in a non-LVC country. The relationship between the NOU and the PMU is usually regulated through a contract where the PMU is called upon to implement activities included in the MYAs. The contract could be between the NOU and the PMU or the implementing agency and the PMU. The cost of the PMU is covered from the MYA budget.

105. A previous evaluation concluded that in countries where PMUs were created, the NOUs now focus on the legal framework, data collection and reporting and inter-ministerial coordination.

106. The financial arrangement seems well suited for the MYA funding model. The NOU is funded under the institutional strengthening projects. The PMU is financed from the budget of the MYAs and could be dissolved once the MYA is completed. Nevertheless, if an MYA is completed in advance of the Montreal Protocol compliance deadline and funding for the PMU is terminated, it could stop the monitoring activities and jeopardize the sustainability of the MYA results.

107. Decision 35/57 of 2001 however, allows funding institutional strengthening projects till 2010 even for countries that completed their phase-out programme earlier. It therefore provided predictable funding for NOUs, maintained the incentive for early phase-out consistent with the original mandate of the Multilateral Fund and secured sustainability of MYA results in case of early phase-out.

## **IV.3 MYAs and the government policy instruments**

### **IV. 3.1 Licences and quotas, financial incentives and policy enforcement measures**

108. The MYA strategies include activities on updating and strengthening legal requirements such as licensing and quota systems, financial incentive and disincentive schemes and introduction of policy enforcement measures. Annex XI summarizes data for 32 countries on these issues

109. All 32 countries in the sample reported requirements of permits for import of bulk ODS. All but one country (Argentina) reported that a permit system was in place. An effective licensing system, however, requires quotas to restrict ODS imports, procedures for an equitable quota allocation system. Twenty-nine countries reported that the quota system for import of bulk ODSs was in place.

110. Furthermore, twenty-six countries have reported an operational permit system and 25 countries reported a quota system for export of bulk ODS. Quota system for ODS export is necessary not only for



ODS producing countries. This system tracks imported CFCs for re-export by imposing more stringent reporting requirements. It also contributes to reducing the availability of CFCs in other countries in the same region.

111. The 1997 Montreal Amendment requests Parties of the Montreal Protocol to establish and implement a system of licensing the import and export of new, used, recycled and reclaimed controlled substances and to report about it to the Ozone Secretariat. The implementation of the Montreal Amendment is under supervision of the Implementation Committee. Currently, 184 Parties ratified, acceded or accepted the Montreal Amendment while twelve Article 5 countries have not done it yet.

112. The study examined the duration between the acceptance of the Montreal Amendment and the setting up of a licensing or permits systems (Annex XI). About 65 per cent of the countries in the sample of 32 countries established their licensing or permits system prior to the date of acceptance of the Montreal Amendment. For the remaining 35 per cent of countries, it took from one to seven years to establish the licensing systems after joining the Montreal Amendment.

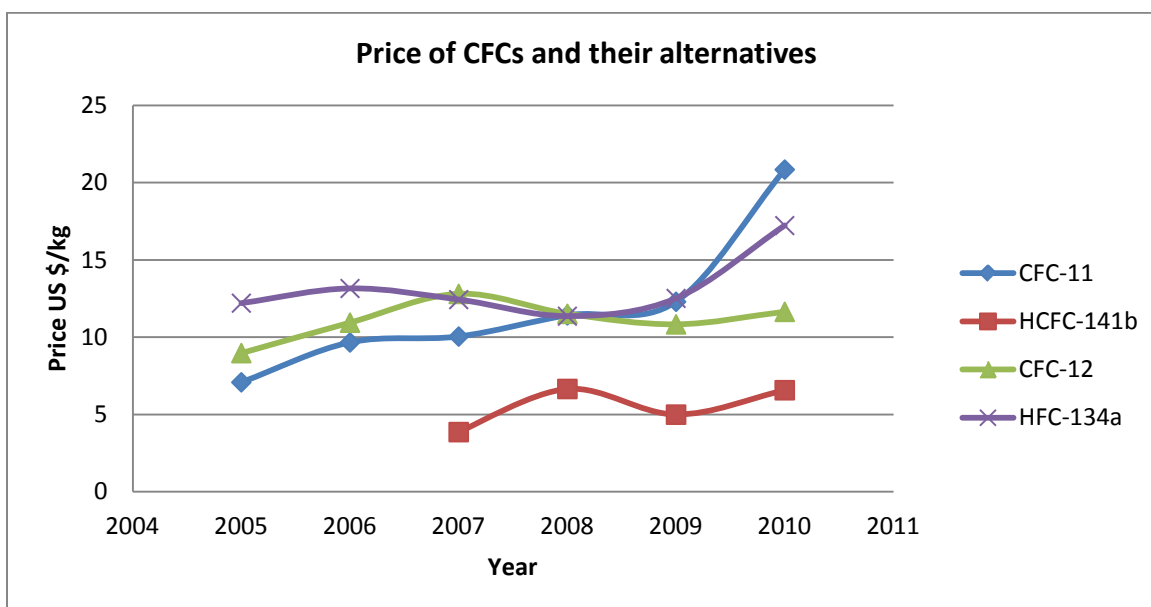
113. For the same sample, the study examined the duration between the approval of MYAs and the time a country introduced its ODS import licensing system, using the approval of the MYAs as a point of reference. The conclusion is that duration varies between -12 to 5 years, which means that 75 per cent of countries had their licensing system ready 12 years before the approval of the MYAs as a result of institutional and technical assistance projects. 25 per cent of countries did not have these systems until 5 years after the approval of their MYAs.

#### **IV.3.2 Import regulation measures**

##### **(a) Average price of CFCs and their alternatives**

114. The change in the CFC prices and of their alternatives can be used as an indicator of effectiveness for regulations on imports, exports and sale of bulk ODS. Since 2005, Article 5 countries included relevant data into their country programme implementation reports Figure 5 and Annex XII show a stable increase in the CFC-11 prices which indicates a dwindling availability of this controlled substance. CFC-12 prices increased and even equalized those of HFC-134a in 2007 and 2008. In addition, the price of HFC-134a increased sharply for unknown reasons in 2010. Subsequently, the gap between CFC-12 and alternative refrigerant (HFC-134a) prices has increased in spite of restricted availability of CFC-12 that could probably trigger the rise of illegal trade. The price correlation is represented in Figure 5.

**Figure 5: Prices of CFCs and their alternatives**



**(b) Measures regulating import and sale of equipment containing ODS**

115. Regulations for import and sale of refrigeration and air-conditioning equipment containing ODS are very effective in addressing CFC demand in the refrigeration servicing sector. This was the major target in the reduction of CFC consumption in many Article 5 countries. Relevant data are presented in Annex XI.

116. After 1995, most of non-Article 5 countries stopped producing new CFC-based refrigeration equipment, in particular domestic refrigerators and freezers and introduced regulations for the servicing sector. As a consequence, a huge number of used CFC based appliances landed into Article 5 countries, particularly in Africa, adding to the challenges to meet the CFC phase-out targets in these countries. Hence, the importance of the timing in the adoption of legislation on banning imports and sales of used refrigeration equipment in the refrigeration servicing sector. About 50 per cent of the countries in the sample adopted legislation banning the import of used refrigerators and freezers prior to 2004. This measure effectively helped meeting the 50 per cent CFC reduction target in 2005.

117. Eleven countries introduced regulations on banning imports and sales of used refrigeration equipment after approval of MYAs in these countries. An average time for adopting these regulations was 3.5 years.

118. In general, 85 per cent of countries introduced a ban on import and about 52 per cent of them banned the sale of used domestic refrigerators and freezers, MAC systems and other air conditioners, including chillers. Proportionally, similar number of countries addressed imports and sale of CFC-containing aerosols except metered dose inhalers and use of CFC in production of some or all types of foam.

119. It is important to note that banning imports and sales of used refrigeration equipment containing controlled substances is effective only when the market of refrigeration equipment with alternative refrigerants is fully mature. It is noted that the starting point of banning regulations was in 2000, the year when refrigeration equipment with HFC (and later with hydrocarbon) refrigerants was widely available on the market.

**(c) Enforcement of government regulations**

120. Data on existing capacity to identify illegal trade is scant. Progress reports do not include accurate information about the training of customs officers. For example, the 2006 country programme (CP) progress reports provide cumulative data on trained customs officers, but not a percentage of trained customs officers by country. The 2010 CP data available in the Secretariat indicate that 15,997 customs officers have been trained in 106 countries (of the 142 countries that reported data.). It is not clear whether this is annual or cumulative data<sup>5</sup>. No information is available on the rotation of personnel in customs.

121. Furthermore, neither MYA nor CP progress reports provide much information about the cooperation between customs and other agencies on sharing intelligence and intercepting illegal trade of ODS. Of a sample of 14 countries only 10 shared an electronic database of actual imports among customs and ozone offices. Two countries only reported about stopping unauthorized ODS imports.

122. From the 68<sup>th</sup> meeting onwards, governments will have to report on whether an enforceable national system of licensing and quotas for HCFC imports, and where applicable, for production and exports is in place (decision 63/17). Agreements will also include reference to decision 49/6 on the adoption of sanctions in case of violation of existing regulations.

**V. Delays in implementation of MYAs: causes and consequences**

123. Deadlines for submission of annual tranches are specified by the Executive Committee in the MYAs. Sometimes the MYAs do not specify the Executive Committee meeting while they indicate the year of submission. This is the case with the methyl bromide projects. The 47<sup>th</sup> meeting established a separate sub-agenda item on delays in the submission of annual tranches and disbursement of funds for tranches and obligations (decision 47/50(d)). It was intended to encourage countries and relevant agencies to submit annual tranches as soon as possible and to address difficulties in meeting deadlines.

124. From the 48<sup>th</sup> meeting onwards, the Executive Committee considered proposals prepared by the Secretariat for revised deadlines for the submission of annual tranches. It considered specific cases of delayed tranches and took decisions to encourage timely submission of tranches. Letters are sent to respective countries and implementing agencies requesting to expedite submission of delayed tranches.

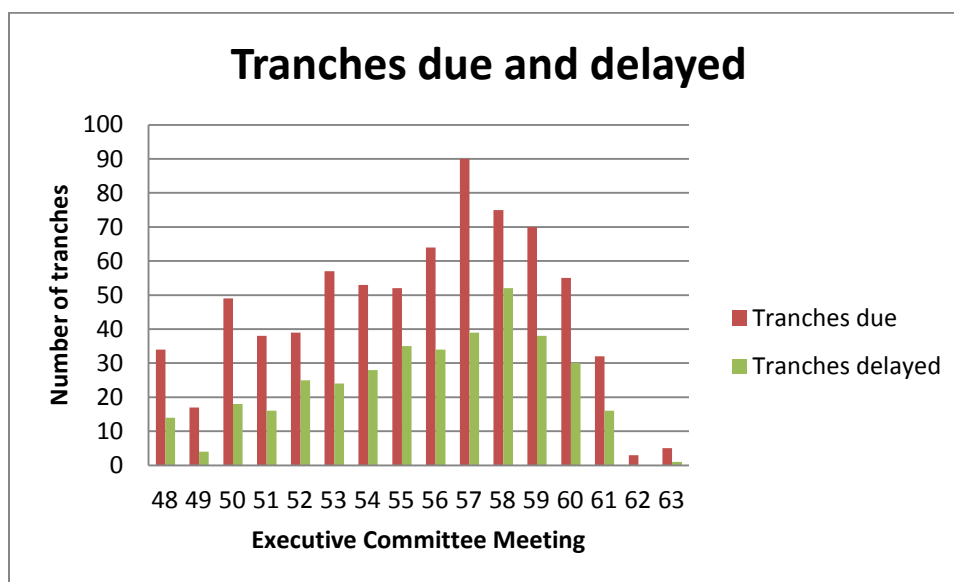
125. Data on delays in submission of annual tranches have been extracted from the Secretariat's reports presented to fifteen consecutive meetings of the Executive Committee (from the 48<sup>th</sup> to the 63<sup>rd</sup> meetings) from April 2006 to April 2011. Data are compiled and summarized in Annex V. 674 annual tranches were due to submission during this period. Of these, 304 (45.1 per cent) annual tranches have not been submitted as scheduled. The 370 submitted tranches have been reviewed by the Secretariat and 70 of them were withdrawn or not recommended for consideration by the Executive Committee. The reasons delays were the slow rate of disbursement and implementation; problems with verification reports; and incomplete documentation. Typically, tranches have been deferred by mutual agreements between the Secretariat and implementing agencies. Altogether 374 tranches or 56.8% of total tranches due were deferred. These tranches are broken down as follows: 98 or 26.2% - UNDP; 134 or 35.8% - UNEP; 70 or 18.7% UNIDO; 43 or 11.4% the World Bank and 29 or 7.7% bilateral agencies.

126. Figure 6 shows that the distribution of tranches due and delayed was not even in the period from 2006 to 2011. The number of these tranches was growing starting 2006 (100 tranches due and 36 tranches delayed) and culminated in 2009 when the number of tranches due and delayed reached 235 and 129 respectively. In 2011, there were 5 tranches due and 1 delayed. Tranches due and delayed at the respective Executive Committee meeting are shown in Figure 6.

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<sup>5</sup> UNEP/OzL.Pro/ExCom/64/6

**Figure 6: Funding tranches due and delayed**



127. At its 60<sup>th</sup> meeting the Executive Committee decided that funds for tranches of NPPs or TPMPs not submitted to the 61<sup>st</sup> meeting should be integrated into the relevant HCFC phase-out management plans of the concerned countries.

128. Following is a classification of the reasons for delays in submissions or approvals of tranches:

- (a) **Actions delayed by implementing agencies – 57.6 per cent:** activities under prior tranches were not completed or **deliverables on the previous tranche were not sufficiently advanced** in implementation; grant agreement and/or working programme required to be amended; low rate of disbursement of approved funds and delay in procurement; sufficient funds are available under the existing tranches; submission was not complete, administrative rearrangements.
- (b) **Actions delayed by governments – 24.7 per cent:** government delays in signature of project documents or grant agreements; licensing system was not in place; institutional rearrangement; unfavourable political situation.
- (c) **Problems with verification report – 15.5 per cent:** verification report was not submitted with the request for tranches or verification was inadequate.
- (d) **Inadequate coordination between implementing agencies – 1.6 per cent** delayed actions of the lead agency resulted in delayed submission of tranches by participating agencies.
- (e) **Others – 0.5 per cent:** difficult climatic conditions; natural disasters; change of implementing agency.

## **VI. Coordination among various parties**

129. Implementation of the MYAs requires a high degree of coordination with governmental and non-governmental entities as well as interaction with a number of stakeholders at the national level; it also depends on the internal modus operandi of implementing agencies

130. The World Bank standard procedures require the establishment in the country of an Implementation and Monitoring Unit (IMU) or Project Management Office (PMO) acting on behalf of the government. Legal agreements/Action Programmes give this institution the overall coordination and management role, describe its responsibilities as well as its operational role in connection to NOU (and other local entities as may be required). The Action Programmes list the performance indicators that will need to be met periodically (minimum of yearly basis). Disbursements are tied to achieving performance indicators. The Bank monitors overall implementation, primarily through performance indicators in annual progress reports to be submitted by the IMU/PMO and NOU.

131. These institutional arrangements, with some variations for local circumstances, applied to all types of 25 MYAs (NPPs, SPPs and TPMPs) implemented by the World Bank in two LVC countries and 13 non-LVC Article 5 countries.

132. UNDP, UNEP and UNIDO rely mostly on NOUs and on international consultants UNDP implemented 34 TPMPs in cooperation with UNEP. Typically, UNDP responsibilities include recovery and recycling programme, training, procurement of technical assistance for end-user sector, and incentive programmes. UNEP was responsible for policy update and enforcement, training, public awareness as well as for monitoring, evaluation and reporting activities.

133. UNEP has a leading role in regional networking through its Compliance Assistance Programme (CAP) and as a global information clearinghouse. However, there is no indication of specific actions undertaken by UNEP in utilizing these mechanisms in annual implementation programmes and in progress reports. References to CAP and clearinghouse were made in some agreements albeit in a very general terms. Agencies reported on difficulties incorporating CAP activities into their MYA implementation programmes<sup>6</sup>.

134. UNIDO implements MYAs as both the only responsible agency and in cooperation with other implementing and bilateral agencies. UNIDO is responsible for implementation of 18 TPMS in cooperation with UNEP. The division of responsibilities between UNIDO and UNEP is similar to those between UNDP and UNEP.

135. Several implementing and bilateral agencies combined their resources for the implementation of MYAs in 92 Article 5 countries. The participation of more than one agency was justified in large high volume consuming countries because it allowed using more effectively the potential and specialized experience of individual players. Historically, the combined implementation had elements of competition among agencies. Nowadays, implementing agencies are well familiar with each other.

136. Annex XIII provides description of institutional set up in the implementation of NPPs, SPPs and TPMPs in Antigua and Barbuda, Argentina, the Bahamas, Bangladesh, Brazil, Croatia and the Democratic Peoples' Republic of Korea involving Project Implementation and Monitoring Units (PIMU), NOUs and relevant governmental and regional authorities.

## **VII. Data collection and monitoring**

### **VII.1 Regulatory procedures for ODS data collection and reporting**

137. The NOU, ODS licensing agencies, trade statistics agencies and customs administration usually collaborate on the collection of data. The NOU is in charge of reporting data to the UNEP Ozone Secretariat. Regulatory procedures for ODS data collection and reporting are in place in 28 countries, one country has no procedures for ODS data collection in place (Indonesia), one country has no procedures in

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<sup>6</sup> UNEP/OzL.Pro/ExCom/51/13

place for ODS data reporting (Mexico), one country reported controversial data (Ecuador) and one country did not report any data in this respect (Burkina Faso).

## **VII.2 Monitoring, reporting, and quality of data**

138. The Executive Committee receives information related to the implementation of MYAs from several sources. These are:

- (a) Annual consolidated progress reports that summarize progress and financial information provided by the implementing and bilateral agencies on approved MYAs in production and consumption sectors;
- (b) Report on the status of implementation of delayed projects and prospects of Article 5 countries in achieving compliance with the next control measures of the Montreal Protocol. This report is submitted at each Executive Committee meeting.
- (c) Annual business planning documents with resource allocation data, including MYAs;
- (d) Reports on annual MYA tranche delays at each meeting.

139. These reports are generated from progress and financial reports by implementing agencies according to Operational Guidelines for Progress and Financial Reporting (put in place in June 1996 and revised in April 2003).

140. In addition, annual implementation reports (AIR) provide the Executive Committee with information on progress in implementation of the MYA annual work programmes. AIRs together with independent verification reports should be submitted in conjunction with a request for the funding tranche.

141. The Executive Committee considered options for improving accuracy in monitoring and assessing the progress of agencies with regard to MYAs at its 47<sup>th</sup> meeting. The implementing agencies have been requested to provide additional information on annual implementation plan submissions on disbursements and completed activities, and on completion of delayed activities. The comparison between what had been planned in the previous annual tranche and what had been achieved should continue. The disbursement information should be provided cumulatively and data concerning actual or planned commitments should also be provided, as appropriate. Furthermore, the implementing agencies have been requested to record phase-out according to the actual and real levels of consumption achieved in annual tranches of MYAs. The evaluation of management and monitoring of national phase-out plans<sup>7</sup> points out that there is no unified format for annual implementation reports and that they vary considerably in length, structure and substance.

142. The Secretariat took an initiative and developed MYA overview tables aiming at standardizing the information on results. The introduction of the MYA overview tables has already contributed to improving the quality of reporting in some cases. However, there are a number of Article 5 countries which have still experience difficulties in submitting data on-line. Data on implemented activities logged in by many countries are not complete.

143. The quality of reports to the Executive Committee depends on the quality of data provided to implementing agencies through monitoring systems established in Article 5 countries. As mentioned before, monitoring and reporting in TPMPs is the responsibility of NOUs with assistance from local and

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<sup>7</sup> UNEP/OzL.Pro/ExCom/51/13

international experts. Data reported under TPMPs is similar to data reported by NOUs under RMPs and institutional strengthening projects.

144. The requirements for monitoring and reporting under NPPs and SPPs are dependent on the structure of the specific MYAs and typically more complex than it is the case in TPMPs. Therefore, institutional arrangements for monitoring systems address the specific circumstances and needs as determined by the country. Arrangements are described in project documents and Appendix 5-A “Monitoring Institutions and Roles” attached to specific agreements. Sometimes, the proposed set up might be exceedingly sophisticated, as was the case in Iran NPP, where the Implementation and Monitoring Facility (IMAF) was created to coordinate the implementation, monitoring and reporting on activities of five agencies (UNEP, UNDP, UNIDO, France, Germany) which were involved in seven industrial sectors. In total, US \$888,474 was allocated for support of IMAF in Iran NPP.

145. Data reported to the Executive Committee in each AIP should be confirmed through verification by independent auditors to receive the funding tranche. Verification reports also investigate the system of collection of ODS consumption data. The effectiveness of verification reports can be tested by comparing of predicted consumption for the first year of the MYA in allowable consumption schedule (starting point) and actual A7 consumption for the same year. The starting point and Article 7 consumption data have been compared in the sample of 21 countries with MYAs with verification requirements. Data reported in verification reports were very close to Article 7 data, and in average, constituted about 80 per cent of predicted starting point consumption (Annex V). This difference can be interpreted as an indicator that countries are more responsible in reporting national consumption data knowing that these data are subject to verification.

146. The desk study on the evaluation of management and monitoring of national phase-out plans<sup>8</sup> indicated that the level of accuracy could be improved, if the examination of consumption at enterprise level is used for crosschecking the consumption data. Most of verification reports do not include this additional examination.

147. All agreements include a provision stating that all actions set out in the last annual implementation programme should be substantially completed in order to receive the funding tranche. The verification would be extremely useful to ascertain that this provision is fulfilled. The guidelines for verification reports do not include such a requirement. However, some verification reports (for example, Ecuador) included detailed examination of the status of enterprises included in the plan and the progress of implementation of planned activities providing revealing results.

148. The Executive Committee examines annually a consolidated project completion report based on analysis of project completion reports (PCR) on investment and non-investment projects from implementing agencies. Lessons learned reported in PCRs and summarized in the document serve to address similar problems in project implementation.

### **VIII. Communication and awareness-raising issues**

149. The Executive Committee acknowledged the importance of communication and awareness raising and designated UNEP as the leading agency in this area, and responsible for the clearing-house mechanism. In 1991 and 1992, US \$844,000 was allocated for four regional workshops to provide government and industry decision-makers with basic information on ODS control policies and strategies as well as the latest information about replacement technologies and products related to controlled substances. These activities resulted in massive preparation of ODS phase-out country programmes and investment and technical assistance projects in Article 5 countries.

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<sup>8</sup> UNEP/OzL.Pro/ExCom/51/13

150. From 1997 to 2001, UNEP received about US \$50,000 annually to conduct outreach at major national, regional and international conferences and workshops. Other channels of communication promoted MYA-related policies: meetings of the Executive Committee and the Parties, UNEP networking meetings, regular working meetings between the Secretariat and implementing and bilateral agencies and visits of the Chairman and Vice-Chairman to Article 5 countries. A number of publications have been prepared and disseminated to clarify strategic, policy and practical issues of the new MYA system.

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## Annex I

### TERMS OF REFERENCE FOR A DESK STUDY FOR THE EVALUATION OF MULTI-YEAR AGREEMENTS

1. Under the guidance of the Senior Monitoring and Evaluation Officer and in collaboration with members of the Multilateral Fund Secretariat for the Implementation of the Montreal Protocol and of implementing agencies, the consultants will undertake a thorough examination and review of the existing documentation on the functioning of the multi-year agreements (MYAs). They will prepare a desk study that will serve as a documentary basis for the evaluation of MYAs, which has been included in the 2011-2012 evaluation work plan following decision 63/11 of the 63<sup>rd</sup> meeting of the Executive Committee.

#### **Background**

2. The MYA modality was introduced by the Executive Committee in 1998 to fund series of ODS phase-out plans in some specific industrial sectors replacing the stand-alone project modality. Since 2000, it became the predominant instrument to assist Article 5 countries in achieving compliance with the Montreal Protocol control schedule for CFCs and other controlled substances under sectoral and national ODS phase-out plans (NPPs) and terminal ODS phase-out management plans (TPMPs) the latter designed for low-volume-consuming (LVC) countries.

3. Under this Agreement, commitment by countries to a gradual ODS production/consumption reduction is matched with a commitment to a total level of funding by the Multilateral Fund, to be disbursed over a number of years. Annual disbursement of funds would happen only upon satisfactory review and clearance by the Executive Committee of independent verification of the annual ODS reduction of the previous year being successfully achieved. In addition, an Article 5 country has also to submit and receive endorsement from the Executive Committee for an annual implementation programme; and has to complete all actions set out in the last annual implementation programme.

#### **Purpose and justification of the evaluation**

4. Now more than 10 years after its introduction into the Multilateral Fund's business, it would be time to take another look at this funding modality not only for marking the completion of the phase-out of CFCs but also for the application of experience gained to the phase-out of HCFCs. Since the 61<sup>st</sup> meeting of the Executive Committee HCFC phase-out management plans (HPMPs) have adopted a MYA modified model.

5. Relevant findings and lessons learned from an in-depth review of the MYA funding modality might therefore be beneficial for both formulation of new and implementation of approved HPMPs.

#### **A phased approach**

6. The evaluation will be organized in two phases. The desk study is the first part of the evaluation. It will analyze all existing documentation related to MYA implementation and will examine the quality of information provided. Complementary data could be collected through discussions with programme officers, implementing agencies and national ozone officers if necessary. It will formulate further evaluation issues as well as questions to be answered during field visits. It will help identify the sample of countries to be visited and will formulate work hypotheses to be tested during field visits.

7. The second part will consist of the preparation of case studies following field visits in several countries. The analysis of data collected during field visits will answer questions raised in the desk study and will help formulate the final report including conclusions and recommendations to be presented to the Executive Committee at its 66<sup>th</sup> meeting.

8. These terms of reference are for the first phase of the evaluation, i.e. the desk study. The terms of reference for the second phase will be built on the outcome of the first phase.

### **Objectives of the desk study**

9. The objective of desk study is to provide an in-depth review of the existing documentation on MYAs.

10. The desk-study will gather information on, *inter alia*:

- (a) **Effectiveness in achieving objectives.** Were MYA objectives achieved as planned? What were the difficulties and the advantages of this implementation modality, as reflected in the documentation? What was the influence of a multi-year, tranche-based funding modality on project functioning?
- (b) **Efficiency in handling allocated resources.** How overall allocated funds were subdivided between individual tranches and how available financial assets were spent in terms of disbursement and procurement of the necessary equipment; was the overall level of funding sufficient? Was the flexibility clause in the Agreement allowing the redistribution of funds between budget items used?
- (c) **Institutional and procedural issues related to project performance.** How did institutions (National Ozone Units and implementing agencies) adapt to this new modality?
- (d) **Causes of delays** e.g. were there delays in the implementation of the annual work programmes?
- (e) **Coordination among various parties.** Describe how did the main stakeholders collaborate within the framework of this new modality. Have usual cooperation patterns and roles assigned to participating stakeholders changed because of the introduction of MYAs? Did new co-operation patterns cause additional delays?
- (f) **Capacity building.** How has the MYAs helped improving technical and administrative capacity at the country level?
- (g) **Legislation related issues.** Was new legislation and regulation required? Which were the most effective tools of enforcement as well as the main obstacles?
- (h) **Monitoring, reporting and quality of data.** Analyze the quality and timeliness of reporting. How accurate were they in reflecting the ongoing reality? Should there be any modification in future reporting? How accurate are data collection methods (with special attention for ODS consumption data)?

- (i) **Communication and awareness-raising issues.** How well the MYAs were understood among stakeholders? Which were the main channels of communication and awareness-raising?
- (j) **Compliance issues.** Review whether projects and activities are in agreement with the 1985 Vienna Convention and the 1987 Montreal Protocol and their associated amendments and decisions.
- (k) **Any other issues** of importance for the formulating work-hypotheses for the MYA evaluation.

### **Scope of the desk study**

11. The desk study will focus on a sample of completed and/or ongoing MYA projects. The sample will include such representation as regional distribution, size of consumption (LVC countries, medium-sized and large-consuming countries), and other relevant considerations.

### **Methodology**

12. A team of two consultants will analyze the content of existing documents such as sectoral and NPPs and TPMPs with approved Agreements; verification reports; annual programmes; progress reports; relevant correspondence; and on-line MYA tables.

13. Furthermore, the consultants will discuss where necessary with members of the Multilateral Fund Secretariat and implementing agencies.

14. They will use narrative description and quantitative analysis as appropriate, and will organize data in tables and diagrams or any device aimed at providing a clear presentation of material.

15. The work will be subdivided between two consultants according to their competencies and areas of expertise.

16. The findings of the desk review will be peer-reviewed by an independent expert.

### **Timing**

17. The consultants will prepare the desk study during a period of 15 working days. Timing for the case studies and final report will be established once the desk study is completed and approved by the Executive Committee.

### **Output**

18. The desk study will yield a report (approximately 35 pages including annexes) that will provide a thorough review of the issues previously outlined. In addition to further evaluation questions and work hypotheses this report will also indicate countries to be visited for the elaboration of case studies. A final report will be issued after discussion with stakeholders and approval by the Executive Committee. Its endorsement by the Executive Committee is the condition to proceed with the second phase of the evaluation.

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Annex II

ARTICLE 5 COUNTRIES IN NON-COMPLIANCE

Country	CFC			
	In non-compliance with freeze (using 1999 data)	In non-compliance with 50% reduction (using 2005 data)	In non-compliance with 85% reduction (using 2007 data)	In non-compliance with 100% reduction (using 2010 data)
Antigua and Barbuda	0.0	0.0	0.0	0.0
Argentina	0.0	0.0	0.0	0.0
Bahamas	0.0	0.0	0.0	0.0
Bahrain	0.0	0.0	0.0	0.0
Bangladesh	219.0	0.0	67.7	**
Bosnia and Herzegovina	126.8	38.7*	18.5	0.0
Brazil	1,086.2	0.0	0.0	0.0
Burkina Faso	0.0	0.0	0.0	0.0
China	0.0	0.0	0.0	**
Costa Rica	0.0	0.0	0.0	0.0
Croatia	0.0	0.0	0.0	0.0
Democratic People's Republic of Korea	0.0	0.0	0.0	0.0
Democratic Republic of the Congo	0.0	0.0	0.0	0.0
Ecuador	0.0	0.0	0.0	0.0
Ghana	11.0	0.0	0.0	0.0
India	0.0	0.0	0.0	**
Indonesia	0.0	0.0	0.0	0.0
Iran (Islamic Republic of)	0.0	0.0	0.0	**
Kenya	1.6	40.9	0.0	0.0
Lebanon	0.0	0.0	0.0	0.0
Malaysia	0.0	0.0	0.0	0.0
Mexico	0.0	0.0	0.0	0.0
Nigeria	636.2	0.0	0.0	0.0
Pakistan	0.0	0.0	0.0	0.0
Republic of Moldova	0.0	0.0	0.0	0.0
Serbia	0.0	0.0	0.0	0.0
Syrian Arab Republic	0.0	0.0	0.0	**
Thailand	0.0	0.0	0.0	0.0
Trinidad and Tobago	0.0	0.0	0.0	0.0
Turkey	0.0	0.0	0.0	0.0
Venezuela (Bolivarian Republic of)	0.0	180.6	0.0	0.0
Zimbabwe	0.0	0.0	0.0	0.0

\*In compliance with action plans.

\*\*For essential use authorizations for CFC consumption.

Country	CTC	
	In non-compliance with 85% reduction (using 2005 data)	In non-compliance with 100% reduction (using 2010 data)
Antigua and Barbuda	0.0	0.0
Argentina	0.0	0.0
Bahamas	0.0	0.0
Bahrain	0.0	0.0
Bangladesh	0.0	0.0
Bosnia and Herzegovina	0.0	0.0
Brazil	0.0	0.0
Burkina Faso	0.0	0.0
China	0.0	*
Costa Rica	0.0	0.0
Croatia	0.0	**
Democratic People's Republic of Korea	0.0	0.0
Democratic Republic of the Congo	14.2	0.0
Ecuador	0.0	0.0
Ghana	0.0	0.0
India	0.0	0.0
Indonesia	0.0	0.0
Iran (Islamic Republic of)	2.1	0.0
Kenya	0.0	0.0
Lebanon	0.0	0.0
Malaysia	0.0	0.0
Mexico	80.1	**
Nigeria	0.0	0.0
Pakistan	86.6	0.0
Republic of Moldova	0.0	0.0
Serbia	0.0	0.0
Syrian Arab Republic	0.0	0.0
Thailand	0.0	0.0
Trinidad and Tobago	0.0	0.0
Turkey	0.0	0.0
Venezuela (Bolivarian Republic of)	0.0	0.0
Zimbabwe	0.0	0.0

\* For process use exemptions.

\*\* For laboratory and analytical uses.

Country	HALON		
	In non-compliance with freeze (using 2002 data)	In non-compliance with 50% reduction (using 2005 data)	In non-compliance with 100% reduction (using 2010 data)
Antigua and Barbuda	0.0	0.0	0.0
Argentina	0.0	0.0	0.0
Bahamas	0.0	0.0	0.0
Bahrain	0.0	0.0	0.0
Bangladesh	0.0	0.0	0.0
Bosnia and Herzegovina	0.0	0.0	0.0
Brazil	0.0	0.0	0.0
Burkina Faso	0.0	0.0	0.0
China	0.0	0.0	0.0
Costa Rica	0.0	0.0	0.0
Croatia	0.0	0.0	0.0
Democratic People's Republic of Korea	0.0	0.0	0.0
Democratic Republic of the Congo	273.3	0.0	0.0
Ecuador	0.0	0.0	0.0
Ghana	0.0	0.0	0.0
India	0.0	0.0	0.0
Indonesia	0.0	0.0	0.0
Iran (Islamic Republic of)	0.0	0.0	0.0
Kenya	0.0	0.0	0.0
Lebanon	0.0	0.0	0.0
Malaysia	0.0	0.0	0.0
Mexico	22.7	0.0	0.0
Nigeria	126.8	0.0	0.0
Pakistan	2.8	0.0	0.0
Republic of Moldova	0.0	0.0	0.0
Serbia	0.0	0.0	0.0
Syrian Arab Republic	0.0	0.0	0.0
Thailand	0.0	0.0	0.0
Trinidad and Tobago	0.0	0.0	0.0
Turkey	0.0	0.0	0.0
Venezuela (Bolivarian Republic of)	0.0	0.0	0.0
Zimbabwe	0.0	0.0	0.0

Country	METHYL BROMIDE	
	In non-compliance with freeze (using 2002 data)	In non-compliance with 20% reduction (using 2005 data)
Antigua and Barbuda	0.0	0.0
Argentina	0.0	0.0
Bahamas	0.0	0.0
Bahrain	0.0	0.0
Bangladesh	0.0	0.0
Bosnia and Herzegovina	8.3	0.0
Brazil	0.0	0.0
Burkina Faso	0.0	0.0
China	0.0	0.0
Costa Rica	0.0	0.0
Croatia	0.0	0.0
Democratic People's Republic of Korea	0.0	0.0
Democratic Republic of the Congo	0.0	0.0
Ecuador	0.0	100.0
Ghana	0.0	0.0
India	0.0	0.0
Indonesia	0.0	0.0
Iran (Islamic Republic of)	0.0	0.0
Kenya	0.0	0.0
Lebanon	0.0	0.0
Malaysia	0.0	0.0
Mexico	0.0	0.0
Nigeria	0.0	0.0
Pakistan	0.0	0.0
Republic of Moldova	0.0	0.0
Serbia	0.0	0.0
Syrian Arab Republic	0.0	0.0
Thailand	287.5	0.0
Trinidad and Tobago	0.0	0.0
Turkey	0.0	0.0
Venezuela (Bolivarian Republic of)	0.0	0.0
Zimbabwe	0.0	0.0

Country	TCA		
	In non-compliance with freeze (using 2003 data)	In non-compliance with 30% reduction (using 2005 data)	In non-compliance with 70% reduction (using 2010 data)
Antigua and Barbuda	0.0	0.0	0.0
Argentina	0.0	0.0	0.0
Bahamas	0.0	0.0	0.0
Bahrain	0.0	0.0	0.0
Bangladesh	0.0	0.0	0.0
Bosnia and Herzegovina	2.0	0.0	0.0
Brazil	0.0	0.0	0.0
Burkina Faso	0.0	0.0	0.0
China	0.0	0.0	0.0
Costa Rica	0.0	0.0	0.0
Croatia	0.0	0.0	0.0
Democratic People's Republic of Korea	0.0	0.0	0.0
Democratic Republic of the Congo	0.0	0.7	0.0
Ecuador	1.5	0.0	0.0
Ghana	0.0	0.0	0.0
India	0.0	0.0	0.0
Indonesia	0.0	0.0	0.0
Iran (Islamic Republic of)	378.1	0.0	0.0
Kenya	0.0	0.0	0.0
Lebanon	0.0	0.0	0.0
Malaysia	0.0	0.0	0.0
Mexico	0.0	0.0	0.0
Nigeria	0.0	0.0	0.0
Pakistan	0.0	0.0	0.0
Republic of Moldova	0.0	0.0	0.0
Serbia	0.0	0.0	0.0
Syrian Arab Republic	0.0	0.0	0.0
Thailand	0.0	0.0	0.0
Trinidad and Tobago	0.0	0.0	0.0
Turkey	0.0	0.0	0.0
Venezuela (Bolivarian Republic of)	0.0	0.0	0.0
Zimbabwe	0.0	0.0	0.0

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### Annex III

#### Cost-effectiveness threshold values adopted at the 16<sup>th</sup> meeting of the Executive Committee in 1995

(c) Adopted the following sector and sub-sector cost-effectiveness threshold values to be applied to projects submitted to the Seventeenth Meeting;

Sector	US \$/kg ODP
AEROSOL	
Hydrocarbon	4.40
FOAM	
General	9.53
Flexible polyurethane	6.23
Integral skin	16.86
Polystyrene/polyethylene	8.22
Rigid polyurethane	7.83
HALON	
General	1.48
REFRIGERATION	
Commercial	15.21
Domestic	13.76
SOLVENT	
CFC-113	19.73
TCA	38.50

Source: UNEP/OzL.Pro/ExCom/16/20

#### Special funding window for LVC countries

(g) Agreed to reserve:

- (iii) US \$6,630,000 exclusively for allocation to projects from low-ODS-consuming countries. This amount would be in addition to any funds received as a result of approval of projects from low-ODS-consuming countries that qualified under the cost-effectiveness thresholds listed above;

Source: UNEP/OzL.Pro/ExCom/16/20

#### Special funding window for small and medium-sized enterprises adopted at the 25<sup>th</sup> meeting of the Executive Committee in 1998

Accordingly, the Executive Committee decided to include an allocation of US \$10 million from the resource allocation for 1999 for a funding window designed to facilitate pilot conversions of significant groups of small firms that met the following criteria:

- (a) Given the fact that SME projects for low-volume consuming countries are currently fully eligible, this window should apply only to group projects from countries with annual ODS consumption of 360 ODP tonnes or more;

- (b) Eligible group projects for this initial pilot programme should be in the aerosol or foam sectors only, and should include firms with annual ODS consumption not exceeding the following:

<u>Aerosols:</u>		20 ODP tonnes/yr.
<u>Foams:</u>	Flexible	25 ODP tonnes/yr.
	Extruded polyethylene/polystyrene	25 ODP tonnes/yr.
	Flexible integral skin	10 ODP tonnes/yr.
	Rigid polyurethane foams	10 ODP tonnes/yr.

- (c) Group projects should be at a level of US \$1 million or less, and should have an overall cost-effectiveness of no more than 150 per cent of the level of the current cost-effectiveness thresholds for the relevant eligible subsectors in (b) above. Such group projects should use the most cost-effective technologies reasonably available, and should consider the possible use of centralized/group use of equipment and industrial rationalization;
- (d) The group project should be put forward with a government plan, including policies and regulations designed to ensure that the specific level of agreed reduction to be achieved was sustained;
- (e) No single country may apply for more than US \$1 million from this pilot funding window although projects from one country may cover more than one sector.

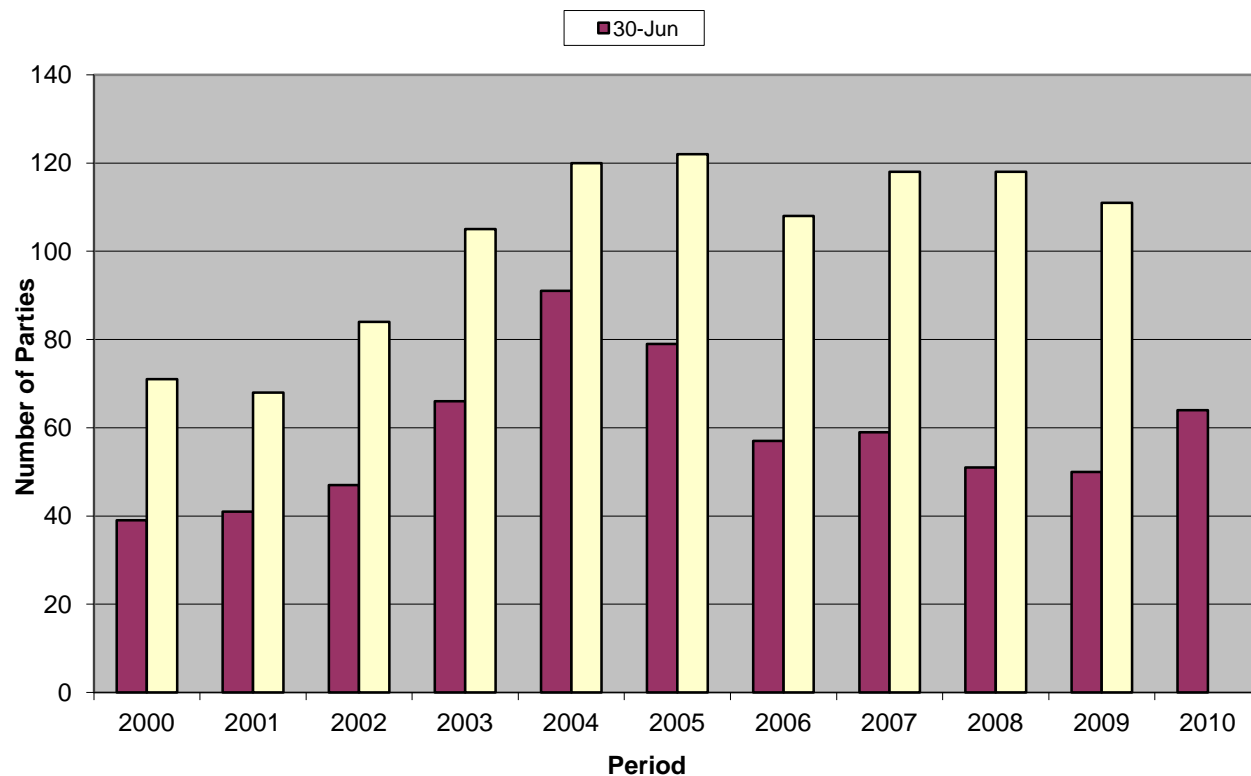
**(Decision 25/56)**

Source: UNEP/OzL.Pro/ExCom/25/68

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**Annex IV**

**ARTICLE 5 PARTIES REPORTING DATA WITHIN 6 AND 9 MONTHS**



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>30-Jun</b>	39	41	47	66	91	79	57	59	51	50	64
<b>30-Sep</b>	71	68	84	105	120	122	108	118	118	111	

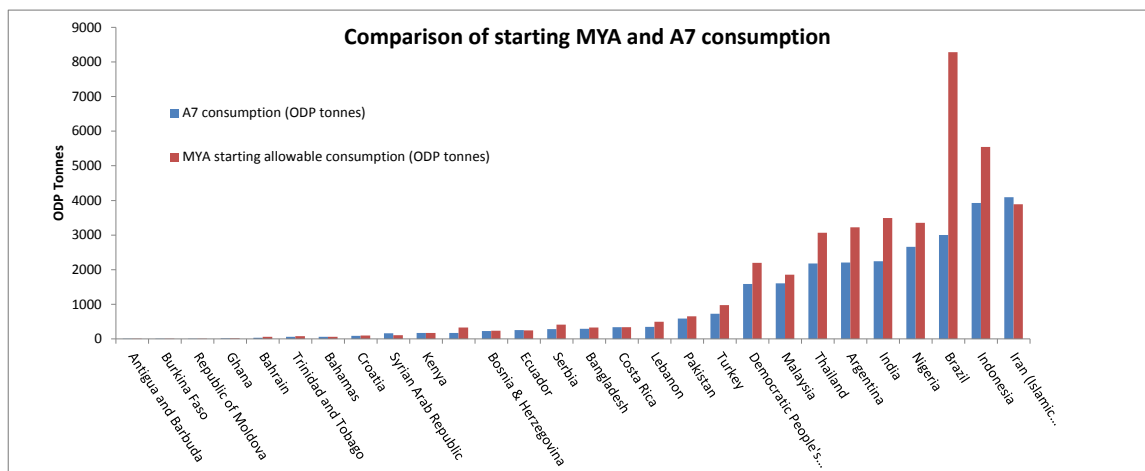
Source: Ozone Secretariat

Annex V  
DELAYS IN SUBMISSION OF MYA FUNDING TRANCHES

Executive Committee meeting	MYA tranches due for submission	MYA tranches not submitted (total)	MYA tranches submitted	MYA tranches submitted but withdrawn	MYA tranches delayed (total)	MYA tranches delayed					Percentage delayed	Reasons for delay	MYA tranches	Government actions delayed	IA management and	Verification report problems	IA coordination problems	Other
						UNDP	UNEP	UNIDO	World Bank	Bilateral								
48	34	14	20	0	14	3	3	5	1	2	41.2	Pending verification report	5			5		
												Government delayed in signature of project document	4	4				
												IA problems of administrative nature	5		5			
49	17	4	13	0	4	0	0	2	1	1	23.5	Need to submit along with the companion UNDP project	1				1	
												Pending verification report	2			2		
												Awaiting clearance by the Gov.	1	1				
50	49	11	38	7	18	5	2	6	4	1	36.7	Milestones not achieved	4		4			
												Verification report problems	7			7		
												Grant agreement not signed	7	7				
51	38	16	22	0	16	5	5	3	2	1	42.1	Government actions delayed in adoption of necessary documents	6	6				
												UNEP and UNDP delayed development of administrative procedures for regional implementation	8			8		
												Awaiting the incorporation of the action plan that was recently approved by the Meeting of the Parties.	1		1			
												There was a delay in the travel of the consultant to undertake the verification audit.	1			1		
52	39	14	25	11	25	10	8	3	3	1	64.1	Low rate of expenditure/implementation	11		11			
												Verification report problems	3			3		
												Government actions delayed in adoption of necessary documents	11	11				
53	57	14	43	10	24	9	7	4	1	3	42.1	Delay in completion of planned activities	14		14			
												Government actions delayed in adoption of necessary documents	5	5				
												Verification report problems	2			2		
												Changes in the institutional arrangements at the NOU.	1	1				
												A7 data not reported	1	1				
												Info not provided	1	1				
54	53	27	26	1	28	13	10	2	1	2	66.0	Government actions delays in adoption of necessary documents	3	3				
												Low rate of expenditure/implementation	18		18			
												Verification report problems	6			6		
												Change of IA	1					1
55	52	21	31	14	35	13	11	4	3	4	67.3	Low rate of expenditure/implementation	19		19			
												Late development of equipment specifications. Lack of coordination	2				2	
												Government actions delays in adoption of necessary documents	5	5				
												NOU restructuring	2	2				
												Verification report problems	6			6		
56	64	30	34	4	34	12	11	5	4	2	53.1	Low rate of expenditure/implementation	18		18			
												Government actions delays in adoption of necessary documents	5	5				
												NOU restructuring	2	2				
												Verification report problems	7			7		
												Agreement WP required to be amended	2		2			
57	90	32	58	7	39	7	13	12	6	1	43.3	Low rate of expenditure/implementation	24		24			
												Verification report problems	4			4		
												Government actions delayed	2	2				
												NOU restructuring	1	1				
												Lack of IA coordination	3				3	
												Late submission, unresolved issues	5		5			
58	75	50	25	2	52	9	22	9	7	5	69.3	Slow implementation, sufficient funds	25		25			
												Delay in signing agreement	14	14				
												Legislation is not in place	3	3				
												Institutional rearrangements	4	4				
												Verification report problems	3			3		
												Info not provided	3		3			
59	70	26	44	12	38	5	17	8	4	4	54.3	Low rate of expenditure/implementation	28		28			
												Licensing system is not in place	2	2				
												Delay in signing agreement	1	1				
												Verification report problems	5			5		
												Institutional changes	2	2				
60	55	30	25	0	30	5	16	4	3	2	54.5	Low rate of expenditure/implementation	23		23			
												Legislation is not in place	2	2				
												Verification report problems	5			5		
61	32	14	18	2	16	2	9	3	2	0	50	Low rate of expenditure/implementation	6		6			
												Info not provided	1		1			
												Delay in signing legal agreement	4	4				
												Verification report problems	2			2		
												NOU restructuring	1	1				
												Late legislation	1	1				
												Natural disaster	1					1
62	3	0	3	0	0	0	0	0	0	0	0							
63	5	1	4	0	1	0	0	0	1	0	20	Delay in signing legal agreement	1	1				
<b>Total</b>	<b>659</b>	<b>304</b>	<b>370</b>	<b>70</b>	<b>374</b>	<b>98</b>	<b>134</b>	<b>70</b>	<b>43</b>	<b>29</b>			<b>373</b>	<b>92</b>	<b>215</b>	<b>58</b>	<b>6</b>	<b>2</b>
<b>Per cent of total</b>		<b>45.1</b>			<b>56.8</b>	<b>26.2</b>	<b>35.8</b>	<b>18.7</b>	<b>11.4</b>	<b>7.7</b>				<b>24.7</b>	<b>57.6</b>	<b>15.5</b>	<b>1.6</b>	<b>0.5</b>

**Annex VI**  
**COMPARISON OF MYA CONSUMPTION IN THE STARTING YEAR AND ARTICLE 7 DATA IN THE SAME YEAR**

Country	A7 consumption (ODP tonnes)	MYA starting allowable consumption (ODP tonnes)
Antigua and Barbuda	1.1	1.8
Burkina Faso	7.4	7.4
Republic of Moldova	9.2	11.0
Ghana	13.1	17.5
Bahrain	32.4	58.7
Trinidad and Tobago	62.5	77.0
Bahamas	63.0	66.0
Croatia	88.7	98.0
Syrian Arab Republic	165.1	105.0
Kenya	168.6	168.8
Democratic Republic of the Congo	170.7	332.8
Bosnia & Herzegovina	230.0	235.3
Ecuador	256.3	246.0
Serbia	282.8	410.0
Bangladesh	294.9	328.7
Costa Rica	337.3	342.0
Lebanon	347.0	499.0
Pakistan	589.1	650.0
Turkey	731.2	977.0
Democratic People's Republic of Korea	1,585.2	2,200.0
Malaysia	1,605.5	1,855.0
Thailand	2,177.3	3,066.0
Argentina	2,211.6	3,220.0
India	2,241.6	3,489.0
Nigeria	2,662.4	3,352.7
Brazil	3,000.6	8,280.0
Indonesia	3,925.5	5,546.0
Iran (Islamic Republic of)	4,088.8	3,889.4
China	22,207	24,480
Total	22,207	64,010
Increase MYA allowable consumption over A7 (%)		29.2



**Annex VII**  
**COMPARISON OF PHASE PLANNED (MYA MAXIMUM ALLOWABLE CONSUMPTION) AND PHASE-OUT ACHIEVED (ARTICLE 7 DATA)**

Country	MYA	MYA approval	MYA allowable consumption and A7 data	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total	Per cent AC to A7 (%)	Percentage A7 in starting point	
Antigua and Barbuda	TPMP	2005	MYA AC								1.8	1.4	1.0	0.5	0.0	0.0	4.7	48.9	61.1	
			A7 data									1.1	1.1	0.0	0.1	0.0		2.3		
Argentina	NPP CFC	2004	MYA AC							3,220.0	2,047.0	1,997.0	686.0	636.0	586.0	0.0	9,172.0	68.1	68.7	
			A7 data								2,211.6	1,675.5	1,654.2	529.0	50.9	126.6		6,247.8		
Bahamas	TPMP	2001	MYA AC				66.0	58.0	48.0	36.0	25.0	14.0	0.0	0.0	0.0		247.0	74.4	95.5	
			A7 data				63.0	55.4	29.6	18.8	13.0	4.0	0.0	0.0	0.0	0.0		183.8		
Bahrain	TPMP	2006	MYA AC									58.7	20.3	20.3	20.3	0.0	119.7	57.9	55.2	
			A7 data										32.4	14.7	11.7	10.5		69.3		
Bangladesh	NPP ODS	2004	MYA AC							328.7	289.7	207.2	87.1	71.0	53.0	0.0	1,036.7	115.3	89.7	
			A7 data								294.9	263.0	196.2	154.9	158.3	127.6		1,194.9		
Bosnia and Herzegovina	NPP ODS	2003	MYA AC						235.3	167.0	102.1	33	3.0	0.0	0.0	0.0	540.4	98.5	97.7	
			A7 data							230.0	187.9	50.8	32.6	22.1	8.8	0.0	532.2			
Brazil	NPP CFC	2002	MYA AC					8,280.0	6,967.0	5,020.0	3,070.0	2,050.0	1,000.0	424.0	74.0	0.0	26,885.0	37.5	36.2	
			A7 data						3,000.6	3,224.3	1,870.5	967.2	376.8	305.3	284.3	46.9		10,075.9		
Burkina Faso	NPP CFC	2006	MYA AC									7.4	5.4	5.4	5.4	0.0	23.7	70.8	99.9	
			A7 data										7.4	5.2	4.2	0.0		16.8		
China	SPP halon	1998	Halon 1211	21,480.0	16,110.0	10,740.0	9,351.0	7,962.0	5,670.0	5,670.0	5,670.0	0.0						80.3	90.7	
			Halon 1301	3,000.0	3,000.0	3,000.0	3,000.0	1,500.0	1,500.0	1,500.0	1,500.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	0.0			
			Halon total	24,480.0	19,110	13,740.0	12,351.0	9,462.0	7,170.0	7,170.0	7,170.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	0.0	104,653.0		
			A7 data	22,207.0	18,602.0	14,780.0	10,409.0	6,604.2	4,959.2	2,238.9	4,516.5	161.0	594.5	977.3	985.9			87,035.5		
Costa Rica	SPP methyl bromide	2002	MYA AC					342.0	342.0	298.8	273.6	253.2	210.0	174.0	114.0	0.0	2,007.6	96.8	98.6	
			A7 data							337.3	288.2	258.0	251.3	238.1	212.4	190.6	166.9	1,942.8		
Croatia	TPMP	2003	MYA AC						98.0	98.0	65.0	21.9	21.9	21.9	21.9	0.0	348.6	70.8	90.5	
			A7 data							88.7	78.2	43.5	31.4	5.0	0.0	0.0		246.8		
Democratic People's Republic of Korea	SPP CTC	2003	MYA AC						2,200.0	2,200.0	192.8	92.8	77.8	37.8	0.0	0	4,801.2	82.8	72.1	
			A7 data							1,585.2	2,198.9	191.4	0.0	0.0	0.0		3,975.5			
Democratic Republic of the Congo	TPMP	2006	MYA AC									332.8	99.8	99.8	99.8	0.0	632.2	36.7	51.3	
			A7 data										170.7	48.9	8.6	4.0	0.0	232.2		
Ecuador	NPP CFC	2003	MYA AC						246.0	235.0	150.0	80.0	42.0	21.0	21.0	0.0	795.0	81.3	104.2	
			A7 data							256.3	147.4	132.5	63.0	28.3	8.2	10.4		646.1		
Ghana	TPMP	2006	MYA AC									17.5	5.3	5.3	5.3	0.0	33.5	61.8	74.9	
			A7 data										13.1	4.2	0.0	3.4		20.7		
Iran (Islamic Republic of)	NPP CFC	2003	MYA AC						3,889.4	3,889.4	2,269.2	965.6	578.7	328.4	132.7	0.0	12,053.4	96.4	105.1	
			A7 data							4,088.8	3,471.9	2,221.0	953.3	549.5	240.6	100.3		11,625.4		
India	SPP CFC	2004	MYA AC							3,489.0	2,266.0	1,560.0	964.0	417.0	273.0	0.0	8,969.0	107.4	64.2	
			A7 data								2,241.6	1,957.8	3,560.3	998.2	216.5	659.9		9,634.3		
Indonesia	SPP CFC	2004	MYA AC							5,546.0	3,880.0	2,331.0	1,122.0	30.0	30.0	0.0	12,939.0	52.1	70.8	
			A7 data								3,925.5	2,385.3	231.0	202.6	0.0	0.0		6,744.4		
Kenya	NPP CFC	2003	MYA AC						168.8	120.0	90.0	60	30.0	10.0	0.0	0.0	478.8	114.6	99.9	
			A7 data							168.6	131.7	160.6	57.7	22.7	7.5	0.0		548.8		
Lebanon	NPP CFC	2004	MYA AC							499.0	362.0	235.0	75.0	35.0	0.0		1,206.0	80.2	69.5	
			A7 data								347.0	287.3	224.4	74.5	33.8	0.0		967.0		
Malaysia	NPP ODS	2002	MYA AC					1,855.0	1,566.0	1,136.0	699.0	579.0	490.0	401.0	332.0	0.0	7,058.0	80.1	86.5	
			A7 data						1,605.5	1,174.4	1,128.5	668.3	564.2	234.2	173.7	105.2		5,654.0		

Country	MYA	MYA approval	MYA allowable consumption and A7 data	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total	Per cent AC to A7 (%)	Percentage A7 in starting point
Mexico	NPP PROD	2003	MYA AC						22,000.0	22,000.0	22,000.0	0.0	0.0	0.0	0.0	0.0	66,000.0	33.2	39.5
			A7 data							8,694.0	8,044.0	5,201.0	0.0	0.0	0.7	0.0		21,939.7	
Nigeria	NPP CFC	2003	MYA AC						3,352.7	3,137.0	1,725.4	1,015.9	507.6	286.1	86.1	0.0	10,110.8	56.8	79.4
			A7 data							2,662.4	2,116.1	466.1	454.0	17.5	16.5	15.1		5,747.7	
Pakistan	SPP CTC	2003	MYA AC						650.0	389.3	61.9	42.0	32.0	15.0	0.0	0.0	1,190.2	128.7	90.6
			A7 data							589.1	752.4	148.5	41.8	0.0	0.0	0.0		1,531.8	
Republic of Moldova	TPMP	2007	MYA AC										11.0	11.0	11.0	0.0	33.0	27.9	83.6
			A7 data											9.2	0.0	0.0	0.0	9.2	
Serbia	NPP CFC	2004	MYA AC							410.0	392.0	268.0	125.0	85.0			1,280.0	56.1	69.0
			A7 data								282.8	52.1	233.8	53.5	76.7	19.2	0.0	718.1	
Syrian Arab Republic	SPP methyl bromide	2001	MYA AC				105.0	100.8	99.0	65.7	43.4	18.0	6.0	0.0			437.9	183.7	
			A7 data				165.1	152.7	128.7	113.6	91.4	64.8	45.0	27.0	16.2			804.5	
Thailand	NPP ODS	2002	MYA AC					3,066.0	2,777.0	2,291.0	1,364.0	1,121.0	912.0	704.0	496.0	0.0	12,731.0	61.5	71.0
			A7 data						2,177.3	1,857.0	1,358.3	1,259.9	453.7	385.6	190.3	141.1		7,823.2	
Trinidad and Tobago	TPMP	2003	MYA AC						77.0	77.0	34.1	34.1	0.0	0.0			222.2	53.4	81.2
			A7 data							62.5	35.0	18.3	2.9	0.0	0.0	0.0		118.7	
Turkey	NPP CFC	2001	MYA AC				977.0	909.0	534.0	316.0	150.0	0.0	0.0	0.0	0.0		2,886.0	78.4	74.8
			A7 data				731.2	698.9	440.9	257.6	132.8	0.2	0.0	0.0	0.1	0.0		2,261.7	

Annex VIII

FINANCIAL STATUS OF THE MYAs IN THE SAMPLE

Agreements	Total funds approved	Funds returned	Funds disbursed as of December 2010	Balance	Estimated disbursement in 2011 as of December 2010	Funds obligated as of December 2010	Difference between balance and funds obligated
Antigua and Barbuda CFC phase-out plan	97,300	0	0	97,300	97,300	97,300	0
Argentina CFC phase-out plan	7,360,850	0	4,245,682	3,115,168	287,000	678,846	2,436,322
Bahamas CFC phase-out plan	530,946	0	530,946	0	0	0	0
Bahrain CFC phase-out plan	617,500	0	352,322	265,178	234,742	50,079	215,099
Bangladesh ODS phase- out plan	1,173,925	0	484,320	689,605	319,914	424,726	264,879
Bosnia and Herzegovina ODS phase-out plan	862,161	0	482,961	379,200	125,000	26,020	353,180
Brazil CFC phase- out plan	26,700,000	0	22,538,321	4,161,679	998,803	0	4,161,679
Burkina Faso CFC phase-out plan	387,369	0	384,369	3,000	0	0	3,000
China domestic refrigeration	7,332,989	0	7,332,989	0		0	0
China foam	53,846,000	0	53,412,500	433,500	433,500	433,500	0
China halon	62,000,000	0	61,750,000	250,000	250,000	250,000	0
China production CFC	150,000,000	0	150,000,000	0	0	0	0
China tobacco	11,000,000	0	11,000,000	0		0	0
Costa Rica methyl bromide	4,845,283	0	4,178,116	667,167	160,120	0	667,167
Croatia CFC phase-out plan	379,254	0	370,896	8,358	5,000	8,358	0
Democratic People's Republic of Korea CTC phase-out plan	5,684,541	0	5,679,057	5,484	3,001	3,359	2,125
Democratic Republic of the Congo CFC phase-out plan	625,000	0	422,636	202,364	140,016	16,590	185,774
Ecuador CFC phase-out plan	1,667,626	0	1,202,287	465,339	428,155	203,793	261,546
Ghana CFC phase-out plan	344,894	0	344,894	0	0	0	0
India CFC phase-out plan	13,425,908	0	12,952,552	473,356	261,929	20,294	453,062
Indonesia ODS phase-out plan	20,644,837	0	20,343,463	301,374	139,739	0	301,374
Iran (Islamic Republic of ) CFC phase-out plan	11,014,755	0	10,986,654	28,101	25,410	0	28,101
Kenya CFC phase-out plan	692,000	0	622,914	69,086	69,086		69,086
Lebanon CFC phase-out plan	2,091,420	0	2,085,164	6,256	5,005	0	6,256
Malaysia ODS phase-out plan	11,517,005	0	11,441,013	75,992	0	0	75,992
Mexico production CFC	31,849,437	0	31,804,171	45,266	45,000	45,266	0
Nigeria CFC phase-out plan	13,130,784	0	12,065,054	1,065,730	255,775	17,870	1,047,860



Agreements	Total funds approved	Funds returned	Funds disbursed as of December 2010	Balance	Estimated disbursement in 2011 as of December 2010	Funds obligated as of December 2010	Difference between balance and funds obligated
Pakistan CTC phase-out plan	2,745,665	-542	2,739,905	5,218	3,900	1,910	3,308
Republic of Moldova CFC phase-out plan	520,000	0	511,915	8,085	6,468	0	8,085
Serbia CFC phase-out plan	2,742,544	0	1,411,883	1,330,661	250,000	45,904	1,284,757
Syrian Arab Republic methyl bromide	1,084,139	-1,572	889,819	192,748	100,000	97,962	94,786
Thailand ODS phase-out plan	14,728,626	0	11,729,323	2,999,303	1,584,797	2,999,303	0
Trinidad and Tobago CFC phase-out plan	460,000	0	414,685	45,315	36,252	0	45,315
Turkey CFC phase-out plan	8,565,903	0	8,565,903	0	0	0	0
Venezuela (Bolivarian Republic of) CFC phase-out plan	6,112,189	0	5,238,735	873,454	520,000	508,769	364,685
Zimbabwe methyl bromide	3,724,970	0	3,724,970	0		0	0
<b>Grand total</b>	<b>480,505,820</b>	<b>-2,114</b>	<b>462,240,419</b>	<b>18,263,286</b>	<b>6,785,913</b>	<b>5,929,849</b>	<b>12,333,437</b>

Annex IX

TRAINING, CERTIFICATION, ENFORCEMENT OF IMPORT CONTROL, RECOVERY AND RECYCLING OPERATION

CP reporting section	Legislation	Country														Total reported	Yes	Per cent	
			Antigua and Barbuda	Argentina	Brazil	Burkina Faso	China	Costa Rica	Croatia	Democratic Republic of the Congo	India	Indonesia	Mexico	Republic of Moldova	Turkey				Venezuela (Bolivarian Republic of)
<b>1.4 Training and certification programmes</b>																			
<b>1.4.1 Training programmes</b>																			
1.4.1.1	Requiring training of customs officers	n.a.	No	No	Yes	Yes	No	No	Yes	n.a.	No	No	Yes	No	No	Yes	13	5	<b>38.5</b>
1.4.1.2	Requiring training of refrigeration service technicians	n.a.	No	Yes	Yes	Yes	No	Yes	Yes	n.a.	No	No	Yes	Yes	Yes	Yes	13	9	<b>69.2</b>
1.4.1.3	Requiring certification of refrigeration service technicians	n.a.	No	No	No	Yes	No	Yes	Yes	n.a.	Yes	No	Yes	Yes	n.a.	Yes	12	7	<b>58.3</b>
1.4.1.4	System for monitoring and evaluation of training programmes	n.a.	Yes	No	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	13	9	<b>69.2</b>
<b>1.4.2 Certification programmes</b>																			
1.4.2.1	Requiring training of customs officers	n.a.	n.a.	No	Yes	Yes	No	No	Yes	Yes	No	No	No	No	Yes	13	5	<b>38.5</b>	
1.4.2.2	Requiring training of refrigeration service technicians	n.a.	n.a.	No	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	13	9	<b>69.2</b>	
1.4.2.3	Requiring certification of refrigeration service technicians	n.a.	n.a.	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	13	9	<b>69.2</b>
1.4.2.4	System for monitoring and evaluation of training programmes	n.a.	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	14	11	<b>78.6</b>
<b>1.5 Recovery and recycling</b>																			
1.5.1	Mandatory recovery and recycling	n.a.	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	14	10	<b>71.4</b>
1.5.2	Monitoring system for reporting recovered and recycled ODS	n.a.	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	14	10	<b>71.4</b>
<b>2 Enforcement of imports control</b>																			
2.1	Registration of ODS importers	n.a.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	14	14	<b>100.0</b>
2.2	A shared database on import quotas and actual imports between customs and ozone office	n.a.	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	14	10	<b>71.4</b>
2.3	Number of instances of unauthorized ODS imports stopped	n.a.	0	0	0	n.a.	n.a.	n.a.	0	1	0	0	n.a.	1	8	2			
2.4	Estimated quantities (in metric tonnes) and origin (country) of unauthorized imports stopped	n.a.	0	0	0	n.a.	n.a.	n.a.	0	0	0	0	n.a.	1	8	1			
<b>Recovery and recycling operations</b>																			
																	<b>Total</b>		
	Recovered CFC 11	0	2.19	0.75	0	6.92	0	0	0	0	0	0.06	0	0	0	0	9.9		
	Recovered CFC 12	0	20.3	8.51	0	5.45	0.25	0	0	26	0	120	1.7	0	0.005	0	182.2		
	Recovered HCFC-22	0	38.5	46.3	0	0	0	1.2	0	0	0	39	0.36	0	78.9	0	204.3		
	No of recovery machines in operation	5	470	2,000	10	395	120	57	0	680	0	1,820	90	1,075	632	0	7,354.0		
	No of recovery machines not in operation	1	85	0	3	0	80	2	0	0	0	0	0	0	386	0	557.0		
	No of recycling machines in operation	0	8	366	2	950	7	8	0	18	0	0	6	27	114	0	1,506.0		
	No of recycling machines not in operation	2	1	114	2	0	3	1	0	0	0	0	0	0	6	0	129.0		
	No of CFC end-users converted/retrofitted	0	1	254	0	0	182	4	0	7	0	0	10	139	0	0	597.0		
	<b>Total number of recovery and recycling machines in operation</b>																<b>8,860.0</b>		
	<b>Total number of recovery and recycling machines not in operation</b>																<b>686.0</b>		9,546.0
	<b>Percentage of R&amp;R machines not in operation</b>																<b>7.18</b>		
	<b>Total ODS recovered MT</b>																<b>396.4</b>		
	<b>ODS recovered per one R&amp;R machine MT/unit</b>																<b>0.045</b>		

Annex X																		
INVOLVEMENT OF AGENCIES AND IMPLEMENTATION DELAY																		
MULTI-AGENCY INVOLVEMENT																		
Country	Agency	Number of agencies	MYA sector	MYA subsector	48 <sup>th</sup> meeting submission delay decision	49 <sup>th</sup> meeting submission delay decision	50 <sup>th</sup> meeting submission delay decision	51 <sup>st</sup> meeting submission delay decision	52 <sup>nd</sup> meeting submission delay decision	53 <sup>rd</sup> meeting submission delay decision	54 <sup>th</sup> meeting submission delay decision	55 <sup>th</sup> meeting submission delay decision	56 <sup>th</sup> meeting submission delay decision	57 <sup>th</sup> meeting submission delay decision	58 <sup>th</sup> meeting submission delay decision	59 <sup>th</sup> meeting submission delay decision	60 <sup>th</sup> meeting submission delay decision	
Argentina	UNIDO	2	CFC phase-out plan		Pending verification report													
Bahrain	UNDP/UNEP	2	CFC phase-out plan									Lack of anticipated completion of first tranche activities (UNDP). Delay in signing the MOU and transferring funds due to change in training institute (UNEP).	Activities for the completion of the first tranche were not completed due to the delay in hiring a consultant and the associated delay with finalizing the specifications for the equipment order (UNDP). Continued delay in signing the MOU and transferring funds for training institute (UNEP).	The agreement has been signed and implementation is underway with phase I due to be completed in the first week of March 2009. The submission date for the second tranche will be coordinated among the agencies involved based on progress in the first tranche. It will be submitted to either the 58th or 59th meeting. Reasons for delays given to previous meetings were that activities in the first tranche had not been completed due to the delay in hiring a consultant and the associated delay finalizing the specifications for the equipment order (UNDP). Implementation has been slow. Reasons for this given at previous meetings include the continued delay in signing the MOU and transferring funds for a training institute (UNEP).	Sufficient funds from approved tranches (UNDP). Replacement of the Training Institute (UNEP).			
Bangladesh	UNDP/UNEP	2	ODS phase-out plan		Government delayed in signature of project document (UNDP). Government delayed in signature of project document (UNEP).	To accommodate time required to complete performance verification of the previous year (UNDP). To accommodate time required to complete performance verification of the previous year (UNEP).	There were inconsistencies in the verification audit and the draft annual plan provided to the Bank that need to be resolved (2005). Signature of the project document is still delayed. The NOU has indicated that the project should be signed by end of September (2006) (UNDP). Signature of the project document is still delayed. The NOU has indicated that the project should be signed by end of September (2005). Government delayed signature of project document (2006) (UNEP).	Tranche request pending signature of project document. UNDP Country Office confirmed that the matter was presented to the Steering Committee Meeting at the Ministry of Environment and Forest, and the project document has been cleared by the Planning Commission and now awaiting the Advisor's (of the Caretaker Government) signature. After the Advisor's signature, the project document will go to the final step of the government clearance process. UNDP Country Office expects that the process will not take longer than one month (UNDP). Waiting for signature of the Lead Agency's project document (UNEP).	Late project document signature, the need for revision to the plan, and sufficient funds from the first tranche for 2007 (UNDP). Late project document signature, the need for revision to the plan, and sufficient funds from the first tranche for 2007 (UNEP).	Tranches for 2005 and 2006 were submitted without verification reports and the 2007 tranche is expected to be submitted with the 2008 tranche after approval of 2005 and 2006 tranches (UNDP). Tranches for 2005 and 2006 were submitted without verification reports and the 2007 tranche is expected to be submitted with the 2008 tranche after approval of 2005 and 2006 tranches (UNEP).	The verification of the 2006 consumption and revision of the Action Plan have not been completed (UNDP). The verification of the 2006 consumption and revision of the Action Plan have not been completed (UNEP).		Delay was due to lack of significant disbursement on the first tranche due to in part the fact that no supplier provided a bid for the retrofitting equipment in the plan (UNDP). Delay was due to lack of significant disbursement on the first tranche due to in part the fact that no supplier provided a bid for the retrofitting equipment in the plan (UNEP).					
Brazil	UNDP/Germany	2	CFC phase-out plan															
Burkina Faso	Canada/UNEP	2	CFC phase-out plan															
China	UNIDO/Italy	2	Domestic refrigeration															
Democratic Republic of the Congo	UNDP/UNEP	2	CFC phase-out plan						Project document has not been signed (UNDP). Political situation in the country (UNEP).	Slow progress in implementing current work plan (UNDP). Slow progress in implementing current work plan (UNEP).	The request for second tranche was not submitted as the deliverables on the first tranche were not sufficiently advanced in implementation (UNDP). The request for second tranche was not submitted as the deliverables on the first tranche were not sufficiently advanced in implementation (UNEP).		Verification report not completed (UNDP). Verification report not completed (UNEP).					Low disbursements (UNDP). Insufficient progress made with respect to the implementation of the approved tranche due to structural and administrative changes in the Ministry (UNEP).

Country	Agency	Number of agencies	MYA sector	MYA subsector	48 <sup>th</sup> meeting submission delay decision	49 <sup>th</sup> meeting submission delay decision	50 <sup>th</sup> meeting submission delay decision	51 <sup>st</sup> meeting submission delay decision	52 <sup>nd</sup> meeting submission delay decision	53 <sup>rd</sup> meeting submission delay decision	54 <sup>th</sup> meeting submission delay decision	55 <sup>th</sup> meeting submission delay decision	56 <sup>th</sup> meeting submission delay decision	57 <sup>th</sup> meeting submission delay decision	58 <sup>th</sup> meeting submission delay decision	59 <sup>th</sup> meeting submission delay decision	60 <sup>th</sup> meeting submission delay decision
Ecuador	IBRD/UNEP/UNIDO	3	CFC phase-out plan		Delays regarding the management audit (IBRD).												
India	UNDP	1	CFC phase-out plan	Foam													
India	UNDP/UNIDO	2	CFC phase-out plan	Refrigeration manufacturing													
India	UNDP/UNEP/Germany/Switzerland	4	CFC phase-out plan	Refrigeration servicing						Verification was inadequate (UNDP). Verification was							
Indonesia	IBRD/UNDP	2	ODS phase-out plan	Aerosol													
Indonesia	IBRD	1	ODS phase-out plan	Foam						Verification was inadequate.							
Indonesia	IBRD	1	ODS phase-out plan	MAC													
Indonesia	UNDP	1	ODS phase-out plan	Refrigeration manufacturing						Verification was inadequate.							
Indonesia	UNDP	1	ODS phase-out plan	Refrigeration servicing													
Indonesia	UNIDO	1	ODS phase-out plan	Solvent													
Iran (Islamic Republic of)	Germany	1	CFC phase-out plan	Foam, MAC training, management													
Iran (Islamic Republic of)	France	1	CFC phase-out plan	MAC R&R													
Iran (Islamic Republic of)	UNDP	1	CFC phase-out plan	Refrigeration manufacturing													
Iran (Islamic Republic of)	UNIDO	1	CFC phase-out plan	Refrigeration servicing/assembly/solvents			The verification audit could not be completed on time. Submitted to the 48th meeting but withdrawn at request of Secretariat.			To be provided by UNIDO.							
Iran (Islamic Republic of)	UNEP	1	CFC phase-out plan	Regulations													
Nigeria	UNDP/UNIDO	2	CFC phase-out plan							Verification was inadequate (UNDP).							
Republic of Moldova	UNDP/UNEP	2	CFC phase-out plan														
Serbia	UNIDO/Sweden	2	CFC phase-out plan								Ongoing government restructurings and new institutional settings and the fact that the first tranche was not sufficiently advance in implementation (UNIDO).	Ongoing government restructuring and absence of ozone officer (UNIDO).					Aerosol and foam projects not yet completed (UNIDO).

**INVOLVEMENT OF AGENCIES AND IMPLEMENTATION DELAY**

**SINGLE AGENCY INVOLVEMENT**

Country	Agency	MYA sector	MYA subsector	48 <sup>th</sup> meeting submission delay decision	49 <sup>th</sup> meeting submission delay decision	50 <sup>th</sup> meeting submission delay decision	51 <sup>st</sup> meeting submission delay decision	52 <sup>nd</sup> meeting submission delay decision	53 <sup>rd</sup> meeting submission delay decision	54 <sup>th</sup> meeting submission delay decision	55 <sup>th</sup> meeting submission delay decision	56 <sup>th</sup> meeting submission delay decision	57 <sup>th</sup> meeting submission delay decision	58 <sup>th</sup> meeting submission delay decision	59 <sup>th</sup> meeting submission delay decision	60 <sup>th</sup> meeting submission delay decision
Antigua and Barbuda	IBRD	CFC phase-out plan				Being transferred to UNIDO	The Grant Agreement is not yet in place.	Grant agreement has not been signed.	Awaiting signature of the grant agreement.	Grant agreement not signed.	Due to delays in signing of the grant agreement, terms and conditions of the agreement are being revisited by WB regional management.	Current delay due to the time elapsed since the approval, it was necessary to change the work plan. Implementation has begun with the funds approved in the first tranche and a verification audit is being conducted.	The grant agreement has been signed. However, due to the time elapsed since the approval of the agreement, the Bank indicated that it was necessary to change the work plan, begin implementation using the funds approved in the first tranche, and conduct a verification audit. The same reason for delay was given to previous meetings.	Due to the need to change the work plan, remaining funds from the first tranche, and the need to conduct a verification audit.	Due to non-advancement of funds for the Grant Agreement that funds on a reimbursement basis.	Funds not advance to NOU due to the financial crisis as per the reimbursement approach agreed in the signed grant agreement.
Bahamas	IBRD	CFC phase-out plan				The Grant Agreement is not in place										
Bosnia and Herzegovina	UNIDO	ODS phase-out plan				Government delayed signature of project document.	Lack of cooperation.									
China	IBRD	Foam				Milestone not achieved. Approval will be considered at the 51st meeting.										
China	IBRD	Halon														
China	IBRD	Production CFC														
China	UNIDO	Tobacco														
Costa Rica	UNDP	Methyl bromide					Delay in submission of 2004 tranche as a result of late start of sector plan, disbursement schedules need to be adjusted. 2004 tranche to be requested at 49th meeting of the Executive Committee and 2006 tranche to be requested at 55th meeting of the Executive Committee.				Slow progress in implementing current tranche.	Continued implementing the first tranche with the delay due to hiring a new project coordinator.				
Democratic People's Republic of Korea	UNIDO	CTC phase-out plan														
Ghana	UNDP	CFC phase-out plan														

Country	Agency	Number of agencies	MYA sector	MYA subsector	48 <sup>th</sup> meeting submission delay decision	49 <sup>th</sup> meeting submission delay decision	50 <sup>th</sup> meeting submission delay decision	51 <sup>st</sup> meeting submission delay decision	52 <sup>nd</sup> meeting submission delay decision	53 <sup>rd</sup> meeting submission delay decision	54 <sup>th</sup> meeting submission delay decision	55 <sup>th</sup> meeting submission delay decision	56 <sup>th</sup> meeting submission delay decision	57 <sup>th</sup> meeting submission delay decision	58 <sup>th</sup> meeting submission delay decision	59 <sup>th</sup> meeting submission delay decision	60 <sup>th</sup> meeting submission delay decision
Kenya	France		CFC phase-out plan				Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.	Submitted to the 48th meeting but withdrawn at request of Secretariat.
Mexico	UNIDO		Production CFC														
Pakistan	UNIDO		CTC phase-out plan				Verification was inadequate and there were compliance issues.	Waiting for incorporation of action plan that was recently approved by the Meeting of the Parties.	Verification report has not been completed.	Verification was inadequate.							
Syrian Arab Republic	UNIDO		Methyl bromide														
Thailand	IBRD		ODS phase-out plan												Not provided.	More time needed to plan activities for the final tranche.	
Trinidad and Tobago	UNDP		CFC phase-out plan														
Turkey	IBRD		CFC phase-out plan										To be provided.	The need to establish alternative working arrangements (now that the Turkey ODS umbrella project is closed) to ensure that the verification and reporting exercises can be carried out with the full support of all the parties. This is the same as the reason given to the last meeting. The tranche is expected to be submitted to the 58th meeting.	Due to slow level of implementation of existing tranche and lack of verification report	Due to lack of verification report.	Verification audits (2007 and 2008) not completed and annual programme incomplete.
Venezuela (Bolivarian Republic of)	UNIDO		CFC phase-out plan		Pending verification report		Previous tranche not released prior to the submission of the current request and verification report not received in time.				Due to possible transfer of activities from the World Bank to UNIDO, the Government of Bolivarian Republic of Venezuela has decided to postpone submission of the tranche.	Pending government decision on responsibility for the chiller component.	Incomplete verification report and potential compliance issue.				
Zimbabwe	UNIDO		Methyl bromide														

## Annex XI

## DATES OF INTRODUCTION OF LICENSING AND PERMITS SYSTEMS AND LEGISLATION BANNING IMPORT OF USED CFC REFRIGERATION EQUIPMENT

Country	MYA type	Date of MYA	Date of acceding Montreal Amendment (MA)	Date of introduction of licensing or permit system on import of ODS	Duration between MYA approval and introduction of licensing import system (years) ( 5-3)	Duration between acceding MA and introduction of licensing or permit import system (years) ( 5-4)	Date of introduction of legislation banning import of used CFC refrigeration equipment	Duration between MYA approval and introduction of legislation banning import of used CFC refrigeration equipment (years) ( 8-3)
Antigua Barbuda	TPMP	2004.12	2000.02.15	1999.01.10	-5	-1	2010.01.01	6
Argentina	NPP CFC	2004.04	2001.02.15	Date not known			Not adopted	
Bahamas	TPMP	2001.12	2005.03.16	2006.01.02	5	1	2006.01.01	5
Bahrain	TPMP	2006.11	2001.01.13	1999.01.01	-7	-2	1999.01.01	-7
Bangladesh	NPP CFC	2004.04	2001.07.27	2005.05.01	1	4	2005.01.05	1
Bosnia and Herzegovina	NPP ODS	2003.12	2003.08.11	2007.05.15	4	4	2007.01.07	4
Brazil	NPP CFC	2002.04	2004.06.30	Date not known			2000.09.14	-2
Burkina Faso	NPP CFC	2006.12	2002.11.11	1997.01.01 2006.01.01 (Permits)	0	4	2006.01.01	0
China	SPP CFC	2002.11	2010.05.19	2000.01.01	-2	-10	2007.01.01	5
Costa Rica	SPP MB	2001.12	2005.12.01	1992.01.01	-9	-7	Not adopted	
Croatia	TPMP	2003.04	2000.08.09	1999.01.30	-4	-1	1999.01.07	-4
Democratic People's Republic of Korea	SPP CTC	2003.12	2001.12.13	2000.01.02	-3	-1	2007.01.01.	4
Democratic Republic of the Congo	TPMP	2006.07	2001.10.19	2004.01.01	-2	3	2004.01.01	-2
Ecuador	NPP CFC	2003.12	2007.16.02	2004.05.27	1	-3	2003.08.04	0
Ghana	TPMP	2006.11	2005.08.08	1995.01.01	-11	-10	2010.01.01	4
India	SPP CFC	2004.04	2003.03.03	2000.07.19	-4	-3	2003.01.01	-1
Indonesia	SPP CFC	2002.11	2006.01.26	Date not known			Date not known	
Iran (Islamic Republic of)	NPP CFC	2003.12	2001.10.17	2003.05.17	0	2	2003.07.14	0
Kenya	NPP CFC	2004.12	2000.07.12	2007.05.31	3	7	2003.07.14	-1
Lebanon	NPP CFC	2004.04	2000.07.31	2003.01.01	-1	3	2005.06.30	1
Malaysia	NPP ODS	2001.12	2001.10.26	1999.01.01	-2	-2	2000.01.01	-1
Mexico	NPP Prod	2004.07	2006.07.28	2006.01.01	2	0	Not adopted	
Nigeria	NPP CFC	2002.11	2001.09.27	N.A.			Date not known	
Pakistan	SPP CTC	2003.12	2005.09.02	2000.01.08	-3	-5	Not adopted	
Republic of Moldova	TPMP	2007.07	2005.05.24	1998.01.01	-9	-7	2002.01.01	-5
Serbia	NPP CFC	2004.07	2005.03.22	1998.01.01	-6	-7	2004.01.01	0
Syrian Arab Republic	SPP MB	2001.07	1999.11.30	1999.01.01	-2	0	Date not known	
Thailand	NPP ODS	2001.12	2003.06.23	1989.01.12	-12	-14	1997.01.04	-4
Trinidad and Tobago	TPMP	2003.07	1999.06.10	1999.01.01	-4	0	2008.01.01	5
Turkey	NPP CFC	2001.12	2003.10.24	1993.01.01 License 1997.01.07 Permits	-4	-6	2000.01.01	-1
Venezuela (Bolivarian Republic of)	NPP CFC	2004.04	2002.05.13	2006. 03	2	4	n.a.	
Zimbabwe	TPMP		Not yet	Date not known				

**Annex XII**

**PRICES OF CFCs AND THEIR ALTERNATIVES (US \$/KG)**

<b>ODS</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
CFC-11	7.09	9.67	10.05	11.42	12.3	20.85
HCFC-141b			3.87	6.66	5	6.58
CFC-12	8.98	10.95	12.81	11.52	10.84	11.65
HFC-134a	12.21	13.16	12.44	11.37	12.52	17.23

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## **Annex XIII**

### **EXAMPLES OF INSTITUTIONAL SET UP IN THE IMPLEMENTATION OF MYAS**

#### **UNDP**

##### **Bangladesh's national phase-out plan (NPP)**

1. The Project Implementation and Monitoring Unit (PIMU) is in charge of the implementation of the NPP in Bangladesh. The budget of the PIMU (US \$365,000) is part of the overall NPP budget of US \$2,090,000. It includes salaries for a project coordinator and five support staff for seven years, the cost of an international consultant, travel and office equipment. UNDP submitted the project document for review by the Government of Bangladesh in August 2004. The Government review process took several years. One of the issues was that one department in the government did not agree with the staffing of the PIMU as stated in the project document. The project document was signed in March 2007 only. Recruitment of project staff was completed in July 2009. It was difficult to identify suitably qualified candidates for some of the positions in the PIMU which resulted in a lengthy recruitment process. The planned date of completion of NPP is September 2011. The actual duration of the operation of the PIMU had to be substantially changed as compared to the initial plan.

##### **National phase-out plan (NPP) in Brazil**

The NPP in Brazil established a PIMU to support the Government in implementing planned activities. In addition, the PIMU is of public awareness activities and of assisting the Government's ozone unit, PROZON. The PROZON is the Brazilian Government National Coordinating Committee for all activities related to Ozone Layer Protection and includes representatives of seven ministries. It is responsible for monitoring; preparing the annual work plans and progress reports for the implementation of the NPP, in accordance with Executive Committee's requirements; updating the consumption data in the end-user sector; preparing a revised strategy; and accounting for project expenditures. The proposed overall budget of the Brazilian NPP was US \$42.5 million, including the budget of PIMU of US \$2.7 million representing 6.3 per cent of the overall budget. The project document did not comprise any details on the number and qualification of PIMU staff and other costs justifying the budget. The Executive Committee approved a budget of US \$26.7 million. The budget and actual cost of PIMU as well as its staffing are not known.

#### **UNIDO**

##### **Argentina's national phase-out plan (NPP)**

In Argentina, the Government, assisted by UNIDO, carried out the overall project management. The Project Management Unit (PMU) managed the implementation of the phase-out plan in the refrigeration sector. The Government designated the PMU coordinator. The Ozone Office was responsible for tracking the promulgation and enforcement of policy and legislation. In addition, it assisted UNIDO with the preparation of annual implementation plans and progress report to the Committee. Teams of experts designated by provincial governments (environmental and industry departments), customs offices, education and training institutions and industries dealt with the management at the regional level. Similar implementation and management teams had been organized in Buenos Aires, Rosario, Mendoza, Mar del Plata as well as in their suburbs. The budget of the project management and technical support (MTS) component is US \$667,350, about 9 per cent of the total budget of the NPP. About 52 per cent of the cost of the MTS component accounts for fees of personnel in the central and regional coordination offices. The planned date for the completion of the NPP in Argentina is December 2011.



### **Terminal phase-out management plan (TPMP) in Croatia**

The Croatia TPMP project implemented by UNIDO shares some interesting lessons learned on the advantages and disadvantages of outsourcing the function of the PMU in the terminal CFC management plan. The disadvantages of outsourcing were reflected in the reluctance of the outsourced PMU to add new tasks to or change its work plan from the initial Terms of Reference. The advantage of the outsourced system was that the PMU was keen to finalize the planned activities in order to receive the corresponding payment; this meant that the planned activities were, to a large extent, timely executed.

### **The Democratic Peoples' Republic of Korea: CTC phase-out sector plan**

2. The implementation of the carbon tetrachloride (CTC) phase-out sector plan (the "Plan") in the Democratic People's Republic of Korea required a different approach. CTC was used as a solvent cleaning, process and fumigation agent. The Plan's objectives were to achieve complete, sustainable and cost-effective phase-out of CTC by 31 December 2007. The Plan implementation required a strong investment component. The overall management of the Plan was carried out by UNIDO, an agency with great experience in dealing with the respective technology. The Government provided the necessary assistance. The National Coordinating Committee for Environment (NCCE) is a leading coordinating body. NCCE is composed of representatives from various ministries including Ministry of the Land and Environment Protection, Ministry of Chemical Industry, the State Planning Committee, Academy of Sciences and so on. NCCE is chaired by the vice-minister of the Ministry of Foreign Affairs. The NOU was set up under NCCE in 1997. It has seven staff members involved in the daily administration and management for the implementation of the Montreal Protocol, data collection, regulatory actions, coordination, monitoring, and recommendations on the policy issues. The overall management of the Plan was carried out by UNIDO with the assistance of the Government. The local management team includes a coordinator from the Ozone Cell designated by the Government and representatives and experts from the implementing/executing ministries and the support infrastructure

3. The policy and management support component of the phase-out plan included the following activities: management and coordination of various government policy actions relative to each sub-sector; establishment of a policy development and enforcement programme; development and implementation of training, awareness and capacity-building activities for key government departments, legislators, decision-makers and other institutional stakeholders; preparation of the implementation plan including determining the sequence of enterprise participation in the projects; verification and certification of CTC phase-out in completed projects within the Plan through plant visits and performance auditing; and establishment and operation of a reporting system of use of substitutes by enterprises.

4. The budget of the policy and management support component included cost of personnel, communication, transport, and miscellaneous expenses amounting to US \$102,000 representing 2.9 per cent of the total SPP budget of US \$3.5 million. The Plan was completed in December 2010.

### **The World Bank**

#### **Terminal phase-out management plans (TPMPs) in Antigua and Barbuda and the Bahamas**

5. The World Bank's institutional arrangements had some difficulties in the implementation of two TPMPs in Antigua and Barbuda, and the Bahamas. The grant agreement for TPMP in Antigua and Barbuda had been discussed between the World Bank and the Government for 50 months. Eventually, the grant agreement was effective in February 2009, and was based on a streamlined implementation approach. The Government was required to advance payments. Reimbursement was approved once expenditures were audited. Due to the global financial crisis, the Government of Antigua and Barbuda had serious budget constraints which precluded providing advancements to the National Ozone Unit for

the implementation of planned phase-out activities. The World Bank undertook certain remedial actions. The implementation of the TPMP in Antigua and Barbuda experienced serious delays and spilled over to 2011. The planned date of TPMP completion is December 2011. It took 24 months to make effective the grant agreement in the Bahamas.

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**Annex XIV**

**LIST OF COUNTRIES TO BE VISITED DURING PHASE II OF THE EVALUATION**

1. Argentina
2. Bangladesh
3. Brazil
4. Burkina Faso
5. China
6. Costa Rica
7. India
8. Indonesia
9. Kenya
10. Moldova
11. Turkey

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## **Annex XV**

### **ISSUES FOR INVESTIGATION DURING PHASE II OF THE EVALUATION**

1. The second phase of the evaluation consists of ten case studies. Information collected during field visits and findings from the desk study will be included in a synthesis report for consideration by the Executive Committee.
2. Phase II of the evaluation will undertake a more detailed investigation at the field level. The key questions for this second phase will focus on MYA implementation and on sustainability of MYA results with regard to the implementation of HPMPs.
3. In addition, the desk study identified some specific issues that will be addressed during the field visits. Following are some of these issues:
  - (a) Cooperation and coordination among national and international institutions;
  - (b) Reasons that lead to discrepancies in estimated and actual ODS consumption in the starting year in some Article 5 countries;
  - (c) The availability and skills of trained technicians in Article 5 countries who could contribute to the achievement of HPMP objectives;
  - (d) The effectiveness of incentive schemes as a potential mechanism for HCFC phase-out under HPMPs;
  - (e) Issues related to the implementation and functioning of licensing and permit systems;
  - (f) The cooperation between customs and other agencies as well as existing enforcement and deterrence systems;
  - (g) Issues related to regulatory procedures for ODS data collection;
  - (h) Communication and awareness strategies that would facilitate timely HCFC phase-out.

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