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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Sixty-seventh Meeting  
Bangkok, Thailand, 16 – 20 July 2012

**REPORT OF THE SUB-GROUP ON THE PRODUCTION SECTOR**

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

## **Introduction**

1. The Production Sector Sub-group was reconstituted at the 66<sup>th</sup> meeting of the Executive Committee and, pursuant to sub-paragraph (j) of decision 66/54, met to continue its discussion of the HCFC production sector guidelines in the margins of the 67<sup>th</sup> meeting of the Executive Committee. The Sub-group also considered the final report on the technical audit of the HCFC production sector in China, as well as stage I of the China HCFC production phase-out management plan. It consisted of Argentina, Canada, Cuba, Finland, India, Japan, Jordan, the United Kingdom of Great Britain and Northern Ireland and the United States of America, with Canada acting as convenor. Representatives of UNDP, UNIDO, the World Bank and the consultant for the technical audit, Wakim Consulting, were also present as observers.

### **Agenda item 1: Adoption of the Agenda**

2. The Sub-group adopted the agenda (UNEP/OzL.Pro/ExCom/67/SGP/1) as contained in Annex I.

### **Agenda item 2: Organization of work**

3. The Meeting agreed to address the agenda as adopted.

### **Agenda item 3: Final report on the technical audit of the HCFC production sector in China**

4. The Convenor called on the representatives of the consultant, Wakim Consulting, to present the final report of the technical audit of the HCFC production sector in China contained in document UNEP/OzL.Pro/ExCom/67/SGP/2, which consisted of three parts entitled: *Evaluation of audited Chinese HCFC plants and determination of residual life of each*; *Evaluation of audited plants and assessment of HCFCs supply and demand in China*; and *Evaluation of audited plants and assessment of HCFCs economics of production in China*, as well as presentation by the Consultant entitled *Assessment of selected HCFC plants in China*.

5. The Consultant reviewed the eight tasks he had undertaken and explained that six enterprises had been visited, all of which produced HCFC-22. Four of those plants also produced HCFC-142b, and one produced HCFC-141b as well. He said that taken together the HCFC production for the six enterprises accounted for around 70 per cent of the production of those chemicals for China and that the cost of raw materials for the production of HCFC-22 was the largest cost element in those production costs. By comparison with that labour, maintenance and capital-related costs were low. He said that while all the plants were profitable on a “cash cost” basis, only three of them were profitable on a “production cost” basis. A clarification of the types of derivatives by plant was requested and subsequently provided.

6. He also explained, with respect to the internal use of HCFCs by the enterprises, that although some small amounts were retained for other uses, consumption was generally for use in feedstock applications. He said that he had been asked to use the capacity of the enterprises as of 21 September 2007 as a cut-off date for his calculations. The Consultant was also asked why the data presented differed from the data that had been supplied by the enterprises. He explained that as data had come from a number of different sources it had been necessary to create a set of homogeneous data and that there might be certain discrepancies between the consolidated data and that provided by some of the sources. He also said that the sales price reported for 2010 had been used because the sales for 2011 had not been vetted. The Consultant had therefore used weighted sale prices for 2010 to make those calculations. Using 2010 data it appeared from the data being presented that some enterprises would have been run at a loss.

7. It was also pointed out that the other figures being used by the Consultant were taken from those reported for 2011. In relation to the Clean Development Mechanism of the Kyoto Protocol (CDM) it was pointed out that 65 per cent of the revenue generated under the CDM projects went to the CDM fund in China and that out, of the 35 per cent received by the enterprises, the incinerator and its operating costs had to be paid. There was also a tax on the revenue that was levied by the CDM.

8. The Consultant was asked whether the report captured the liabilities of the enterprises as well as the assets, and how the overall sales related to the profit and loss statements of the enterprises. He explained that only the chemical production units within the enterprises had been examined. The Consultant was also asked whether the prices for HCFC-22 were the same for both domestic and exported substances as well as the overall trend in the costs and it was explained that there was no difference in the domestic sale price between sale for feedstock applications or controlled uses, although a small difference in prices in the export market, as well as between companies, did exist. The Consultant further explained that the trend in prices over a five year period could be provided.

9. The Convenor asked the representatives of China, the Secretariat, the World Bank and the Consultant to meet informally to discuss how to reconcile views on data.

10. At a subsequent session of the Sub-group the representative of the Secretariat said that they had discussed those issues, that the correct Article 7 data had been supplied to the Consultant and that the Consultant would look at the vetting of the 2011 sales price data. The Ozone Secretariat had also been requested to supply data on exports to non-Article 5 countries. The Consultant was also asked to provide additional sales price data for the five years previous to 2010.

11. It was suggested that the Sub-group proceed to the next item on the agenda as several issues relating to data remained unresolved.

12. At a subsequent session the Sub-group noted that additional information would be provided as requested by some members of the Sub-group.

#### **Agenda item 4: China HCFC Production Sector phase-out management plan (stage I)**

13. In considering the agenda item the Sub-group had before it a report by the Secretariat on the China HCFC production sector phase-out management plan (stage I) (UNEP/OzL.Pro/ExCom/67/SGP/3, Corr.1 and Add.1). The representative of the Secretariat explained that the addendum to the document contained a proposed presentation by China and the World Bank as well as the model used for the calculation of incremental costs.

14. The Convenor asked the representatives of China and the World Bank to make a presentation on the incremental costs for the HCFC production sector phase-out management plan (HPPMP) for China.

15. After the presentation, the representative of the World Bank confirmed that taxes had not been included in the calculations; they were considered as a transfer payment toward development of the country. The total reported revenues had included all sales for both feedstock and controlled.

16. In response to questions about costs, the representative of the World Bank explained that labour, energy use and feedstock required to produce HCFCs had been treated as variable costs, while the physical plant and insurance had been treated as fixed costs. That data had been randomly checked by verifying one or two months of data for each enterprise against the information provided in the questionnaires.

17. In response to a question as to how activities at the corporate level, such as advertising, had been accounted for, the representative of the World Bank explained that “sales costs” had been allocated as part of fixed costs. He was requested to provide the Sub-group with both the profit and loss statements, and the balance sheets of the enterprises for two to three years in order for it to have a better understanding of the activities of the enterprises.

18. At a subsequent session of the Sub-group, the representative of the Secretariat made a presentation on the report contained in document UNEP/OzL.Pro/ExCom/67/SGP/3 and explained the different assumptions that had been used by the Consultant and the World Bank when presenting the HPPMP for China, as well as the different conclusions that they had reached. With respect to methodology for the calculation of the incremental costs he explained that some of the calculations would be changed as a result of the revised information that had been supplied to the Secretariat. He said that it appeared that differences in the cut-off date produced no differences between the two models.

19. With respect to data the representative of the Secretariat explained that the data used in the report had been provided by the previous consultant. He also said that although the World Bank had indicated that it would provide a technical review of the HPPMP by a production sector expert the Secretariat had not yet received that review.

20. In response to a question about the estimation of foreign ownership, and whether it had been aggregated, the representative of the Secretariat explained that both the different chemicals and the total phase-out had been included in the calculation of foreign ownership. There was also a discussion about the definition of foreign ownership.

21. An explanation was also requested as to why the cut-off date did not appear to produce a difference between the models. The representative of the Secretariat said that in the case of the Consultant it had been assumed that there was no growth while in the case of World Bank’s model the cut-off date had been included to limit growth to plant production capacity, but that growth had been stopped at 2015 levels before full capacity was reached.

22. The representative of the Secretariat explained that a discount rate of 5 per cent had been recently set nationally by the Government of China, and agreed that while information on the remaining life for each production facility or production line was desirable, neither consultant had provided that information; it would have required another technical audit to produce that data. There was also discussion of the ways to measure the remaining lifetime of the production facilities.

23. With respect to feedstock it was suggested that additional information was required on the effect of shifting production to feedstock on the proposed compensation for lost profits. The World Bank was requested to provide a spread-sheet that laid out the EBIDT data, as well as the profit and loss statements and the balance sheets.

24. It was also pointed out that because of the consumption sector projects approved by the Executive Committee a reduction in demand for HCFCs could be expected. Consequently China might be able to meet its obligations under the Montreal Protocol simply through that lost demand and resultant loss of production. In response to a question about the effect of the CDM, the representative of the World Bank indicated that it had found no effect although that view was not agreed with by all members.

25. The representative of China said that the data in the HPPMP differed only slightly from that reported under Article 7. The Government of China was urged to use Article 7 data. Information was requested on the price of polytetrafluoroethylene (PTFE) and the effect of PTFE pricing on HCFC sale prices. More information was also requested on the effect on compensation of the possible closure of

production facilities, redirection of production for use as feedstock and the cost of possible conversion to HFC-32, HFC-1234yf and HFC-152a. The representative of the World Bank explained that such conversion was a high-cost option and was not foreseen during stage I of the HPPMP, although it was also pointed out that while that conversion had not been cost-effective so far it might become cost-effective in the future.

26. At a subsequent session the Secretariat was requested to lay out additional options on which to base total incremental costs on the technical review, as specified in paragraphs 61 and 62 of document UNEP/OzL.Pro/ExCom/67/SGP/3. The representative of China also indicated that it was prepared to discuss the revision of the schedule of payments for the project duration of the HPPMP and the representative of the World Bank said that the Bank would provide a revised agreement for the HPPMP that would include additional information on the agency fees and the administrative costs. The representative of China also made a presentation on the likely future trends in feedstock use.

27. The representative of the Secretariat explained that the outstanding information needs consisted of all those items that had been identified in document UNEP/OzL.Pro/ExCom/67/SGP/3 as pending, but clarified that no additional information would be required from the plants themselves. One member also said that he would provide a list of additional information needs to the Secretariat.

28. Another member pointed out that there still remained a number of unresolved issues, such as the choice of methodology, the basis of compensation, the costs required to meet the 10 per cent reduction, the need to look at the compensation for the less profitable plants for closure, and their monitoring as well as industrial rationalization and how to achieve that, redirection of production for use as feedstock, and the best way to calculate the lifetime of production facilities and the remaining funding available for the business plans during the triennium.

29. It was also pointed out that the Executive Committee had not adopted a methodology for the calculation of incremental costs for the production sector but that it had not prevented it from approving production sector projects in the past.

30. Another member agreed and questioned the EBDIT methodology and the use of growth in compensation calculations. He considered the methodology proposed by the consultant to be more appropriate. He also said that consideration should be given to developing a plan that included the closure of older and less efficient plants with limited remaining lifetime, as well as possible diversion from feedstock and conversion from HCFC production to production for HFC-32, HFC-1234yf and HFC-152a. In addition consideration should be given to what fraction of the compensation costs could be defrayed by growth in production for feedstock use.

31. The Sub-group on the Production Sector recommended that the Executive Committee decides:

- (a) To request the Secretariat to undertake new analyses related to information needs identified during the meeting of the Sub-group on the Production Sector held in the margins of the 67<sup>th</sup> meeting of the Executive Committee for submission to the 68<sup>th</sup> meeting of the Executive Committee;
- (b) To further request the World Bank to provide for submission to the 68<sup>th</sup> meeting of the Executive Committee the outstanding information identified in document UNEP/OzL.Pro/ExCom/67/SGP/3;
- (c) To note the urgency and challenge facing the Government of China and its industry to meet the 2013 and 2015 Montreal Protocol HCFC control targets in the production sector;

- (d) To further note the intention of the Sub-Group on the Production Sector to hold intersessional consultations in the margins of and/or before or after the 24<sup>th</sup> Meeting of the Parties with a view to facilitating discussions at the 68<sup>th</sup> meeting; and
- (e) To confirm the Executive Committee's commitment to consider the HPPMP of China at its 68<sup>th</sup> meeting with the aim of reaching agreement on it.

**Agenda item 5: HCFC production sector guidelines**

- 32. Owing to a lack of time, the HCFC production sector guidelines were not discussed.

**Agenda item 6: Other matters**

- 33. No other matters were raised.

**Agenda item 7: Adoption of the report**

- 34. The present report was prepared in consultation with the Convenor.

**Agenda item 8: Closure of the meeting**

- 35. The facilitator declared the meeting closed at 10.30 am on Friday, 20 July 2012.

**Annex I**

**Agenda of the meeting of the Production Sector Sub-group**

1. Adoption of the agenda.
2. Organization on work.
3. Final report on the technical audit of the HCFC production sector in China, presentation by the Consultant.
4. China HCFC production phase-out management plan (stage I).
5. HCFC production sector guidelines.
6. Other matters.
7. Adoption of the Agenda.
8. Closure of the meeting.

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