REPORT OF THE PRODUCTION SECTOR SUB-GROUP
1. The Production Sector Sub-group reconvened at the 59th Meeting of the Executive Committee. The Sub-group consisted of Australia, Plurinational State of Bolivia, China, Dominican Republic, Georgia, Germany, Japan, Namibia, Sweden and the United States of America. Representatives from UNDP, UNIDO and the World Bank were also present as observers. Ms. Annie Gabriel of Australia was the facilitator.

**Agenda item 1: Adoption of Agenda**

2. The Sub-group considered the draft agenda proposed by the Secretariat and agreed to add an agenda item based on the request of the 21st Meeting of the Parties decision on Essential Use Nominations to consider the review the CFC production sector agreements of China and India with a view to allowing production of pharmaceutical-grade CFCs to meet the authorized levels of production and consumption for essential use exemptions. A copy of the agenda is found in Annex I.

**Agenda item 2: Presentation by the Secretariat of the paper on an analysis of the technical feasibility of redirecting HCFC-22 production from controlled uses to feedstock uses**

3. The representative of the Secretariat indicated that analysis found that HCFC production facilities can be converted to produce at the quality level required for HCFC feedstock to be used for the production of tetrafluoroethylene (TFE) and polytetrafluoroethylene (PTFE). The costs are indicated at a range between 10 to 25 per cent of the initial plant investment. However, the analysis also indicates that it is unlikely that the facilities would convert to feedstock since there is a significant over capacity in the HCFC production facilities that currently produce feedstock that are also vertically integrated into the PTFE industry. With respect to the information concerning downstream users, the paper indicated that this information required detailed information about the producers that could be addressed in technical audits. Concerning the issue of sustaining the phase-out with feedstock production, the paper notes that countries have introduced national control systems for the phase-out of the controlled use of dual use substances like CTC and methyl bromide where annual verification reports confirmed the levels of feedstock use. The second part of the paper examines a way of moving the discussion forward and proposed recommendations that were addressed by the Committee.

**Agenda item 3: Discussion on key elements of the paper**

4. In response to a question why the study did not address downstream producers, the Secretariat stated that this would involve a detailed assessment of such facilities that was suggested to be part of the modification to the terms of reference (TOR) for a technical audit along with issues related to the impact of Clean Development Mechanism (CDM). The need for a revised TOR was emphasized and the Secretariat was asked to make its best efforts to submit a revised TOR for the Executive Committee’s approval as soon as possible.

5. On the issue of the technical analysis contained in the paper, the Secretariat provided clarification of the paper’s conclusion that it was unlikely that non-pharmaceutical-grade CFC producers would convert to produce pharmaceutical-grade CFCs due to capacity both in China and the rest of the world. A clarification of paragraph 3 of Annex II of the paper is annexed to this report as Annex II.
6. In response to a question regarding requests for technical audits outside China, the Secretariat noted that since the text of the existing agreements\(^1\) precludes any further projects for countries with swing plants and that all countries outside China only have swing plants, the Secretariat would not be in a position to conduct any technical audits for those countries until such time as the Executive Committee addresses the policy issue and decides otherwise.

7. Following the discussion of the key elements of the paper, the Sub-group addressed each recommendation in the paper.

**Agenda item 4: Items for discussion per decision 57/35**

8. At its 57\(^{th}\) Meeting, the Executive Committee agreed to request the Sub-group to address the issues contained in decision 57/35.

9. With respect to decision XIX/6 paragraph 15 of the 19\(^{th}\) Meeting of the Parties\(^2\) regarding the environmentally-safe substitutes and related technologies, a proposed recommendation by the Sub-group was considered by it. Members noted that this provision of decision XIX/6 related to both the consumption and production sectors.

10. HCFC-141b (0.5 ODP/kilogram) has a phase-out that is five times higher than HCFC-22 (0.1 ODP/kilogram). In line with decision XIX/6, paragraph 11(a)\(^3\), it was felt that consideration should be given to accelerating the closure of HCFC-141b production facilities. The issue was also addressed in agenda item 7(a) of the 59\(^{th}\) Meeting of the Executive Committee, Overview of issues identified during project review.

11. Concerning the issue of cut-off dates for funding new HCFC production facilities, it was agreed that the issue would be deferred until the Committee addressed it with respect to HCFC consumption.

12. The Sub-group also considered the issue of swing plants as required by decision 57/35. One member indicated that she needed to consult her legal department and that she would not be in a position to discuss the matter further at the present time but would prefer to continue this discussion of this matter at the next meeting.

**Agenda item 5: Work of the Sub-group on elements of a future decision with respect to the HCFC production sector**

13. The Sub-group was not able to address this agenda item at the present meeting due to time constraints.

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\(^1\) The agreements contain a close that states “that the funds being agreed in principle by the Executive Committee at its 40\(^{th}\) Meeting for complete closure of its CFC production capacity is the total funding that will be available to it to enable its full compliance with the CFC production phase-out requirements of the Montreal Protocol, and that no additional Multilateral Fund resources will be forthcoming for related activities including the development of infrastructure for the production of alternatives, the import of alternatives, or the eventual closure of any HCFC facilities that use existing CFC infrastructure.”

\(^2\) “In accelerating the HCFC phase-out, to agree that Parties are to take every practicable step consistent with Multilateral Fund programmes, to ensure that the best available and environmentally-safe substitutes and related technologies are transferred from Article 2 Parties to Article 5 Parties under fair and most favourable conditions.”

\(^3\) “The Executive Committee, when developing and applying funding criteria for projects and programmes, and taking into account paragraph 6, give priority to cost-effective projects and programmes which focus on, inter alia, Phasing-out first those HCFCs with higher ozone-depleting potential, taking into account national circumstances.”
Agenda item 6: Review of CFC production sector agreements of China and India

14. Several issues were identified that might need to be resolved with respect to the issue of reviewing the CFC production sector agreements of China and India to meet essential use needs of Article-5 countries including: the need to review the possibility that existing stockpiled pharmaceutical-grade CFCs are assessed for possible use; the need to consider the destruction of non-pharmaceutical-specification-grade CFC by-production and surplus CFCs that might be produced for the purpose; the need to verify quantities for additional production; the need to provide resources for implementing agencies; the possibility that legally allowable production in 2009 might meet the demand; as well as the specific wording in the agreements with respect to provisions related to exports and essential uses.

15. One member indicated that his delegation was not in a position to change the agreements for China and India at this meeting. Another member requested the report to reflect the fact that if the agreements were not modified at this meeting that India would have no choice but to continue its production of pharmaceutical-grade CFCs to meet the essential use requirements of Article 5 Parties due to the potential adverse impact on human health of a shortage of CFC-MDIs. In response a member noted that the export of stockpiled CFCs for essential uses was allowed under the Protocol as it had no impact on compliance with the control measures. Two members indicated that they had stockpiles of pharmaceutical-grade CFCs that might be available for export to assist Article 5 parties until the agreements were reviewed.

16. In response to a question concerning whether the CFC production sector agreement with Mexico had a prohibition with respect to export existing stockpiles, the Secretariat reviewed the agreement and indicated that there was no such provision.

17. In light of the extensive discussion on this issue, it was felt that the Executive Committee should note the relevant paragraphs of decision XXI/4 on essential use exemptions.

Recommendations

18. In light of the discussion above, the Production Sector Sub-group recommends that the Executive Committee considers:

(a) Noting that the Sub-group on the Production Sector had considered the “Analysis of the technical feasibility of redirecting HCFC-22 production from controlled uses to feedstock uses” prepared by the Fund Secretariat;

(b) Noting that impact on costs on downstream facilities as a result of possible conversion were not addressed in the analysis but could be addressed in the context of technical audits;

(c) Requesting eligible countries ready to phase out the production of HCFCs to submit a draft sector phase-out strategy (that should include an industrial rationalization strategy, as appropriate) and preliminary data of its HCFC plants using the forms adopted at the 19th Meeting of the Executive Committee (decision 19/36);

(d) Requesting eligible countries ready to proceed with the phase-out of HCFC production to submit a request for auditing of their HCFC plants;
(e) Requesting the Secretariat to modify the terms of reference for the technical audit adopted at the 32nd Meeting as appropriate to meet the audit needs of the production of HCFCs and present it to the Executive Committee for consideration as soon as possible but no later than the 61st Meeting;

(f) Acknowledging the importance of assuring the supply of pharmaceutical-grade CFCs for Parties with essential use exemptions in accordance with decision XXI/4;

(g) Requesting the Secretariat to report to the 60th Meeting on the terms and conditions under which the existing CFC production agreements with China and India and associated accelerated phase-out agreements might be modified taking into account the discussion at the Sub-group in accordance with decision XXI/4, paragraph 6;

(h) Deciding that the Sub-group on the Production Sector review decision XXI/4, paragraph 6 at its next meeting;

(i) Considering to give priority to phasing out HCFCs with larger ODP values first, taking into account national circumstances, and the requirements for parallel reductions in the consumption sector, within the Sub-group on the Production Sector, in parallel with the Committee’s consideration of other HCFC matters, consistent with decision XIX/6 of the 19th Meeting of the Parties;

(j) Deferring the issue of a cut-off date until the Executive Committee had addressed the issue with respect to HCFC consumption.

(k) Noting that the 21st Meeting of the Parties:

(i) Encouraged Parties with essential use exemptions in 2010 to consider sourcing required pharmaceutical-grade chlorofluorocarbons initially from stockpiles where they are available and accessible;

(ii) Encouraged Parties with stockpiles of pharmaceutical-grade chlorofluorocarbons potentially available for export to Parties with essential use exemptions in 2010 to notify the Ozone Secretariat of such quantities and a contact point by 31 December 2009;

(iii) Decided that the Parties listed with authorized essential use exemptions shall have full flexibility in sourcing the quantity of pharmaceutical-grade chlorofluorocarbons to the extent required for manufacturing of metered-dose inhalers, either from imports or from domestic producers or from existing stockpiles;

(l) Encouraging to take every practicable step consistent with Multilateral Fund programmes, to ensure that the best available and environmentally-safe substitutes and related technologies are transferred from Article 2 Parties to Article 5 Parties under fair and most favourable conditions

(m) Promoting substitutes, alternatives and practices in Multilateral Fund programmes to minimize other impacts on the environment, including on the climate, taking into account global-warming potential, energy use and other relevant factors whenever possible.
Annex I

AGENDA

1. Adoption of the agenda.

2. Presentation by the Secretariat of the paper on an analysis of the technical feasibility of redirecting HCFC-22 production from controlled uses to feedstock uses.

3. Discussion on key elements of the paper:
   (a) Issues with respect to the feasibility of redirecting HCFC-22 production to feedstock uses;
   (b) Sustaining HCFC phase-out redirected to feedstock production;
   (c) Costs for downstream facilities;
   (d) Recommendations from the paper:
       (i) Need for countries to submit draft sector phase-out strategies and data per
       (ii) Decision 19/36 for requesting technical audits;
       (iii) Need for submitting request for technical audits of HCFC plants;
       (iv) Need to modify terms of reference for the technical audits.

4. Items for discussion per decision 57/35:
   (a) Decision XIX/6 (paragraph 15) of the Nineteenth Meeting of the Parties;
   (b) HCFC-141b production;
   (c) Cut-off dates;
   (d) Swing plants.

5. Work of the Sub-group on elements of a future decision with respect to the HCFC production sector.

6. Review of CFC production sector agreements of China and India.

7. Closure.
Annex II

CLARIFICATION OF GLOBAL CAPACITY AND DEMAND FOR PTFE GRADE HCFC-22 FEEDSTOCK AND POLYTETRAFLUOROETHYLENE (PTFE)

1. In 2008, total HCFC-22 capacity in China was estimated to be 600,000 metric tonnes/year and at least 300,000 metric tonnes/year of that capacity was capable of producing feedstock for PTFE. Actual production of HCFC-22 in China in 2008 was 440,000 metric tonnes of which about 85,000 metric tonnes of HCFC-22 were used to produce approximately 41,500 metric tonnes of PTFE. By contrast global production of HCFC-22 in 2008 was about 800,000 metric tonnes of which 300,000 metric tonnes of HCFC-22 were used to produce some 140 metric tonnes of PTFE.

2. Global PTFE demand is projected to rise from the current 140,000 metric tonnes to 190,000 to 200,000 metric tonnes in 2016, and consumption of HCFC22 would accordingly rise to about 400,000 metric tonnes of HCFC-22 in 2016. Given that HCFC-22 capacity in China today is capable of producing HCFC-22 feedstock of sufficient quality to produce PTFE is at least 300,000 metric tonnes/year that could produce about 150,000 metric tonnes of PTFE, it is unlikely that Chinese HCFC-22 production for refrigeration would be converted for feedstock production.

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