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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-seventh Meeting
Montreal, 17-19 July 2002

STATUS REPORT ON LIQUID CARBON DIOXIDE (LCD) TECHNOLOGY AND GUIDELINES FOR LCD PROJECTS

1. The Executive Committee in its Decision 35/16 (a) decided:

To request the Secretariat, in consultation with the implementing agencies, to re-examine LCD technology and the guidelines for projects converting to the technology and to report on its findings to the 37th Meeting of the Executive Committee.

2. The following is the status report of the study undertaken in response to the request of the Executive Committee.

Instruments for Collection of Information on Approved Projects

3. In order to expedite the work on the study and ensure uniformity of information provided by the three implementing agencies and the bilateral agency involved in the implementation of LCD projects, the Secretariat reviewed and collated information on all the approved LCD projects except those approved in the China Polyurethane Foam Sector Plan to be implemented by the World Bank which were not available to it. It then prepared questionnaires in the form of spreadsheets which were distributed to the implementing agencies on 17 May 2002 to enable them to provide the status of implementation of their projects. The following table provides a summary of approvals of slabstock foam projects for conversion to LCD technology based on the review of data available at the Secretariat as of March 2002. The Executive Committee began approving LCD projects since the 22nd Meeting in May 1997. Since then 60 flexible slabstock foam (four of which have been closed) worth US \$30 million and 13 flexible moulded foam projects worth US \$3 million have been approved for conversion to LCD to phase out total CFC consumption of 5,943 ODP tonnes and 457 ODP tonnes, respectively. As of March 2002, 13% of the slabstock foam projects and 54% of the moulded foam projects had been reported as completed.

Summary of Flexible Slabstock Foam LCD Projects as of March 2002

	Total Funds Approved US \$	No. of Projects Approved	No. of Projects Completed	CFC Consumption ODP tonnes	CFC Consumption Phased out ODP tonnes
UNDP	7,535,952	15	3	1,377.1	368
UNIDO	8,876,396	18*	4	1,983.0	366
World Bank	11,243,274	19**	1	2,105.2	135.2
Germany	2,511,066	4	0	478.0	0
Total	30,166,688	56	8	5,943.3	869.2

* Excluding one closed project

** Excluding three closed projects

4. The information from the questionnaires was to be used by the consultant to be engaged to undertake the study. All the implementing agencies and the bilateral agency (GTZ) except the World Bank have responded and provided the required information. A reminder was sent to the World Bank on 2 June 2002 but as of this writing (21 June 2002) the Secretariat had not received the required information on the status of implementation of its LCD projects. Therefore, the consultant's reviews may not include the 19 projects approved for implementation by the World Bank.

Terms of Reference

5. The Secretariat prepared draft terms of reference for the study together with a proposed work plan and circulated to the implementing agencies on 30 April 2002 for their comments. There was general agreement with the Terms of Reference. However, the work plan which envisaged completion of the study in about two months (by mid-June) was considered to be too ambitious in view of the work of agencies and the Secretariat towards preparations for the 37th Executive Committee Meeting. There was, however, general agreement that the study be started.

6. The Secretariat undertook to engage a consultant to carry out the study to re-examine the guidelines. The consultant has so far undertaken the following activities:

- Visited facilities of the major suppliers of LCD technology, namely Cannon Viking Ltd. (U.K.), Hennecke GmbH (Germany) and Beamech Ltd. (U.K.) and carried out extensive discussion on various aspects of the technology and its transfer to foam manufacturers both in "developed" and "developing" countries.
- Visited and assisted in the production runs of five major foam companies in Europe (Germany and Italy) using the technologies offered by the three suppliers and had discussions on their application at these plants.
- Reviewed project documents of approved LCD projects as well as information so far provided by implementing agencies on the status of implementation of approved projects. Based on this background information a sample of enterprises will be selected for field visits in June/July 2002.

Remaining Activities

7. Two main activities are foreseen to be undertaken by the consultant. These are:
- Identification of implementation issues at plant level:
This will entail visits to selected companies with approved LCD projects in Article 5 countries to observe foam production and identify key implementation issues. The companies will be selected for convenience of location as well as representativeness (by agency and technology). Tentatively, visits are envisioned to take place at plants in Algeria, Cameroon, Iran, Morocco, Syria, Tunisia and Turkey.
 - Review of actual costs as well as the type of equipment provided in projects which have begun implementation. This requires cooperation of the implementing agencies in making available the relevant information for the consultant to assess the actual costs of equipment and technology provided and modality of project implementation by the various equipment and technology vendors.

Submission of Final Report

8. If the expected cooperation from the implementing agencies is received, the Secretariat expects that the final report of the study will be ready for submission to the 38th Meeting.

Observations

9. The Secretariat wishes to note that a study of this nature requires cooperation on all sides. The consultant commends the unqualified cooperation of the technology providers - Beamech Ltd., Cannon Viking (U.K.) and Hennecke Gmbh as well as foam producing companies in Europe, some of which belong to large multinational foam producing companies who have either invited him on their own accord or received and opened up their facilities and expertise to him. He expects similar cooperation from the implementing agencies and foam producing companies in Article 5 countries when the time comes to conduct similar exercise with them.

10. The Executive Committee may wish to draw the attention of the implementing agencies and the relevant National Ozone Units to this observation of the consultant.
