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Executive Committee of
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STUDY ON LOW PRESSURE VERSUS HIGH PRESSURE FOAMING MACHINES

Background

1. In Decision 18/10 (para (i)), the Executive Committee requested the implementing agencies to undertake a study of the feasibility of using low pressure foam dispensers with HCFC-141b formulations in rigid PU foam conversion. In Decision 19/7, the Executive Committee noted that two projects submitted to the 19th Meeting proposed the use of low-pressure machines and requested the implementing agencies to take this and related technological developments into account and, in consultation with the Fund Secretariat, to prepare a report on the subject for submission to the 20th Meeting.

2. In March 1996, the implementing agencies and the Fund Secretariat undertook a joint mission to evaluate evolving technologies for ODS-free conversion in the foam sector. The mission was planned around a technical conference and exhibition of foam manufacturers and equipment manufacturers and suppliers, which took place in the Netherlands. A joint report on that mission has been prepared.

Developments since the 19th Meeting

3. Following the 19th Meeting, the Fund Secretariat, in consultation with the implementing agencies, developed terms of reference for a study which would examine opportunities for the use of low-pressure machines in the full range of foam-blowing subsectors. A study commissioned by the Fund Secretariat has been undertaken by an expert consultant on the basis of the terms of reference.

4. Additionally, in August 1996, UNDP hosted a working group, which included relevant implementing agencies and industry representatives, to explore the results of combined agency operational experience in relation to foam processing equipment that could, or should be, recommended in the major foam subsectors.

Current Position

5. Technical issues such as foam density, polyol viscosity and relative production capacity before and after conversion are under discussion, and are influenced by rapid development of technology, especially in relation to the formulation of chemicals for the manufacturing of foam. No significant policy matters are evident at this stage. Rather, the product of the activities in progress will take the form of agreed modifications to the foam templates developed jointly by the implementing agencies and the Fund Secretariat.

6. Preliminary indications from the work done so far are that low pressure foam dispensers may not need to be replaced for production of:

- flexible slabstock polyurethane foam production using methylene chloride technology
- flexible moulded foam production using water blown technology under defined circumstances
- rigid polyurethane foam using continuous production, depending on the choice of the conversion technology
- rigid polyurethane foam for non-insulation applications, subject to examination of any possible shortfalls in capacity.

7. The Fund Secretariat and implementing agencies are continuing their examination of the technical issues involved to confirm the above, and to clarify the situation in regard to other foam production applications.

8. The preparation and review of projects will be undertaken on the basis of the guidance contained in the current templates for the foam sector, as amended by conclusions reached jointly by the implementing agencies and the Fund Secretariat based on the current studies now being undertaken.

Conclusions

9. There are indications that low pressure foam machines may continue to be used in certain non-CFC foam applications, sometimes with a need for modification or retrofitting. The Fund Secretariat and the implementing agencies are continuing to investigate the situation for other foam production applications. Projects will be formulated and reviewed on the basis of the templates and the latest information agreed between the implementing agencies and the Fund Secretariat. The Executive Committee will be advised if any policy issues arise and will be kept informed of developments as appropriate.