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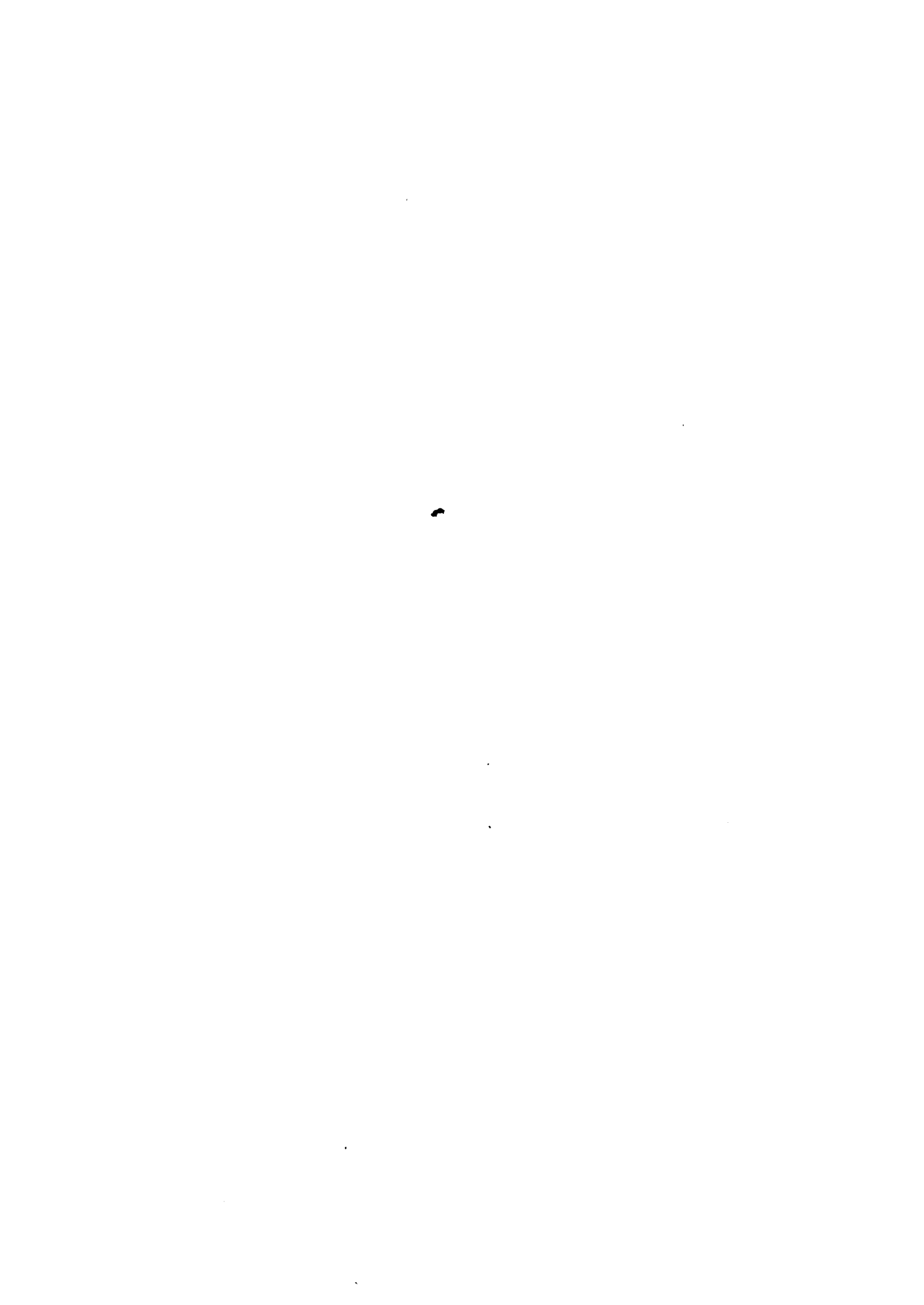
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**SEVENTH MEETING OF THE PARTIES TO
THE MONTREAL PROTOCOL ON SUBSTANCES
THAT DEplete THE OZONE LAYER**

Vienna, 5-7 December 1995

**AN INTERIM PROGRESS REPORT FROM THE EXECUTIVE COMMITTEE ON
TECHNOLOGY TRANSFER UNDER THE MULTILATERAL FUND**



EXECUTIVE SUMMARY

This report is prepared in response to a request by the Open-ended Working Group at its 12th Meeting in August 1995 (Report of the 12th Open-ended Working Group, UNEP/OzL.Pro/WG.1/12/4).

Section 1 of the report focuses on the current process under which transfer of technology is being effected under the Multilateral Fund and reports, item by item, those measures which have been implemented to date by the Fund to facilitate the transfer of technology under fair and most favourable conditions. As part of the process examination, Section 1 also addresses the likely existence of impediments in the transfer of technology and concludes that no impediments exist.

Section 2 discusses the efforts currently under way in the Multilateral Fund to further elaborate the issue of eligible incremental costs of transfer of technology, as negotiated by recipient enterprises, as per the request of the Open-ended Working Group, after a short discussion on the considerations underlying the elaboration on such an issue. The efforts currently under way include developing project templates on a sector basis and commissioning an Expert Group to examine the policy and strategic issues of the ODS/substitutes producing sector.

Introduction

1. At its Eleventh Meeting in Nairobi in April 1995, the ~~Open-ended~~ Working Group established a Sub-group to identify the priority issues in the Study on the Financial Mechanism of the Montreal Protocol, and requested it to report thereon to ~~the~~ OEWG at its Twelfth Meeting in Geneva.

2. The report of the Sub-Group to the Twelfth Meeting of the ~~the~~ OEWG recommended that the Executive Committee be requested:

“(a) To prepare an itemized progress report on measures ~~taken~~ so far, in the context of Article 10 of the Protocol, to establish a mechanism specifically for the transfer of technology and the technical know-how at fair and ~~most~~ favorable conditions necessary to phase-out ODS; and at the same time,

(b) To request UNEP to intensify ~~its~~ efforts to collect ~~information~~ from relevant sources, and to prepare an inventory and assessment of environmentally sound and economically viable technologies and know-how conducive to ~~the~~ phase-out of ODS. This inventory should also include an elaboration of terms ~~under~~ which transfers of such technologies and know-how could take place;

(c) To consider what steps can practicably be taken to ~~eliminate~~ any impediments in the international flow of technology;

(d) To further elaborate the issue of the eligible ~~incremental~~ costs of technology transfer, including costs of patents and designs and the ~~incremental~~ costs of royalties as negotiated by the recipient enterprises.

The action in subparagraphs (a), (b) and (c) should be ~~completed~~ by its Nineteenth Meeting and updated periodically, and the action in ~~sub~~paragraph (d) be taken immediately.”

3. The Twelfth Meeting decided that “The OEWG should request the Executive Committee to provide an interim progress report to the Parties at ~~their~~ 7th Meeting and a final report to the Parties at their 8th Meeting”.

4. This Progress Report is prepared in response to the above ~~mentioned~~ requests.

Structure of the Report

5. The Report is organized in two sections to address ~~sequentially~~ the three requests in sub-paragraphs (a), (c) and (d) of recommendation 21.

6. Section 1 addresses sub-paragraph (a) where the task is understood to be a process-oriented exercise to examine "measures taken so far, ... to establish a mechanism specifically for the transfer of technology and the technical know-how at fair and most favorable conditions necessary to phase out ODS". The review in this Section, therefore, focuses on the current process under which transfer of technology is being effected under the Multilateral Fund, and report, item by item, those measures which have been implemented to-date by the Fund to facilitate the transfer of technology under fair and most favourable conditions.

7. As part of the above process examination, Section 1 also addresses the issue of likely impediments in the implementation of transfer of technology under the Multilateral Fund, as per request in sub-paragraph (c) of Recommendation 21.

8. Section 2 addresses sub-paragraph (d), which requests "further elaboration on the issue of eligible incremental costs of transfer of technology as negotiated by recipient enterprises." This is done by a discussion of the efforts currently under way in the Multilateral Fund in this direction.

Section 1. Mechanism for the transfer of technology

Elements of Technology Transfer

9. The transition from a consumption and production pattern based on ozone-depleting substances (ODS) to a consumption and production pattern based on ozone-friendly technologies is basically a technological change. The transfer of technologies necessary to enable Article 5 countries in their compliance with the Montreal Protocol, would involve, *inter alia*:

- identification of needs;
- acquisition of patents;
- acquisition of designs;
- adaptation of technology for local assimilation;
- identification and procurement of appropriate equipment and materials;
- training of personnel; and
- technical assistance.

These elements are considered under the three categories of incremental costs adopted by the Parties in London in 1990, namely the incremental costs arising from the supply of substitutes, incremental costs arising from the use of substitutes in manufacturing as intermediate goods, and incremental costs arising from end use.

Process of Transfer of Technology under the Multilateral Fund

10. Article 10 of the Protocol established the financial mechanism with the Multilateral Fund as the main source of funding and entrusted the Executive Committee with the management responsibility of the Fund. This responsibility is circumscribed by the provisions of Article 10 and the decisions of the Parties elaborating these provisions. Furthermore, Article 10A enjoins each Party to ensure that the best available, environmentally safe substitutes and related technologies are expeditiously transferred to Parties operating under paragraph 1 of Article 5 and that such transfers occur under fair and most favourable conditions.

11. The Executive Committee has thus, through its decisions, endeavoured to establish a mechanism that would ensure transfer of technology and technical know-how in a fair and equitable manner under the most favourable conditions within the limits of resources available to it and at the same time catalyze the Parties individual responsibilities under Article 10A.

12. The following items indicate the measures that the Committee has taken so far in the context of Article 10 of the Protocol to facilitate the transfer of technology and technical know-how necessary to phase out ODS.

A. Technology Assessment

Through various measures including funding for activities such as country programme preparation in Article 5 countries, workshops, information dissemination, demonstration and organization of networks, the technical know-how for assessing suitable substitute technologies, identifying the sources of such technologies and most appropriate means of their transfer have been provided to Article 5 countries.

- Country programme preparation has provided a means of interaction between experts from Article 2 countries acting as consultants to implementing agencies with national experts, and led to transfer technical know-how for identifying the relevant sectors and the technologies needed to phase them out.
- Workshops organized at national, sub-regional and regional levels have provided very favourable opportunities for experts, specialists, technology suppliers, etc. from non-Article 5 countries to meet and discuss, review and/or impart knowledge on technologies and technological options for ODS phase-out to decision-makers, plant managers, technical experts and specialists from Article 5 countries.

- Information dissemination has been a major means of providing technical know-how to Article 5 countries. Funds provided for production and dissemination to all Article 5 countries of technical brochures, technology catalogues, technological case studies, regular newsletter and other media products, have provided these countries with free information on all aspects of the substitute technologies to facilitate informed choices of technological options.
- Funding for training, usually sector-related, at the national, regional or sub-regional levels have often provided technical know-how to national experts or operatives at plant level at no cost to the countries or the enterprises they represent.
- Demonstration projects organized in specific sectors have provided the means for plant managers and experts from specific Article 5 countries to cooperate to successfully transfer technology through the design and implementation of pilot or full scale projects.

B. Project Preparation Process

The process of project preparation, a measure under which considerable funding have been provided to Article 5 countries, provides a means for enterprises and governments, with assistance from external experts of the implementing agencies to select technologies appropriate to their needs. Through project preparation local knowledge and expertise is upgraded through constant interaction between external consultants and consultants engaged locally by the Fund or technical representatives of enterprises or through visits to plants in non-Article 5 countries. Peer review of project documents prepared ensures that the enterprise receives suitable technology under fair and favourable conditions, while Government clearance of such project proposals further ensures that technology transfer resulting from the implementation of the project meets local conditions or standards.

C. Project Approval and Implementation

Projects developed to be implemented in Article 5 countries as a means of transfer of technology to these countries have been evaluated against various criteria adopted by the Committee within the framework of the provisions of the Protocol and decisions of the Parties to ensure technological soundness, safety, fairness and cost-effectiveness. The Committee has continually streamlined this process of evaluation and approval as more experience is gained, to ensure expeditiousness in the transfer of funds to acquire the chosen technologies by Article 5 countries. The implementation of the approved projects involving installation of required equipment or modification of existing equipment and trials of the substitute technology and testing of new products

promotes collaboration with local experts and also provides training by technology suppliers and external consultants to ensure smooth and safe transition from the ODS-based technologies to the substitute technologies. Supervision by consultants of implementing agencies involving periodic visits during the learning curve to ascertain progress and/or reinforce earlier training further ensures safe transfer of such technologies.

Impediments to the Transfer of Technology under the Multilateral Fund

13. A process examination is done as part of this review exercise to identify any impediments which could have been encountered at the various stages of the transfer of technology as discussed in the preceding paragraphs. None has been reported by the implementing agencies and Article 5 countries. This is corroborated in the Study of the Financial Mechanism commissioned by the contracting Parties of the Montreal Protocol.

Section 2 Further Elaboration of Incremental Costs on the Transfer of Technology

14. The participatory approach espoused by the Fund in the transfer of technology has always enabled the enterprises of Article 5 countries to choose, with the advice of the implementing agencies, the technology preferred and negotiate the terms of their transfer, including such costs as patents, designs and royalties. While it is the prerogative of the enterprises to negotiate such terms, the results of such negotiations may not always be able to be accommodated by the funding policies of the Multilateral Fund.

15. Part of the task of managing the Multilateral Fund has been the development of operational policies and guidelines including those on the transfer of technology to reflect the concept of incremental cost. For the current exercise, it is deemed useful to discuss some of the considerations which have guided and will continue to guide the elaboration of the eligible incremental cost on the transfer of technology.

16. According to the Indicative List of Categories of Incremental Cost, the most cost-effective and efficient option should be chosen in the selection of ozone-friendly technology. Since the purpose of transfer of technology under the Fund is to move away from ODS-based technology, the ultimate criterion on eligibility would be a technical determination of what is essential for the conversion from ODS-based technology to ozone-friendly technology. Any intended upgrade either in terms of sophistication or in capacity would be the responsibility of the concerned enterprise.

17. Another important consideration in treating the transfers of technology negotiated by enterprises is the equity to be exercised under the Fund between similar projects from the same country or different countries.

Efforts currently under way on further elaboration of eligible incremental costs for the transfer of technology

18. Currently two initiatives are under way in the Multilateral Fund which may have an impact on the issue of incremental costs of the transfer of technology as negotiated by recipient enterprises.

19. The first initiative under way is the development of project templates for various sectors. A template is a model project which will include the necessary cost items and cost ranges for each item including those of the transfer of technology. These will be established on the technical requirements of conversion. These templates once ready will go a long way towards standardizing the costs of projects on a sub-sector basis and will enable the multilateral Fund to achieve greater international equity across projects and across countries.

20. The other initiative is an Expert Group commissioned by the Executive Committee to advise it on the strategic and policy issues on the phase-out in the ODS production sector and one of the key issues to be examined by this Expert Group is the elaboration of eligible incremental costs in the sector. The Expert Group had its first meeting in September 1995 and provided a series of recommendations to the Executive Committee and also identified issues for further examination.

Action taken by the Executive Committee

21. The Executive Committee has provided some guidance to the Fund Secretariat and, taking into consideration the additional guidance the Meeting of the Parties will be providing, the report will be finalized.

