

# TECHNOLOGICAL COOPERATION AND THE MONTREAL PROTOCOL MULTILATERAL FUND: A BRIEF DESCRIPTION

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## I. Background

In September 1987 the Montreal Protocol on Substances That Deplete the Ozone Layer was signed.<sup>1</sup> The Protocol provided for the partial phaseout of substances which deplete the ozone layer, the Earth's essential ultraviolet radiation filter. In June 1990, prompted by a growing awareness that a partial phaseout would not be adequate, the parties agreed to totally eliminate the most harmful ozone depleting substances.<sup>2</sup>

It was understood, however, that any regime to eliminate ozone depleting chemicals would pose particular problems for developing countries. For many of them, the costs of converting to the emerging substitute technologies would be prohibitive. Moreover, to undertake such costs seemed to many of them not to be equitable, since it was industrialized countries that were responsible for virtually all the emissions to date.

In response to these concerns and to encourage developing countries to sign the Protocol and participate in the phaseout, the parties established the Montreal Protocol Interim Multilateral Fund.<sup>3</sup> The \$160-240 million fund is to provide financial and technical assistance, including the transfer of relevant technologies, to eligible developing countries to enable them to comply with the control measures set out in the Protocol.<sup>4</sup>

According to the agreement reached at the Second Meeting of the Parties to the Montreal Protocol, in June 1990, the fund will:

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<sup>1</sup>Montreal Protocol on Substances That deplete the Ozone Layer, 16 Sept. 1987, 26 I.L.M. 1541.

<sup>2</sup>See Report of the Second Meeting of the Parties to the Montreal Protocol on Substances That Deplete the Ozone Layer, 27-29 June 1990, UNEP/OzL.Pro./2.3.

<sup>3</sup>The Montreal Protocol *Interim* Multilateral Fund will convert to the Montreal Protocol Multilateral Fund if and when the amendment to the Montreal Protocol, signed in London in June 1990, enters into force--at the earliest, 1 January 1992. See Amendment to the Montreal Protocol on Substances That Deplete the Ozone Layer, contained in Annex II, UNEP/OzL.Pro.2/3.

<sup>4</sup>Report of the Second Meeting of the Parties to the Montreal Protocol on Substances That Deplete the Ozone Layer, Decision II/8, UNEP/OzL.Pro./2.3 [hereinafter cited as Decision II/8]. To be eligible for financial assistance from the fund, a developing country must operate under Article 5, paragraph 1 of the Protocol. *Id.* A developing country so operating must keep its annual consumption of controlled substances below 0.3 kilograms per capita. Montreal Protocol, Art. 5, par. 1.

"(a) meet, on a grant or concessional basis as appropriate, and according to criteria to be decided upon by the parties, the agreed incremental costs [to parties operating under Article 5, paragraph 1 of complying with the Protocol];

(b) finance clearinghouse functions to:

(i) assist parties operating under paragraph 1 of Article 5, through country specific studies and other technical co-operation, to identify their needs for co-operation;

(ii) facilitate technical co-operation to meet those identified needs;

(iii) distribute, as provided for in Article 9, information and relevant materials, and hold workshops, training sessions, and other related activities, for the benefit of parties that are developing countries; and

(iv) facilitate and monitor other multilateral, regional and bilateral co-operation available to parties that are developing countries;

(c) finance secretarial services of the Multilateral Fund and related support costs."<sup>5</sup>

Although the Multilateral Fund is one of the component funds of the Global Environmental Facility (GEF),<sup>6</sup> it operates in many respects as an independent entity, with its own administrative structure, terms of reference, work programs, guidelines, and so on.

## II. Organizational Structure

The fund is administered by an Executive Committee and staffed by the fund Secretariat. The Executive Committee is to "discharge its tasks and responsibilities...with the cooperation and assistance of the International Bank for Reconstruction and Development (World Bank), the United Nations Environment Programme (UNEP), and the United Nations Development Programme (UNDP), or other appropriate agencies depending on their respective areas of expertise."<sup>7</sup>

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<sup>5</sup>Decision II/8, *supra* note 4.

<sup>6</sup>See THE WORLD BANK, ESTABLISHMENT OF THE GLOBAL ENVIRONMENTAL FACILITY (February 1991). D. GOLDBERG, TECHNOLOGICAL COOPERATION AND THE GLOBAL ENVIRONMENTAL FACILITY: A BRIEF DESCRIPTION. Note that in the context of the GEF the Multilateral Fund is referred to as the Ozone Projects Trust Fund.

<sup>7</sup>*Id.*

## A. Executive Committee

The Executive Committee was established by the parties "to develop and monitor the implementation of specific operational policies, guidelines and administrative arrangements, including the disbursements of resources for the purpose of achieving the objectives of the Multilateral Fund."<sup>8</sup> Its responsibilities include:

- developing a three-year plan and budget and allocating resources among the implementing agencies;
- supervising the administration of the fund;
- developing project eligibility criteria and guidelines;
- reviewing performance reports of implementation activities;
- monitoring and evaluating expenditures;
- considering all country programs and projects and approving projects with agreed incremental costs in excess of \$500,000;<sup>9</sup>
- reviewing disagreements concerning funding requests under \$500,000;
- assessing bilateral arrangements to determine compliance with eligibility criteria;
- reporting annually and making recommendations to the Meeting of the parties;
- nominating the Chief Officer of the fund Secretariat;
- performing all other functions assigned by the Meeting of the Parties.<sup>10</sup>

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<sup>8</sup>*Id.*

<sup>9</sup>Project proposals with agreed incremental costs of less than \$500,000 are to be approved by the implementing agencies within the context of approved work programs. Implementation Guidelines and Criteria for Project Selection, in UNEP/OzL.Pro/ExCom/3/18 at 31.

<sup>10</sup>Terms of Reference of the Executive Committee, par. 10, contained in Annex IV, UNEP/OzL./Pro.2/3 at 46.

## B. Secretariat

The fund Secretariat has no direct line responsibility. Rather, it functions as the staff of the Executive Committee. It assists in discharging the day-to-day functions of the Executive Committee, including *inter alia*:

- liaising with the parties, implementing agencies, and other institutions;
- developing the three-year plan and budget;
- monitoring and evaluating fund expenditures;
- assessing country programs and work programs developed by the implementing agencies and making recommendations to the Executive Committee;
- completing reports for the Executive Committee on projects over \$500,000;
- preparing implementation performance reports for review by the Executive Committee;
- serving as liaison between governments, implementing agencies, and the Executive Committee; and
- monitoring the activities of the implementing agencies.<sup>11</sup>

## C. The Implementing Agencies

**World Bank** - The World Bank will assist the Executive Committee in administering and managing the program to finance the agreed incremental costs. The administrator of this program is the President of the World Bank.<sup>12</sup>

**UNEP** - UNEP serves as the "treasurer" for the fund, receiving and administering all contributions, and disbursing funds to the fund Secretariat and implementing agencies. UNEP is also to assist in the political promotion of the objectives of the Protocol, as well as in research, data gathering, and the clearinghouse functions. The clearinghouse functions include:

- assisting countries, through country-specific studies, to identify their needs;

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<sup>11</sup>Draft Report of the Third Meeting of the Executive Committee of the Interim Multilateral Fund for the Implementation of the Montreal Protocol, 15-19 April 1991, UNEP/OzL./Pro./ExCom/3/18 at 25-27.

<sup>12</sup>Terms of Reference for the Interim Multilateral Fund, paragraph 15, contained in Annex IV, UNEP/OzL./Pro.2/3 at 50.

- facilitating technical cooperation to meet identified needs;
- distributing information and conducting workshops, training sessions, and other related activities for developing country parties;
- facilitating and monitoring all multilateral, regional, and bilateral assistance available to developing country parties.<sup>13</sup>

**UNDP** - UNDP will provide technical assistance, including conducting feasibility and preinvestment studies.<sup>14</sup>

**Other Agencies** - Other agencies, depending on their areas of expertise, will be invited by the Executive Committee to cooperate with and assist the Committee in carrying out its functions.<sup>15</sup>

### III. Multilateral Fund Financing

The fund is financed for the first three years of its operation with \$160 million (US) with another \$80 million to be added if other countries become parties to the Protocol.<sup>16</sup> Contributions to the fund are based on the UN scale of assessments, but countries can be credited up to 20% of their assessment for bilateral assistance.<sup>17</sup> In some cases, countries will be permitted to make their contributions in kind.<sup>18</sup> Multilateral Fund resources are to be independent of other World Bank funds allocated for ozone layer protection.<sup>19</sup> At its third meeting the Executive Committee allocated \$1 million to the World Bank and \$250,000 to UNDP to be used for "effective operational purposes and not for administrative and support activities."<sup>20</sup>

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<sup>13</sup>Implementation Guidelines and Criteria for Project Selection, *supra* note 8, at 27.

<sup>14</sup>*Id.*

<sup>15</sup>*Id.*

<sup>16</sup>Terms of Reference for the Interim Multilateral Fund, *supra* note 11, at 50. It is expected that if China and/or India become parties to the Protocol, approximately \$40 million will be added to the fund for each country.

<sup>17</sup>*Id.* at 51.

<sup>18</sup>*Id.* The Soviet Union has indicated its intention to provide some in-kind support, *see infra* note 34.

<sup>19</sup>Draft Report of the Third Meeting of the Executive Committee, *supra* note 10, at 10.

<sup>20</sup>*Id.* at 11.

## IV. Framework for Activities

### A. Country Programs

Article 5 countries seeking funding for projects must develop country programs, which require the approval of the Executive Committee. In developing their programs, countries may request technical assistance and other support from the implementing agencies.<sup>21</sup>

The Executive committee has set out a series of elements which should be contained in country programs. Countries which have already initiated or completed country studies can convert those studies to country programs by adding elements required by the Executive Committee and not included in the original study.<sup>22</sup> Individual projects prepared prior to completion of country programs can qualify for funding if they are consistent with project eligibility criteria (*see infra*).<sup>23</sup>

The following elements have been identified by the Executive Committee for inclusion in the country programs:

- review of recent production, imports, applications, and uses of controlled substances;
- description of the institutional framework governing controlled substances (government agencies, collaborating NGOs, industry associations, consumer groups);
- description of policy framework, regulatory and incentive systems;
- description of government and industry activities in response to the Protocol;
- strategy for implementing the Protocol;
- action plan including investment and technical assistance projects, pre-investment studies, and any necessary policy analysis;
- timetable for activities and review of action plan;
- budget and financing program for the above activities.<sup>24</sup>

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<sup>21</sup>Implementation Guidelines and Criteria for Project Selection, *supra* note 8, at 29-30.

<sup>22</sup>*Id.* at 29, n.1. Country studies have been submitted to the Executive Committee by Egypt and Thailand. Draft Report of the Third Meeting of the Executive Committee, *supra* note 10, at 12.

<sup>23</sup>Implementation Guidelines and Criteria for Project Selection, *supra* note 8, at 30.

<sup>24</sup>*Id.* at 29.

## B. Work Programs

To receive support from the Multilateral Fund, the implementing agencies and other "appropriate agencies" must develop work programs in cooperation with recipient countries. The Executive Committee will approve work programs annually and review implementation of work programs semi-annually.<sup>25</sup> Project proposals not included in an implementing agency work program may be submitted to the Secretariat to be transmitted to the appropriate implementing agency for inclusion in its next work program.<sup>26</sup> UNEP has indicated that, with respect to its work program, the services of the Industry and Environment Office in Paris would increasingly be used.<sup>27</sup>

Work programs must specify:

- types of activities on which agreement has been reached between Article 5 countries and implementing agencies;
- types of activities which must be further defined;
- means of coordination with other agencies;
- time frame for action;
- expected outcomes; and
- estimated budget.<sup>28</sup>

The implementing agencies submitted work programs to the Executive Committee at its third meeting. The Executive Committee asked the agencies to continue to develop the work programs, and then to integrate them into a single work program.

## C. Project Eligibility Criteria

Interim project eligibility criteria have been proposed by the Executive Committee. These proposed criteria will be clarified in the process of preparing country studies and during the project review and approval process. The project criteria will be reconsidered one year after their adoption. The proposed criteria are as follows:

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<sup>25</sup>*Id.* at 30.

<sup>26</sup>*Id.* at 31.

<sup>27</sup>Draft Report of the Third Meeting of the Executive Committee, *supra* note 10, at 10.

<sup>28</sup>Implementation Guidelines and Criteria for Project Selection, *supra* note 8, at 30.

- Only countries operating under Article 5 and in compliance with the Protocol are eligible for financial and technical assistance from the fund. Such assistance may only be used to facilitate compliance with Articles 2A to 2E (control measures) and to finance resulting incremental costs;<sup>29</sup>
- All projects must be approved by the requesting party's government;
- Financial assistance is available for categories of agreed incremental costs;<sup>30</sup>
- In addition to capital investment projects, technical assistance projects and clearinghouse projects--and possibly other types of projects--are eligible for funding;
- projects must be cost-effective and based on environmentally sound alternative technologies and substances, taking into account the national industrial strategy of the recipient country.<sup>31</sup>

#### D. Project Priority Guidelines

The following guidelines were set by the Executive Committee for determining the priority to be given to eligible projects:

- cost-effectiveness and efficiency in reducing emission of controlled substances;
- breadth of project's geographic balance;
- ease of replication and technology transfer to other Article 5 countries;
- quantity and speed of reductions of controlled substances.<sup>32</sup>

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<sup>29</sup>*Id.*

<sup>30</sup>Agreed incremental costs are set out in Annex IV of the Report of the Second Meeting of the Parties, *supra* note 2. (See Appendix for the *Indicative List of Categories of Incremental Costs.*)

<sup>31</sup>Implementation Guidelines and Criteria for Project Selection, *supra* note 8, at 32-33.

<sup>32</sup>*Id.* at 34.



## E. Grants, Loans, and In-Kind Support

All technical assistance and pre-investment activities must be provided in the form of grants or, in certain circumstances, in-kind support.<sup>33</sup> At the request of the recipient country, in-kind support can be provided in the form of expert personnel, technology, technical documentation and training.<sup>34</sup> Assistance for investment projects is generally to be provided as a grant, but may take the form of a highly concessional loan if the payback period is short (i.e. 1-2 years). The Executive Committee must approve any concessional financing.<sup>35</sup>

## V. Article 10A

Article 10A of the Montreal Protocol obligates parties to "take every practical step, consistent with the programs supported by the financial mechanism," to ensure that "the best available, environmentally safe substitutes and related technologies are expeditiously transferred" to Article 5 countries, and that these transfers take place under "fair and most favourable conditions."<sup>36</sup>

Implementation of the Protocol by developing countries operating under Article 5 depends upon the "effective implementation" of the Multilateral Fund and Article 10A.<sup>37</sup> The parties, if notified by an Article 5 country that it is unable to meet its obligations because of failure to implement Articles 10 or 10A, are to decide at their next meeting on "appropriate action to be taken."<sup>38</sup>

## VI. Assessment

A number of projects are being considered for funding, but as of mid-June, none has received approval. Therefore, it is hard to say exactly how successful technological cooperation will be under the Multilateral Fund. No doubt, the commitment to pay for

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<sup>33</sup>*Id.* at 35.

<sup>34</sup>*Id.* The Soviet Union has indicated its intention to provide in-kind support consisting of technical assistance with halon recycling. Personal communication with EPA staff; *see also* Report of the Second Meeting of the Executive Committee of the Multilateral Fund Under the Montreal Protocol, 17-19 December 1990, UNEP/OzL.Pro/ExCom/2/5/ at 5.

<sup>35</sup>Implementation Guidelines and Criteria for Project Selection, *supra* note 8, at 35.

<sup>36</sup>Amendment to the Montreal Protocol on Substances That Deplete the Ozone Layer, Article 10A, UNEP/OzL.Pro.2/3.

<sup>37</sup>Amendment to the Montreal Protocol on Substances That Deplete the Ozone Layer, Article 5, par. 5, UNEP/OzL.Pro.2/3.

<sup>38</sup>*Id.*, par. 6.

incremental costs will address some concerns of the developing countries, but other concerns are likely to remain.<sup>39</sup>

There may be dissatisfaction with the categories of incremental costs. While these include the cost of converting or replacing existing CFC production facilities, they do not include the added expense to brand new facilities of using the more expensive substitute technologies.<sup>40</sup> Also, "depreciation" may be deducted from the reimbursement due developing countries when old plants are retired or replaced with new ones.

Implementing the Protocol in developing countries may cost far more than the \$160-240 million committed for the first three years of the fund's operation. The many existing CFC production facilities in developing countries will have to be retooled or replaced. Products made with CFCs will have to be redesigned and their production facilities revamped. Workers and technicians will have to be trained to operate a whole new generation of equipment. These are all potentially very costly undertakings.

Companies developing substitute technologies have expressed a reluctance to license production facilities to developing countries, preferring instead to maintain control over production and sales.<sup>41</sup> As noted above, some companies fear their intellectual property rights will not be adequately protected. They may also prefer not to share what some think will be a smaller market for CFC substitutes.<sup>42</sup>

Access to the Multilateral Fund may also present problems. Industries seeking financial or technical assistance cannot apply directly to the fund, but must apply through their national governments. The lengthy project development and approval process may prove too much for companies with limited resources or small, hard to calculate incremental costs or with incremental costs spread out over long periods of time.

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<sup>39</sup>An indication of the potential for future problems arose in the very meeting in which the Fund was created, when DuPont expressed an interest in a joint venture to produce CFC substitutes with India but, over India's objection, insisted on maintaining control of the technology, citing its concern over India's record of intellectual property rights protection. MacKenzie, *Cheaper Alternatives for CFCs*, NEW SCIENTIST at 39, June 1990. DuPont later decided that India's market was too small to justify building a plant and abandoned the plan. *Id.*

<sup>40</sup>Indicative List of Categories of Incremental Costs, in Report of the Second Meeting of the Parties to the Montreal Protocol, Annex IV, UNEP/OzL.Pro./2.3 (see Appendix).

<sup>41</sup>At a recent conference to review the progress of technology transfer under the Protocol, the environmental manager of DuPont's fluorochemicals division said developing countries should "either buy from world-class plants or, if they want local manufacture, should have joint ventures." Pool, *A Global Experiment in Technology Transfer*, 351 NATURE 6 (1991).

<sup>42</sup>CFC replacements will probably not fill the entire market niche now occupied by CFCs. For instance, the electronics industry plans to replace CFCs with water based solvents in many of its cleaning processes.

The biggest disappointment with the fund, from the developing country perspective, may be its failure to provide technology on preferential terms or to address many of the traditional problems of technology transfer. The bargaining position of most developing country firms remains weak relative to transnational corporations and transfers may continue to be burdened by restrictive trade practices and hindered by concerns over intellectual property rights. To the extent these issues remain as impediments to technological cooperation and make it difficult for developing countries to meet their obligations under the Protocol, they run counter to the objectives of the Protocol and will interfere with its effective implementation.

