

# **SWAPPING DEBT FOR THE ENVIRONMENT: THE POLISH ECOFUND**

March 1998



## FOREWORD

### The EAP, OECD and Environmental Funds

The Environmental Action Program for Central and Eastern Europe (EAP) was endorsed by environment ministers of economies in transition and OECD countries at the 1993 “Environment for Europe” Conference in Lucerne, Switzerland. The EAP provides a three-pillared framework for improving environmental conditions in Central and Eastern Europe (CEE) and the New Independent States of the former Soviet Union (NIS) based on: policy reform, institutional strengthening and investments. The EAP stresses that scarce human and financial resources should be targeted on the most critical problems and used in a cost-effective manner. It also emphasizes that most financing for environmental protection will have to come from domestic sources.

A Task Force for the Implementation of the EAP, composed of senior government officials from CEE, NIS and OECD countries, was also established at the Lucerne Ministerial Conference. OECD, through its Centre for Co-operation with Non-Members, provides the Secretariat for the Task Force. Since its inception, the policy and institutional framework required to mobilize and channel domestic financial resources has been a priority theme for the Task Force. Environmental funds, in particular, have been a focus for the Task Force’s work. In 1995, OECD, in consultation with CEE/NIS officials, developed the “St. Petersburg Guidelines on Environmental Funds in the Transition to a Market Economy”. The Guidelines were subsequently endorsed by the Task Force. The role of environmental funds during the transition period was also high-lighted by the 1995 Environment for Europe Ministerial Conference in Sofia, where strengthening of the funds was identified as a high priority. Following the Sofia Conference, the EAP Task Force expanded its activities in the area of environmental financing and undertook a range of activities focused on improving the operations of environmental funds.

### Review of the Polish EcoFund

The Task Force, in cooperation with the European Union’s Phare Programme, reviewed the operations of the Polish EcoFund (Poland’s debt-for-environment swap fund). Using the *St. Petersburg Guidelines* as a benchmark, the review set out to examine EcoFund’s operations, identify institutional strengthening measures that could enhance the fund’s effectiveness and highlight lessons learned by the fund which could be helpful to other funds in the region. The functional objectives of the review were as follows:

- *Describe EcoFund’s activities* - summarize financial support provided by EcoFund through 1996, and characterize its mission, organizational structure, and operating procedures.
- *Assess EcoFund’s effectiveness as a tool of environmental policy* - its success in achieving its environmental objectives, its comparative advantage and unique contributions vis-à-vis other environmental policy instruments.
- *Evaluate EcoFund’s performance as a financial instrument* - the cost-effectiveness of the projects it supports, its ability to leverage its limited financial resources and its impact on the development of market-based financing mechanisms.

- *Examine EcoFund's effectiveness as a public institution* - its use of staff and administrative resources, its project cycle management procedures, objectivity, accountability and transparency of decision-making.
- *Review EcoFund's experience as a "debt-for-environment swap" mechanism* - develop lessons learned on the effectiveness and implications of this type of financial institution.

The principal audiences for the review report are the supervisory and management bodies of the EcoFund and officials of other institutions involved with financing environmental protection, particularly environmental funds, in Poland, elsewhere in the CEE and NIS regions and beyond.

## **Methodology and Acknowledgments**

The review of the Polish EcoFund involved three stages: preparatory activities, an appraisal mission, and drafting of the report. During the appraisal mission the review team spent one week in Warsaw, engaged in intensive interviews and discussions with EcoFund staff, Supervisory Council members, officials of cooperating institutions and EcoFund clients. The full cooperation of these parties is gratefully acknowledged. Following the appraisal mission the review team members drafted inputs for the review report, which were then compiled and edited by the OECD/EAP Task Force Secretariat in cooperation with the Phare Programme. A final draft of the document was reviewed by the EcoFund for factual accuracy, and the Fund's comments were taken into consideration in finalizing the text.

Members of the review team were: Glen Anderson (OECD/EAP Task Force Consultant), Patrick Francis and Brendan Gillespie (OECD/EAP Task Force Secretariat), Mike Betts, Arunas Kundrotas and Rob Wylie (EU Phare Consultants), and Janis Brunienieks (Observer from the Latvian Environmental Protection Fund). Additional support for the review was provided by local consultants: Barbara Letachowicz, Agata Miazga and Grzegorz Peszko. Helpful comments on the draft final report were provided by Tomasz Zylicz, Zsuzsa Lehoczki and Stanislaw Sitnicki. The final report was prepared by Patrick Francis, with guidance from Brendan Gillespie. The overall review process and the publication of the final report were co-sponsored by the EU Phare Programme and the OECD through its Centre for Cooperation with Non-Members.

The views expressed do not necessarily represent the opinions of the Member countries of the EU, the European Commission, the OECD and its Member countries, or the EAP Task Force. This report is published on the responsibility of the Secretary General of the OECD.

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## EXECUTIVE SUMMARY

### Origins, Goals and Results

The Polish “EcoFund” was established in 1992, following Poland’s debt relief agreement with the “Paris Club” of western creditor nations. Due to a timely initiative by the Polish Government, this agreement included an option for creditor countries to make bilateral agreements with Poland for the conversion of up to an additional 10% of debt for environmental protection purposes. Although other “debt-for-environment” swaps had been concluded elsewhere, EcoFund was the first fully-fledged institution established in Central and Eastern Europe for the purposes of managing debt-for-environment swap proceeds.

The US was the first country to contribute to EcoFund through the debt-swap option, followed by France, Switzerland and more recently, Sweden. Norway provided a grant to EcoFund at the end of 1997. Prior to the Fund’s creation Finland had also agreed to a debt-for-environment swap with Poland, but the resulting revenues are not managed by EcoFund.

Under current agreements, total *contributions to EcoFund* through year 2010 (when most of these agreements expire), will reach approximately USD 474 million, the highest value of debt-for-environment swap funds to be managed by any single institution. EcoFund’s 1996 revenues totalled about USD 31 million, and subsequent annual revenues from the existing debt-swap agreements are expected to average approximately USD 30 million. By the end of 1996 the Fund had approved 171 grants worth 109 million USD, and disbursed 61 million USD for the implementation of 164 projects.

The EcoFund is obliged by its statute to provide *grant support for projects* in Poland addressing: transboundary air pollution of sulphur and nitrogen oxides; pollution and eutrophication of the Baltic Sea; global climate change gases; biological diversity, and; waste management and the reclamation of contaminated soil. (This last priority sector was only recently adopted by the Fund and has not yet become operational.)

In 1996, just under two-thirds of EcoFund’s support was provided to public institutions; the remainder went largely to publicly-owned enterprises (30%), private enterprises (5%) and to NGOs (2%). From 1992-1996, the EcoFund approved grants among its priority environmental sectors as follows:

Priority Environmental Sector	# of Projects Approved	Value of Grants Approved (in millions of USD)
Transboundary air pollution	11	39.7 (36%)
Baltic Sea	26	27.8 (26%)
Climate change	74	28.5 (26%)
Biological diversity	60	13.2 (12%)

### Performance

EcoFund’s budget is relatively small in the context of overall environmental financing in Poland: its disposable resources in 1995 represented about 2.4% of Poland’s environmental investments for that year. Nevertheless, EcoFund has become an important

mechanism for financing environmental protection and is making an impact which extends beyond the size of its revenues and expenditures.

In particular, EcoFund provides additionality by:

- *financing environmental priorities insufficiently supported by other institutions, by focusing on nature protection, the transfer of innovative, environmental technologies, geographic regions of special interest and competitions for specific types of projects;*
- *providing a powerful leveraging effect on other finance sources; EcoFund has served as an effective “deal closer”, contributing to projects whose total costs represent over 10% of environmental investment expenditures in Poland from 1992-96.*
- *creating domestic environmental financing capacity; instilling financial discipline and improving project preparation skills among applicants;*
- *providing a model for the financing of cost-effective environmental projects through its use of least-cost criteria in project appraisal;*
- *promoting the development of the environmental goods and services industry in Poland and encouraging foreign investment in this sector;*
- *providing a benchmark for similar institutions in Poland, the region and beyond.*

Much of EcoFund’s additionality stems from *rigorous project cycle management procedures* based on: a strict framework of clearly defined environmental priorities and project eligibility criteria; clear requirements for, and strictly professional relations with, applicants; clearly defined appraisal criteria emphasizing environmental benefits and cost-effectiveness; disbursement of grants only upon completion of work, and; careful monitoring of projects to ensure proper use of funds and achievement of environmental effects.

EcoFund’s *close attention to achieving high benefit/cost ratios* should reassure the Polish Government and donors that the debt-for-environment swap has not resulted in the inefficiencies sometimes associated with earmarked programs. Moreover, the Fund’s *procurement policy benefits donor country and Polish firms* by limiting competitions for the provision of EcoFund financed environmental equipment to their participation. However, there is a trade-off between providing incentives to forgive debt for environmental purposes and efficiency and equity considerations linked to the exclusion of other Paris Club members (who have forgiven 50% of Poland’s debt) from EcoFund’s procurement competitions.

Several other factors are crucial to EcoFund’s effectiveness:

- *political independence;*
- *stable, predictable, long-term revenues;*
- *strong leadership and highly qualified staff;*
- *objective, accountable and transparent decision-making;*
- *competitive tendering procedures involving partial untying of donor aid.*

## **Lessons**

*Possibilities for replicating debt-for-environment swaps, particularly in other CEE/NIS countries, are limited.* To date, a Swiss/Bulgarian swap is the only other example in CEE/NIS. Debt-for-environment swaps depend on two key considerations: the willingness of a government to pursue debt reduction in general, and for environment in particular, taking

account of the potentially adverse implications for macro-economic policy and creditworthiness; and the willingness of donors to forgive debt, particularly for environmental purposes. From EcoFund's experience, factors which may influence donors' consideration of debt relief for environmental purposes include: opportunities for addressing regional or global environmental problems; business opportunities in the recipient country for the sale of environmental technologies; and an interest in supporting the development of local environmental financing capacity in the partner country.

*Replicating an EcoFund-type institution, using forms of financing other than debt-for-environment swaps, may be a more realistic option in many transition countries. New "environmental investment funds", depending initially on donor grants, have been established in Lithuania and Latvia. A Pollution Abatement Facility has been created in Russia, capitalised by a loan from the World Bank. EcoFund has also diversified its revenues beyond debt-conversion proceeds, as illustrated by Norway's recent decision to provide the Fund with a direct grant. The policies and procedures developed by EcoFund have already begun to serve as examples for some of these and other, similar institutions.*

## **Recommendations**

EcoFund has established itself as an important player on the Polish environmental financing scene, and a benchmark institution in CEE/NIS. However, the context in which it operates is changing: political and economic reforms are yielding positive results; market-based financing mechanisms for environmental investments are being more commonly used; and the use of subsidised finance is becoming harder to justify. EcoFund will need to review its strategy, so as to ensure that the high-quality capacities it has developed continue to provide added-value in areas where it enjoys a comparative advantage. Compliance with EU environmental standards or Activities Implemented Jointly under the Climate Change Convention, for example, could provide EcoFund with new opportunities to continue to help Poland meet domestic and international environmental goals.

As the EcoFund continues to evolve and refine its operations, it may wish to take into account the following suggestions:

- *to exploit more fully its comparative advantages* by further reducing support for projects which could be financed from other sources, and by concentrating its resources on nature protection and in geographical regions of special importance, and, in particular, by promoting the transfer of innovative environmental technologies;
- *to greater emphasize pollution prevention/cleaner production measures* so as to ensure that technology-based solutions are integrated into least-cost management strategies;
- *to continue strengthening its economic and financial appraisal of projects;*
- *to streamline its decision-making by delegating authority to the Management Board for the approval of small grants,* with appropriate provision for accountability;
- *to continue strengthening its outreach efforts,* by more effectively disseminating information about its activities and ensuring that appropriate explanations are provided to applicants whose proposals are rejected.
- *to improve its links with the private sector and commercial financial institutions* so as to facilitate their greater involvement in the financing of environmental investments;
- *to consider seeking ISO 9000 certification as a means to further enhance its operational procedures and quality assurance.*

## **CHAPTER 1 ORIGINS, KEY FEATURES AND ACTIVITIES OF THE ECOFUND**

### **1.1 Origins of the EcoFund**

During the 1970s the Polish Government borrowed approximately 18 billion USD from 16 foreign countries. As the country's centrally-planned economy encountered increasing difficulties in the 1980s, the loans (guaranteed by western governments), were not repaid, and by 1991 the debts mounted to over 32 billion USD. In the midst of an economic crisis, and facing enormous costs in rebuilding a post-communist society, the Government entered into negotiations with western creditor nations of the "Paris Club" for debt-relief.

In this same time period, the seriousness of environmental problems in Poland was becoming increasingly well-understood and widely publicized, both domestically and abroad. The amount of financial resources required to tackle the problems were recognized as being very considerable, and substantial efforts were undertaken to begin mobilizing Polish and foreign financing for the challenges at hand.

In early 1991, a consensus was emerging that debt-forgiveness from the Paris Club for Poland would reach 50% (provided the remainder would be repaid by 2010), and an additional 10% reduction would be possible based on agreements with individual creditors. In this context, a proposal was initiated by the then Polish Minister of Environmental Protection, Natural Resources and Forestry, and officially put forward by Poland's Prime Minister, for the additional 10% of debt reduction to be ear-marked to address environmental problems in Poland of international importance. A proposal to create a special fund, an "EcoFund", for managing the earmarked money was elaborated by the Polish Government and discussed with various creditor nations. In June 1991 the United States Government agreed to forgive an additional 10% of Poland's debt under the condition that the money be administered by the proposed new fund, thus paving the way for the Polish EcoFund to be established.

### **1.2 Key Features and Objectives of EcoFund**

#### *Legal Establishment and Contributing Donors*

The EcoFund was officially established by Poland's Ministry of Finance on April 6, 1992 as an independent, non-profit foundation. Following the US Government's commitment, the French Government agreed to have 1% of its Polish debt allocated to the EcoFund. Later, the Swiss Government agreed to allocate 10% of its Polish debt to the Fund. In 1997, Sweden agreed to convert 2% of Poland's debt for use by the Fund, and Norway agreed to provide a direct grant. Table 1 summarizes the revenues thus far committed to the EcoFund by participating countries.

Table 1. Donor country commitments to the Polish EcoFund as of October, 1997 (in million USD, based on exchange rates prevailing at the time of agreement).

Country	Date of Agreement	% of debt allocated to EcoFund	Amount accruing to EcoFund through 2010 (in million USD)
United States	1991	10	370.0
France	1993	1	48.0
Switzerland	1993	10	52.0
Sweden	1997	2	6.5
Norway	1997	n.a.	0.4
Total			473.9

Source: EcoFund (1997b, 1997d).

Poland concluded a separate “debt-for-environment” swap agreement with Finland (10% of the debt, totalling 14 million USD) in 1990, prior to the creation of EcoFund. This money is administered through a separate bilateral mechanism and not managed by the Fund.

### *Main Objectives*

As described in the EcoFund’s Statute, the objective of the Fund is to use the financial resources made available to it through the debt-for-environment swap agreements or other mechanisms to provide financial assistance, in the form of grants, to projects aimed at:

- preventing transboundary air pollution of sulphur and nitrogen oxides;
- reducing flows of polluting and eutrophying substances into the Baltic Sea;
- reducing the emission of gases causing global climate change;
- protecting biological diversity, and;
- promoting waste management and contaminated soil reclamation.

The first four priority sectors clearly indicate the intention of the EcoFund to focus on environmental problems of both Polish and international significance; issues which it was thought would be attractive to both Poland and donors. The fifth priority sector was added to the Statute in 1996, and is expected to become operational in 1998. The Fund’s Supervisory Council has also authorized the Management Board to consider providing co-financing for projects that protect the drinking water resources for Cracow, Katowice, and Wroclaw, three of Poland’s largest cities, located in the south of the country. While addressing environmental problems in these sectors, EcoFund also endeavors to:

- facilitate the transfer of innovative environmental technologies from the Fund’s donor countries into Poland and support the development of Polish industry in this sector;
- to provide “additionality”, that is, to support projects that would not otherwise be implemented or would be implemented only at a substantially later date, and;
- to support projects which maximize “cost-effectiveness” (achieve the greatest environmental benefit for the money spent).

## *Management Structure*

To achieve the objectives outlined above EcoFund's creators devised a management system and organizational structure which sought to balance the interests of the principal parties involved (i.e. Poland/creditor countries; Ministry of Environment/Ministry of Finance) and fulfill the imperatives of an institution which was to be environmental, financial and public in nature. The interests of the main stakeholders are represented on EcoFund's Supervisory Council, while its operational objectives and performance are the primary responsibility of the Fund's Management Board. The specific functions and compositions of these bodies are described in Box 1 below. (A full description can be found in EcoFund's Statute and other official Fund documents such as Bye-laws of the EcoFund Council Sessions and Bye-laws of the EcoFund Foundation Board of Management).

### **Box 1. The Management Structure of EcoFund**

The members of the Supervisory Council are appointed by the Founder (the Minister of Finance), except for the Chairperson, who is appointed by the Minister of Environment. The Council may consist of from seven to fifteen persons (there are currently 10), representing Polish national and local government authorities (including the Ministries of Environment and Finance), the Parliament, scientific and other organizations, and the Governments of countries which have agreed to contribute debt-conversion proceeds to the Ecofund. All members of the Council are appointed individually for a three year term. The Statute requires at least two Council meetings per year, however, in practice, the Council meets five to six times per year because of the large number of project proposals to be considered.

The *Council's* main responsibilities are to:

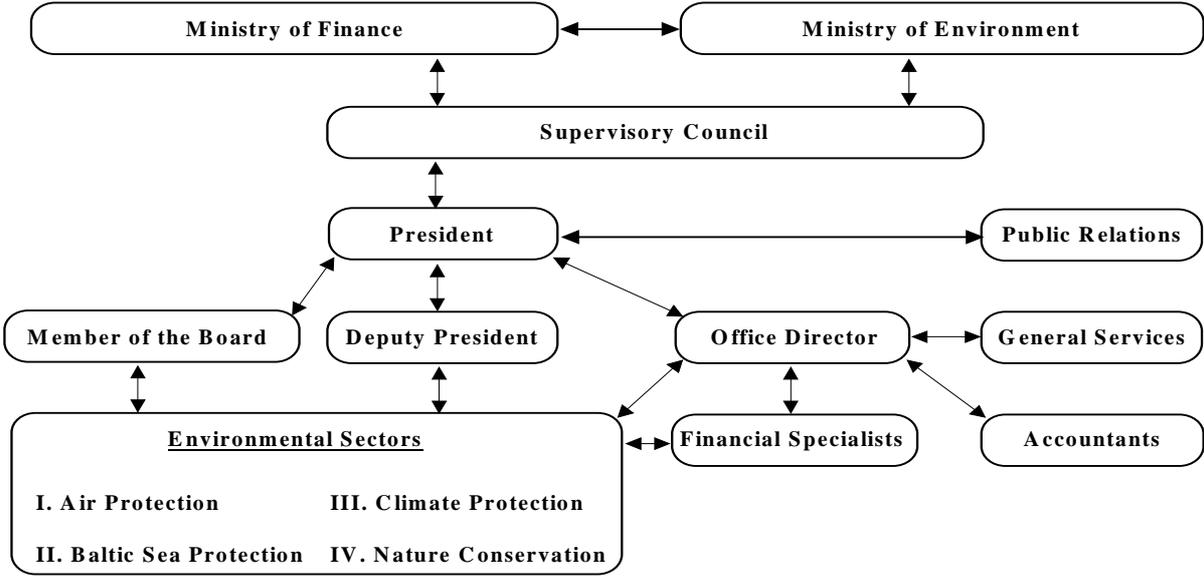
- define the Ecofund's general policies concerning, *inter alia*, program priorities, project selection criteria, eligibility and procedures for awarding grants;
- examine funding proposals put forward by the Management Board;
- make final decisions on awarding grants to projects proposed by the Board;
- approve project implementation and annual reports submitted by the Board;
- appoint or dismiss members of the Management Board, and;
- determine the duties, responsibilities and remuneration of the Board.

The *Management Board* is the executive body of the Ecofund and may consist of two to five persons (there are currently four, also appointed for three year terms). The Board is responsible for managing the daily activities of the Fund, including:

- project appraisal and initial project selection;
- preparation of project applications to be submitted to the Council for consideration;
- conclusion of grant agreements for projects approved by the Council;
- monitoring of expenditures on projects which are under implementation;
- insuring proper and timely completion of projects by grant recipients;
- preparation of annual reports and evaluation of completed projects, and;
- external/public relations.

The EcoFund office provides professional and technical support for the Fund's activities. Starting with five people in the autumn of 1992 (including members of the Board), the EcoFund now has a staff of 21 people. (An organizational diagram of the Ecofund is depicted in Figure 1.)

Figure 1. Organizational diagram of the Ecofund.



Source: EcoFund (1997b).

**1.3 Main Activities of the EcoFund**

*Revenues and Disbursements*

As shown in Table 2 and Figure 2, EcoFund’s revenues from debt-for-environment swaps and interest on the Fund’s bank accounts have steadily increased since 1992. Expenditures have also increased, though not at the same pace. The schedule for the debt-swap transfers are stipulated in the agreements between the Polish Government and creditor countries, thus the revenue flows to the Fund are stable and predictable, and will continue until the agreements are concluded in year 2010.

Table 2. Total revenues and expenditures of the EcoFund (in USD, current values based on annual average exchange rates, except 1992, which is based on the average fourth quarter exchange rate).

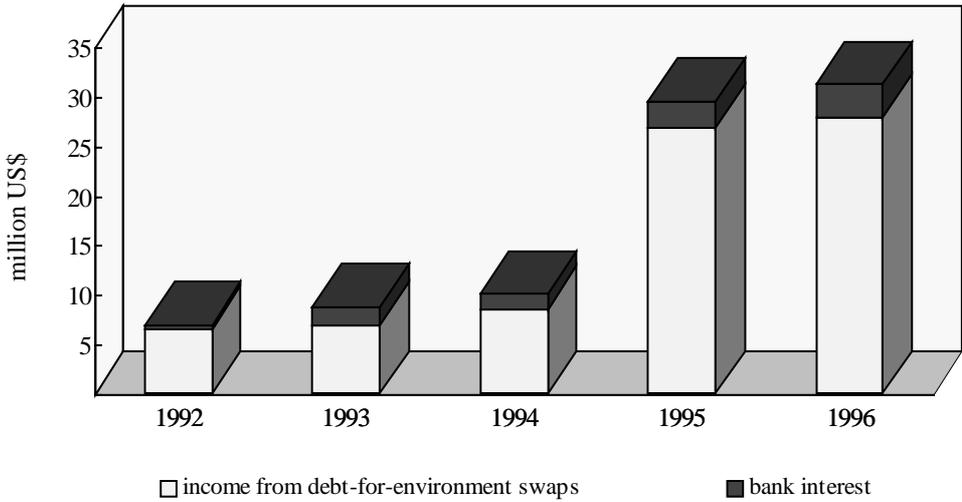
	1992	1993	1994	1995	1996
Total revenues	6 700 000	8 836 072	10 151 622	29 704 186	31 343 361
Total expenditures	60 000	4 896 008	15 351 085	21 092 019	22 413 242

Source: Calculations based on information provided by EcoFund and EcoFund’s Annual Reports 1993-96.

Figure 3 and Table 3 (on the following pages) summarize EcoFund’s grant awards from 1992-1996, broken down according to the Fund's priority environmental sectors.

The first two sectors - reduction of *transboundary air pollution* and protection of the *Baltic Sea* - feature a relatively small number of projects with relatively large amounts allocated to each. These projects usually involve large pollution abatement installations in the industrial and power sectors for the reduction of sulphur dioxide and nitrogen oxide emissions (sector I), and municipal wastewater treatment plants (sector II).

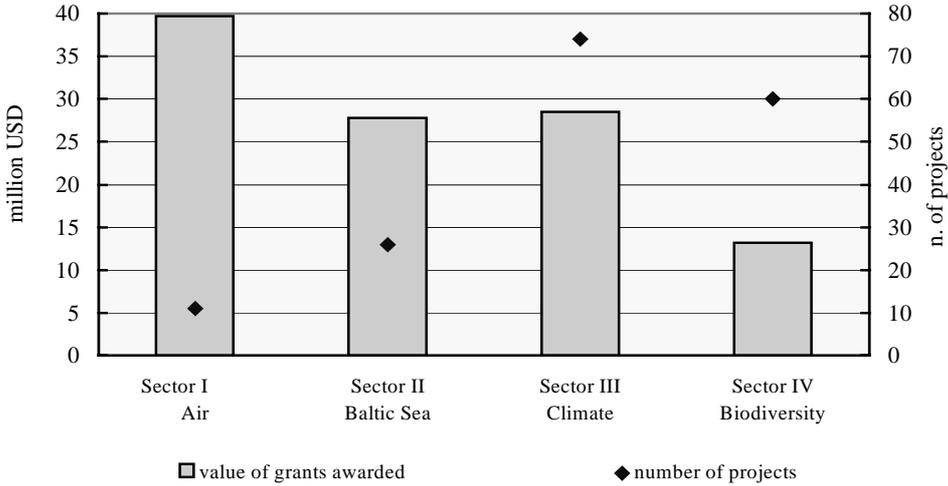
Figure 2. EcoFund revenues from 1992 through 1996 (in current values).



Source: EcoFund (1997a).

The average EcoFund grant size in sectors III and IV, *climate change* and *nature protection*, is much smaller than in sectors I and II. In sectors III and IV, the Fund supports numerous smaller initiatives, usually undertaken by local government authorities, public utility institutions, and non-governmental organisations dealing with energy saving and nature protection activities.

Figure 3. Value of EcoFund awards (in current USD) broken down by priority sectors, and the number of grants awarded from 1992 to 1996.



Source: EcoFund (1997a).

Lastly, Table 4 gives a breakdown of EcoFund’s overall expenditures according to investment projects, non-investment projects and the administrative costs of the Fund itself. The table reveals that for 1996 the proportions of the three types of expenses amounted to 96.4% for investment projects, 0.3% for non-investment projects and 3.3% for administrative costs.

Table 3. Projects approved, and grants awarded by the Polish EcoFund from 1992-1996, according to environmental sector. (Percentages may not add up to 100 due to rounding. Grant awards are reported in millions of USD, current values.)

	1992		1993		1994		1995		1996		Cumulative Totals	
<b>Priority Environmental Sectors</b>	# of projects approved	Value of grants awarded	# of projects	Value of grants awarded	# of projects	Value of grants awarded	# of projects	Value of grants awarded	# of projects	Value of grants awarded	# of projects approved (with % of total)	Value of grants awarded (with % of total)
Transboundary Air Pollution	0	0	2	5.0	2	13.9	5	8.9	2	11.9	11 (6.4)	39.7 (36.4)
Baltic Sea Protection	1	1.6	7	7.0	4	3.0	8	9.0	6	7.2	26 (15.2)	27.8 (25.5)
Climate Change	1	0.7	3	1.7	12	4.4	26	14.4	32	7.3	74 (43.3)	28.5 (26.1)
Nature Protection	3	0.5	8	2.1	17	1.2	12	5.7	20	3.7	60 (35.1)	13.2 (12.1)
<b>Annual Totals</b>	5	2.8	20	15.8	35	22.5	51	38.0	60	30.1	171 <sup>1</sup>	109.2 <sup>2</sup>

Notes: 1) Not all “approved” projects have been implemented. 2) Not all grants “awarded” have been disbursed.

Source: EcoFund Annual Reports 1993-1996.

Table 4. Fund expenditures broken down by investment projects, non-investment projects and administrative expenses. (USD, current values.)

	1993	1994	1995	1996
Investment projects	4 569 806	14 270 059	20 471 086	21 596 663
Non-investment <sup>1</sup> projects	36 998	38 907	56 278	72 206
Fund's overhead / administration costs	289 204	1 042 120	564 653	744 362
TOTAL expenditures	4 896 008	15 351 085	21 092 017	22 413 231

Notes: 1) “Non-investment projects” refer to certain elements of nature protection projects. 2) Administrative expenses in 1994 include the costs of purchasing and renovating the EcoFund’s office building.

Source: EcoFund (1997b).

## *Programming and Project Cycle Management*

The priorities and criteria upon which the Fund bases its decision-making are set out in *tri-annual strategy papers*, which are drafted by the Management Board and revised annually in consultation with the Supervisory Council. These strategies define major trends in the Fund's operations and guide the distribution of resources among the various sectors. The strategies outline, for example, targeted competitions to be held by the Fund and special regional programs. Though discussed with the Council, the strategies have the status of non-binding working documents, thus allowing for flexible planning by the Management Board.

EcoFund's project cycle follows the stages typically used by financing institutions: project identification, preparation, appraisal, selection, implementation, monitoring and evaluation. (A full description of EcoFund's project cycle management procedures can be found in Annex 1.) Certain key characteristics distinguish EcoFund's approach to project cycle management, including:

- a strict framework of priorities and project eligibility criteria;
- a pro-active approach to project identification, involving the use of special regional programs and competitions focused on specific types of projects;
- strictly professional relations with applicants during project preparation;
- a two-stage appraisal process for some types of projects allowing for the quick elimination of unqualified proposals;
- appraisal criteria favoring projects using environmental technology which is innovative on the Polish market, projects which represent "least-cost" solutions, and which yield significant environmental and human health benefits;
- thorough appraisal procedures for determining the environmental and cost-effectiveness of projects (including, since 1996, full financial analysis of applicants and projects);
- activation of awarded grants only upon proof from applicants that 100% of the financing needed for full project implementation has been secured;
- disbursement of grant support only upon proof of completed work, and;
- close monitoring of projects to ensure proper use of finances and achievement of environmental benefits

(A chart depicting EcoFund's project appraisal and selection process appears in Annex 1.)

## CHAPTER 2 ECOFUND AS A TOOL OF NATIONAL ENVIRONMENTAL POLICY

### 2.1 Context

45 years of central planning in Poland resulted in seriously degraded environmental conditions in many (though not all) parts of the country. In 1990-91, Poland's new government responded, formulating the first post-communist era National Environmental Policy (NEP) in Central and Eastern Europe. The policy, developed by the Ministry of Environment and approved by the Parliament in 1991 (just as the EcoFund was under formation), outlined a new approach to environmental protection, with sustainable development as its principal foundation. The policy also elaborates the organization of, and responsibilities for, environmental management at the national, regional, and local levels of government. Two of the major principles of sustainable development articulated in the NEP are an emphasis on *pollution prevention* and reliance on the *Polluter Pays Principle*.

The NEP also recognizes the importance of financing for environmental protection and cites environmental funds as a mechanism for supporting investments. It also acknowledges the need for international cooperation in solving Polish, European and global environmental problems and articulates Poland's commitment to cooperate with foreign partners under a number of international and bilateral agreements. The objectives of many of these agreements - protection of the Baltic Sea, reduction of long-range transboundary air pollution, elimination of ozone-depleting substances, wetlands protection, etc. - as well as more recently signed agreements concerning climate change, the reduction of sulphur emissions and protection of biodiversity, have also been adopted as objectives of the EcoFund. As a means for addressing such issues, the NEP refers to the mutually beneficial role which international cooperation can and should play in facilitating the transfer of environment-friendly technologies from western countries to Poland, an activity which also features prominently in the priorities of EcoFund.

There have been no major refinements to the NEP since 1991. The National Environmental Action Programme, prepared in 1995, assesses Poland's progress in achieving near-term priorities and elaborates a plan for implementing medium-term strategies by the year 2000. Estimates of the costs to implement medium-term strategies suggest the need to substantially expand the supply of capital for environmental investments. In addition, there has been increased emphasis placed on the approximation of Poland's environmental laws and regulations with those of the European Union in advance of Poland's accession. Compliance with EU environmental standards is likely to place an additional, and considerable, demand on environmental financing sources in Poland, potentially affecting the capacity and role of institutions such as the EcoFund.

### 2.2 Findings

- *EcoFund's objectives are clearly and closely linked to the NEP.* EcoFund's creation closely followed Parliament's adoption of the NEP, and was guided by the same Environment Ministry leadership that formulated the policy. The NEP is broad and inclusive in the identification of its priorities, which allowed the EcoFund to be selective in choosing its objectives and in defining its role vis-a-vis other mechanisms

for implementing the new environmental policy. Of EcoFund's four original priority sectors (transboundary air pollution, Baltic Sea protection, climate change, and biodiversity), all can be found as priorities in the NEP, and at the same time are also of international significance. Subsequent priority areas taken up by the Fund - improvement of drinking water quality in southern Poland's largest cities and waste management/soil reclamation - while not necessarily of great international interest, do conform with the priorities of the NEP. The EcoFund was authorized by its Supervisory Council to add these last two priority sectors to its portfolio principally because of the relative lack of progress made in these areas.

- *EcoFund strongly supports NEP provisions on international cooperation.* As noted, many of the projects EcoFund supports address environmental issues of international significance, and thereby contribute to Poland's ability to meet commitments under various international and regional treaties, conventions, and agreements. EcoFund's support for biodiversity, Baltic Sea protection, and climate change projects represents an important contribution to Poland's efforts to achieve international environmental priorities. One program supported by the Fund - the Green Lungs of Poland - has received international attention and praise for its efforts to protect the natural heritage of Northeastern Poland.
- *Projects supported by EcoFund yield significant environmental benefits.* Despite its relatively small size in financial terms, EcoFund support has contributed to the generation of significant environmental benefits. EcoFund achieves these benefits by vigorously screening projects against stringent environmental and cost criteria. It also requires each grant recipient to submit a final report to the Fund upon project completion, describing the environmental effects achieved and the actual costs of the project. Such discipline in the project selection and implementation process promotes effective use of public funds. A sample of the environmental benefits produced by projects in the air sector are shown in the table below.

Table 5. Selected environmental benefits from air protection projects supported by EcoFund from 1992-1996.

Type of Pollutant	Amount reduced (in thousands of tonnes)	Share of domestic emissions
CO <sub>2</sub>	1041.0	3%
SO <sub>2</sub>	90.9	3.5%
Dust	183.5	13.1%
NO <sub>x</sub>	4.7	0.4%
Methane	8.5	5.2%
CFCs (R11 and R12)	0.48	26.0% (of national consumption)

Source: EcoFund (1997d).

- *EcoFund supports environmental activities and regions which are insufficiently funded by other institutions.* A variety of sources, both within and outside the EcoFund, have estimated that around two-thirds of the projects financed by the Fund would not have been implemented without its support. The other major sources of public sector environmental financing in Poland – the National and 49 Provincial Environmental Funds – have tended to focus on those environmental problems which generate the fees and fines providing their revenues (sulphur and nitrogen oxide emissions and wastewater discharges). Issues such as *greenhouse gases, ozone depleting substances,*

*energy efficiency, and especially nature protection* have received relatively more attention from EcoFund than from other funds (although other funds often provide co-financing for projects supported by EcoFund). EcoFund has also given special attention to the *poorer regions of eastern Poland*, where the Provincial Funds are relatively small and there are inadequate financial resources to undertake many needed environmental projects.

- *EcoFund provides a mechanism for facilitating the transfer of modern environmental technology into Poland.* Through the debt-for-environment swap agreements, companies from EcoFund's partner countries (as well as Poland) can bid on tenders associated with EcoFund grants. In this manner, EcoFund has facilitated the transfer of modern environmental technologies (often innovative in the Polish context) from donor countries onto the Polish market. A number of projects supported by EcoFund have represented the first use of such technologies in the country, thus adding demonstration value to the projects. This comparative advantage of the Fund could be further exploited by increasing support for innovative technologies and by providing start-up capital for their development and launch on the Polish market.
- *EcoFund could magnify the impact of its resources by further concentrating on its comparative advantages.* EcoFund has been successful in carving out a niche for itself within the complex web of environmental policy tools in Poland. Some types of projects which the Fund supports, however, including many wastewater treatment plants and low-stack emission projects, have been identified by other financing institutions (i.e. the National and Provincial Funds) as high priorities, and are likely to be implemented in the near term, with or without EcoFund support. *The Fund should carefully consider how its involvement in such projects provides "value-added",* e.g. by reducing significant human health risks, promoting innovative technologies, protecting valuable ecosystems and/or ensuring high benefit/cost ratios. This could leave the Fund with more resources to focus on those projects with a stronger need for *its* support and where it has a clearer *advantage*.
- *EcoFund provides support predominately to public sector institutions.* In 1996, approximately two-thirds of EcoFund's support went to public institutions. In the same year enterprises received under one-third of EcoFund disbursements. Most of these enterprises were publicly-owned, while privately-owned enterprises received about 5% of total disbursements. Closer cooperation with the private sector could lead to more opportunities for EcoFund to support cost-effective cleaner production/pollution prevention measures and the transfer of innovative, environment-friendly technologies.
- *EcoFund could generate greater environmental benefits by providing additional support for projects featuring Pollution Prevention and Cleaner Production measures.* In some cases, pollution prevention/cleaner production measures, often based on management, process or input changes, are more environmentally and cost-effective than "end-of-pipe", technology-based alternatives. While continuing its valuable work in facilitating the transfer of innovative environmental technologies into Poland, *the Fund should consider integrating pollution prevention/cleaner production criteria more fully into its appraisal process.*

- *EcoFund's proactive approach to project identification improves the quality of its environmental investments.* A key feature of EcoFund's support for environmental policy is its proactive approach for identifying and stimulating environmental investments. This approach is realized primarily through its competitions, which target specific types of projects, and its geographically focused regional programs. The more focused nature of the competitions and regional programs also allows the Fund to achieve economies of scale, and to set more specific, and exacting standards for project eligibility, resulting in higher quality, better prepared proposals.
- *EcoFund's stable, predictable, long-term revenues create unique opportunities to support environmental policy.* The ability of EcoFund to establish its own niche by focusing its efforts in ways and areas that other environmental financing institutions in Poland have not, is largely made possible by the Fund's stable, predictable, long-term revenues from the bilateral debt-swaps. As these revenues do not originate from particular geographic regions or policy instruments addressing specific environmental issues within Poland, the EcoFund is not obliged to earmark its expenditures in the same manner as are other Polish environmental funds. The nature of EcoFund's revenues also allow it to engage in long-term planning and to support multi-year projects (as it has in the area of nature protection).

## CHAPTER 3 ECOFUND AS A FINANCIAL INSTRUMENT

### 3.1 Context

Having become operational in 1992, the EcoFund has evolved in the midst of Poland's economic and financial transformation. This transformation has included a decline in economic production and financial reserves, economic "shock therapy" with attendant austerity measures and, in recent years, steady, strong economic growth. Despite the recent progress, Poland's economy remains "in transition" and the financing conditions and mechanisms typical of more mature market economies are still emerging. (For example, loans from the commercial banking sector may come with interest rates of 22-25% and payback periods of 2-5 years, conditions which many potential environmental investors are not prepared or able to accept.) At the same time, many traditional sources of financing, particularly the State budget, have dwindled or disappeared entirely, while governments are having difficulties in raising new revenues.

Decentralization has created problems for local and regional authorities, as central governments have delegated "unfunded mandates" to them. These authorities are now responsible for maintaining and initiating major investments in public services, such as water and waste management, but often lack the skills and expertise necessary to finance such projects, and sometimes are unable to generate the needed financing because of legal restrictions. The new private sector has also faced severe constraints. The advent of privatization, "hard" budgets, price liberalization, increased domestic and international competition, and the high price of capital on the commercial markets has induced a strong preference for allocating money to investments which yield immediate profits (not typical of many environmental projects) and an aversion to projects involving net costs or only long-term profits (typical of many environmental projects). The budgets of many households are also under strain, especially as they are increasingly obliged to pay the full costs of many goods and services which were previously subsidized by the state, or were not provided at all.

Nevertheless, even while facing serious economic and financial constraints, Poland is recognized as having one of the most extensive environmental financing systems in the CEE region. Expenditures on environmental investments in Poland (excluding operation and maintenance costs) increased substantially from the late 1980s through the mid-1990s, (even while expenditures in many other sectors declined), eventually stabilizing at around 1.1% of GDP (See Table 6). These levels compare favorably with those of other OECD countries. The key sources of this financing are indicated in Table 7, which also shows that the sources have remained fairly stable in recent years in terms of percentage of financing provided.

Table 6. Environmental investment expenditures in Poland.

	1990	1991	1992	1993	1994	1995
Totals in million USD (current prices)	437	794	878	834	937	1 308
As a % of GDP (current prices)	0.7	1.0	1.0	1.0	1.0	1.1

Sources: Sleszynski (1996).

Table 7. Revenue sources for environmental investment in Poland (%).

Investment Sources	1991 <sup>a</sup>	1992 <sup>a</sup>	1993 <sup>a</sup>	1994 <sup>a</sup>	1995 <sup>b</sup>
State Budget	5	5	7	5	5
National Environmental Fund	15	27	21	22	20
Provincial Environmental Funds	25	31	25	15	15
Municipal Environmental Funds	-	-	1	4	5
Enterprises	30	20	25	31	32
Municipalities	20	13	16	19	18
Foreign Assistance <sup>1</sup>	5	4	5	4	5

Notes: 1) Includes revenues received by the EcoFund.

Source: a) COWIconsult (1996); b) Sleszynski (1996).

Table 7 clearly illustrates the prominent role played by environmental funds in financing environmental investments in Poland. In 1992 they provided about 58% of total environmental investment financing in the country, while that figure leveled off to about 40% in 1995. Table 8 indicates the financial resources at the disposal of the different types of funds - National, Provincial, Municipal (whose revenues are based mainly on a complex and extensive system of pollution fees and fines), and the EcoFund. Even though its budget is relatively small, representing ~3% of all Polish environmental fund resources and ~ 1% of annual environmental investment expenditures in Poland, the financial resources offered by EcoFund are attractive to potential investors, as they are provided entirely as grants.

Table 8. Total disposable financial resources<sup>1</sup> of environmental funds in Poland (millions of current USD, at prevailing exchange rates, with percentages of collective, annual fund totals).

Funds	1993		1994		1995	
National Fund	287	(64%)	404	(54%)	595	(53%)
Provincial Funds	120	(27%)	231	(31%)	358	(32%)
Municipal Funds	33	(7%)	92	(12%)	140	(12%)
EcoFund	9	(2%)	18	(2%)	32	(3%)
Total	449		745		1125	

Notes: 1) "Total disposable financial resources" = carryover from the previous year + current revenue - foreign sources administered. Percentage totals may not add up to 100% due to rounding.

Sources: For National, Provincial and Municipal Fund data, COWIconsult (1996); For EcoFund data, Annual Reports of the EcoFund 1993-1995.

EcoFund is rarely the sole financial sponsor of the projects it supports. Poland's National and Provincial Environmental Funds are its most common co-financiers and these institutions cooperate regularly with EcoFund, though largely on an informal basis. On a more formal level, EcoFund has entered into agreements with the Cracow, Katowice and Gdansk Provincial Funds to co-finance projects as part of special joint programs.

Earmarking of resources, for environmental or other purposes, raises questions of economic efficiency. Unless carefully designed and effectively managed, funds can cause greater distortions than they rectify. Environmental funds have been justified as *transitional* mechanisms on the grounds that a number of market and institutional failures exist during the

transition period which constrain application of the Polluter Pays Principle and the development of more market-based financing mechanisms. However, this rationale will weaken as the transition progresses and the incidence of such failures diminishes.

**3.2 Findings**

As a financial institution the EcoFund can be evaluated from the perspective of the Polish Government, project developers and other Polish financial sources, as well as from the perspective of foreign donors. For the former, EcoFund’s effectiveness can be considered in terms of the *additionality* it provides, the other *resources it leverages* and its impact on *the development of other sources of environmental finance* within Poland. Donors may be interested in the role EcoFund can play in generating business opportunities for companies from their countries. For both, the *efficiency* and *cost-effectiveness* of EcoFund in managing the money under its control is key.

*Additionality*

Beyond those benefits already discussed in the previous chapter, the EcoFund provides additionality in the following ways:

- *By leveraging other sources of finance.* EcoFund only finances partial project costs: enterprises may generally receive 20%, and in exceptional cases, 30% of project costs; local governments and state budgetary entities up to 50%, and; nature protection projects (which generally do not generate any revenues) up to 80%. In practice, EcoFund covers from 10-30% of total project costs, with the remainder being provided from the applicants’ own resources or other financing sources, such as other environmental funds or commercial investors. Table 9 illustrates EcoFund’s role as a co-financier of environmental projects.

Table 9. EcoFund’s role as a co-financier of environmental projects from 1993-1996.

# of projects financed <sup>1</sup>	Total EcoFund expenditures on projects (current PLN) <sup>2</sup>	Total cost of projects financed by EcoFund (current PLN) <sup>1</sup>	Total cost of projects financed by EcoFund as a % of all environmental investments in the country <sup>1</sup>
164	149 mln	1 742 mln	>10%

Source: 1) EcoFund (1997a); 2) Calculations based on data provided by the EcoFund (1997b).

- *By initiating and closing deals.* EcoFund is recognised by other Polish environmental institutions as having rigorous and objective methods for assessing projects and its endorsement of a project encourages other institutions to participate in its financing. The Fund closes deals by providing “gap” financing for projects, once the applicant has secured as much financing from various other sources as possible.
- *By supporting inward investment in Poland.* Through its support for the transfer of foreign environmental technologies into Poland, a few foreign companies have generated enough business to justify setting up offices and manufacturing operations in the country. By using its extensive know-how in the area of technology, and contacts with foreign and domestic producers of environmental equipment, EcoFund is

well placed to promote development of the environmental goods and services industry in Poland, strengthening the industry's position to supply growing domestic and European demand, which is likely to intensify with the acceleration of the EU accession process. EcoFund is also well-placed to market business opportunities in the environmental sector, both to foreign and Polish firms, and could facilitate joint-ventures and other cooperative partnerships.

- *By reducing the costs of its projects through VAT exemptions.* EcoFund has obtained agreement from the Polish Government for goods financed through EcoFund grants to receive VAT and import tax relief. (This relief is justified by the fact that these goods represent foreign assistance.) EcoFund manages this process on behalf of the project developer, who gains additional benefits from reduced project costs.

#### *EcoFund's Impact on Market-based Financing Mechanisms*

EcoFund's budget is relatively small in the context of total environmental financing in Poland: its disposable resources in 1995 represented about 2.4% of all environmental investment expenditures in the country that year. Nonetheless:

- *EcoFund covers substantially less project costs than requested by applicants.* The Fund's average share of project costs in 1996 was only 22% (excluding the large Turow power station project where its percentage contribution was much smaller). Thus, while applicants tend to request 30% or more, EcoFund endeavored to keep its contribution to the minimum necessary.
- *Since 1996 EcoFund has subjected most projects to full economic and financial analyses.* Part of this process involves an assessment of the minimum grant that EcoFund should provide to give the project a reasonable internal rate of return. This calculation is then used as the basis of the Fund's grant offer and should lead to further reductions in its share of project costs, prompting applicants to seek additional funds from other sources. *Further refinement of these procedures would help maximize the Fund's leveraging effect and enable it to support more projects.*
- *EcoFund is starting to develop contacts with certain private banks* to encourage their involvement in environmental projects, particularly in offering procurement guarantees to foreign suppliers. However, the involvement of private capital in Polish environmental expenditures remains rather limited, constraining the Fund's opportunities to cooperate with sources of private finance. Nevertheless, *EcoFund should consider strengthening its contacts with private sector and commercial sources of finance so as to facilitate their greater involvement in the financing of environmental investments.*

#### *Business Opportunities for Donor Country Companies*

- EcoFund's procurement procedures partially untie donor aid while offering advantageous business opportunities for donor country companies. Under these procedures, competition for the supply of technology to be financed by EcoFund is generally limited to companies from the Fund's debt-swap donors and Poland. Within this group of countries, however, the tendering procedures are rigorously applied and

competition is fully open. Such an arrangement provides for partial “untying” of the donor aid channelled through EcoFund while offering donor country companies improved access to Poland’s sizable environmental technology market.

- Objections have been raised, however, in at least one Paris Club member country to the exclusion of their nation’s companies from EcoFund’s procurement competitions. All Paris Club members have agreed to forgive 50% of Polish debt; in some cases this represents a very substantial sum. Those expressing this particular objection consider the fact that their country did not forgive an additional amount insufficient grounds for being excluded from the Fund’s tendering procedures. It seems likely that more open international competition for EcoFund sponsored procurement would enable even more cost-effective use of EcoFund’s resources. However, there are trade-offs between this objective, issues of equity and the provision of incentives for additional Paris Club members to become EcoFund partners through debt-conversion.
- Donor Country (and Polish) Companies are benefitting from EcoFund’s Financing of Environmental Technologies. In 1996, EcoFund supported the procurement of foreign country equipment from 38 companies with a value of ~10 million USD, or 37% of the total Polish debt-for-environment swap revenues of that year. Table 10 displays the debt-swap revenues and levels of procurement from companies in the different donor states. The table also indicates that the value of procurement won by each donor country’s companies has not matched the amounts contributed by their governments. This imbalance has not presented a problem to date. If it should become problematic in the future, any measures taken to address the issue should be carefully implemented so as not to compromise the integrity and impartiality of EcoFund’s tendering procedures.

Table 10. EcoFund’s debt-for-environment swap revenues from 1992-1996 and procurement by donor state companies (in million PLN, current values).

Donor State	1992-1995			1996		
	Debt-for-environment swaps revenues	Procurement from donor country	Procurement as a % of revenues	Debt-for-environment swap revenues	Procurement from donor country	Procurement as a % of revenues
USA	95.24	11.51	12.1	65.27	13.59	20.8
France	6.59	12.77	194.0	5.75	6.16	107.0
Switzerland	5.78	6.52	113.0	4.44	4.58	103.0
Total	107.61	30.80	28.6	75.46	24.33	32.2

Source: EcoFund (1997a).

### *Efficiency of Project Selection*

In 1996 the EcoFund Management Board considered 220 project applications, 97 of which required the initiation of full-cycle appraisal proceedings. 63 proposals were eventually approved by the Board and submitted to the Supervisory Council. The Council approved 60 of these projects for financing. An analysis of the rejected proposals indicates that:

- *EcoFund's use of clearly defined eligibility criteria is extremely effective in screening out unqualified projects at the start of the appraisal process.* The large majority of rejected projects (over 80%) were turned down because they “did not comply with the EcoFund’s criteria”. Around 10% were rejected because they did not achieve a high enough score when subjected to multi-criteria analysis. Of the three projects rejected by the Council, two were rejected due to their high profitability and one because of its high pollution abatement cost ratio. *Early screening also saves both EcoFund and applicants time and resources,* as it allows Fund staff to quickly determine which proposals will require additional appraisal and applicants whose proposals are rejected to avoid the unnecessary preparation of additional information.

#### *Efficiency of disbursement*

- *Over 96% of the Fund's expenditures went towards implementing projects, leaving just over 3% spent on administrative costs.* The share going to project expenditures would have been even higher if disbursements in 1996 had been as planned (PLN 80 mln planned versus PLN 58.4 mln actual).
- *The significant gap between revenues and actual disbursements in 1995 and 1996 was due to external events,* particularly the unexpected threefold increase of revenues in 1995 resulting from a rescheduling of the American debt-swap, the harsh weather during the winter of 1995/96 (which delayed many projects involving construction work) and delays arising from the competitive procurement process. Delays in procurement affected three of EcoFund’s larger projects, for which around PLN 11 mln, or 50% of 1996’s shortfall, had to be re-allocated to the 1997 budget. The fact that some of the delays were associated with the larger projects further distorts the true picture of disbursement efficiency.
- *EcoFund's policy of funding only specific, clearly defined items within a project has led to clear reimbursement schedules for the project developers.* EcoFund’s linking of disbursement to success in project implementation coupled with close project monitoring are further factors in maintaining disbursement efficiency and in minimizing EcoFund’s financial risk.

#### *Cost-effectiveness of projects*

- *EcoFund is strengthening its efforts to identify and finance “least-cost” project options.* Since 1996 the Fund has calculated “pollution abatement cost ratios” of most projects, incorporating investment, operation and maintenance, and annual emission abatement costs. This allows the Fund to estimate “lifetime” costs of proposed projects and to select the least-cost options. (Prior to 1996, EcoFund’s appraisal procedures favored projects involving lower upfront investment costs, but not necessarily those which were less costly over the lifetime of the equipment.) *Full use of least-cost planning in the ranking of projects will further enhance the Fund's ability to select cost-effective projects.*

## CHAPTER 4 ECOFUND AS A PUBLIC INSTITUTION

### 4.1 Context

Poland's transition to a market economy and democratic, civil society also involves great changes in its various institutions, public and private. Many institutions are undergoing radical reform and restructuring, some are being dissolved entirely, and other, completely new institutions are being formed. Market forces and democracy are placing new demands on institutions for better, more open, more efficient performance. New skills, practices and ways of thinking are required to meet these new demands. The EcoFund itself is a relatively new product of this transformation process, and as an institution charged with administering public money for the public good, it is subject to standards of objectivity, accountability and transparency in its decision-making and operations.

### 4.2 Findings

- *EcoFund's dual nature - international and Polish - poses challenges for its institutional design and management.* On the one hand, EcoFund's revenues can be considered as donor country contributions to Poland in the field of environmental protection. It is common in such cases for the donor to allocate the funds as tied aid, generating environmental benefits for the recipient country and economic benefits for donor country contractors. On the other hand, EcoFund's revenues are local resources, money allocated from the Polish State budget rather than repaid to creditor countries. From this latter perspective, it might be expected that Poland would want to use the resources for national priorities. Another issue concerns the Fund's staff: should they be treated, and remunerated, according to international or Polish standards?
- *The composition of EcoFund's Council strikes a balance between domestic and foreign interests.* The composition of the Council carefully accounts for the interests of both donors and recipient. While Polish representatives are in the majority, each donor has its representative on the Council, with full voting rights. The structure of the Council also balances the interests of the two Polish institutions principally responsible for the Fund - the Ministry of Finance (stressing efficiency of public expenditures) and the Ministry of Environment (stressing achievement of environmental protection goals). Representation on the Council ensures that these different parties are: informed about all projects proposed for financing, and able to regulate spending policies through discussion and approval of annual financing plans. As a result of this balance, and a carefully worded statute, the EcoFund has not been "captured" by any of its main stakeholders.
- *This freedom from political interference fosters political independence and objective, accountable, transparent decision-making.* As none of EcoFund's main stakeholders is able to dominate its decision-making, the Fund has been able to operate largely free from intrusive political influence. This has permitted it to formulate and successfully implement, policies and procedures based on high standards of objectivity, accountability and transparency. The Fund's objectivity is achieved principally through its use of clearly defined and communicated environmental priorities,

eligibility and selection criteria, and rigorous appraisal procedures. The allocation of responsibilities among the Supervisory Council, Management Board and staff is set out in organizational documents, including job descriptions for individual positions. Statutory requirements and voluntary measures ensure that information about the Fund's activities (including environmental effects and financial operations) is provided to applicants, government institutions and the public.

- *EcoFund's operations could be streamlined by delegating more decision-making authority to the Management Board for approving small grants.* All project proposals to be approved for financing, regardless of size, must be submitted to, and decided upon, by the Supervisory Council. The Council approved 60 projects in 1996, 52 of which were in the climate change and nature protection sectors, and received grants of relatively small average size in comparison with grants provided in the other sectors. Nevertheless, even very small projects require the full attention and approval of the Council. Delegating decision-making authority to the Management Board for approving grants below a certain threshold amount, with appropriate provisions for accountability, could help to streamline operations.
- *Leadership, commitment and expertise enable the EcoFund to meet high standards.* EcoFund's leadership has developed a clear, effective vision for the organization and pursued it decisively. The Fund's staff are highly qualified, professional and motivated. Competitive staff selection, performance incentives and a positive work environment help to maintain such standards. In addition to in-house staff, the EcoFund may retain the services of outside experts for the appraisal of large or particularly complex projects, or to provide advice regarding legal and financial matters.
- *EcoFund's communications policy has helped it to develop professional relations with applicants.* While understanding the importance of project preparation and supporting educational activities with potential applicants, the Fund's policy is to avoid the close involvement of staff in project preparation, which could threaten impartiality and raise conflicts of interest. Professional, objective relations with clients maintain the professional stature of the EcoFund and build confidence that its decisions are based on objective criteria. To maintain good relations with its clients, and further promote transparency, *the Fund should ensure that appropriate explanations are provided to applicants whose proposals are rejected.* Additionally, *the Fund should continue to strengthen its public relations and outreach activities.* Its recent step to retain an "External Relations Officer" should help the Fund to more effectively provide information to potential clients. It should also help to more actively promote and share the Fund's achievements and experience, on the domestic and international front.
- *The establishment of EcoFund has supported the development of Polish institutional capacity.* While donor aid programs typically involve local experts and institutions, sometimes extensively, it is not standard that they rely on the establishment of new, locally managed and staffed organizations. The EcoFund offers one such example. From the earliest stages of the Fund's genesis to the present, EcoFund's development and evolution was initiated and led almost exclusively by Poles. While strengthening its own capacity the Fund has also played an important role in building the capacities of its clients. Through its stringent requirements for project applications, the training it

has provided and advice it has given to potential applicants, *the Fund has instilled financial discipline and improved the project preparation and investment planning capacity of applicants.*

- *Ecofund's success has made it a model for other environmental financing institutions in Poland and the region.* EcoFund has acquired a reputation as a center of excellence and is serving as a model institution. Other environmental financing institutions, both in Poland and abroad, have studied the Fund's experience, often adopting and adapting its policies and operational procedures for their own use.
- *EcoFund should consider seeking ISO 9000 certification as a means to further enhance its operational procedures and quality assurance.* ISO 9000 certification would represent an internationally recognized, independent endorsement of the quality of the Fund's operational procedures and should be attainable without major changes given the effectiveness of the Fund's existing procedures.
- *EcoFund exists in a dynamic setting and must evolve to meet changing demands and challenges.* Two events in particular will affect the future evolution of the Fund: Poland's accession to the EU and the expiration of most of EcoFund's current revenue sources in 2010. The EU accession process has already begun, and will almost certainly require very substantial environmental investment expenditures in Poland, possibly far in excess of what domestic sources can supply. The EcoFund may wish, therefore, to *consider what role it might play in helping Poland to implement least-cost approaches for compliance with EU environment directives.* Additionally, as the Fund nears the conclusion of the current debt-swap agreements in 2010, it may wish to *assess how its capacities could be used most effectively in the future.* By the year 2010, the need for subsidized environmental financing in Poland should have largely disappeared. Now that EcoFund has five years of experience, it may be timely to consider the types of strategies it might follow in this transition.

## CHAPTER 5 ECOFUND AS A DEBT-FOR-ENVIRONMENT SWAP MECHANISM

### 5.1 Context

The “debt-for-nature swap” concept first appeared in 1984, and the first swap was implemented in 1987 in South America. Since then a number of agreements have been struck around the globe, allowing indebted countries to combine a reduction of their external debt with a mobilization of resources for environmental protection. Debt-for-nature/environment swap deals have reached a total of about 1 billion USD. Initial swaps generated significant interest and enthusiasm, especially among environmental advocates. While interest in debt-for-environment swaps remains, a number of factors have limited wider implementation of their use, including much greater interest in relieving debt through swaps for *equity*, rather than environment. Certain concerns about the appropriateness of debt-for-environment swaps as instruments for environmental management have also been raised. One concern is related to the weak correlation between bilateral indebtedness and the creditor’s environmental interest in the debtor country, another to the indirect, and therefore possibly inefficient nature of debt-relief as an environmental subsidy.

A number of conditions must exist before debt-for-environment swaps can be considered viable options, particularly: a country’s debt is sufficiently large to encourage it to seek debt-relief; the indebted country makes the political decision to actively seek debt-relief and to use at least a portion of the relief for the purposes of environmental protection; willingness on the part of creditors to convert the debt and to allow at least some of the proceeds to be used for environmental purposes; that debt-relief is part of a larger, comprehensive approach of the debtor country for addressing macroeconomic and environmental problems; the mechanism designed to administer the debt-for-environment swap satisfies the interests of both creditor and debtor country, and; sufficient local capacity exists to effectively supervise and operate the mechanism administering the funds. Donors also typically require that the institution managing the debt-swap funds operate in an open and transparent manner to ensure proper and efficient use of the funds, and that the funds be considered “additional” to existing budgetary resources allocated to environmental protection by the recipient state (not a substitute for them).

### 5.2 Findings

- *EcoFund was the first fully-fledged institution established in Central and Eastern Europe for the purposes of administering a debt-for-environment swap. (The establishment of the Bulgarian “National Trust Ekofund” in 1996, patterned on the Polish EcoFund, represents the second such institution in CEE.) Previous debt-for-environment swaps in Poland, including the 1990 agreement with Finland, did not involve the establishment of entirely new institutions.*
- *The concept for creating the Polish EcoFund was initiated by the Polish Government, and the debt-swaps have been concluded as bilateral agreements between the Polish and creditor country governments. Many of the other debt-for-environment swaps around the world have been tri-lateral agreements, often initiated by, and heavily*

involving NGOs as purchasers of the debt. On the basis of available information, the EcoFund appears to be the largest debt-for-environment swap.

- *The Polish Government's need to address environmental issues, and to introduce innovative financial instruments for this purpose, was crucial in the creation of EcoFund.* As part of the development of the new National Environmental Policy, Ministry of Environment officials actively explored the use of various economic instruments for implementing the policy. A debt-for-environment swap fund was identified and suggested as one such option. Support for this option by the Ministry of Finance and Prime Minister were key factors in assuring its successful implementation.
- *Donor incentives for contributing to EcoFund included a desire to help Poland's transition, general interest in environmental protection and business opportunities.* By the early 1990's a number of countries, including EcoFund's early donors, were already providing various types of aid to Poland in support of its political, economic and social transition. American officials expressed interest in the debt-for-environment swap concept even before the details of EcoFund's design and priorities had become clear. Each of the first three donors - US, France and Switzerland - were generally interested in environmental improvement in Poland, even though none of them share borders with Poland and were unlikely to derive direct benefits from environmental investments in Poland. (On the other hand, EcoFund's newest contributors - Sweden and Norway - are more likely to gain environmental benefits from some of the Fund's activities.) A factor that appealed to all the donors was EcoFund's procurement policy, which offers donor country companies improved access to Poland's sizeable environmental technology market. This policy has been especially beneficial to companies in France and Switzerland (see Table 10), which have won procurements from EcoFund in excess of the amounts contributed to the Fund by their countries during 1992-1996.
- *Poland's improving economic conditions have mixed implications for the prospects of additional countries contributing to EcoFund.* As the economic conditions in Poland improve, donors may be less likely to provide debt-relief for Poland and less convinced that the country requires assistance in addressing its environmental problems. On the other hand, the economic recovery and size of the Polish market are attractive to foreign companies. Economic recovery provides an impetus for increased spending on the environment, enhancing the attractiveness of the EcoFund, with its five years of experience in facilitating technology transfer. Furthermore, with a population of 39 million people, Poland is one of the largest markets for environmental protection know-how and equipment in the CEE region. Accessing and demonstrating environmental technologies in this market can lead to additional business opportunities in Poland and other CEE countries.
- *Debt-for-environment swaps need not represent the only source of revenues for EcoFund.* As illustrated by Norway's recent decision to provide EcoFund with a direct grant, debt-swaps need not be the only source of capital for the Fund. Norway's grant could set a precedent for other countries, including those for which debt-conversion is not a viable or attractive option, to make direct contributions to the Fund.

- *the Possibilities for replicating debt-for-environment swap institutions in other CEE/NIS countries are limited.* The conditions necessary for establishing debt-for-environment swap funds (i.e. sufficiently high debt, willingness on the part of creditor countries, initiative on the part of debtor countries) appear not to exist in most countries of the region. Other obstacles to such swaps include the small markets of many countries (which offer limited business opportunities) and the already heavy reliance of some countries in the region on donors for environmental investment capital (stretching those donors' willingness to increase their environmental aid in these countries).
- *Possibilities for replicating other types of donor-capitalized environmental financing institutions in CEE/NIS countries may be more promising.* Other types of donor-capitalized environmental financing institutions have, however, recently been created in the region. New "environmental investment funds", depending initially on donor grants, have been (or are being) established in Lithuania and Latvia. A "pollution abatement facility" has been created in Russia, capitalized by a loan from World Bank. Though their specific features and objectives may differ, all these institutions are striving to develop or strengthen their capacities for the effective identification, appraisal and selection of environmental projects. The policies and procedures which the EcoFund has developed in response to these challenges have already begun to serve as important resources for some of these and other, similar institutions.

## ANNEX 1 PROJECT CYCLE MANAGEMENT AT ECOFUND

The Main stages and characteristics of EcoFund's project cycle management procedures are as follows (EcoFund 1996c, 1997a, 1997b):

### Project Identification and Preparation

The priority environmental sectors in which the EcoFund may support projects are defined in official Fund documents and have been listed in Chapter 1 of the main report. The Fund has formulated additional eligibility criteria which further determine what kind of projects the Fund may and may not support. These eligibility criteria include:

- that EcoFund supports primarily investment projects (the exception is listed below), and does not support research activities or monitoring;
- concerning investment projects, the Fund supports only the investment stage, and not preparation or feasibility studies, and only the costs of the actual construction or equipment may be covered, not administrative or coordination costs;
- the Fund gives preference to supporting the use of proven environmental technology which is innovative in the context of the Polish market, to projects which represent value for money, and which yield significant human health benefits;
- the applicant must be able to justify the need for non-commercial (grant) financing and to prove that, with EcoFund support, total project costs are covered;
- support may be granted for non-investment projects *only* in the field of biodiversity protection.

The environmental priorities and eligibility criteria are elaborated more fully by Fund staff and communicated to potential applicants through a number of fora, including documentation, public announcements, seminars and meetings. Increasingly, the Fund has used direct meetings with potential applicants as a means for identifying projects and for disseminating information about the Fund's priorities and requirements. In 1996 Fund staff participated in over 1000 such meetings, as well as more than 10 training workshops organized by other organizations. As illustrated in Table A1, both private and public sector institutions, as well as private persons and non-governmental organizations are eligible to receive financial support from EcoFund. In 1996, approximately one-third of EcoFund's financial support was provided to enterprises, a bit less than two-thirds to municipalities and public institutions (i.e. schools, hospitals, etc.) and the remainder to a variety of recipients including NGOs and private persons.

Table A1: Fund expenditures by type of recipient (PLN; actual values for the given year)

Type of Recipient	1993	1994	1995	1996
Enterprises (total)	3 258 500.00	15 216 000.00	19 069 459.51	20 073 172.33
Including: - publicly-owned <sup>1</sup>	3 204 500.00	12 800 000.00	17 668 042.74	17 099 730.60
- privately-owned <sup>1</sup>	54 000.00	2 416 000.00	1 401 416.77	2 973 441.73
State administration	55 000.00	382 800.00	1 431 417.23	385 203.88
Regional administration	68 900.00	226 000.00	149 024.30	70 000.00
Municipal / local administration	4 895 400.00	13 882 400.00	22 183 252.44	33 121 484.24
Public institutions (schools, universities, hospitals, etc.)	0.00	2 623 000.00	5 803 573.46	3 289 173.39
NGOs	77 100.00	181 200.00	1 041 868.12	1 059 695.89
Private persons	0.00	0.00	90 000.00	311 852.62
Other	0.00	0.00	0.00	108 690.29
Total expenditures <sup>2</sup>	8 354 900.00	32 511 400.00	49 768 595.06	58 419 272.64

Notes: 1) "Privately-owned enterprises" include: small businesses owned by private persons, companies owned by foreign capital, joint stock companies and limited liability companies. All other enterprises are referred to as "publicly-owned enterprises". Nevertheless, the distinction is difficult to make and should be considered as indicative only. 2) Does not include the Fund's overhead and administration costs.

Source: EcoFund (1997b).

Within the strict framework of the priority environmental sectors and eligibility criteria, the EcoFund takes a flexible approach to project identification, employing both passive and pro-active strategies, conducting nation-wide programs and those with a sub-national, regional scope. The Fund accepts unsolicited proposals for projects falling generally within the priority environmental sectors and also actively solicits proposals through special regional programs and competitions focused on specific types of projects. Unsolicited projects are processed in two stages: applicants must first submit a brief "project questionnaire" (provided by the Fund office), verifying whether or not the project complies with the Fund's priorities and eligibility criteria, and outlining the expected environmental benefits and project financing. Preliminary approval at this stage leads to the Fund inviting the applicant to submit a full application, including all requisite attachments and technical documents (specified in the application materials). Project proposals solicited by the EcoFund through one of its special competitions are *not* required to first include a project questionnaire. The public announcements of the special competitions contain very specific, detailed information regarding project criteria and eligibility and, therefore, applicants are expected to submit full applications to start the appraisal process. (In both the two, and one stage application processes, applicants whose proposals are rejected by the Fund are notified of such in writing, with an explanation provided.) Box A1 below illustrates EcoFund's "pro-active" approach to project identification, highlighting the regional programs and focused competitions conducted by the Fund in 1996, which represent 73% of that year's total number of approved projects.

**Box A1. Regional Programs and Focused Competitions Sponsored by EcoFund in 1996.***Regional Programs*

Protection of Waters of the Biebrza National Park  
Protection of Rare Species of Birds  
Protection of Waters of Gdansk and Puck Bays  
Protection of Waters of Great Mazurian Lakes  
Protection of Water Intakes of Cracow, Silesia and Wroclaw  
Low Emission Abatement in Cracow

*Focused Competitions*

Energy Saving in Urban Heat Supply Systems (2 competitions)  
Elimination of Low Air Emissions in Katowice Voivodship (2 competitions)  
Protection of Threatened Animal and Plant Species  
Restoration of Natural Wetland Areas  
Wetland Conservation in State Forests  
Biodiversity Conservation in Landscape Parks

*Source:* EcoFund (1997a).

Preparation of project proposals and applications submitted to the EcoFund is the responsibility of the project investors. However, in the focused competitions and particularly the regional programs the EcoFund makes special efforts to inform potential applicants about the requirements for projects. The criteria for regional programs are formulated in close cooperation with local authorities, beneficiaries and co-financing sources, and usually encompass 10 or more individual projects.

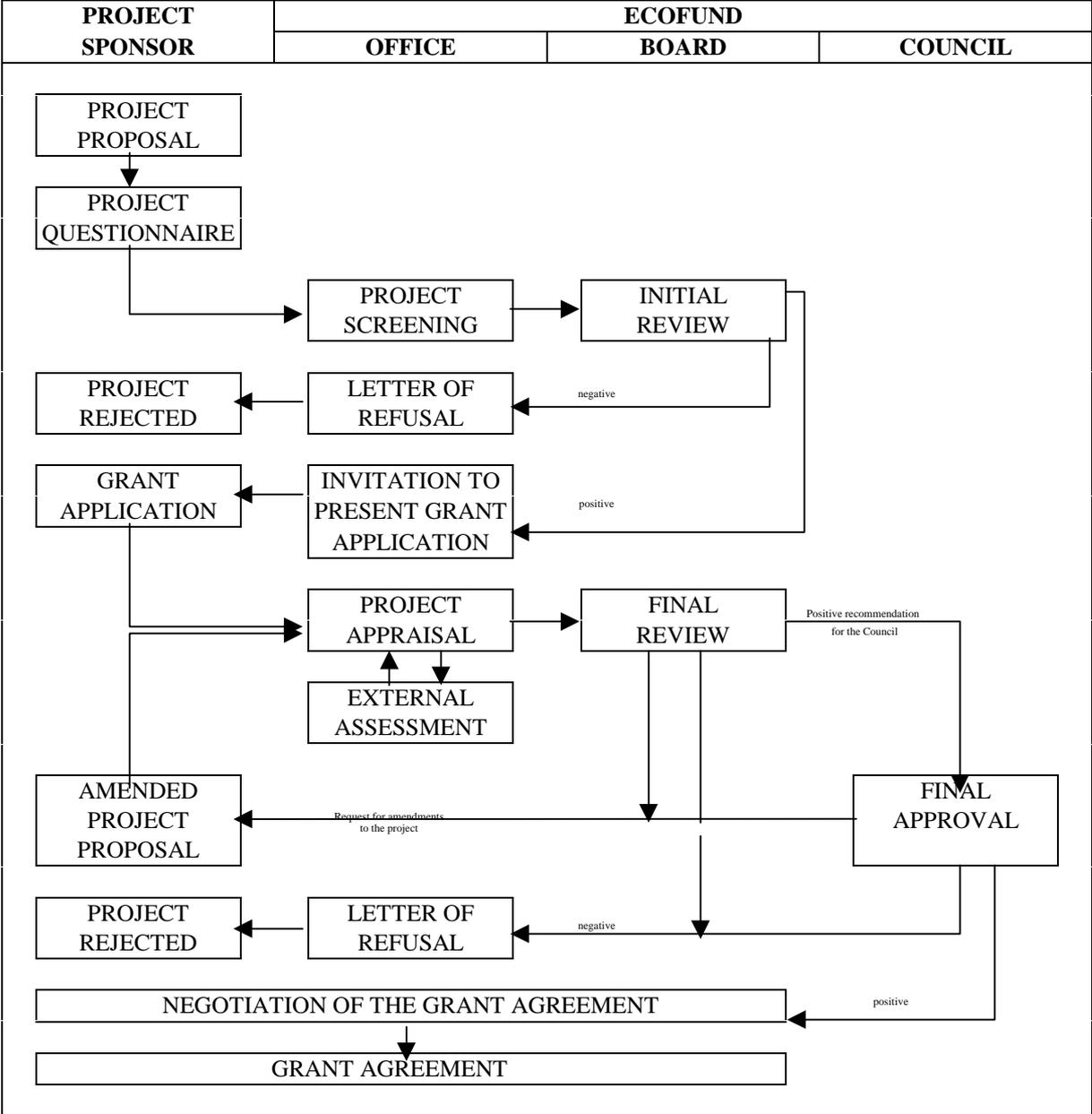
**Project Appraisal and Selection**

Environmental, technical, economic and (since 1996), financial aspects of project applications are appraised by EcoFund's in-house staff. Full applications are required to:

- specify the objective(s) and rationale of the proposed project;
- contain relevant documentation concerning the proposed technology and/or methods for implementing the project, and expected environmental results thereof;
- provide information on the selected or proposed contractors/suppliers and/or the procurement procedures used;
- include a project performance schedule (including time-schedule);
- present an economic and financial analysis of the project proving the complete financial coverage thereof in case of the application being approved by the Ecofund;
- be complemented by other necessary supporting documentation, in particular a feasibility study (business plan in commercial projects) and Environmental Impact Assessment.

A scheme depicting EcoFund's project appraisal and selection process appears in Figure A1. In addition to using the eligibility criteria as a rapid screening mechanism, for some sectors a multi- criteria analysis or scoring system is used to rank projects. Scoring systems, which allow the comparison of similar projects, have been developed for the following project areas: modernization of heating systems (boiler conversions); elimination of air emissions from low-stack sources in Katowice Province; wind power plants; small hydro-electric plants; protection of wetland areas, and; endangered flora and fauna species.

Figure A1. A chart of EcoFund’s project appraisal and selection process.



Source: EcoFund (1996c).

Proposals for projects which are particularly large (requesting over 300 000 USD), or complex, are evaluated by independent experts/consultants commissioned by the Ecofund. (In 1996, 23 such studies were commissioned.) The opinions of the external consultants are always submitted to the applicant. For all proposals, applicants may amend and/or modify their proposals based on the suggestions of the EcoFund staff or its external consultants.

Should the appraisal yield a positive result, the Fund's Management Board approves the application, and consequently submits it to the Supervisory Council. In accordance with the Statutes of the Ecofund, the Council makes the final decision regarding the awarding of a grant and the amount thereof. Council decisions must be approved by a two-thirds majority vote.

In 1996, the EcoFund considered 273 project proposals (received either as completed questionnaires, full applications or letters of inquiry), 97 of which required the launch of full-cycle appraisal proceedings. The Management Board approved 63 applications as meeting the required standards, and submitted these for consideration to the Fund's Supervisory Council. The Council approved grants for 60 of the projects. All project proponents whose proposals are rejected, either by the Board or Council, are sent a notification letter explaining the rejection.

### **Negotiation of Grant Agreements**

The Council's decision to award a grant remains in force for six months, during which time the Management Board negotiates the contents of the agreement with the applicant. Prior to signing the agreement EcoFund has to be satisfied that:

- a procurement plan has been suitably defined specifying which components of the project EcoFund will finance, the sources of any equipment to be funded and the timetable of the stages of financing. As a matter of policy all equipment and services funded by EcoFund has to be obtained according to international tender rules but tenders are sought only from donor countries and Poland;
- the applicant can supply guarantees that all relevant permissions have been obtained and that he or she has full financial coverage for the project from all the planned sources.

Should the agreement not be signed within the six months period it is subject to cancellation unless prior approval is obtained from the Supervisory Council. In 1996, 111 grant agreements were signed (which includes projects approved the previous year).

### **Project Implementation and Monitoring**

Projects are divided into discreet implementation stages with payments being made on an agreed schedule against proof of purchase and/or accomplishment of agreed project milestones. The Grantee may receive an advance payment at an amount foreseen in contracts with suppliers (up to 50 per cent of the value of the particular project stage in the case of nature conservation projects conducted by NGOs). Individual implementation stages are considered complete only after receipt and approval of required reports. EcoFund staff, or for larger and/or more complex projects, independent consultants, regularly make on-site visits to monitor project progress. EcoFund retains the right to terminate the agreement if the Grantee

does not comply with the terms and conditions agreed to in the contract. Under such circumstances the Grantee is obliged to reimburse the EcoFund the full amount disbursed plus a penalty equal to 25% of the total amount. (This has occurred on one occasion.)

In case of any major changes in the circumstances surrounding implementation of an Ecofund-supported project, it is possible, by mutual agreement, to re-negotiate and amend the agreement, e.g. with respect to the performance schedule, and as regards the substantive scope of the project (if the changes will increase the environmental benefits). Generally speaking, however, such changes may not affect the total grant amount. In 1996, 52 amendments were signed and 93 field audits were conducted.

### **Evaluation of Implemented Projects**

At the technical completion of the project, the Grantee is obliged to submit a final report concerning the entire project, its ultimate cost and environmental benefits attained. Endorsement of the final report is subject to positive evaluation by the Ecofund's project manager with regards to the project's overall performance and conformity with the contract agreement. The project manager's evaluation is examined by the Ecofund's Management Board, which makes the formal decision on closing the project. Experience (positive and/or negative) from completed projects is taken into consideration when preparing and supervising subsequent projects. On an institutional level, semi-annual reports containing detailed information on the implementation of approved projects and general conclusions are prepared by the Board and submitted to the Supervisory Council.

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