

PART ONE

**SELECTED ENVIRONMENTAL FUNDS
IN CENTRAL AND EASTERN EUROPE**

CHAPTER 1

BULGARIA: THE NATIONAL ENVIRONMENTAL PROTECTION FUND

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1. Background and Objectives

Bulgaria's Environmental Protection Act of 1992 provides the legal basis for the establishment of the National Environmental Protection Fund (NEPF or the "Fund"). The Fund's Regulations were adopted by Decree of the Council of Ministers (CoM) in 1992. This Decree defines: sources of revenue for the Fund; the areas of its expenditure; how the Fund is to be managed, including reporting and control procedures; and, the legal status of the NEPF and the municipal environmental protection funds. The main objective of the NEPF is to provide financial support to implement the national environmental policy of the Republic of Bulgaria. Annual revenues and expenditures of the Fund from 1993-1997 are summarised in Table 1.1.

Table 1.1: Annual revenues and expenditures of the NEPF (mln USD; nominal values based on average annual exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	3.598	4.416	5.942	6.139	9.492
Environmental expenditures	2.183	3.423	6.253	8.484	4.380
Fund's overhead / administrative costs	0.000	0.018	0.007	0.009	0.009
Total expenditures	2.183	3.440	6.261	8.493	4.389

Source: Table II.1.1 in Annex II.

Notes: Totals might not equal the sums of individual sub-components due to rounding.

The Fund's Regulations were amended in 1995 by CoM Decree in order to reflect changes in both the sources of revenue and areas of expenditure. This amendment also established the legal basis for the Fund to offer loans to municipalities. Later, enterprises were also made eligible to receive loan finance from the Fund.

The 1995 amendments also established a "Fund for Environmental Projects in Mountainous Regions" (FEPMR) as a separate sub-fund within the framework of the NEPF. With the adoption of the Law for Liquid Fuel Taxes in 1996, FEPMR ceased to exist independently and its activities were merged into the NEPF. However, 30% of the revenues generated through the Law for Liquid Fuel Taxes remain earmarked for environmental projects and activities in the mountainous regions (including projects for sustainable agriculture and environmentally sound cattle-breeding), while the remaining 70% are at the general disposal of NEPF for other environmental projects and activities.

Amendments and supplements to the Fund Regulation adopted by CoM Decree in 1996 have further expanded the Fund's potential by enabling it to finance activities aimed at preventing soil erosion and landslides and those addressing the consequences of environmental emergencies and disasters. Since August 1996 there have been no further amendments to the Fund Regulation.

2. Management and Administration

The Fund's resources are managed by a Management Board (the "Board") consisting of 12 people. The Board is chaired by the Minister of Environment and also includes: a Deputy Minister of Environment (Deputy Chair); Deputy Ministers of other ministries directly concerned with environmental issues (e.g. the Ministry of Finance (MoF), the Ministry of Energy and Energy Resources, the Ministry of Health, the Ministry of Regional Development and Construction, the Ministry of Agriculture and Food Industry, the Ministry of Industry, the Ministry of Transport); a representative of the scientific community and a representative of the environmental NGOs. Individual members of the Board are determined by an order of the Minister of Environment upon proposals from the other relevant Ministers.

The Management Board's principal responsibilities include:

- formulating the Fund's policy for implementing the National Environmental Strategy (NES);
- defining criteria for selection of environmental projects;
- approving the Fund's application documents;
- establishing the terms and procedures for allocation of the Fund's resources;
- approving the annual budget;
- and, deciding which projects receive support from the Fund.

The daily functioning of the NEPF is carried out by an Executive Bureau (the "Bureau") consisting of six people. The Bureau's main functions are to:

- organise the Board meetings and prepare related documentation;
- draft the Fund's application forms;
- propose criteria for project selection and terms for financing;
- appraise applications for funding; to prepare contracts for financial awards;
- publish important documents, project appraisal and selection criteria and financing terms, as endorsed by the Board, in the mass media;
- draft the Fund's budget and annual report; and,
- otherwise implement decisions of the Board and report regularly to the Board on its activities.

The organisational structure of the NEPF is depicted in Figure 1.1.

Figure 1.1: Organisational diagram of the NEPF.



The Bureau of the Fund is not an independent legal entity and operates within the structure of the Ministry of Environment (MoE). Experts of the MoE play an important role both in shaping the environmental priorities of the Fund (through the NES and MoE members of the Fund Board) and in helping to appraise project proposals received by the Fund.

The MoF is another important state institution when it comes to financing environmental protection. The MoE, and the Fund as a tool for implementing the NES, interact with the MoF concerning the earmarking of finance for environmental projects from the state budget. The Fund also communicates with the Ministry of Regional Development and Construction concerning the building of wastewater treatment plants and municipal waste disposal sites. Each year as part of the process of preparing the State Budget Act, the MoE presents to the MoF a list of proposals for environmental projects which should be financed from the State budget. After the adoption of the State Budget Act, targeted grants are disbursed to the corresponding municipalities, since they are typically the developers of such projects.

3. Revenues

The Fund's main sources of revenue are:

- 60% of fines imposed by the MoE or its affiliated agencies for environmental damage or pollution above the admissible levels pursuant to the Environmental Protection Act;
- various fees collected by the MoE according to the Transitional and Final Provisions of the Environmental Protection Act. More specifically, these include fees for: issuing permits for transit shipment of hazardous substances and hazardous waste; the collection and export of protected animal and plant species; extraction of sand from river beds; discharge of wastewater; issuing environmental impact statements; conducting environmental audits of plants; co-ordination of certificates for import/export;
- proceeds from privatisation pursuant to the Act for Restructuring and Privatisation of State and Municipal Enterprises;
- principal and interest payments on loans;
- proceeds from taxes on fuel according to the Act for Taxes on Liquid Fuels;
- grants and donations from domestic and foreign sources.

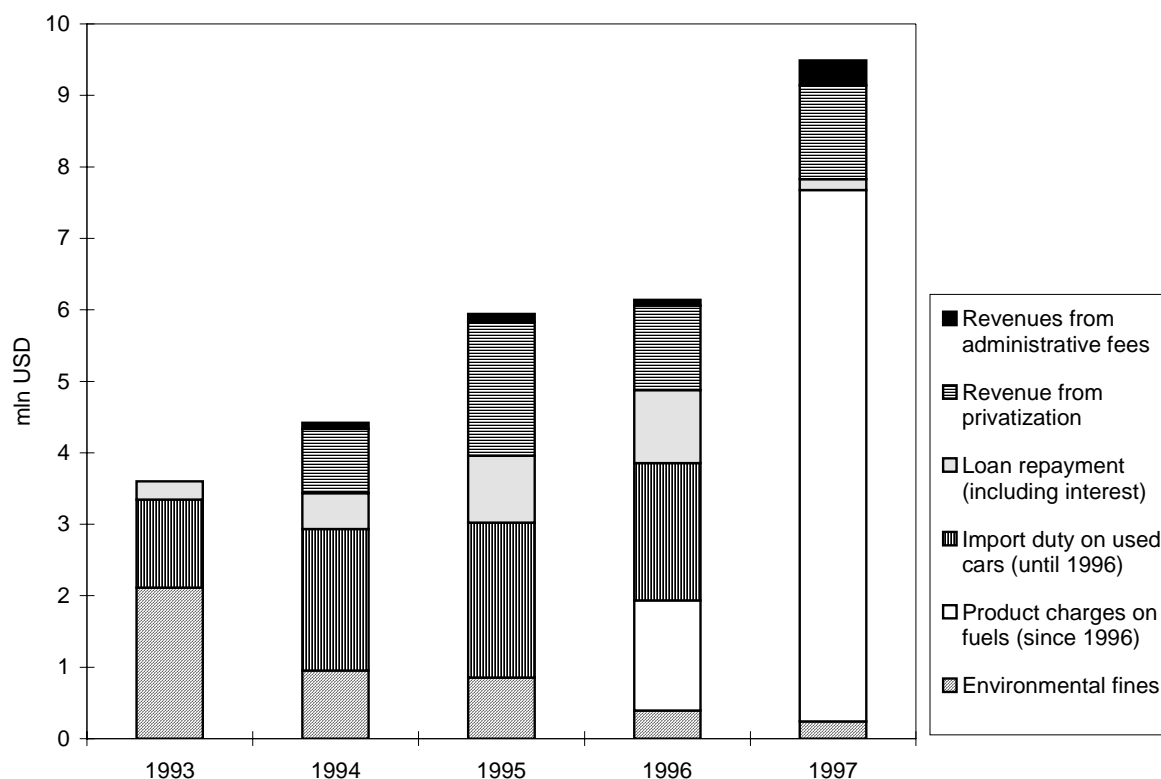
The Environmental Protection Act also provides for 60% of charges on pollution below admissible levels to be channelled to the Fund. However, as the regulations needed to put this provision into effect have not been adopted, the Fund does not yet receive any revenues from pollution charges. The Fund's annual revenues from 1993-1997 are profiled in Figure 1.2 below.

At the beginning of each year, the Bureau prepares a report on the resources allocated by the NEPF for the past year and estimates expected income for the coming year. Revenue estimates are periodically adjusted throughout the year, and corresponding changes made in the disbursement plans upon the approval of the Management Board and the MoF.

In 1996, the Fund collected 65.7% of the revenues it expected to. Collection efficiency was most negatively affected by the taxes on liquid fuels: 5-6 times less revenues from this source were collected than the amount planned for in the 1996 budget and 14 times less than the taxes actually received (credited, but not transferred). This is largely explained by serious financial difficulties experienced by the *Naftochim* refinery. Naftochim, the main source of revenues for the NEPF under the Law for Liquid Fuel Taxes, suffered enormous losses from barter deals imposed on it by the government. As a result the refinery accumulated great debts to the state budget and was not able to fulfil its duties to NEPF. Fortunately, this deficit was mitigated to some extent by greater revenues than planned from: import taxes on second-hand cars - 2.5 times more; privatisation - 2.5 times more; and principal and interest payments on NEPF loans - 3.3 times more. (Since the end of 1996, by

Decision of the CoM, import taxes on second-hand cars - a source which used to bring up to 30% of the Fund's revenues - are no longer channelled into the NEPF).

Figure 1.2: Annual revenues of the NEPF by source (mln USD; nominal values based on average annual exchange rates).



Source: Table II.1.2 in Annex II.

The NEPF functions as an extra-budgetary account; unspent money remaining at the end of the year is carried over for use the following year. Nevertheless, the Fund's revenue stream, particularly from taxes on liquid fuels and the privatisation of state-owned enterprises, is affected by state budgetary procedures and the MoF. At the beginning of 1997, the MoF delayed the transfer of revenues from these sources, causing the Fund difficulties, especially with respect to disbursements under existing contracts.

4. Spending Strategy

The Fund's spending priorities, set by the Management Board, are based on state environmental policy, the annual work programme of the MoE, government decisions concerning environmental problems and decisions of the MoE's High Council of Environmental Experts. Project selection criteria and financing terms are drafted by the experts of the Executive Bureau and approved by the Board. Annual spending plans are elaborated in the Fund's annual budgets, which are approved by the MoF on the proposal of the MoE.

The NEPF spending priorities for 1998 were environmental projects:

- for which the Republic of Bulgaria is a party to international agreements (e.g. reconstruction of the wastewater treatment plant in Plovdiv for which the Swiss Confederation will provide four secondary radial sedimentation plants);
- which will be co-financed by the EU's PHARE Programme;

- which are at an advanced stage of construction and will soon be completed and operational; often these are projects also selected to receive targeted grants from the state budget.

5. Expenditures

Table 1.2 shows trends in total environmental expenditure in Bulgaria, including the share of such expenditure in GDP and the role played by the NEPF. The Table reveals that environmental expenditure as a share of GDP has remained relatively stable through the years. The level of expenditure, however, does not correspond to the need for environmental investment. Moreover, the real value of the increase in expenditure has been eroded by inflation. The Fund's role in environmental expenditure in the country has (at least nominally) steadily increased.

Table 1.2: Environmental expenditure in Bulgaria (mln USD; nominal values based on average annual exchange rates).

	1992	1993	1994	1995	1996
Total environmental expenditure in Bulgaria	101.2	136.5	201.4	279.7	652.1
- as % of GDP	1.2%	1.3%	1.0%	0.9%	1.0%
including - NEPF		2.2	3.4	6.3	8.5
- as a % of the national total		1.6%	3.4%	5.4%	9.0%

Note: Environmental expenditure is defined here as including expenditures for the acquisition of material and non-material durable assets with environmental purpose; expenditures for maintenance and exploitation of material and non-material durable assets with environmental purpose; expenditures for other environmental activities; other expenditures from the NEPF and the Municipal Environmental Protection Funds.

As illustrated in Table 1.3, the majority of the Fund's resources over the past four years have been allocated to projects in the water sector (i.e. related to wastewater treatment). In 1997 for example, the Board directed over 40% of the Fund's expenditure for the construction of sewage/wastewater collector and connecting lines and equipment used at wastewater treatment plants (WWTP). The financial resources of the Fund and targeted grants from the state budget are, however, insufficient to finance the completion of all needed projects; the cost of unfinished WWTP amounts to hundreds of billions of leva. For this reason the Fund has focused its resources on activities related to WWTP which are at a more advanced stage of construction and have a real possibility of being completed and put into operation in the near future. In comparison, the Fund allocated about 20% of its expenditure for environmental monitoring and information systems, about 17% for waste management and about 9% for air protection projects in 1997; remaining funds were provided for fundamental or applied scientific research, public awareness raising activities, participation in environmental conferences, symposia, etc., and other expenses (including administrative costs of the Bureau of the Fund).

Table 1.3: Fund expenditures by environmental sector (mln USD; nominal values based on average annual exchange rates).

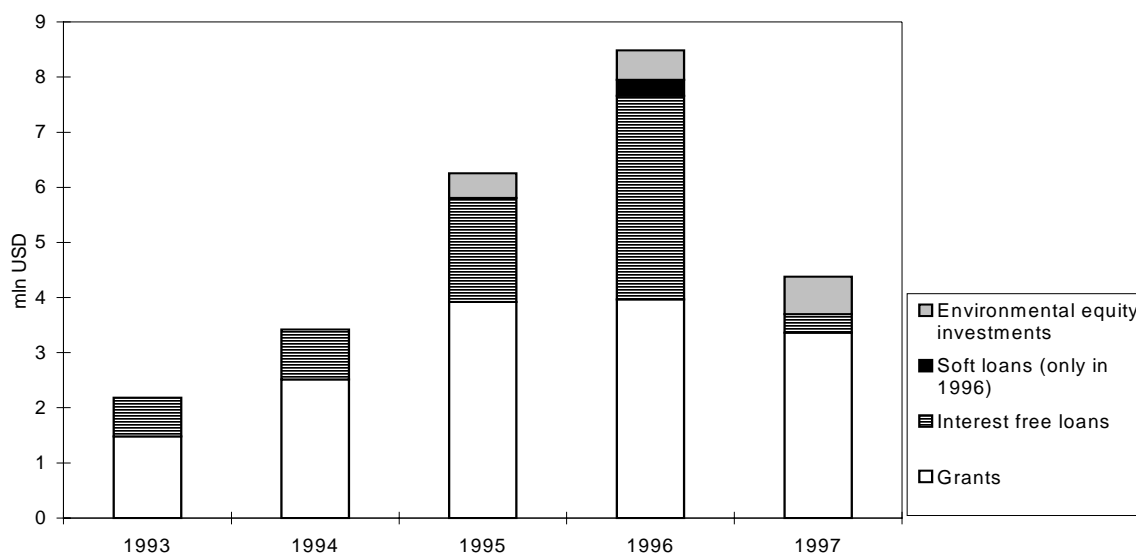
	1993	1994	1995	1996	1997
Air (total)	0.3	1.1	1.6	1.1	0.4
Water (total)	0.7	1.1	2.4	3.8	1.9
Waste (total)	0.1	0.1	0.2	0.7	0.7
Soil and nature protection	0.1	0.0	0.0	0.5	0.4
Monitoring systems	1.0	1.0	1.8	1.4	0.9
Environmental education, research and others	0.1	0.2	0.4	0.9	0.1

Source: Table II.1.3 in Annex II.

The demand for grants and loans from the NEPF is high both on the part of municipalities and companies. In 1996, for example, the Bureau of the Fund received and processed 647 application forms from municipalities, companies, and environmental NGOs. As can be seen in Figure 1.3, grants have been the dominant form of disbursement since 1993, with interest free loans also forming a significant part of the Fund's portfolio. (Interest-free loans began being offered to municipalities in 1996; previously they were offered only to companies, while municipalities received grants.) In recent years the Fund has also begun to make some equity investments and in 1996 the Fund extended one low interest loan.

NEPF loans, which have relatively long repayment periods and have been (for the most part) interest free, are far more attractive than those offered by commercial banks (especially with high inflation prevailing). Loans to companies usually include 12 months of grace period with a maximum 36-month repayment period. According to its regulations, NEPF can give interest free loans as well as loans with preferential interest rates of 10 to 50% of the interest rate of the Bulgarian National Bank. The Fund can support up to 70% of total project costs. The Fund has thus far forgiven only one loan - that to the City of Plovdiv for activities related to the reconstruction of the WWTP - by special decision of the Board. Loans to companies cannot be forgiven.

Figure 1.3: Environmental expenditures of the NEPF by form of disbursement (mln USD; nominal values based on average annual exchange rates).

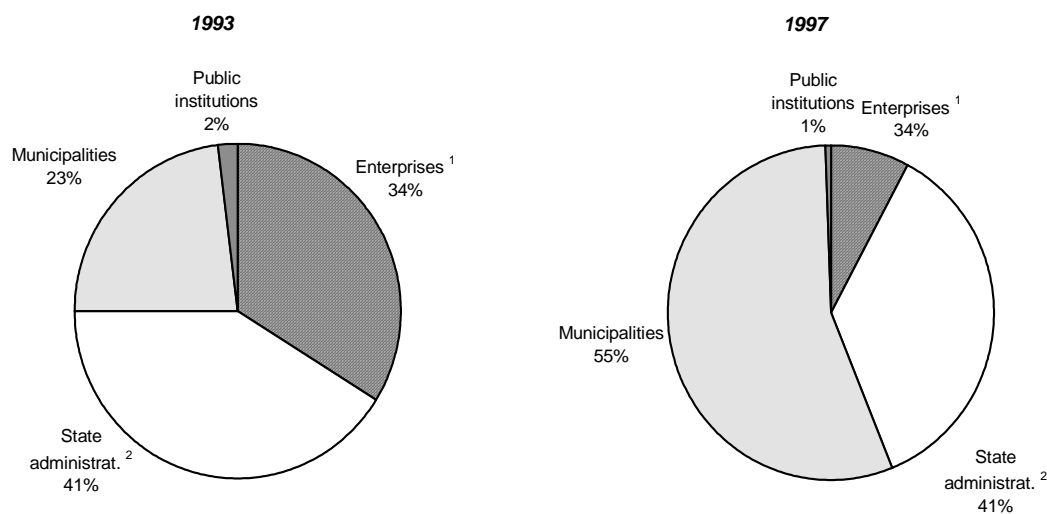


Source: Table II.1.4 in Annex II.

As shown in Figure 1.4, the Fund's support has been allocated among enterprises, municipalities, bodies of the state administration (namely environmental agencies) and other public institutions. Figure 1.5 illustrates that most of this support has been related to investment projects. (However, it should be noted that "investment projects" has been defined here as including operational and maintenance costs and expenditures on the state environmental monitoring system. In 1997, for example, ~23% of the Fund's environmental expenditure went for the purchase of core equipment for capital investments.)

Legislation enables the Fund to co-finance environmental projects and programmes with other state institutions (e.g. the state budget, Ministry of Regional Development and Construction), international financial institutions and national and foreign governmental bodies, according to terms fixed in agreements between the MoE and the respective co-financing institution. Co-financed projects typically include WWTP equipment; sewerage pumping stations, collector pipelines to WWTP, and landfills for municipal solid waste. In 1997, the Fund also began co-financing co-operation with the Bulgarian National Trust Ecofund and the EU's PHARE Programme.

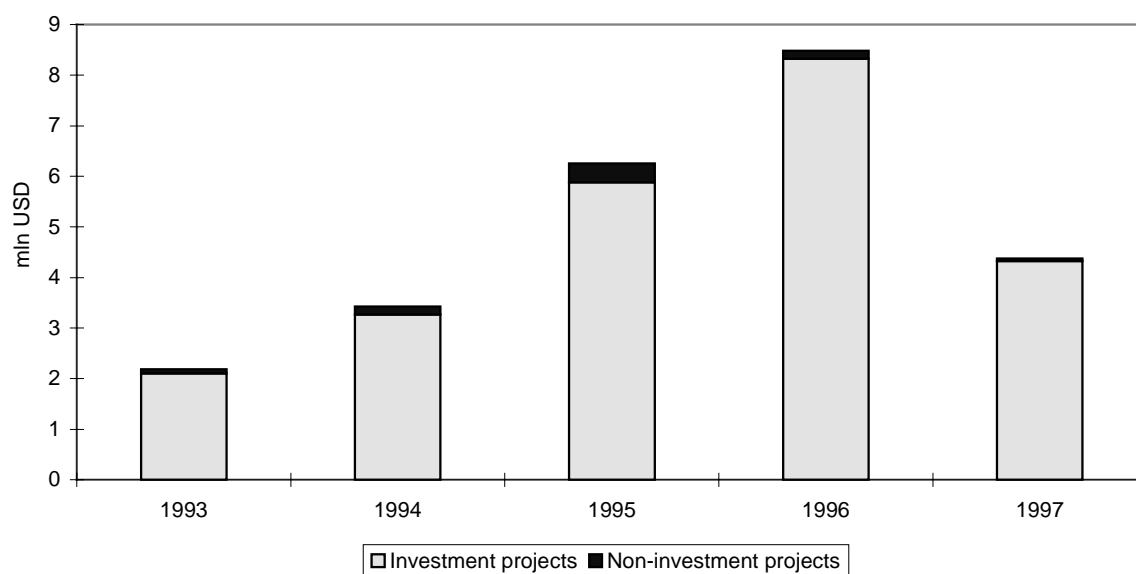
Figure 1.4: Fund environmental expenditures by type of recipient (mln USD; nominal values based on average annual exchange rates).



Source: Table II.1.5 in Annex II.

Notes: 1) Includes funds allocated to private producers of agriculture projects in mountainous regions. 2) Includes expenditures for the National Environmental Monitoring and Control System.

Figure 1.5: Fund environmental expenditures according to “investment” vs. “non-investment” projects (mln USD; nominal values based on average annual exchange rates).



Source: Table II.1.6 in Annex II.

6. Funding Cycle

The project eligibility and selection criteria used by the NEPF can be divided into two groups: general criteria, based on the major environmental priorities laid down in the Environmental Action Program for CEE; and more specific criteria related to individual environmental sectors. The most important criteria are:

- the significance of the project in implementing the National Environmental Strategy;
- environmental conditions in the region where the project is to be implemented (i.e. “hotspots”);
- the projects ability to decrease environmental health risks;
- how well prepared/close to completion the project is;
- structure of the project’s financial packaging and level and type of finance requested from the Fund.

Beyond the fundamental criteria listed above, preference is given to projects which:

- reduce emissions of ozone-depleting substances, toxic substances, sulphur dioxide, carbon dioxide, etc. (especially in combination with dust particles);
- reduce heavy metal pollution (in air, water, soils and agricultural production);
- protect the waters of the Black Sea and the Danube River, and river valleys with aggravated environmental conditions (particularly upper and middle stream segments);
- build solid municipal waste disposal sites;
- apply best available technologies;
- are included in the National Biological Diversity Conservation Strategy;
- are more than 70% complete;
- involve the least capital investment and least operational costs per unit of environmental benefit.

The main stages of the NEPF’s funding cycle are shown in Figure 1.6.

Figure 1.6: Stages of the NEPF’s Funding Cycle.

Applicant	Prepares and submits the necessary application documents
Regional Environmental Inspectorate	Statement on the project/EIA
NEPF Executive Bureau	Preliminary assessment
MoE Departments NEPF Executive Bureau	Technical and financial assessment Preparation of project annotations
NEPF Management Board	Comes up with decisions
NEPF Executive Bureau	Signs contracts for the approved projects and Returns the rejected ones
Applicant	Project implementation
Regional Environmental Inspection	Control of project implementation Control of loan recovery

To apply for funding from the NEPF applicants must prepare and submit their proposal in a standardised format, accompanied by all necessary documents, such as: a project description, including the geographic area and sector of the project, implementation strategy, main technological

characteristics, funding sources, expected environmental benefits; an environmental impact assessment; documents related to the tendering and procurement for equipment and construction work; and a statement from the Regional Environmental Inspectorate. If the applicant is requesting a loan from the Fund, he or she must provide evidence on the financial status of the company/municipality and present a bank guarantee. All information and procedures required during the application process are explained in a booklet published by the Fund and disseminated to all municipalities, Regional Environmental Inspectorates, ministries and other relevant institutions, as well as interested parties who contact the NEPF.

After submission to the Executive Bureau of the Fund, each project proposal is carefully reviewed. If a proposal meets the established criteria and priorities, and contains all the necessary information, it is passed on to the appropriate department of the MoE for appraisal; otherwise, the proposal is sent back to the applicant. The MoE experts render their opinion on the project in accordance with the internal rules of the Ministry. Simultaneously, the Executive Bureau checks out and verifies the cost estimates made by project proponents. A proposal is approved only if the estimated costs and prices of materials are within a range considered average for the country. If otherwise, the proposal is returned to the applicant for revision. Project proposals which are not rejected by the MoE experts or the Bureau are submitted to the Board for review and decision.

After a positive decision of the Board, a contract with the applicant is signed for funding of the project. The contract contains the implementation schedule, terms for disbursement of funds, reporting requirements, conditions on loan repayment (if applicable), etc. During the course of project implementation, the beneficiary is required to submit documentation connected with costs incurred, including receipts, accounting statements and signed testimony from the Regional Environmental Inspectorates. The submitted documents are checked carefully by the Bureau; completed work is compared with the costs incurred. Only after the documents are approved by the Bureau does the Fund disburse its financial support. The procedure is complex and time consuming, but it ensures proper implementation of the project. Project implementation is monitored in the field by the Regional Environmental Inspectorates. Recently the Bureau and experts from the MoE have begun to make site checks as well.

Because of very high inflation in recent years the Fund was compelled to introduce special measures to ensure that projects were fully implemented. In 1996 the Board adopted a resolution through which the amounts of support fixed by contract should be corrected in accordance with the official monthly inflation index announced by the National Institute of Statistics. A provision was added to the contracts, effectively increasing disbursements to compensate for the additional expenses resulting from inflation. These provisions were deleted in 1997 when inflation rate fell considerably.

7. Evaluation, Reporting and Public Information

In accordance with the NEPF's regulations, the Bureau prepares annual reports on the activities and financial accounts of the Fund. These reports are discussed, amended as needed and approved by the Board. The financial accounts are prepared in co-operation with the MoF and are presented for approval to the Government.

The NEPF's substantive and financial operations are subject to audits by the authorised state control authorities. To date, there have been two audits by the MoF and one by the Chamber of Accounts; the Fund was found to be in compliance with the relevant legislation and regulations. The Parliament may also question the Fund about its activities in the form of questions raised by the national representatives, to which staff of the Bureau must respond in writing.

One of the principles of NEPF's activity is full transparency to the public with regard to spending and decision-making and co-ordination of the activity with the other leading ministries and institutions. Last year both the MoE and Fund have increased their visibility in the media. The Fund has increased

its public relations activities and the Bureau participates periodically in press conferences with journalists, NGOs and others. The Bureau routinely disseminates information on the decisions taken by the Board concerning the awarding of financial support.

8. Major Achievements

The Fund's income is modest in comparison with that of some environmental funds in other CEE countries. As a result, its capacity to finance major investment projects is very limited and its expenditures have been characterised by giving relatively small amounts to numerous sites. Example of projects financed with the help of the Fund include:

- *Activities related to WWTPs* in the following cities, significantly reducing the levels of pollution in nearby rivers: Jantra, river Struma /"Zvezda" - Dolna Mitropolia, MSD - V. Tarnovo, "Pigbreeding" - Stambolovo, "Sugar plants" - G. Orjahovitza, "Dinamika" - Drjanovo, Gen. Toshevo and Kavarna.
- *Solid waste landfills* have been extended in Berkovitza, Bjala Slatina, Smoljan, and Haskovo.
- *Air pollution abatement facilities and equipment* have been financed in "Vulkan" Dimitrovgrad, "Tzelhart" in Stamboliisky, "Binder" in Sliven, and TPS in Gabrovo.
- *Conversions to gas at thermal power stations* in regions declared as "hot spots", such as Burgas, Sofia, Rousse, Lovetch, Razgrad, and Vratza.
- *Upgrading bus engines in Sofia* by changing old fuel engines with cleaner burning gas-diesel engines.

Some of the projects supported by the Fund generate economic and financial benefits in addition to environmental benefits. For example, the replacement of old equipment at a WWTP in Sofia with new, more efficient equipment resulted in savings of millions of Leva each month.

9. Challenges and Future Prospects

Among the challenges faced by the Fund are the following: the small number of staff working at the Fund's Bureau (currently six, including its Head); the lack of sufficient office equipment at the Bureau; the lack of an appropriate computer system to support the Bureau's daily activities, such as processing correspondence, managing the financial accounts, registering and tracking applications and projects. Since 1997 some of these problems have been solved. The Fund also envisages the development and application of a system for monitoring and evaluating the environmental effect of the projects it finances. As the Fund envisages closer co-operation with the EU's Phare Programme, revisions in the Fund's legislative base may be necessary to allow institutional strengthening, new financial management procedures, and other changes.

CHAPTER 2

BULGARIA: THE NATIONAL TRUST ECOFUND

Vesselin Bossevsky, Chairman of the Board of Directors

Dimiter Nenkov, Executive Director

Milka Docheva, Expert

1. Background and Objectives

The Bulgarian National Trust EcoFund (NTEF or “Fund”) was established in 1995, based on:

- the debt-for-environment swap agreement between the Governments of the Republic of Bulgaria and the Swiss Confederation signed in October, 1995;
- Bulgaria’s Environmental Protection Act of July 1995;
- the Regulation on the Organisation and Activities of the National Trust EcoFund enacted by Decree of the Council of Ministers in August 1995.

The NTEF has been operational since October, 1996, functioning in accordance with its Statutes and Procedural Rules. The main objective of NTEF, as specified in the above documents, is the management of financial resources provided under debt-for-environment agreements, as well as resources provided under other types of agreements by international, foreign, or Bulgarian sources, aimed at financing projects and activities protecting the environment of Bulgaria.

For the purpose of fulfilling its objective the Fund works in the following priority areas:

- Clean up of past pollution and environmental damages:
 - hazardous waste and hazardous substance disposal;
 - sources of drinking water or food contamination (by heavy metals, toxic organics or other harmful chemicals);
- Air pollution reduction:
 - pollutants of health concern (e.g. particulate matter, sulphur dioxide, nitrogen oxides, lead and other toxic chemicals in urban areas);
 - greenhouse gases (e.g. carbon dioxide, methane, CFCs);
- Water pollution protection:
 - municipal and industrial wastewater treatment in the Danube and Black Sea watersheds;
- Protection of biodiversity:
 - development of infrastructure in protected areas for the protection of flora and fauna and habitat preservation;
 - the monitoring and inventorying of biodiversity and promotion of sustainable use of biodiversity for alternative social development.

A summary of the Fund’s revenues and expenditures is provided in Table 2.1.

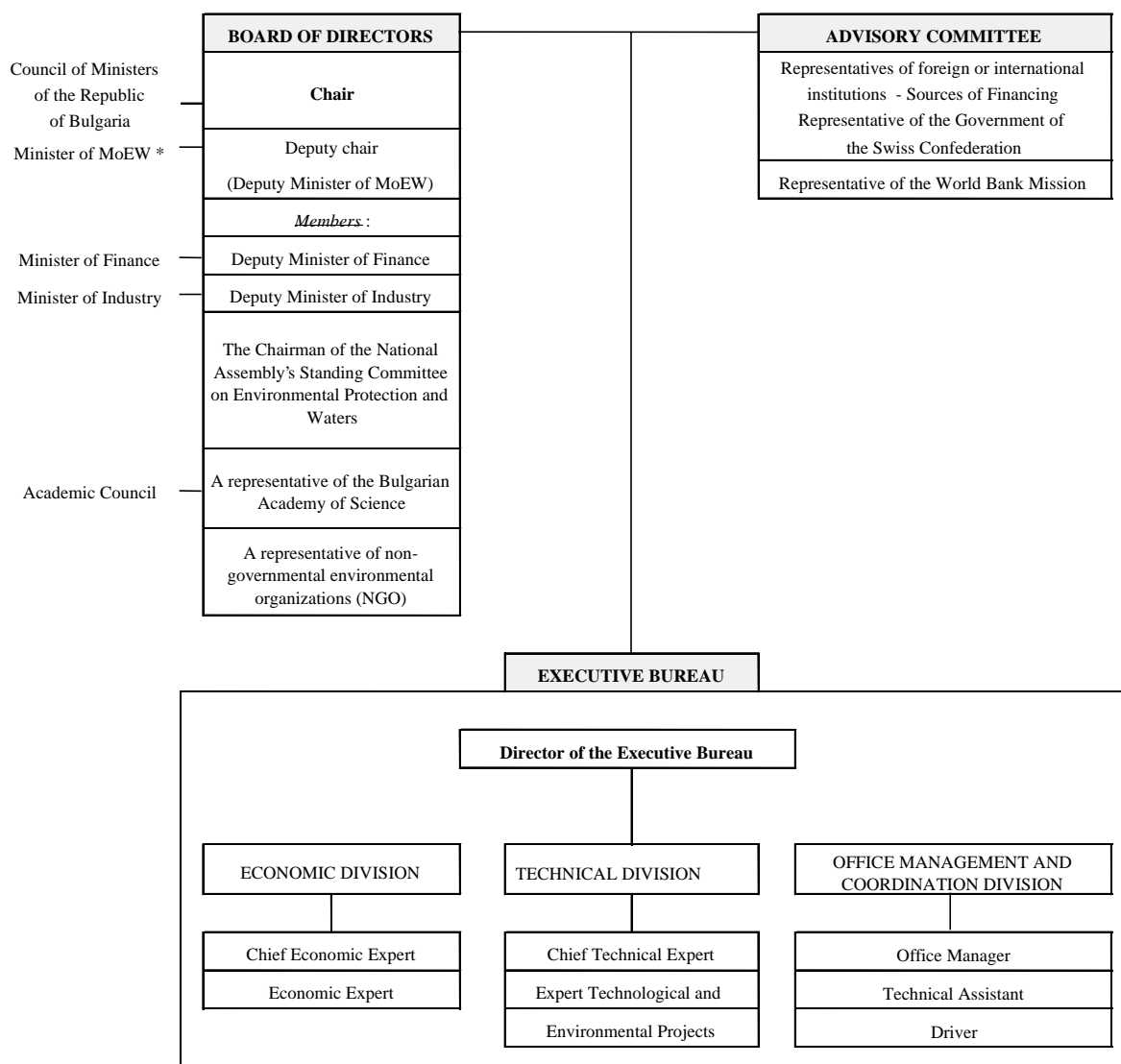
Table 2.1: Revenues and expenditures of the NTEF (mln USD; nominal values based on average annual exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	0.0	0.0	0.0	5.526	5.243
Environmental expenditures	0.0	0.0	0.0	0.0	0.391
Fund overhead/administrative costs	0.0	0.0	0.0	0.276	0.109
Total expenditures	0.0	0.0	0.0	0.276	0.500

2. Management and Administration

The NTEF is a legal entity, independent from the state budget. The Fund is governed by a Board of Directors (“Board”), an Advisory Committee, and an Executive Bureau (“Bureau”), whose powers and responsibilities are defined in the Fund’s regulation, the debt-for-environment swap and related agreements between the Governments of Bulgaria and Switzerland, as well as agreements with other contributors to the Fund. The organisational and governance structure of the Fund is depicted in Figure 2.1.

Figure 2.1: Organisational Structure and Governance of the National Trust EcoFund (NTEF).



* MoEW - Ministry of Environment and Waters

The Fund’s *Board* consists of seven members: a Chair, Deputy Chair, and five ordinary members. The Board has the following functions and powers:

- formulating, in association with the Advisory Committee, the Fund’s strategy and policies;
- specifying the criteria for appraising and selecting projects to be financed by the Fund;
- making final decisions on the selection of projects to receive financial support from the Fund;

- approving the annual work plans and annual reports on the Fund's activities;
- approving the annual operational budget, and annual projections for the Fund's revenues and project financing expenses;
- approving the annual reports on the Bureau's budget and on the Fund's actual revenues and project financing expenses;
- ordering, at its discretion, financial audits of the Fund, including by external experts;
- notifying the Advisory Committee promptly of its decisions;
- providing, at least once a year, the Government of Bulgaria and the Fund's contributors with a report on its activities during the past year;
- nominating the Director of the Bureau (the "Director");
- dismissing the Director prior to expiry of his mandate if he resigns or if he is convicted of an intentional crime;
- setting the Director's salary and approving the Bureau's payroll and employees' job descriptions as proposed by the Director.

The *Chair of the Board* (the "Chair") is appointed by the Council of Ministers for a five-year term after consultations with the Advisory Committee. The Chair's mandate may not be terminated except for the following reasons: resignation; incompatibility of the Chair's position with other positions held by the same individual; conviction of an intentionally committed crime. The Chair may not hold other positions within the government or other state institutions. The Chair's responsibilities include:

- representing the Fund before Bulgarian state institutions and, if authorised by the Government or the National Assembly, before foreign governments, international organisations, other institutions, and third parties;
- managing the activities of the Board and ensuring their consistence with the Fund's Statutes;
- leading sessions of the Board;
- signing all contracts for the provision of finance by the Fund;
- the possible delegation to his/her Deputy or to members of the Board the performance of certain acts;
- and, hiring the Fund's Director, as nominated by the Board.

The Deputy Chair of NTEF is an acting Deputy Minister of Environment. The Deputy Chair assists the Chair and performs various activities assigned to him or her by the latter. The Deputy Chair's mandate is terminated following an Order of the Minister of Environment for dismissal, or following the termination of his/her mandate as a Deputy Minister. If the mandate of the Deputy Minister is terminated, he or she continues to act as Deputy Chair until the inauguration of the new Deputy Chair.

The ordinary members of the Board include: a Deputy Minister of Finance; a Deputy Minister of Industry; the Chairman of the National Assembly's Standing Committee on Environmental Protection and Waters; a representative of the Bulgarian Academy of Science; and a representative of environmental NGOs which are not registered as political parties, have at least two registered representations within Bulgaria and whose scope of activities encompass environmental protection. The Deputy Ministers are appointed by their respective Ministers; the representative of the Bulgarian Academy of Science by its Academic Council; the NGOs, within a period designated by the Chair, agree in writing on a jointly elected representative. Should the NGOs fail to reach an agreement within the deadline, the Board elects an representative from among the candidates proposed.

Whenever the Board reviews proposed projects in the areas of industry, energy, construction, agriculture, transport, etc., representatives from those ministries may be invited to attend the Board's meetings in an advisory capacity. Representatives of the Advisory Committee and the Fund's Director may also attend the Board sessions in an advisory capacity. Sessions of the Board are convened by the Chair at his/her discretion or at the request of the Fund's Director, and are held at least every three months. A member of the Advisory Committee (i.e. contributor to the Fund) may also request in writing that the Chair convene a session of the Board. In such a case, the Chair convenes a session within one week of the request or makes a reasoned refusal.

The Fund's *Advisory Committee* ("Committee") consists of representatives of foreign or international, governmental or non-governmental organisations, or institutions which contribute financially to the Fund or which vigorously support the Fund's activities. The first member of the Committee is a representative of the Government of Switzerland. He or she performs all functions and exercises all powers of the Committee until other members are enrolled. The enrolment of representatives of other organisations or institutions in the Committee takes place following an agreement to this effect between the Fund and the respective organisation or institution.

Committee members have the right to:

- review, evaluate and give written opinions on projects proposed for financing by the Fund Director before such proposals are submitted to the Board;
- require that projects and funds managed by the NTEF be reviewed by outside experts;
- demand any information about the current activities of the Fund from the Bureau, its structures and employees, and the Board, and give recommendations for their improvement;
- participate in the Board's meetings.

The representative of Switzerland as well as any other representative of a contributor to the Fund, if so provided in the respective agreement with that contributor, has an absolute veto right as regards projects proposed to be financed with means provided by that contributor. A project, vetoed in accordance with this procedure, is not submitted to the Board for consideration.

The organisational structure of the *Bureau* includes: the Director; the Finance and Economic Division headed by the Chief Economic Expert; the Technical Division headed by the Chief Technical Expert; and, the Office Management and Co-ordination Division. At present the Bureau operates with a staff of eight members, including a technical assistant and a driver.

The *Director* is appointed by the Board after receiving the Committee's opinion. The Director:

- manages the Fund in accordance with the decisions of the Board and Committee and within the powers granted to him by the Board;
- is responsible for the proposition of projects and the allocation of resources by the Fund;
- submits to the Board quarterly and semi-annual financial reports on the Bureau's operational expenses and the Fund's project financing expenses;
- sees to the proper and lawful preparation and conduct of tenders for the purchase of goods and services, and approves the results of such tenders;
- proposes to the Board a draft payroll of the Bureau and signs and cancels the contracts of the Fund's employees;
- contracts outside services and other activities required by the Fund's operation within the scope of his authorities;
- attends sessions of the Board.

The Finance and Economic Division performs all functions related to the evaluation and control of economic and financial parameters of projects (including applications for finance, project evaluations, tenders, contracting, and others) and project implementation. The Division also implements the accounting system of the Fund. *The Technical Division* performs all functions related to the evaluation and control of technical parameters of projects. *The Office Management and Co-ordination Division* performs all functions related to the co-ordination of the Bureau's interaction with the Board, Committee, and financial contributors; supports contacts and negotiations with potential donors and creditors, potential beneficiaries, national and international institutions; and provides logistical support for the Bureau.

3. Revenues

According to the provisions of the debt-for-environment swap agreement, the equivalent of 20% of Bulgarian debt to Switzerland is to be paid to the Fund by the State Treasury in eight equal semi-annual instalments. In practice, this means the partial cancellation of payments that would have otherwise been made to Switzerland in Swiss Francs, with the corresponding amount in Bulgarian leva (at the exchange rate of the Bulgarian National Bank on the date of payment) being earmarked for the Fund. The first partial cancellation was made on 31 March 1996 and the last one will be made on 30 September 1999. The Fund has also received grant support from the World Bank and the Ministry of Environment and Waters. The Fund does not collect revenues from environmental taxes, charges etc., as is the case at many other funds in the region (including the Bulgarian National Environmental Protection Fund).

4. Spending Strategy

The Bureau carries out its activities in accordance with *annual work plans* defining its priorities and tasks for the respective year. The work plans are designed by Bureau's Director and are endorsed by the Board. The Director informs the Bureau's staff of the goals and tasks included in the respective annual work plan. The goals and tasks included in the respective annual work plan are broken down in three-month plans for each of the Bureau's Divisions. The Fund's long-term spending strategy, which is still evolving, will be a function of its long-term revenues and thus potential for financing projects.

The Fund's top priority for 1998 was the financing of investment projects for clean up of past pollution and environmental damages - 67% of total financing. The financing of wastewater treatment plants followed with 20%, and financing of air pollution reduction was planned at 12%.

5. Expenditures

As the Fund began its operation only in late 1996, it started making disbursements for environmental projects only in 1997. The NTEF's budget is relatively small in comparison with the financial needs for environmental projects in Bulgaria and the Fund's contribution to overall environmental expenditures in the country is correspondingly modest. Total Fund expenditures on environmental projects budgeted for 1998 (as of June) were 5.67 million USD.

Terms and Conditions for Support

Thus far the NTEF has provided support in the form of grants and interest free loans. The loans have been coupled with the grants to cover related VAT expenses (the Swiss Government does not allow Swiss funds to be used to cover VAT expenses). While the Fund's founding legislation and regulations do not restrict it to providing grants, that has been the major form of support thus far provided by the Fund because of two reasons:

1. The debt-for-environment swap agreement with Switzerland states that "...funds resulting from the swap will be used mainly as grants to finance or co-finance well-prepared and appraised projects of high environmental priority which are not commercially viable...". In practice, this means that NTEF funds are likely to be used primarily for environmental infrastructure projects with low financial returns.
2. Such projects, in most cases, do not generate enough revenues to ensure repayment of interest and principal on loans.

The NTEF may support up to 30% of total project costs. In practice, the NTEF has thus far supported about 20% of total project costs.

The NTEF maintains close contacts with other institutions involved in financing environmental projects in Bulgaria, among them the National Environmental Protection Fund and the World Bank. (Unfortunately, commercial financial institutions in the country are not yet very active in financing environmental projects, and thus the Fund's cooperation with such institutions is minimal). Cooperation includes the exchange of information on submitted project proposals and approved and financed projects, as well as co-financing of projects. Co-financing from any reputable and reliable institution is acceptable for the Fund.

6. Funding Cycle

The NTEF periodically disseminates information about its environmental investment priorities, together with selection criteria and instructions for the preparation of project proposals, to relevant organisations, including NGOs, regional governments, municipalities, companies, etc. NTEF representatives also regularly participate in seminars, working meetings and other activities organised by different institutions and NGOs. Interest in, and awareness of, the Fund and its funding potential has grown considerably. In 1997 the Fund received 60 project proposals, while in 1998 (as of 31 March) the number was 264.

The NTEF strives to allocate its resources to projects offering the most cost-effective solution to environmental problems. Three stages of the project cycle are crucial in this aspect: at the appraisal/selection stage, alternatives to the proposed technical solution are considered, so that only the best technical solution in terms of cost-effectiveness is approved for financing; later, goods and services are procured on a competitive basis, through a well-elaborated and transparent mechanism, ensuring reasonable costs for carrying out the project; at the implementation stage, NTEF experts carefully monitor ongoing activities.

The most important criteria for the selection of projects are:

- the environmental significance of the project vis-à-vis national environmental policy and local environmental priorities, including scope of the environmental problem to be addressed and scale of the environmental effect;
- the project's cost-effectiveness;
- the technological level of the project;
- the level of secured co-financing. In the case of grants, the beneficiary is expected to contribute 70% of project costs; in the case of loans, 50%. Exception to these requirements is possible upon a special decision of the Fund's Board, after preliminary consultation with the Fund's principal contributor (i.e. a representative of the Swiss Government);
- the organisational and financial capacities of the applicant to properly maintain and operate assets acquired as a result of the Fund's support and to ensure the desired environmental effect for the entire duration of the project.

Additionally, for a project to receive the Fund's financial support applicants must:

- submit project documents which quote valid technical solutions and prices and are otherwise in compliance with the requirements publicised by the Fund;
- offer proof of lowest capital and operational costs per unit of reduced pollution, based on the evaluation of project implementation options;
- and, provide proof of compliance with national environmental standards and requirements through environmental impact assessments, when required by the Environmental Protection Act, or through other estimates and proof in accordance with the relevant Bulgarian legislation.

In the selection of projects and the determination of the form of financing, the Fund's bodies are guided by the requirements of the Fund's contributors and the National Environmental Policy. Applications for support from the Fund are appraised in a two-stage procedure: 1) preliminary

assessment for compliance with the Fund's priorities and funding conditions; and, 2) full appraisal leading to selection of projects.

The application process begins with the submission of a proposal for financing, according to Appendix 1 of the Fund's Procedural Rules. This proposal then undergoes preliminary assessment. If the proposal passes this assessment, additional information and documents are requested, pursuant to the procedure provided for in Article 6 of the Fund's Procedural Rules, and the proposal undergoes full appraisal. The full appraisal and selection of projects for funding is conducted in the following phases:

Appraisal of the project against established criteria and terms - This is conducted by a Projects Assessment Committee (PAC), which is appointed by the Director and includes members of the Finance and Economic, and Technical Divisions, and, as needed, qualified external experts. The PAC's decisions are recorded and the minutes are signed by the Director.

Advisory Committee approval - The Committee approves or rejects project proposals submitted to it by the Director of the Bureau. The Committee's decisions on rejecting projects shall be final, unless otherwise provided for in the agreement with the Committee member whose funds have been earmarked for the project under review. The Committee may approve, for further consideration by the Board, projects that have been rejected by the Bureau. The Committee's decisions shall be in writing and shall include supporting arguments.

Board of Directors' approval - Final decision for approval or rejection of projects are made by the Board on the basis of the Bureau's minutes and Committee decisions, unless otherwise provided for in the Fund's Rules of Procedures or in the agreement with the respective contributor to the Fund.

Project implementation is monitored as follows: by the Fund's beneficiaries, through contracted outside experts or in-house staff; by controllers designated by the Fund's Director (must be outside the Bureau staff); and, by the Bureau's Technical Division staff.

7. Evaluation, Reporting and Public Information

The Fund's financial accounts are audited by an independent auditor on annual basis. The 1997 audit has been successfully completed by Ernst & Young. The Executive Bureau elaborates annual reports, which are approved by the Advisory Committee and the Board of Directors and presented to the Government through the Minister of Environment and to the Fund's current donors, through the representative of the Swiss Government and the Permanent Mission of the World Bank.

Information about the Fund's activities, funding priorities and requirements is disseminated through specialised programmes on national television, the distribution of general information materials among potential beneficiaries by mail, at different seminars and workshops, as well as among local authorities via the Association of Local Community Mayors.

8. Major Achievements

As of mid-1998, the Fund approved the following projects, which are now under implementation:

- a wastewater pumping station in Russe;
- gasification of the central heating unit of the United Regional Hospital in Lovech;
- gasification of the central heating unit "Ovcha Kupel 1" in Sofia;
- a study of the biodiversity in the vicinity of Viden Peak (Konjavaska Mountain) and the Erma River canyon near Tran;

- the purchase and delivery of equipment for purifying gases released from the clinical and domestic waste incinerator at the Military Medical Academy in Sofia;
- emergency cleanup of environmental hazards at MDK Pirdop, Component 1;
- wastewater treatment plant and sewerage collectors at Samokov;
- gasification of the heating plants at schools and kindergarten in Lovech; and,
- wastewater treatment plant and sewerage collectors at the resort complex of Borovets.

9. Challenges and Future Prospects

The most significant challenges that the NTEF currently faces include:

- improving the efficiency of work of NTEF staff through a) further elaboration of project selection mechanisms, and b) developing and integrating an automated system for project management;
- attracting new donors / contributors;
- developing and increasing the Fund's use of market-based financing mechanisms in line with changes in demand for environmental finance;
- increasing the NTEF's co-operation with international financing institutions, including involvement in projects implemented by IFIs.

CHAPTER 3

CZECH REPUBLIC: THE STATE ENVIRONMENT FUND

Lubomír Paroha

Consultant for the Czech State Environmental Fund

1. Background and Objectives

The State Environment Fund of the Czech Republic (the “Fund” or SFZP) was established by National Council Act No. 388 in 1991, with the legal status of a “State Institution”, in effect merging and replacing the pre-existing State Air Fund and State Water Fund. This Act includes the Fund’s Statute, related Regulations, and the Directive on the Provision of Financial Resources from the Fund. The Directive, issued by the Ministry of Environment, is supplemented each year through annual Annexes issued by the MoE following close consultations with the Fund Office. Recent Annexes have been guided by the “Strategy of the State Environment Fund in the Years 1997-2000”, which was approved at a meeting of the economic Ministers of the Government of Czech Republic on January 13, 1997.

The chief motivation for establishment of the Fund was the aim to create a comprehensive and flexible financial instrument of environmental policy that would:

- be based on the system of payments for activities affecting the environment (fees, charges, and fines for the use of the environment);
- replace other existing specialised funds (the State Water Management Fund¹ and the Air Protection Fund²);
- allow for the mobilisation of financial means for environmental protection;
- allow for a sufficiently flexible reaction to evolving priorities in environmental protection;
- allow for a yearly carry-over of financial resources.

The “Strategy of the State Environment Fund in the Years 1997-2000” is based on the State Environmental Policy adopted in 1995. The most important elements of this strategy include:

I. Setting priorities:

- air pollution abatement (especially from medium-sized sources, i.e. 0.2-5 MW);
- water pollution abatement (especially from medium-sized sources, i.e. 5-10 thousand equivalent inhabitants);
- minimisation of waste, especially hazardous waste;
- support for “clean” (low waste, low emission and low energy consumption) technologies, especially for small and medium-sized enterprises;
- protection of nature and landscape (with emphasis on increased retention capacity of the landscape and the flood prevention effect of measures).

II. Introduction of five specialised assistance programmes corresponding to the above listed priorities for the period 1998-2000.

III. Setting the criteria (and their relative importance) for assessing applications within the five programmes:

- health risk minimisation;

¹ The State Water Management Fund was established in 1967 as part of the Ministry of Forest and Water Management.

² The Air Protection Fund was established in 1977, also as part of the Ministry of Forest and Water Management.

- environmental damage within given locality;
- compliance with international treaties;
- emphasis on preventive measures;
- abatement cost per unit of pollution;
- share of the Fund assistance on the project cost.

The role of the Fund in total environmental expenditures in the Czech Republic is illustrated in Table 3.1 below, which indicates the main State sources of annual environmental expenditures in the country from 1990-97.

Table 3.1: The structure of total annual expenditures on environmental protection in the Czech Republic, 1991-1997 (mln USD; nominal values).

Year	State Government Sources			Total from State Government	Total Environmental Investments	Investments as a % of GDP
	State Budget	SFZP	National Property Fund			
1991	254.5	50.9	0.0	305.3	318.9	44.1
1992	378.6	53.1	0.0	431.6	597.9	74.3
1993	312.1	99.5	0.0	411.6	686.0	75.5
1994	347.4	125.1	3.5	475.9	983.1	93.8
1995	346.6	184.6	30.1	561.4	1217.0	101.7
1996	302.0	169.4	40.5	512.0	1399.7	99.5
1997	252.3	104.1	44.2	400.6	n.a.	n.a.

Source: Ministry of Environment of the Czech Republic.

Notes: "n.a." = not available. National Property Fund expenditures include expenditures for drinking water. "Total Investments" represents statistically monitored expenditures on environmental protection investments based on the methodology applied by the Czech Statistical Office. (This methodology, which excludes expenditures on drinking water, conforms with EU methodology). Municipal environmental protection expenditures are estimated at the amount of approximately 2.0 billion CZK per year.

Another reflection of the scale of the Fund's activities since 1993 is given in Table 3.2 below, which illustrates its total annual revenues and expenditures.

Table 3.2: Annual revenues and expenditures of the SFZP from 1993-97 (mln USD; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	94.94	155.93	186.87	197.21	167.15
Environmental expenditures	98.41	123.11	183.84	169.55	103.97
Fund overhead/administration costs	0.89	1.39	1.46	1.53	2.16
Total expenditures	99.30	124.50	185.30	171.08	106.13

Source: Table II.3.1 in Annex II.

2. Management and Administration

The Fund is a state institution, subordinated to the Minister of Environment, but not directly linked to the State Budget. Its scope of work is defined by its Statute, which was approved by the Czech Government in February 1992. The Administrator of the Fund is the MoE, with the Minister holding ultimate responsibility for the use of the Fund's resources.

The *Fund Council* acts as the Minister's advisory body; its decisions are submitted to the Minister as recommendations. Regular Members and the Chairperson of the Council are appointed and discharged by the Minister of Environment. The Members of the Council include:

- six representatives of the following ministries: MoE, Ministry of Finance, Ministry of Regional Development, Ministry of Agriculture, Ministry of Industry and Trade, and the Ministry of Health;
- six members of the lower chamber of the Czech Parliament, from the following committees: Committee for the Environment and Regional Development, Committee for the Budget, and, Committee for the National Economy;
- one representative of the Union of Towns and Municipalities.

The activities of the Fund are executed by the *Fund Office*. In accordance with the Fund Statute, the Fund Office performs the following main activities:

- draws up budgets and final accounts of the Fund;
- receives applications from those interested in obtaining support from the Fund;
- ensures skilful evaluation of the applications;
- prepares the background materials necessary for the Council to render its recommendations;
- prepares proposals for projects to be financed and submits them to the Minister;
- on the basis of the resolution of the Minister, the Fund Office is authorised to enter into contracts with successful applicants;
- administers the bank accounts of the Fund and executes all payments;
- carries out analyses of the use of the Fund's resources and submits these to the Council, the Ministry of Finance and the Czech Parliament;
- regularly informs the public about the Fund's activities.

The *Fund Director* is appointed and discharged by the Minister of Environment. The other senior managers are the Technical and Financial Directors, who are appointed by the Fund Director. As of spring 1999, the number of employees at the Fund was approximately 100. The organisational structure of the Fund is shown in Figure 3.1.

A particularly important institutional partner for the Fund is the Czech Environmental Inspectorate, which establishes and monitors the pollution charges and fines which represent the largest part of the Fund's revenues.

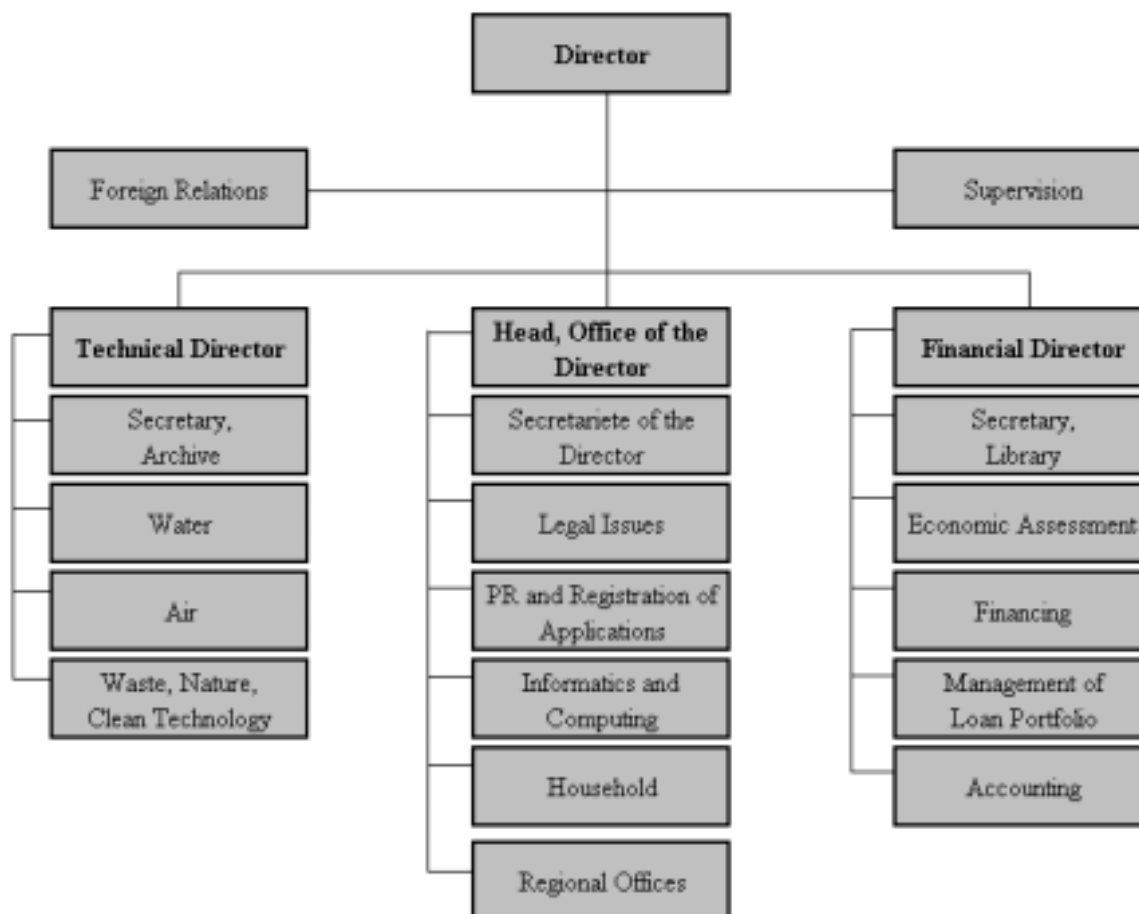
3. Revenues

The Fund's standard sources of revenue include:

- charges on the discharge of waste water into surface waters;
- charges on the use of ground water;
- charges on the emission of harmful substances into the air;
- charges pursuant to the Waste Law;
- payments for the conversion of agricultural land from agricultural production;
- charges on the production and import of substances damaging the Earth's ozone layer;
- fines imposed by the Czech Environmental Inspectorate;
- repayments of loans principal and interest;

- transfers from the National Property Fund under the “Air Revitalisation Programme” (a total of 6.1 bln CZK from 1994-1997).

Figure 3.1: Organisational structure of the Czech State Environment Fund as of March 1999.



According to the Fund's founding law, revenues may also come from:

- fines on the misuse of financial support provided by the Fund;
- transfers from the State Budget;
- taxes (such as a proposed CO₂ tax being considered by Parliament);
- loans from legal entities;
- contributions made by domestic and foreign legal entities.

Over the period 1992-1997, the revenue of the Fund totalled 25.29 billion CZK (nearly 900 million USD). The largest sources of revenue in that period were air pollution charges (28.2%), transfers from the National Property Fund (23%), wastewater charges (22%), and, payments for the conversion of agricultural land (9.2%). The annual revenues of the Fund from 1993-1997, with a break down of major sources, are shown in Table 3.3.

Table 3.3: Fund revenues according to source (mln USD; nominal values based on annual average exchange rates).

Revenue Source	1993	1994	1995	1996	1997
Air pollution charges	28.09	44.72	43.84	46.70	50.45
Water use charges	1.43	1.49	1.06	1.33	1.15
Wastewater charges	37.01	28.94	24.65	20.90	15.74
Waste disposal charges	12.23	14.79	22.52	9.72	1.74
Soil/land use charges	11.12	17.04	13.14	16.10	14.48
Air pollution fines	0.35	0.31	0.32	0.40	0.64
Wastewater fines	0.62	0.39	0.38	0.31	0.30
Waste disposal fines	0.05	0.41	0.64	0.36	0.27
Soil/land use fines	0.06	0.09	0.12	0.14	0.09
Product charge on CFCs	0.00	1.93	1.90	1.43	1.29
Loan repayments (including interest)	1.44	8.46	14.59	21.63	24.81
Privatisation (<i>Air Quality Program</i>)	0.00	34.73	60.29	73.67	47.32
Financial operations and interest on bank deposits	2.55	2.62	3.44	4.54	10.15
Other	0.00	0.00	0.00	0.00	0.41
TOTAL revenues	94.94	155.93	186.87	197.21	167.15

Source: Table II.3.2 in Annex II.

Notes: Totals might not equal the sums of individual sub-components due to rounding.

In order to have a longer-term perspective, the Fund (together with Czech Environmental Inspectorate and other institutions) has carried out a study on the trends in pollution charges for the period 1998-2002. Only wastewater charges are expected to rise (as a result of the new clean water act); payments for the conversion of agricultural land are expected to remain at about the same levels while waste disposal and air pollution charges will decrease in near future. The share of loan repayments in total revenues is also expected to rise, as has been the case in recent years.

The Fund does not set, collect, or claim the charges; it is only the recipient of the revenue. The general scheme for collecting pollution charges is as follows:

- the level of pollution charges for each polluter is set by Czech Environmental Inspectorate;
- the polluter makes the actual payment to the tax authority;
- the tax authority channels the payment to the Fund.

Each year, when preparing the next year's annual budget, the Fund receives forecasts from the Czech Environmental Inspectorate on the expected levels of revenue. The difference between these estimates and actual revenues is typically not significant, as may be seen from Table 3.4 (a notable exception being waste charges).

4. Spending Strategy

The long term spending strategy of the Fund is based upon State Environmental Policy goals and the financial means available to the Fund. The Fund's long-term spending priorities, as specified by the MoE in the "Strategy of the State Environmental Fund in the Years 1997-2000", are listed earlier in this chapter. The Fund also has an annual spending plan, the priorities of which are again set by the MoE. The top priorities for 1998 are:

- air protection - focused on medium size pollution sources;
- water protection - focused on medium size pollution sources;
- use of renewable energy sources.

Table 3.4: Forecast and actual revenues collected by the Fund in 1997 from pollution charges.

Pollution Media	Forecast (mln USD)	Actual revenue (mln USD)	Actual/forecast (%)
Water	19.9	17.5	88.0
Air	47.0	51.7	110.0
Waste	0.6	2.2	351.0
Soil	12.6	14.6	115.5
Total	80.1	85.9	107.3

5. Expenditures

Through 1997 (inclusive), the Fund has spent approximately 686 mln USD on environmental protection. The major fields of this expenditure are indicated in Table 3.5, which readily shows that the large majority of support has gone to the air and water sectors.

Table 3.5: Fund expenditures by environmental sector (mln USD; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Air	32.13	42.65	89.65	83.97	37.99
Water	57.37	69.25	81.51	71.68	59.67
Waste (total)	7.35	6.19	9.37	5.35	1.91
<i>incl.</i> : incineration	3.42	1.28	0.00	0.71	0.17
Nature protection/conservation ¹	1.55	5.02	3.31	8.55	4.40
TOTAL environmental expenditures	98.41	123.11	183.84	169.55	103.97

Source: Table II.3.3 in Annex II.

Note: 1) Includes projects focused on soil and landscape protection.

The Fund categorises its assistance as either *direct* or *indirect*. Direct forms of assistance include:

- grants (only to non-commercial entities);
- loans to non-commercial entities with an interest rate of 3% (as of 1998; previously, such loans were interest-free); and,
- loans to commercial entities with an interest rate of 7%.

Indirect forms of assistance include:

- guarantees for loans, to an amount of 50 mln CZK for a period of 10 years, and;
- subsidies to offset the interest rate of loans extended by commercial banks (up to an amount of 7%) for a maximum period of 5 years.

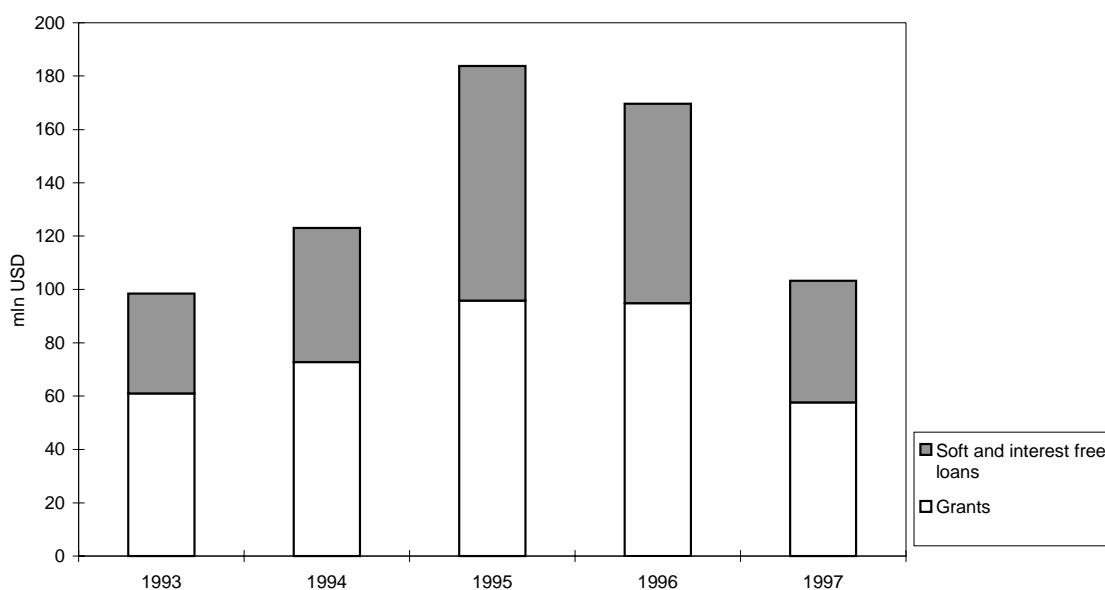
As suggested above, the Fund differentiates between two types of applicants: 1) municipalities and other non-commercial entities; 2) commercial entities. For either type of beneficiary, the Fund does not combine direct and indirect forms of assistance, nor interest subsidies and guarantees for loans. The terms associated with the different forms of support provided by the Fund differ according to specific assistance programme category and type of applicant. (In 1998, the Fund had six programmes of assistance with 21 detailed sub-programmes.) The maximum loan repayment period is 7 years (including up to 3 years of grace period), starting the year after the last disbursement is made by the Fund. The Fund may cover a maximum of 80% of total project costs, though commercial entities may typically receive support amounting up to 50%. Non-commercial entities may receive a combination

of both grants and soft loans, while commercial entities are typically eligible for soft loans only. (See Table II.3.4 in Annex II for more details.) The Fund does not support projects already supported from the state budget. In order to ensure appropriate use of the financial support provided by the Fund, 10% of the support is retained until the project is completed and evaluated.

While the Fund does not directly co-operate with commercial banks, it does co-operate with them indirectly. Applicants may, for example, turn to commercial banks to borrow money to complement “own” resources and those provided by the Fund. Also, in some cases commercial banks guarantee loans provided by the Fund and, conversely, the Fund may guarantee loans provided by a commercial bank or provide grants to borrowers to effectively lower the commercial interest rate on loans.

As can be seen in Figure 3.2 below, the vast majority of the Fund’s financial support is provided in the form of grant or soft loan. Since the early 1990’s, there has been a trend toward reducing the share of total support provided as grants and increasing the share provided as soft loans. Amounts that the Fund might be required to pay as a result of its loan guarantees are covered by the maintenance of a financial reserve. The reserve held by the Fund fluctuates during the year according to changes in the risks related to Fund's financial situation.

Figure 3.2: Fund environmental expenditures by form of disbursement (mln USD; nominal values based on annual average exchange rates).

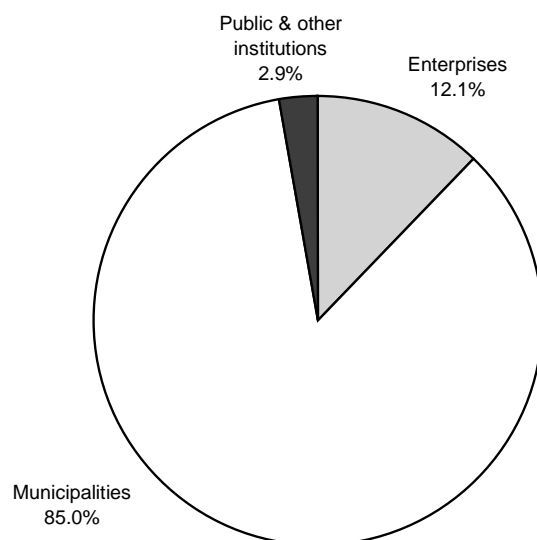


Source: Table II.3.5 in Annex II.

Notes: The Fund began to provide loan guarantees in 1996. The total amount guaranteed by the Fund in that year was 1 471.5 mln CZK (~ 54 mln USD), however, it was not called upon to pay any of those guarantees. In 1997, the Fund extended loan guarantees worth 1 410.8 mln CZK (~ 47 mln USD), and was required to make payments of 1.2 mln CZK (~ 0.04 USD), which do not appear in the above table due to the proportionally low amount.

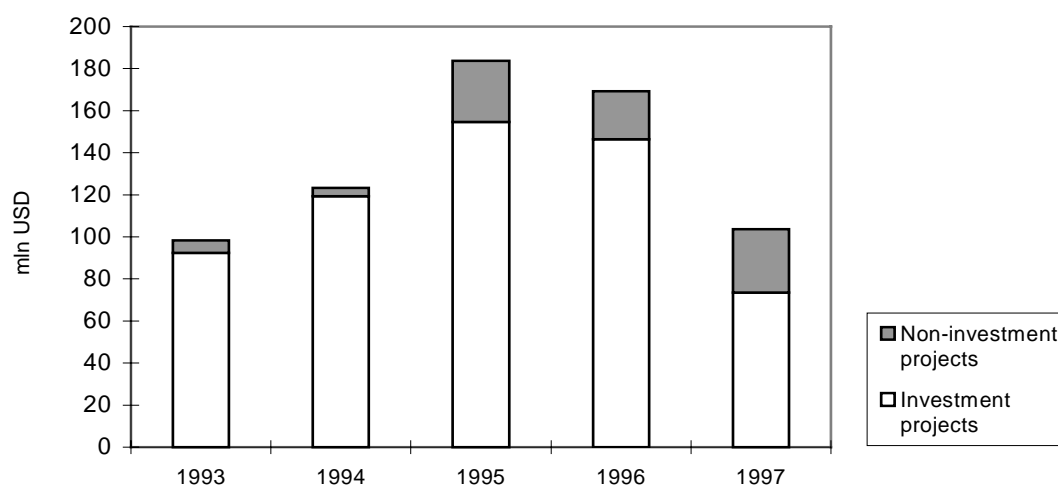
Support from the Fund is typically provided to municipalities, as illustrated in Figure 3.3. In 1997, municipalities received about 85% of the total environmental expenditures of the Fund while ~12% was received by commercial entities, and 3% by other non-commercial entities. (Water management joint stock companies where municipalities own at least 90% of the shares are treated by the Fund as municipalities.) Figure 3.4 indicates that the large majority of the Fund’s environmental expenditures have gone toward the implementation of investment projects rather than non-investment activities.

Figure 3.3: Fund environmental expenditures in 1997 by type of recipient.



Source: Table II.3.6 in Annex II.

Figure 3.4: Fund environmental expenditures in 1993-1997 according to “investment” or “non-investment” projects (mln USD, nominal values based on average annual exchange rates).



Notes: The term “investment” projects here means capital expenditures for environmental technology/equipment and the construction of facilities (including operation and maintenance of such installations). The term “non-investment” projects here includes activities such as training/education and public awareness raising, environmental monitoring and research, nature protection through non-technological means, etc. (including computers and other office equipment for the support of such activities).

6. Funding Cycle

For each calendar year, the Fund's priorities, and assistance programmes designed to address those priorities, are published at the end of the previous year by the MoE as an Annex to the Directive on the Provision of Financial Resources from the State Environmental Fund. The Annex is widely distributed as a special brochure, published in several newspapers and is also available on the Fund's relatively new Internet page (<http://www.sfzp.cz>).

The funding cycle applied by the Fund includes the following steps:

- The applicant submits an application to the Fund Office on the Fund's standard form, together with the required annexes.
- The application is briefly checked by Fund staff for its completeness. A complete application is then officially registered.
- A registered application is passed on to the relevant experts at the Fund for appraisal of its technical, environmental and financial merits. A number of criteria - specific for each assistance programme - are applied in the appraisal process (see Box 1 below for a description of criteria applied in the air programme). Following appraisal, the Fund ranks project proposals and recommends to the Fund Council which projects should be funded. During its session, the Council reviews the opinion of the Fund Office, and makes its own recommendation on whether the project should be approved or disapproved, which is then submitted to the Minister of Environment. The Minister then issues a resolution specifying which projects are to receive financial support from the Fund.
- If a project is approved in the Minister's resolution, a "Decree" is issued by the MoE to the Fund Office with detailed instructions and conditions for entering into a contract with the applicant. This Decree must be forwarded on to the applicant within 15 days after the Fund receives it from MoE.
- The applicant must then submit to the Fund Office any additional information necessary for the preparation and signing of a Contract for Provision of Financial Support.
- If a loan is a part of the financial support package, it must be secured with suitable collateral. The most common form of collateral is real estate, (in which case the value of the collateral is required to be greater than the loan itself), however, other kinds of collateral are also acceptable. Loan disbursement does not begin until the loan is fully secured by collateral. In order to secure a loan with real estate as collateral, the borrower must register a "collateral right" with the relevant regional territorial registry in the name of the lender. Loan disbursements may be made only after proof of this "right", in the form of an abstract made available by the registry, is submitted to the Fund. Once a borrower repays his or her loan, the Fund releases its "collateral right" to the real estate.
- Once all required additional information (including collateral in the case of a loan) is submitted to and approved by the Fund, the contract is signed.
- Payments are made according to the schedule agreed upon in the contract. The Fund withholds 10% of the support until the project is completed and a final evaluation is conducted. If the project is found to have met all the targets and benefits stated in the application, the remaining 10% is paid.

The applicant must receive notification indicating the outcome of the selection process (positive or negative) within six months after his or her application was registered.

In 1997, the Fund received 462 applications for assistance, out of which the Minister approved:

- 83 projects within the air programme;
- 27 projects within the water programme;
- 10 projects within the waste programme;
- 4 projects within the clean technologies programme;
- 67 projects within the nature protection programme.

BOX 1: APPRAISAL CRITERIA USED IN THE AIR PROGRAMME

Formally complete applications submitted in the field of air protection are evaluated on the basis of the following criteria:

1. *The level of concentrations of the main pollutants at the given locality.* This criterion is established on the basis of the air ambient and emission conditions at the given location and is expressed in terms of air ambient and emission orders of municipalities as drawn up by the state administration.
2. *The importance of the project in regional environmental policy.* This criterion is employed to reflect the prioritisation assigned to individual projects by the pertinent territorial department of the Ministry of the Environment.
3. *A preference for measures which maximise pollution reduction.* This factor is determined as a percentage of the value of the emission limits for the chief and possibly other pollutants as set down in the Measure of the State Committee for the Environment Law No. 17/1997.
4. *The costs for implementing the project and the amount of support requested from the Fund, related to a unit of pollution abatement.* A pollution unit abatement cost is calculated; the value of pollution charges and fines reduced as a result of the project are also considered in the cost calculations.
5. *Consideration of the requirements of environmentally burdened areas.* This criterion is expressed in terms of a point value of the total sum of all the evaluation factors carried out in the framework of the project "Delimitation of Environmentally Burdened Areas in the Czech Republic".

7. Evaluation, Reporting and Public Information

Each year the Fund prepares a report on its activities and submits it to the MoE. At the MoE, the report is reviewed by the relevant departments and then submitted to other ministries for their comments. Subsequently it is submitted to the Czech Government. The Fund also submits special reports annually to the Czech Parliament and the Ministry of Finance.

Each year the Fund undergoes a financial audit conducted by a certified firm. The audits are conducted in accordance with Czech laws, but the firms selected to carry out the audits have experience in working according to EU standards. In 1997, the Fund underwent an additional special audit concerning its loan portfolio.

Information about the Fund is disseminated publicly through its annual report, articles in the Bulletin of the MoE, specialised journals and in response to specific requests. Another, recently opened forum for disseminating information is the Fund's new Internet web page.

8. Major Achievements

From 1992-1997, the Fund helped finance:

- 469 wastewater treatment plants and sewer systems;
- 96 projects to remedy flood damage (resulting from the floods in July 1997);
- 1197 conversions from more polluting fuels to gas in municipalities;
- 457 projects to protect nature and landscapes.

Over the period of its operations, the Fund has financed activities in the water sector leading to a decrease in water pollution by 54 004 tonnes of BOD₅ and also by 75 516 tonnes of insoluble substances. For comparison: in 1996, a total of 49 744 tonnes of BOD₅ and 84 102 tonnes of insoluble substances was produced in the Czech Republic.

In the sphere of air protection, a *decrease in pollution (dust, sulphur dioxide, nitrogen oxide, carbon oxide and hydrocarbons) of 316 236 tonnes per year* was achieved in the years 1992-1997. For comparison: in 1996, a total of about 628 500 tonnes of the chief pollutants was emitted into the air by small and medium-sized pollution sources.

The fact that the large majority of expenditures from the Fund have thus far been directed towards the protection of air and water is in accordance with the priorities laid down in the State Environmental Policy for the short term (1995-1998). The dominant character of projects supported thus far by the Fund - construction of small wastewater treatment plants and installation of connections to sewer systems, conversion to gas in towns and municipalities - corresponds to the needs of the communal sector and also to the financial capabilities of the Fund.

9. Challenges and Future Prospects

The most significant challenges for the Fund are related to EU accession. The Fund will serve as an implementing agency for EU financial assistance, namely “ISPA” funds, which will require significant strengthening of the Fund’s professional capabilities. Another important challenge is the future role of the Fund as a tool for implementing the new national environmental policy that is being prepared. A draft of the new policy envisions that the Fund’s role will be elaborated in a Fund Strategy document that should be drafted by the MoE in the near future.

CHAPTER 4

ESTONIA: THE ENVIRONMENTAL FUND³

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1. Background and Objectives

The predecessor of the present Estonian Environmental Fund (the “Fund”) was established at the end of 1983 by Decree of the Council of Ministers of the USSR as the “Estonian Fund for Nature Protection and Rational Use of Natural Resources”. The Fund has operated in its present form since 1990, when it was re-constituted by regulation of the Government of Estonia. The Fund has the legal status of a national, public institution, and operates according to the Parliamentary “Act on the Environmental Fund”, passed in January, 1994, its Statute, and other legal acts of the Republic of Estonia.

According to the Fund’s Act, its objective is to collect and provide financial resources for the protection of the natural environment and natural resources. The Fund’s financial support is to be additional to other sources (e.g. state and local budgets, enterprises’ own resources, foreign aid, commercial loans), and may be provided in the form of grants and loans in support of international, national, county and local programmes and measures in the fields of:

- environmental protection;
- nature conservation;
- monitoring vis-à-vis environmental protection and nature conservation;
- development and provision of environmentally sound technologies, equipment and technical means;
- training, public and post-graduate education and public awareness-raising related to environmental and nature protection;
- the resolution of other, environment-related problems of national and regional importance.

The magnitude of the Fund’s activities is reflected in Table 4.1 below, which indicates the annual revenues and expenditures of the *Central* Environmental Fund. (Annual revenues and expenditures of the entire Fund, which formally includes the Central, county and city funds, can be found in Table II.4.2 in Annex II.)

Table 4.1: Annual revenues and expenditures of the Central Environmental Fund of Estonia (mln USD; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	n.a.	0.928	1.775	6.780	7.691
Environmental expenditures	n.a.	1.078	1.833	5.411	8.776
Fund overhead/administrative costs	n.a.	0.009	0.012	0.029	0.052
Total expenditures	n.a.	1.087	1.845	5.440	8.828

Sources: Table II.4.1 in Annex II.

Notes: The Fund carries over unspent money from one year to another, thus total disposable resources for a given year may be higher than the amounts indicated under “annual revenues”. For detailed start/end year balances and total disposable yearly resources see Table II.4.1 in Annex II. Totals might not equal the sums of individual sub-components due to rounding.

³ In June 1999, the Estonian Government decided to dissolve the Fund, effective from October 1999. The Fund’s revenues, however, remain earmarked for environmental protection purposes. At the time of publication, there were plans to establish a new Foundation in Estonia which would likely assume part of the financing role previously played by the Fund.

⁴ In co-operation with the Executive Unit of the Fund.

2. Management and Administration

General Provisions

The Fund is a legal entity, has its own bank accounts, and operates under the authority of the Minister of Environment. As specified in the Fund's Act, the Minister of Environment approves the Fund's spending programmes, based on the proposals of the Fund's Board. The Minister of Environment is also responsible for submitting the Fund's draft annual budget and budget implementation report to the Government in a timely manner.

In order to enhance the Fund's performance, its Statute provides for the Fund to be divided internally into a Central Fund (operating at the national level) and county funds which exist in all 15 counties and the cities of Narva and Tallinn. (Estonia's counties are regional units of the state government administration.) Within the Fund, special sub-funds can also be established.

Administration of the Fund

The Fund is supervised by a *Fund Board*. The Board is responsible for the appropriate use of the Fund's financial resources. The Chairman and members of the Board are appointed by the Government by decree, based on the proposal of the Minister of the Environment. The Board has 21 members, including representatives of the Ministry of the Environment (2 members), the Ministry of Finance (1 member), all county governments (15 members), two major cities (Tallinn and Narva) and scientific institutions (1 member). The Deputy Chairman of the Board is elected by the members of the Board. The Board's current Chairman is Deputy Secretary General of the Ministry of Environment (MoE). The current Deputy Chairman is the Head of one of the County Environmental Departments. The Board members serve in a voluntary capacity, though they do receive small honoraria.

The *Fund Board* has the following responsibilities:

- establishing the regulations of the Fund;
- approving the draft annual budget of the Fund and the budget implementation reports. Following submission by the Minister of the Environment and approval by the Government, the Fund's budget is adopted by the Parliament and appears as an annex to the State Budget;
- approving the draft budgets and the budget implementation reports of county funds and special sub-funds. The budgets of the county and special sub-funds also appear in the State Budget as part of the Fund's overall budget;
- establishing procedures governing the application for, and awarding of, the Fund's financial support;
- making the decisions to award financial resources to projects approved by the Minister and establishing the terms of contracts between the Fund and beneficiaries;
- making decisions on loan forgiveness;
- approving profit making activities of the Fund (setting the interest rates on loans; selecting bank(s) to manage the Fund's accounts; purchasing bonds);
- establishing the principles and procedures governing the Fund's accounting system;
- appointing and dismissing the Managing Director and other employees of the Fund;
- approving the administrative expenses and payroll of the employees of the Fund;
- overseeing the activities of the Managing Director of the Fund;
- approving the composition of the Fund's Auditing Commission from among its own members;
- informing the public about the Fund's activities.

The Fund Board is competent to pass resolutions if at least half of its members are present, and among them are the Chairman or the Deputy Chairman. Decisions of the Board are adopted by simple majority vote of the Board members present at the meeting. In the case of tied votes, the vote of the Chairperson (the Chairman or the Deputy Chairman) is decisive. Sessions of the Fund Board are held

as needed, and at least once each quarter of the year. In exceptional cases the Board can make decisions without convening a session. In such case, voting may take place by means of telephone or fax, and 75 percent of the Board members must agree with the decision for it to be passed. The Board's decisions must be in writing and be signed by the Chairman of the Board.

Due to a dramatic increase in the annual budget of the Fund, an *Executive Unit* of three persons, led by a Managing Director, was established at the Fund in 1996. Since the beginning of 1999, the Executive Unit has had seven members: Managing Director, Deputy Director, Internal Auditor, Assistant Managing Director (responsible for administrative and personnel management and record keeping) and three bookkeepers. This unit is broadly responsible for implementing the Board's decisions, coordinating programmes and managing the financial and economic activities of the Fund. (Appraisal and evaluation of project proposals submitted to the Fund are not conducted by the Executive Unit, but rather by programme managers at the MoE, and occasionally outside experts.)

The *Managing Director* of the Fund has the following responsibilities:

- implementing the decisions of the Fund Board;
- organising and overseeing the Fund's daily activities;
- making use of outside experts as necessary, and arranging their compensation;
- keeping accounts on the Fund's revenues and expenditures;
- receiving applications for project proposals requesting support from the Fund;
- convening Fund Board sessions on the order of the Chairman of the Board and ensuring the necessary logistical support for the sessions;
- monitoring and ensuring appropriate use of loans and grants by beneficiaries;
- preparing the draft budget and budget implementation reports for submission to the Board;
- overseeing budget preparation by the county funds and their timely submission to the Executive Unit.

County funds have been established under the authority of the Environmental Departments of all county governments and at the Environmental Departments of Tallinn and Narva. The county funds, which focus on solving county-level environmental problems, are not legal entities (though they do have their own bank accounts) and are officially part of the structure of the single Environmental Fund. Their annual budgets are quite limited, ranging from about 35 000 to 1 million USD in 1998. (For illustrative purposes, total revenues and expenditures of the county funds in 1994 and 1995 are shown in Table II.4.2 in Annex II.)

Each county fund is administered by its own board that consists of 5-9 members. The members and chairpersons of the county fund boards are appointed by the Minister of the Environment in agreement with the county governors. County fund board members are typically representatives of municipality or town councils and governments, county governments, NGOs, the scientific community, water and wastewater enterprises, architects and foresters. The spending priorities of the county funds are guided by the corresponding county or town development programmes. The most important expenditure areas for the county funds are water protection and nature conservation. While the county funds are independent in the allocation of their own resources, they co-operate closely with the MoE.

3. Revenues

The Fund's sources of revenue are specified by legislation and include those listed below. In practice, the majority of revenues are generated by pollution charges, and water/mineral extraction fees.

- pollution charges;
- 5 % of revenues from the privatisation of land and buildings pursuant to the Privatisation Act and Land Reform Act (since May, 1996);

- excise taxes on packaging. In accordance with the Packaging Excise Act of 1997, the Environmental Fund receives 50% of the excise taxes on packaging for alcoholic products (in force since March 1, 1997) and packaging for soft drink products (as of December 1, 1998) ;
- water and mineral extraction fees;
- special allocations made from the State and local budgets. For example, in 1998, 13.5 million kroons was allocated from the State budget (from the fuel excise revenues) to the Central Fund;
- special allocations made by the governments of foreign countries, legal and natural persons and international organisations (in practice, revenues from such sources have been received by the county funds);
- donations;
- repayment of loans (possibly with interest) provided by the Fund;
- revenues from profitable activities of the Fund (loan interest payments; loan repayments; interest from deposits);
- other revenues.

The revenues from pollution charges are *not* earmarked according to their respective environmental sector of origin (i.e. air pollution charges need not be allocated to air projects) However, according to the Act on the Environmental Fund, at least 25% of the pollution charges received by the Fund from a given county will be spent on financing local environmental projects and compensating pollution damages in that county.

A natural or legal entity whose activities cause the emission/disposal of polluting substances and solid wastes into the environment has no right to avoid pollution charges. If, however, they are willing to invest into environmental protection, they have the right to apply for a *pollution charge waiver*. In accordance with the Act on Pollution Charges, the Minister of Environment has the right to grant waivers from pollution charge payments to polluters who either: 1) invest in environmental protection measures which guarantee a reduction of pollution by at least 25% from the previous year's pollution level, or: 2) participate in the financing of national or regional environmental programmes or projects approved by the Minister of Environment. If the pollution charge waiver in the first year is not sufficient to cover investment costs, pollution charges can be reduced for up to three years up to the point where the nominal investment value equals the nominal value of the pollution charge waiver. A polluter applying to the Minister of Environment for exemption from pollution charges submits an application together with a project proposal for environmental measures including ecological and economic considerations. The basis for granting a pollution charge waiver is an agreement between the polluter and the Minister of Environment. The agreement includes the commitments of the polluter to reduce pollution, i.e. information on how the pollution will be reduced and up to which level. On the day such an agreement expires, the polluter should present data indicating actual amounts of pollution reduction. Implementation of such agreements is monitored by the Environmental Department of the respective county where the polluter is located, and the Environmental Inspectorate.

The revenue distribution is different for each revenue source. The county funds collect pollution charges, game resource fees, natural resource use fees (water and mineral extraction fees) from corresponding county or town polluters or users and transfer to the Central Fund the following shares: 50% of pollution charges, 100% of the Fund's part of natural resource use fees, 50% of hunting rent, and 20% of game shooting fees. Fines from the violation of forest regulations, compensation for nature damage, fines for delayed payment and other revenues stay fully at the county funds. If the revenues from pollution charges which remain at a given county fund (50% of total pollution charges from that county) are less than 0.5 millions EEK, the Central Fund compensates the county fund to make up the shortfall. Among the funds, only the Central Fund receives revenues from excise taxes on packaging materials and the privatisation of land/buildings.

The majority of revenues is collected by the county environmental departments and the Environmental Inspectorate and are initially held on the account of the corresponding county fund. Excise taxes on packaging materials are collected by the National Tax Board and the Customs Board. The collection

efficiency of revenues is affected by various factors, i.e. unforeseeable bankruptcies of companies. Revenues from privatisation are hardly predictable. The efficiency of revenue collection has an impact on the implementation of the annual budget of the Fund: if the budget revenue plan cannot be fulfilled, less support can be provided to projects than planned.

The revenue structures of the *Central* Environmental Fund and the overall Estonian Environmental Fund (including the Central, county and city funds) are shown in Table 4.2 and Figure 4.1, respectively.

Table 4.2: Annual revenues of the *Central* Environmental Fund of Estonia by source, (mln USD; nominal values based on annual average exchange rates).

Revenue Source	1994	1995	1996	1997
Air pollution charges and fines	0.248	0.293	0.377	0.416
Water abstraction fees	0.000	0.000	1.415	1.370
Wastewater charges and fines	0.277	0.619	0.672	0.708
Waste disposal charges and fines	0.268	0.630	0.652	1.006
Mineral extraction charges	0.000	0.000	0.454	1.365
Game resource use chargeQ3	0.061	0.086	0.065	0.065
Package excise	0.000	0.000	0.000	0.260
Import / export duty (please specify)	0.000	0.000	0.000	0.000
Loan repayment (including interest)	0.000	0.128	0.118	0.173
International loans / grants (please specify all sources)	0.000	0.000	0.000	0.000
Revenue from privatization	0.000	0.000	0.914	2.104
Revenue from financial operations and interest on bank deposits	0.000	0.000	2.091	0.211
Other (violation of the forest regulation, compensation for nature damage, fine for delay etc.)	0.073	0.020	0.022	0.012
TOTAL	0.928	1.775	6.780	7.691

4. Spending Strategy

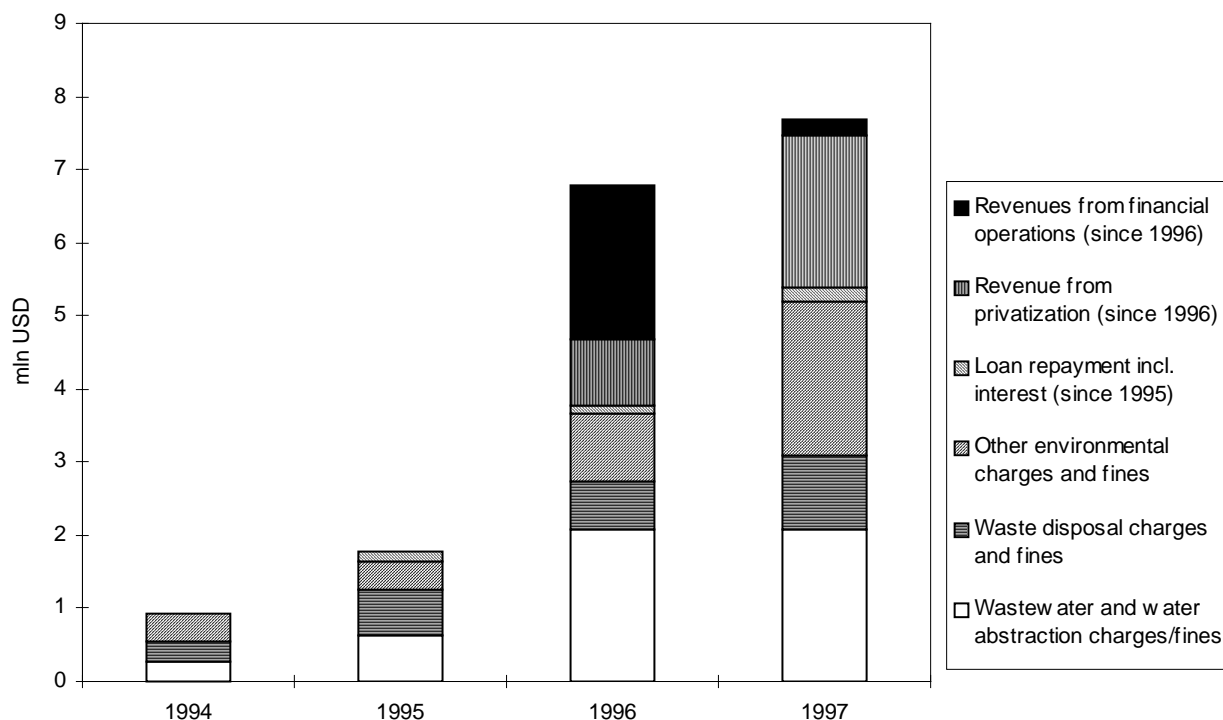
By April of each year, at the latest, the Fund Board should draft the Fund's spending priorities for the next 3 years and present them to the Minister of Environment for approval. These priorities, submitted by the members of the Board and the MoE Programme Managers, take into account national and local environmental priorities as reflected in state environmental policy. The state environmental policy is based on the Economic Development Act and the Estonian National Environmental Strategy, adopted by Parliament in 1995 and 1997 respectively.

The Fund's spending is based on annual sectoral programmes developed by MoE Programme Managers and approved by the Minister and Fund Board. These programmes are composed of individual projects and activities. The programmes are elaborated in co-operation with municipalities, counties and specialists from the MoE. The programmes address short-term priorities, effective for not more than one year, and long-term priorities, valid from one to seven years. In 1997, 18-20% of Fund expenditures were allocated for activities being directly implemented by the MoE. The implementation of county and local programmes financed by county funds is carried out under the leadership of programme managers appointed by the county environmental departments and approved by the county fund boards.

Following the departure of the Soviet Army, the Fund's top priority was the remediation of past environmental pollution and hazardous waste at military sites, as well as radioactive waste at the Paldiski Nuclear Station. Since then priorities have changed. The top priority for 1998 was the

collection, transportation and treatment of hazardous waste. Water protection has also been a high priority. Indeed, the largest share of expenditures by the Fund in 1997 was for the water protection programme - 33.3% of the total environmental expenditures of the Central Fund.

Figure 4.1: Annual revenues of the overall Estonian Environmental Fund by source, (including the Central, county and city environmental funds; mln USD, nominal values based on annual average exchange rates).



Source: Table II.4.5 in Annex II.

Notes: "Other environmental charges and fines" includes: air pollution charges/fines; mineral extraction charges (since 1996); game resource charges (since 1994); packaging excise (since 1997); and various environmental fines.

A special "reserve fund" has been established to cope with environmental accidents and to provide compensation for the sometimes considerable damages caused by protected wild animals species. For example, migrating Barnacle Geese cause damage to fields with grain crops in spring and autumn, as well as cultivated and natural grasslands (in spring). A necessary precondition for compensation for damage caused by protected wild animal species is that possible and necessary measures for prevention of the damage have been taken by the landowner.

5. Expenditures

Expenditures on environmental investments in Estonia (excluding operation and maintenance costs) and R&D increased substantially from 1993 to 1997, eventually stabilising at around 1.5 % of GDP (see Table 4.3). In 1993, the Central and county environmental funds provided about 7% of total environmental investment and R&D financing in the country. In 1994, the share of the Central Fund was 7.3%, and the share of county funds was 6.8%; in 1995, 8.0% and 7.4% respectively; in 1996, 8.7% and 2.0% respectively; and, in 1997, the Central Fund's share was 12.6% while the county funds accounted for 3.5%. The key sources of environmental investment and R&D financing for 1997 are indicated in Table 4.4

Table 4.3: Environmental investment and R&D expenditures in Estonia, 1993-1997.

	1993	1994	1995	1996	1997
Total expenditures (mln USD, nominal values)	18.9	14.8	27.0	62.5	69.8
Total expenditures as a % of GDP (nominal values)	1.1	0.6	0.8	1.4	1.5

Source: Author's calculations based on the Estonian Environmental Protection Expenditures Yearbooks 1993-1997, the Statistical Yearbooks 1994-1998, and, the Draft Public Investment Programme 1998-2000.

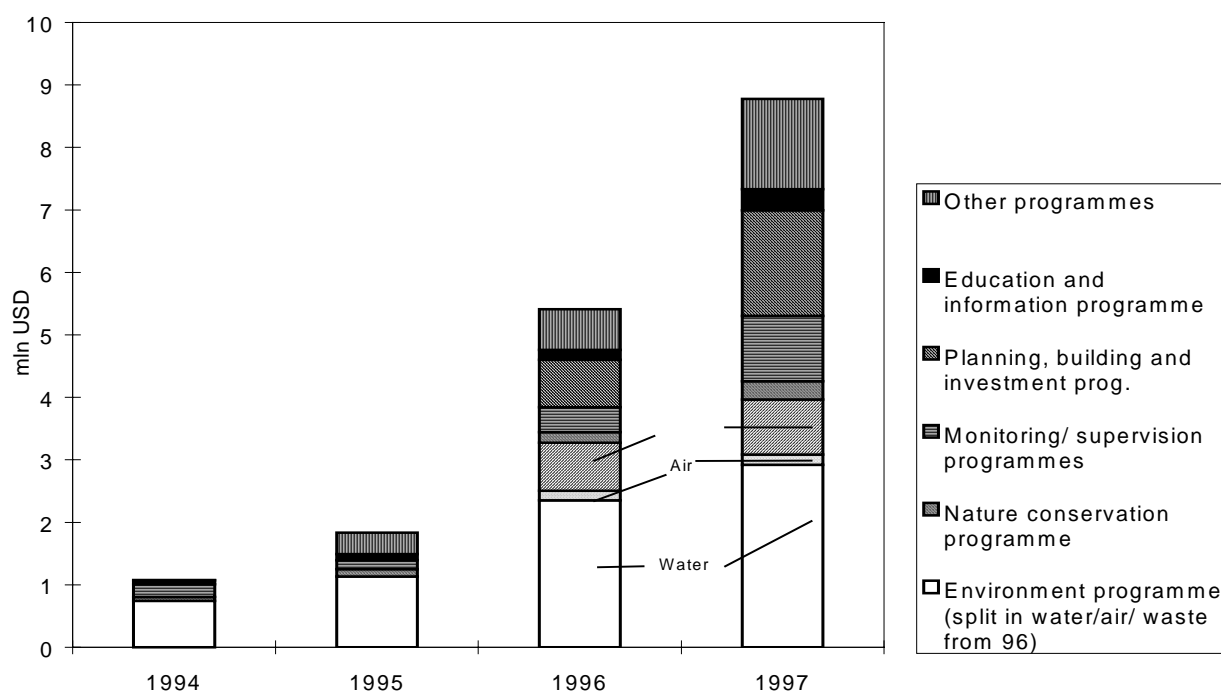
Table 4.4: Sources of finance for environmental investment and R&D in Estonia in 1997 (%).

Investment Sources	1997
State Budget	7.0
Funds of State Budget and non-budgetary Funds	1.1
Local Budgets	10.8
Enterprises	41.7
Municipalities	1.7
Central Environmental Fund	12.6
County Environmental Funds	3.5
Foreign Assistance	13.0
Foreign Loans	5.6
Other Sources	3.0

Source: Author's calculations based on the Estonian Environmental Protection Expenditures Yearbook 1997, and the Draft Public Investment Programme 1998-2000.

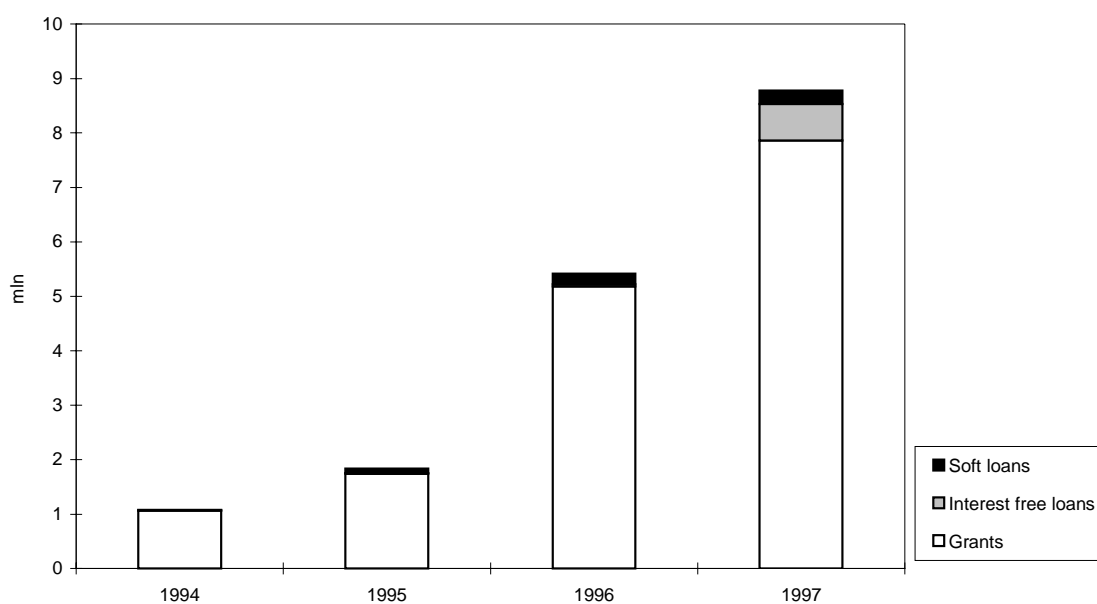
In 1998, 12 programmes were to be financed by the Fund, including the water and air protection programmes, the waste treatment/recycling programme, the environmental inspection programme, the training and education programme, the nature conservation programme, etc. Since 1997, the Environmental Fund has made a considerable contribution to the fulfilment of obligations stemming from the Estonian National Environmental Strategy. Expenditures of the Central Environmental Fund from 1994-1997, according to sector, are shown in Figure 4.2. Figures 4.3 – 4.5 profile the Central Fund's expenditures according to form of disbursement, type of recipient and whether the money was used for investment or non-investment projects.

Figure 4.2: *Central Environmental Fund expenditures by sector, (mln USD; nominal values based on annual average exchange rates).*



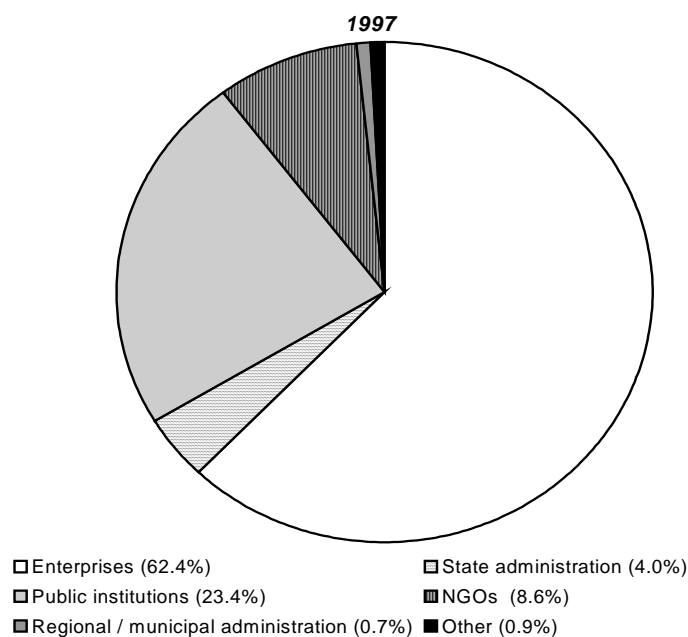
Source: Table II.4.6 in Annex II.

Figure 4.3: *Central Environmental Fund expenditures by form of disbursement, (mln USD; nominal values based on annual average exchange rates).*



Source: Table II.4.7 in Annex II.

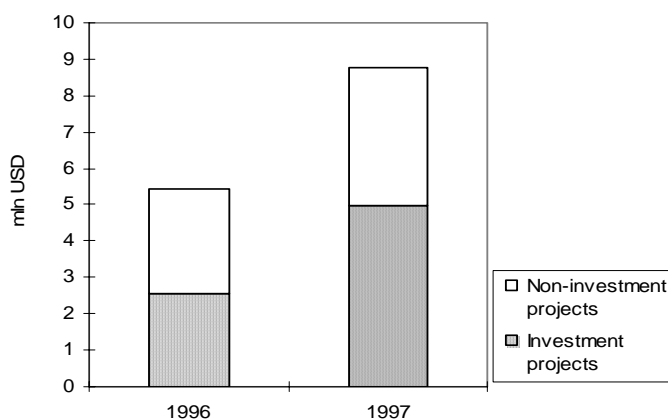
Figure 4.4: *Central Environmental Fund expenditures by type of recipient in 1997 (%)*.



Source: Table II.4.9 in Annex II.

Notes: The term “investment” projects here means capital expenditures associated with environmental technology/equipment and the construction of facilities (including operation and maintenance of such installations). The term “non-investment” projects here includes activities such as training/education and public awareness raising, environmental monitoring and research, nature protection through non-technological means, etc.

Figure 4.5: *Central Environmental Fund expenditures according to “investment” vs. “non-investment” projects, (mln USD; nominal values based on annual average exchange rates).*



Source: Table II.4.10 in Annex II.

Financing Conditions

The Fund can provide *soft or interest free loans* for environmental investment projects. The maturity date of a loan is up to 7 years. The Fund can finance a maximum of 75% of total project costs. It is expected that the share of loans in the Fund's expenditures will increase in coming years.

Enterprises may be awarded low interest loans (0-10% nominal interest rate) for the implementation of high priority projects. A 25% share of the applicants' own resources in the total cost of the project is necessary as well as a loan guarantee and business plan. Similarly, *municipalities* may be awarded loans having 0-10% nominal interest rates, and are required to cover at least 25% of total project costs with their own resources. However, in the case of timely and successful realisation of the project, municipalities are eligible for partial or total forgiveness of the loan, based on the decision of the Fund Board. It is rare, however, that such loans are entirely forgiven.

In practice, the nominal interest rates extended for municipalities are 3-5% and those offered for enterprises are 5-9%. (In comparison, as of July 1998, average annual interest rates on loans in national currency, from commercial credit institutions, ranged from 14-16%.)

Activities which are typically supported by *grants* include training, awareness raising, nature conservation, environmental monitoring and inspection, and research. Research is not financed on an application basis, but is commissioned as needed within relevant sectoral programmes of the MoE. The implementing agents of the research projects are selected following a public tender procedure announced in a national newspaper. The form of support provided for publications is decided on a case-by-case basis; either a loan or a grant may be offered.

Both private enterprises and municipalities are subject to Estonia's Law on Public Procurement, thus with regards to some projects to be supported by the Fund, the beneficiaries must follow public tender procedures before money is transferred by the Fund.

The Fund disburses resources on the basis of a contract between the Fund and the beneficiary and in accordance with procedures established by the Fund Board and the provisions of the Fund's Statute. The basis for concluding a contract is the decision of the Fund Board. Contracts may be signed by persons authorised by the Fund Board. As a rule, contracts for financial transactions are signed by the Managing Director of the Fund. The Fund's Executive Unit is responsible for monitoring the use of the Fund's financial support by beneficiaries. Undisbursed resources of the Fund are held in a bank account or as shares/stocks. Some of the Fund's cash may be invested in short-term bank deposits.

The Fund may collaborate with other financial institutions in the co-financing of projects. The Fund commonly co-finance projects with national, municipal, enterprise resources and foreign aid. Table 4.5 illustrates co-financing of environmental projects included in the Public Investment Programme for 1995-2000. Table 4.6 illustrates the Environmental Fund's role as a co-financier of some on-going long term (1995-2000) projects.

6. Funding Cycle

At present, the MoE, particularly via the role played by the Programme Managers, is largely responsible for leading projects through the funding cycle. While the Fund's Executive Unit may receive applications for funding, it is the MoE Programme Managers which take the lead in identifying, appraising and proposing projects to be supported by the Fund. Project identification is often aided by the suggestions of the county environmental departments (whose Heads, it should be remembered, largely comprise the Fund Board). Once these projects have been preliminarily included into the appropriate annual programme of the MoE, the programmes are reviewed and approved by the Minister and then the Fund Board. The Fund thus acts largely as a co-financier of projects already

appraised and approved by other institutions (principally the MoE). The Fund strives to control the amount and effectiveness of planned expenditures with the assistance of outside experts. If it becomes evident that certain expenditures are not justified, the subject project/activity will not be financed and the Fund's expenditure plan will be modified accordingly.

Table 4.5: Environmental Fund's co-financing of the Public Investment Programme for 1995-2000.

Source of finance	Total cost		Financed by 1998	
	mln EEK	%	mln EEK	%
State Budget	492.051	24.4	218.355	35.0
Local Budgets	248.399	12.3	78.676	12.6
Pollution charge waivers	50.500	2.5	3.700	0.6
Environmental Fund (Central Fund and county funds)	167.573	8.3	55.479	8.9
Foreign assistance	670.221	33.2	186.871	29.9
Foreign loans	230.445	11.4	59.738	9.5
Enterprises own resources	127.720	6.4	21.920	3.5
Sought	30.558	1.5	-	-
TOTAL (including 27 projects)	2 017.467	100.0	624.739	100.0

Sources: Author's calculations based on data presented in the Draft Public Investment Programme for 1998-2000.

Table 4.6: Environmental Fund's role as a co-financier of selected projects.

Kohtla-Järve water supply, sewerage and wastewater treatment	
– Total cost of the project (mln EEK)	219.445
– Costs of the project to be financed by the Environmental Fund (mln EEK)	18.150
– % of total project costs to be financed by the Fund	8.3 %
Other financiers involved: state/local budget, enterprise's own resources, bank loans, foreign aid	
Narva intake, sewerage and water supply	
– Total cost of the project (mln EEK)	226.660
– Costs of the project to be financed by the Environmental Fund (mln EEK)	22.410
– % of total project costs to be financed by the Fund	9.9 %
Other financiers involved: state/local budget, loans (EBRD, NEFCO), foreign aid	
Small municipalities wastewater treatment plants and water supply	
– Total cost of the project (mln EEK)	70.000
– Costs of the project to be financed by the Environmental Fund (mln EEK)	13.000
– % of total project costs to be financed by the Fund	18.6 %
Other financiers involved: state/local budget, foreign aid	
Wastewater treatment facilities & water protection measures of the Matsalu Bay drainage basin	
– Total cost of the project (mln EEK)	17.790
– Costs of the project to be financed by the Environmental Fund (mln EEK)	3.960
– % of total project costs to be financed by the Fund	22.2 %
Other financiers involved: state budget, foreign aid	
Development of the hazardous waste treatment system	
– Total cost of the project (mln EEK)	154.000
– Costs of the project to be financed by the Environmental Fund (mln EEK)	28.600
– % of total project costs to be financed by the Fund	18.6 %
Other financiers involved: state budget, foreign aid	

Sources: Author's calculations based on data presented in Draft Public Investment Programme for 1998-2000.

7. Evaluation, Reporting and Public Information

The Fund's performance is evaluated by the Fund Board, the Government and the Parliament. The Fund presents an annual report on its activities and budget implementation to the Government. The Fund also reports quarterly to the MoE and monthly to the Ministry of Finance on the implementation of its budget. Monthly reports are also submitted to the Statistical Office and National Tax Board.

Once a year, the State Audit Office audits the economic activities and the results of the work of the Fund. In addition, the Fund has formed its own auditing commission consisting of three members of the Fund Board, that monitors and controls the implementation of Board decisions at the Central Fund and county funds.

The public is regularly informed about the Fund's spending priorities and activities through television (in a special environmental news programme), newspapers and radio.

8. Major Achievements

An example of the Fund's achievement in the water sector can be given. Within the Water Protection Programme in 1997, the construction of wastewater treatment facilities was completed in: Mustvee, Tapa, Treimani, Imavere, Halinga, Taali, Salme-Läätsa, Orissaare, Ruusmäe, the Krabi School, the Kärü School, Vihula, Vastemõisa, etc. As a result of measures supported by the Fund, the organic pollution load (BOD₇) decreased by 591 tons which accounts for 14% of the pollution load that was directed to water bodies in 1996.

CHAPTER 5

HUNGARY: THE CENTRAL ENVIRONMENTAL PROTECTION FUND⁵

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1. Background and Objectives

Since 1976, the Hungarian government has made use of environmental fines, and provided subsidies through earmarked environmental funds, to improve environmental quality in the country. The most important fines were those concerning wastewater, whose revenues were channelled to the Water Management Fund, and air pollution, whose revenues were channelled to the Environmental Protection Fund. The operations of the Environmental Protection Fund were further institutionalised and regulated by Ministerial Decree in 1980. This decree was amended in 1986, creating the Central Environmental Protection Fund (the “Fund” or “CEPF”). The regulation governing the Fund was designed so as to prohibit use of the revenues from the environmental fines for purposes other than environmental protection. The Fund was substantially re-constituted by the Act on Certain Separated State Funds of 1992. About this same time the Fund, in co-operation with EU experts, developed and introduced new operational procedures in conjunction with the Fund’s receipt of financial support from the EU’s Phare Programme. The Fund’s regulations are regularly revised as needed.

The aforementioned Act of 1992 regulates a number of issues related to the operation of the Fund, including revenue sources, disposal of the Fund’s financial resources and contracts with beneficiaries. Ministerial Order 16/1997 established the main rules and procedures governing the operation of the Fund and the execution of the Act with regards to the following:

- conditions and deadlines for submission of applications;
- the disbursement system;
- co-operation with NGOs;
- the formulation of the Yearly Program for Support;
- the system for appraising applications;
- tendering rules (according to the Hungarian Public Procurement Act).

The primary objectives of the Fund, as defined in the latest version of the Act, are:

- to encourage and promote the development of an environmentally sound economic structure of the country;
- to prevent environmental damage;
- to reduce or eliminate existing environmental damage;
- to preserve and maintain the country’s natural resources and protected natural areas;
- to promote effective methods for protecting the environment; and,
- to develop public awareness of the value of environmental protection and nature conservation.

While pursuing these objectives, the Fund takes into account the priorities of the National Environmental Protection Programme issued in 1997. The scale of the Fund’s activities from 1993-1997 is reflected in Table 5.1.

⁵ As a result of new legislation, the Fund was officially consolidated into the State budget from the beginning of 1999 and now appears as a special line in the annual budget of the Ministry of Environment. The Fund’s revenues, however, remain earmarked for environmental protection purposes and are disbursed by the Ministry of Environment.

Table 5.1: Annual revenues and expenditures of the CEPF, 1993-7 (mln USD; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	29.902	61.134	55.325	93.219	80.986
Environmental expenditures	17.187	25.610	26.303	53.845	84.562
Fund overhead/administrative costs	1.259	0.393	0.829	4.430	5.187
Total expenditures	18.446	26.003	27.132	58.275	89.749

Source: Table II.5.1 in Annex II.

Notes: Through 1995 the Fund could carry over unspent money from one year to the next, thus total disposable resources available for environmental expenditure in any given year during that period could have been higher than the amounts indicated under "annual revenues". However, since the end of 1995, unspent money at the end of the year reverts back to the State Treasury and is not available to the Fund.

2. Management and Administration

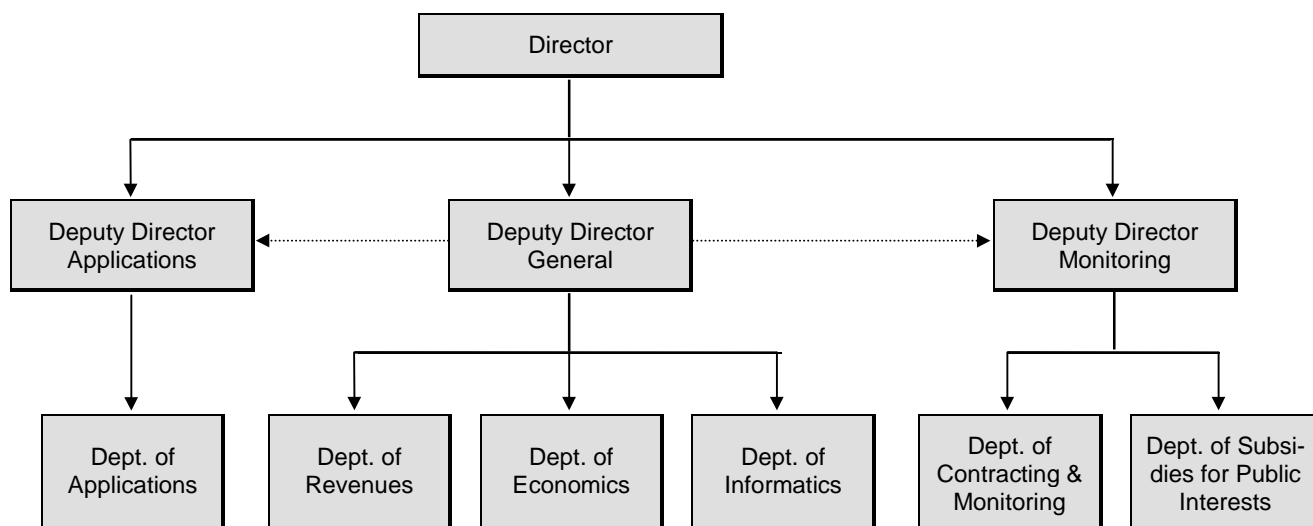
Institutionally, the Fund is situated within the structure of the Ministry of Environment and Regional Policy (MERP). Personal responsibility for use of the Fund's resources lies with the *Minister of Environment and Regional Policy* (the "Minister"), who has final decision-making authority. The Minister is obliged to report on the use of the resources of the Fund to the public at least semi-annually (in practice, this is done every quarter of a year).

The key role in the decision making process - apart from the final decision-making authority of the Minister - is delegated to the *Committee for Evaluation of Applications* (CEA). The chairperson of the CEA is a high-standing officer of the MERP appointed by the Minister. The Committee members include one representative of the following ministries: Ministry of Transport, Communication, and Water Management (KHVM); Ministry of Industry, Trade, and Tourism (IKIM); Ministry of Agriculture (FM); Ministry of Finance (PM); Ministry of Welfare (NM); Ministry of Interior (BM). An additional seven members are delegated by the National Council of Environmental Protection, which is an advisory board of the Hungarian Government, representing scientific and business organisations as well as NGOs. The CEA holds regular meetings, where preliminary decisions upon the awarding of support to proposed projects are taken along with strategic decisions such as the definition of the Yearly Programme for Support.

Within the MERP, the *Fund Secretariat* is responsible for the overall co-ordination, supervision, and administration of the Fund (e.g. processing applications, preparing proposals for the CEA meetings, providing information to the public about the Fund). The Secretariat, which does not play a decision-making role in the process of appraising applications and awarding support, employs 7 public servants and 7 experts. A *Fund Management Organisation* (FMO), based at the Institute of Environmental Management (affiliated with the MERP) is also involved in the administration of the Fund. The FMO is responsible for planning the budgets of both the Fund and the Ministry, which are submitted for approval to the Parliament each year. The FMO is also responsible for managing the contracting procedure and the financial administration of all projects financed from domestic financial sources of the Fund. The organisational structure of the FMO is illustrated in Figure 5.1. The FMO employs 38 people. Management costs of the Fund should not exceed 5% of the Fund's income.

Technical Departments of the MERP, namely the Department for Environmental Pollution Prevention and Control (Air, Water, and Soil), and the Department for Waste Management and Environmental Security, are responsible for the technical appraisal of applications. They are also responsible for setting short- and long-term targets in their respective fields and for setting the technical and environmental criteria for the evaluation of applications.

Figure 5.1: Organigram of the Fund Management Organisation.



The *Regional Environmental Inspectorates*, which are the local bodies of the MERP, also play a very important role vis-à-vis the Fund. The Inspectorates, of which there are twelve covering the whole country, collect applications for Fund support and perform initial screening of applications taking into account local priorities. During project implementation they are responsible for monitoring and evaluating the projects.

Projects supported by the Fund commonly have benefits beyond those which are strictly environmental. In many cases, such projects are also financed by other public sources, especially in the municipal sphere. Government Decree 263/1997 regulates the co-ordinated use of sectoral subsidies and extra-budgetary state funds for the same or associated projects. It also regulates mutual information exchange between the different sources of finance and the co-ordinated monitoring of project implementation.

3. Revenues

The Fund's Act defines its potential sources of revenues as follows:

A portion of:

- a) environmental and nature conservation fines;
- b) environmental product charges;
- c) charges for use of the environment (not in effect);
- d) charges for the exploitation of the environment (not in effect);
- e) fees for the protection of historical buildings (as of 1998);
- f) building fines (as of 1998);
- g) income from the sale or use of state-owned historical buildings (as of 1998);
- h) mining annuities;

as well as:

- i) direct budget allocations (not in effect);
- j) international aid for environmental protection;
- k) voluntary payments and subsidies to the Fund (not in effect);
- l) repayment of loans (possibly with interest) provided by the Fund;
- m) reimbursements to the Fund for costs incurred by it in the remediation of environmental damages;

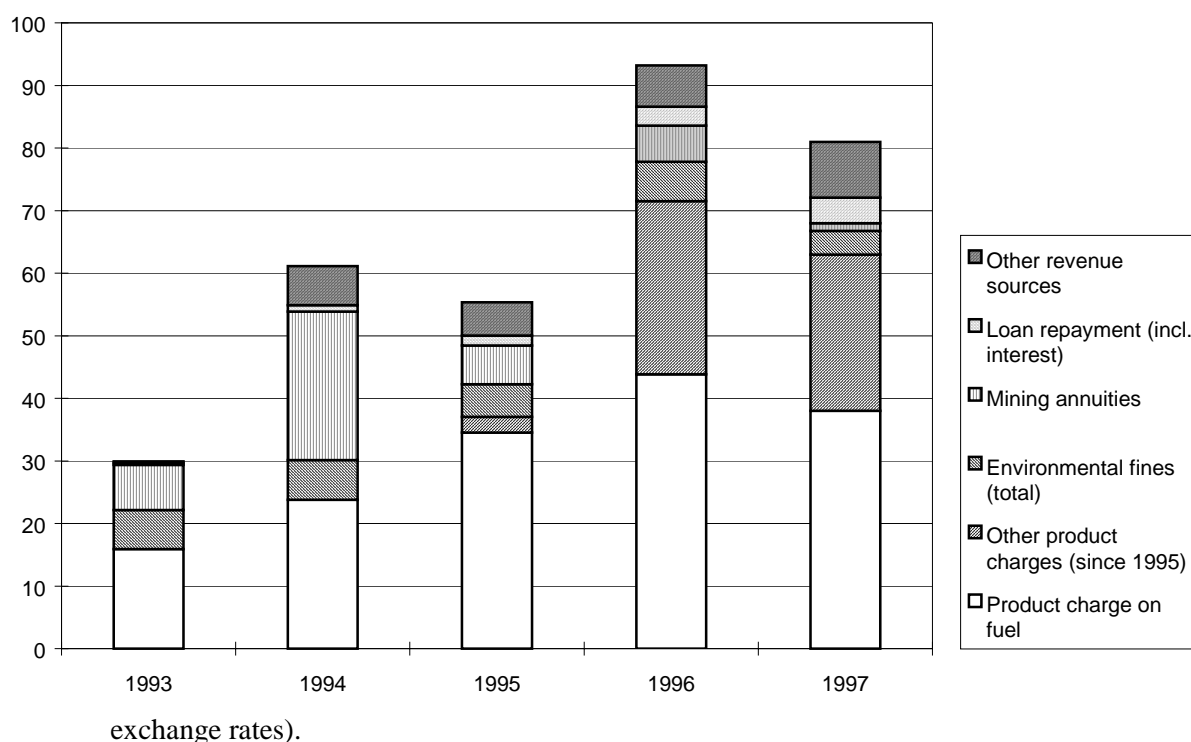
n) other sources of revenue.

The prospective regulation on charges c) and d) envisions giving the right to polluters to withhold a certain part of their payment obligation if used for approved environmental investments. The draft legislation on these charges would come into effect in 1999 at the earliest.

The Fund's revenues are held in an account kept by the State Treasury. (The Fund's disbursements are made from the same account.) The Fund's cashflow management is conducted by the FMO. As of 1996, the Fund ceased to be able to carry over unspent revenues from one year to the next. Revenues which are unspent at the end of the year revert to the control of the State Treasury.

Figure 5.2 shows the levels and structure of annual revenue to the Fund from 1993-1997. From the figure it can be seen that the most important revenue sources in 1997 were the product charges on fuels and other product charges (e.g on packaging materials and tires).

Figure 5.2: Annual revenues by source, (mln USD; nominal values based on annual average



Source: Table II.5.2 in Annex II.

Notes: "Other product charges" includes revenue from charges on packaging materials, tires, refrigerants/refrigerators, and batteries/accumulators. "Other revenue sources" includes revenue from: a loan taken by the Fund (USD 3.2 mln in 1994); Phare grants (USD 3.0 mln in 1994, USD 5.5 mln in 1995, USD 3.3 mln in 1997); privatisation (USD 6.6 mln in 1996, USD 5.4 mln in 1997); claims for damages, and; late fees on defaulted interest payments.

4. Spending Strategy

The Fund does not have its own long-term spending strategy, but its spending is guided by the National Environmental Protection Programme issued in 1997 and its annual action plans. The 1998 Action Plan included measures in various areas: energy, industry, agriculture, transport, inter-sectoral programmes, protection of historical buildings, nature conservation, regulations (legislative proposals, amendments), research and development, information technology developments, and education.

The Fund's annual spending plan is adopted as part of the yearly State Budget, which is issued as an Act at the end of every year. Within 60 days of the State Budget Act (and thus the Fund's prospective budget) being issued, the Fund must publish a Call for Applications for that budgetary year.

The projects and activities supported by the Fund are categorised into three broad groups, or "windows": 1) environmental investments, 2) the avoidance and/or mitigation of environmental emergencies, and 3) environmental tasks of public interest. These windows are defined more thoroughly below.

I. The *first window* includes *environmental investments*, technical solutions, and environment-friendly products and measures that improve environmental quality and strengthen environmental awareness of the society. 75% of the Fund's income is earmarked to be allocated to projects and activities falling into this window, such as:

- a) protection of air quality;
- b) re-use and/or neutralisation of waste and the introduction of environmentally sound and low-waste technologies and products;
- c) reduction of the adverse environmental effects of noise and vibration;
- d) nature protection and conservation;
- e) protection of the quality and quantity of surface and underground water resources;
- f) facilitation of international aid, co-operation and credit programmes serving environmental protection;
- g) protection of the built environment, including historical buildings;
- h) promotion of environment-friendly consumer behaviour and consumption of environmentally sound products;
- i) rehabilitation of landscape around abandoned mines;
- j) remediation of accumulated past pollution.

The Call for Applications stipulates in detail the areas that can be supported and defines eligibility criteria for applicants in a given area. Support for projects/activities in this window can only be obtained through the submission of an application.

II. The *second window* of expenditures covers the costs of *avoiding or mitigating environmental emergencies*. A fixed amount of the whole budget of the Fund is set aside for this type of expenditure – 5%.

III. The *third window* covers support for *environmental tasks of public interest*, as defined below. About 15% of the total budget of the Fund may be used to finance activities in this group. (The remainder of the Fund's budget, but not more than 5% of its income, is devoted to cover the costs of managing the Fund.)

Environmental tasks of public interest are currently defined as follows:

- a) development of environmental measuring, monitoring, and information systems;
- b) conservation of protected natural areas and biological diversity;
- c) protection of the built environment, including historical buildings;
- d) environmental research and development, education and training;
- e) analyses and feasibility studies necessary for environmental protection measures;
- f) development of public awareness on environmental protection and nature conservation;
- g) nation-wide or regional tasks and programmes for measures related to international treaties on environmental protection and nature conservation;
- h) environmental programmes and initiatives of NGOs.

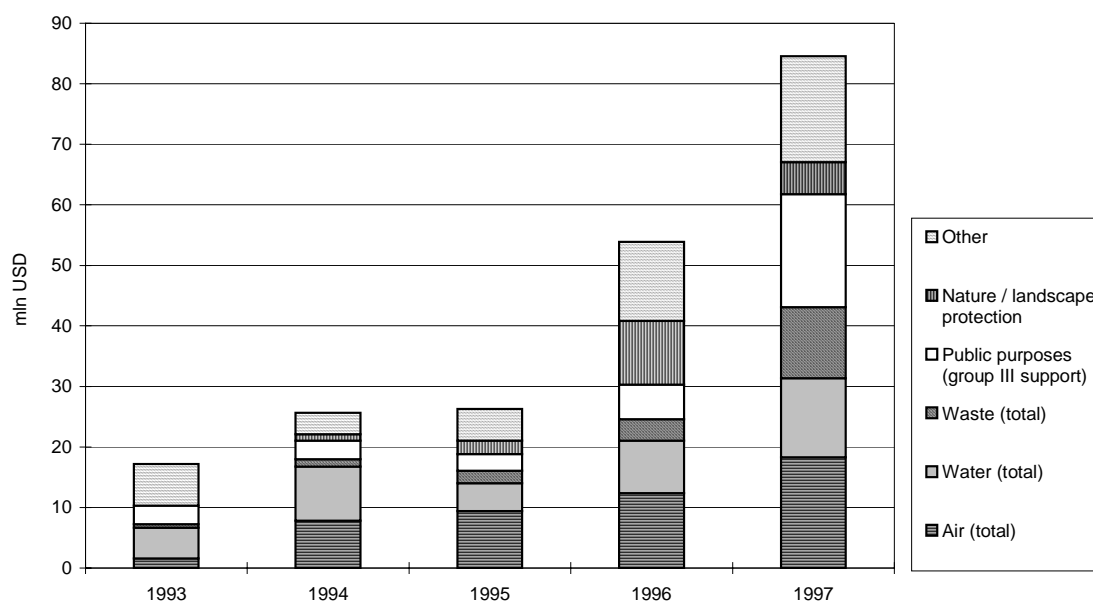
These priorities areas were valid for 1998. While their main headings have changed little in the past few years, the detailed definitions and criteria vary from year to year.

5. Expenditures

Total annual public expenditures in Hungary on environmental protection have typically been around 0.7% of GDP in recent years. In 1996, total public environmental expenditures amounted to 54 billion HUF (~354 mln USD), in 1997, 71 billion HUF (~380 mln USD), and for 1998, initial estimates were 115 billion HUF (~ 564 mln USD). These amounts include the expenditures of the national budget, of the local and regional governments, and of the Fund. As an indication of the Fund's contribution to environmental financing in the country, a recent OECD study showed that the Fund accounted for 20 % of pollution abatement and control expenditures in 1996.

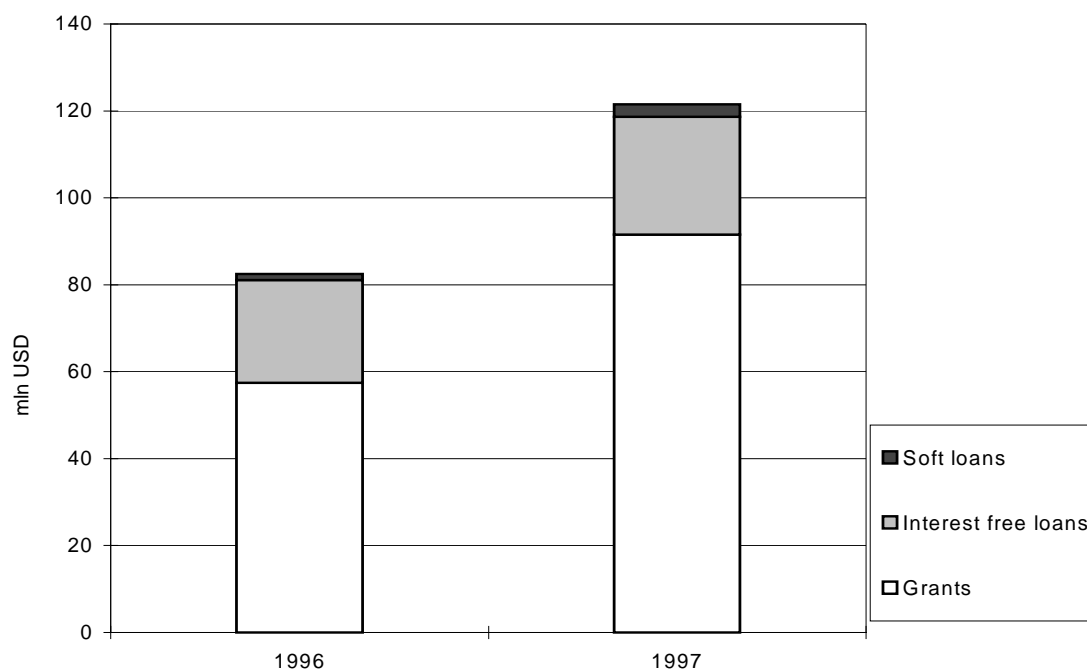
Other characteristics of the Fund's expenditures, such as expenditures by environmental sector, form of disbursement and type of recipient, are shown in figures 5.3-5.6.

Figure 5.3: Fund expenditures by environmental sector (mln USD; nominal values based on annual average exchange rates).



Source: Table II.5.3 in Annex II.

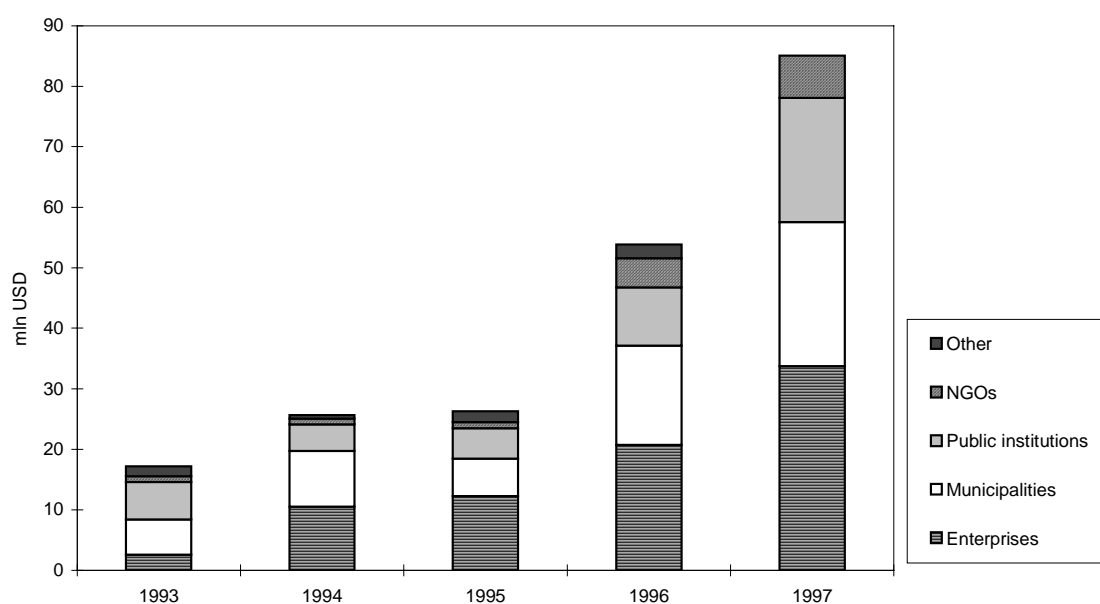
Figure 5.4: Support *committed*¹ by the Fund for environmental projects according to form of disbursement, 1996-1997 (mln USD; nominal values based on annual average exchange rates).



Source: Table II.5.4 in Annex II.

Notes: 1) The Fund does not regularly record actual expenditures according to form of disbursement. As the data presented in this table reflects *committed*, rather than actual expenditures, the totals do not match those in Table 5.1.

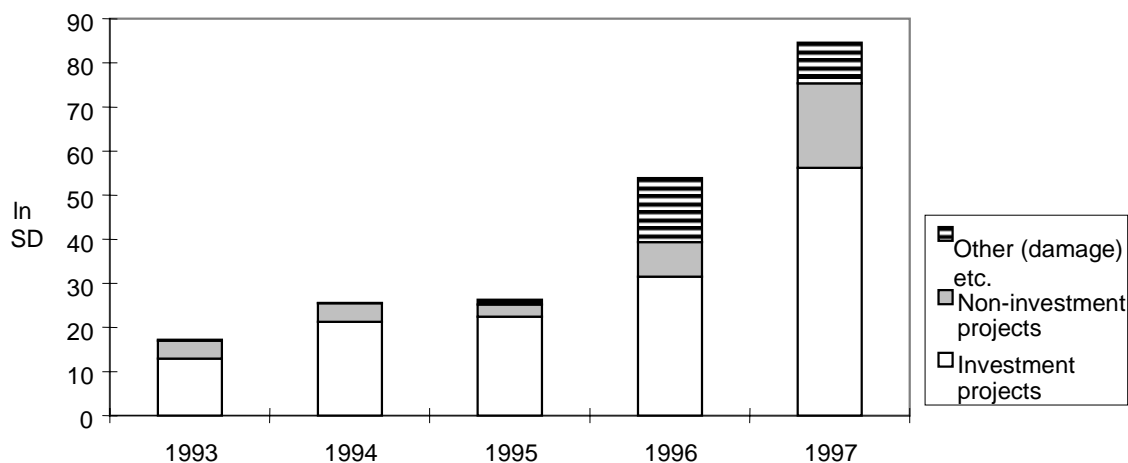
Figure 5.5: Environmental expenditures by type of recipient, (mln USD; nominal values based on



annual average exchange rates).

Source: Table II.5.6 in Annex II.

Figure 5.6: Environmental expenditures according to “investment” or “non-investment” projects, (mln USD; nominal values based on annual average exchange rates).



Source: Table II.5.7 in Annex II.

Notes: The term “investment” projects here means capital expenditures associated with environmental technology/equipment and the construction of facilities (essentially window I projects according to the Fund’s classification). The term “non-investment” projects here includes essentially window III projects/activities: training/education, public awareness raising, environmental monitoring and research, nature conservation, protection of the built environment through non-technological means, etc. (including computers and other office equipment for the support of such activities).

Financing Conditions and Co-financing

As illustrated in Figure 5.4, the Fund provides financial support in various forms:

- grants;
- soft or interest-free loans;
- interest subsidies;
- loan guarantees.

The interest rate of soft loans is half of the official base rate (which was ~18% at the end of 1998). The grace period is one year after the completion of the investment, and the repayment period another two or three years. Loans are normally not forgiven. For certain projects, the grace or repayment periods may be extended. The Fund can also give interest rate subsidies on loans extended by other (e.g. commercial) institutions and loan guarantees, but currently does not use these financing mechanisms.

Grants may not exceed 30% of the total investment cost. The Fund may provide both grant and loan support for a given project, up to 60% of costs. If an interest rate subsidy and/or loan guarantee is provided by the Fund along with any of the other financing forms, the Fund’s support may reach as much as 70% of project costs. In practice, municipalities, public institutions and public utility companies receive grants. Profit-making companies typically receive interest-free loans. As large communal infrastructure projects are typically very expensive, the Fund’s grant support to them generally amounts to less than 30%: up to about 20% for solid waste disposal sites and sewage networks, 25% for sewage treatment plants, and 15% for gas heating networks.

Additional costs should be covered from the beneficiary's own resources or, exceptionally, by commercial credits. In addition, applicants are obliged to demonstrate the ability to cover operation and maintenance costs of the project.

Projects supported by the Fund are commonly co-financed from other national sources. International co-financing is not a common practice, except for the contributions from Phare to the Fund. Phare provided 6.3 MECU in 1992, 7.5 MECU in 1994 and was expected to contribute 4.5 MECU in 1998.

6. Funding Cycle

Figure 5.7 displays the milestones of the project cycle for projects receiving Fund support through window I (i.e. environmental investments). More detailed information about the individual stages of this cycle follows below. The project cycle for window III (tasks of public interest) is much simpler: requests (which need not be formal applications) are submitted directly to the CEPF Secretariat which, after registration, forwards them to the Committee for Evaluation of Applications for their consideration and recommendation. The Committee's recommendations are then passed on by the Secretariat to the Minister for final decision. As an indication of the number of applications the Fund receives each year, in 1996 the Fund received a total of 694 applications out of which 408 received support. In 1997, the Fund received 1282 applications out of which 621 received support.

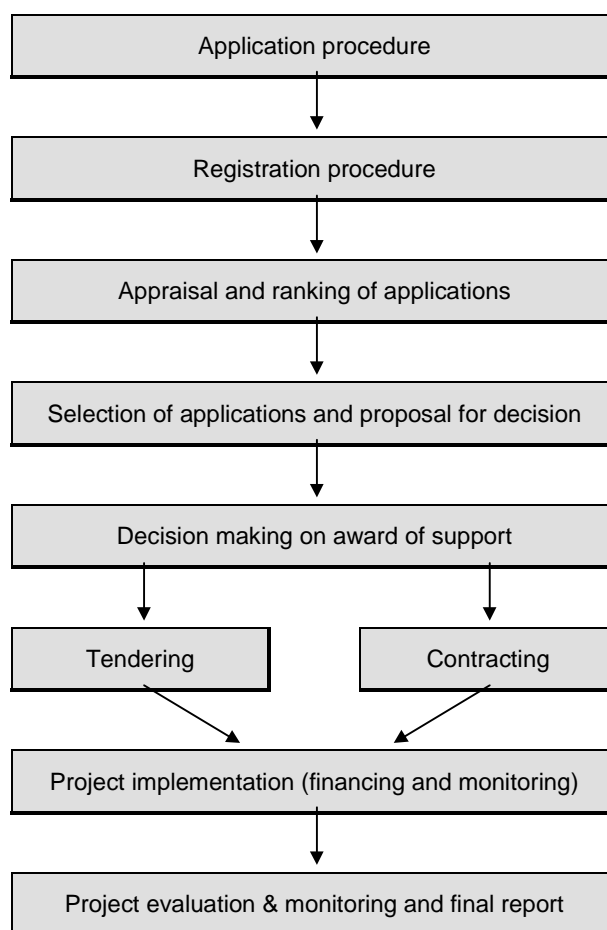
6.1 The Application Procedure

Applications for support from the Fund can be submitted at any time during the year. Information on the conditions and procedures for projects to receive support from the Fund is described in the Guidelines for Support and Filing Applications; the Call for Applications; and the application form itself. Applicants must follow all guidelines and instructions as they complete and submit their applications.

The documents listed above are available at the offices of the regional environmental inspectorates; at the Fund Secretariat and the Fund MO; the national park directorates; and, the nature conservation directorates. To apply for support from the Fund, the applicant must complete the Fund's application form and submit at the inspectorate of the region in which the project will be located. If there is no distinct project location, the application form is to be submitted at the inspectorate in the region of the business address of the applicant.

The application form is very important as it forms the basis for the entire evaluation and decision-making process. The *first part of the application form* contains enough basic information about the project to allow the Fund to determine if the project is eligible for Fund support. Information requested by the application includes: details about the

Figure 5.7: CEPF funding cycle for window I investments.



applicant; information on the project proposed; project background and justification including the expected environmental benefits; implementation details, including project costs, requested amount of support, form of financing and other financing arrangements.

The *second part of the application form* contains more detailed technical information about the project, and supplementary information in the form of annexes to the project description. Specific requirements for such annexes are specified by the regional environmental inspectorate, on the basis of the application. Additionally, each application includes a questionnaire corresponding to the sector of the proposal (air, water, waste, etc.).

The regional environmental inspectorate performs an initial screening of applications, provides the applicant with written notification on the eligibility of the project and forwards the application to the Fund MO with comments regarding the following questions:

- if the application form is duly completed;
- if the proposed project is in one of the recognised areas to be supported by Fund;
- if the objectives and outputs of the project conform with the priorities specified in the Fund's guidelines for support;
- if the Fund is the appropriate institution for financing the type of project proposed;
- if the form and level of finance requested are possible within the regulations of the Fund.

6.2 Registration

If the application is complete, the inspectorate formally registers it and informs the applicant about the registration date and number. Registration does not mean that support will be awarded; it only means that the application has been received into the application procedure. The registration process is a formal event which obliges the MERP to appraise the project and make a final decision as to whether the Fund will finance it, before the end of the quarter following the quarter in which the registration takes place. The Fund, however, retains the right to request additional information from the applicant and/or the inspectorate, as required for the appraisal.

6.3 Project Appraisal

The various responsibilities for project appraisal are distributed as follows:

- the inspectorate performs initial screening (described below);
- independent experts (as needed) provide a second opinion on technical feasibility, environmental impact, financial aspects;
- competent MERP Department and, if necessary, departments of other ministries (see section 6.4) comment on the policy relevance of projects;
- the Fund MO assesses the financial and economic justification of the application.

During the initial screening, the inspectorates assess applications against the following criteria:

- the environmental justification for the project;
- the environmental impact of the project;
- the local and regional environmental significance of the project;
- the technical feasibility and cost effectiveness of the project;
- the institutional feasibility of the project and the proposed implementation arrangements;
- the local and regional socio-economic characteristics of the project.

The inspectorate summarises the appraisal findings on a standard Fund appraisal memorandum. Within 30 days from the submission of the application the inspectorate forwards a registered copy of the application dossier - with the appraisal memorandum - to the Fund MO. The dossier consists of:

- the completed and signed application form;
- the eligibility report prepared by the inspectorate;
- the notice from the inspectorate to the applicant confirming registration of the application with the registration number and date;
- any other correspondence between the inspectorate and the applicant on the application.

Once an application has been fully appraised, it is forwarded to the Fund Secretariat, which then prepares the dossier for consideration by the CEA.

6.4 Selection of Applications and Recommendations for Decision

Fully appraised projects are discussed quarterly at a meeting of the CEA organised by the Fund Secretariat. For the discussion of projects to be supported by Phare resources, a representative of the EU Delegation is also invited. CEA members receive summarised appraisal documents 8 days prior to the meeting. The documentation provided by the Secretariat includes recommendations either to approve, reject or request further revisions in the project. The recommendations are accompanied by conditions for contracting (if the project is to be approved) or comprehensive justification for rejecting a project or requesting revisions.

At the quarterly meetings, the CEA members: decide how much of the annual budget available for each specific priority area can be committed during that meeting; give their final appraisal on the applications; and finalise project ranking, taking the available budget resources into account.

The Committee's official recommendation on each project is registered by vote. Voting results are precisely recorded by name of the institutions represented on the Committee (if not unanimous) in the minutes of CEA meeting, which are edited by the Fund MO and then forwarded to the Minister via the Fund Secretariat. The CEA's decisions are in the form of recommendations; the Minister is not obliged to follow them.

6.5 Decision-making on award of support

Based upon the minutes of the CEA meeting, the Minister takes the final decision. The applicants are informed by the Fund MO about the Minister's decision not later than 8 days after it has been made. Around this period the Fund Secretariat organises a press release where the ministerial decision is announced. The decision is published in the official journal of the MERP and in a nation-wide daily newspaper.

6.6 Tendering and Contracting

Many applicants receiving contributions from the Fund (practically all through Window I) are subject to the Hungarian Public Procurement Law of 1995, which is compatible with EU practices. The applicant may start the tendering procedure prior to Minister's decision as to whether the Fund will support the project, however, the applicant does so at his or her own risk. The tendering procedures may involve a two-stage process: 1) open pre-qualification; 2) restricted tendering for the pre-qualified applicants.

The "support offer" sent by the Fund MO to the successful applicant includes the maximum amount of support - expressed also in percent of the total investment cost - and the applicable conditions. The offer is valid through a specified deadline.

The applicant should acknowledge his/her acceptance of the offer and of the set conditions. As the contracting prerequisites are met by the applicant, the Fund MO prepares the Contract which defines the rights and obligations of the contracting parties. The contract determines the following issues:

- the maximum amount of the Fund contribution;
- the type of the subsidy (grant, interest bearing / interest free loan, etc.);

- financing and project implementation schedule;
- the environmental requirements of the project;
- in case of loans, guarantee for repayment, the repayment period, and the applicable interest rate.

The Fund MO is responsible for contract negotiations with the beneficiary and arranges the details of the signing procedure.

6.7 Project Implementation

As regards financing, the payment requests are to be sent by the beneficiaries to the Fund MO for approval. Projects are monitored and, as needed, supervised, to ensure that they are implemented in accordance with the contract. Supervision is co-ordinated by the Fund with the involvement of the co-financing partners. Monitoring of project implementation is the task of the inspectorates.

6.8 Project Evaluation and Final Report

This stage starts after the technical completion of the investment. The inspectorate evaluates a project's environmental impact on the basis of M&E (monitoring and evaluation) reports prepared by the beneficiary. If required, the inspectorate may conduct its own assessment/measurements. The monitoring period is one year, or, if the project receives a loan, to the end of the loan repayment period. Preparation of regular M&E reports is obligatory for the beneficiary. The M&E report presents data on the environmental impact of the project and the environmental targets set in the contract. This stage of the project cycle ends when the inspectorate endorses a final M&E report on the project prepared by the beneficiary. In case of inappropriate implementation of the project, the Fund shall initiate cancellation of the support contract and the disbursed subsidies shall be claimed back as debts.

7. Evaluation, Reporting and Public Information

A comprehensive financial audit of the CEPF was conducted by the National Court of Auditors in 1995. This audit also assessed the Fund's performance with respect to its environmental effectiveness. Several shortcomings were cited by the audit, which led to the development of action plan for improving the Fund. The Fund's finances are audited each year by a company selected by the Minister from a list of firms recommended by the National Court of Auditors, as required by the Act on State Finances of 1992. Occasional revisions are made in the Fund's operations according to suggestions of the National Court of Auditors and the Government Monitoring Office. Official auditing of the Fund has followed Hungarian auditing standards which, it should be noted, differ from the comparable EU standards.

Decisions made by the CEPF regarding the approval or rejection of applications are open to the public. They are published quarterly in the Official Journal of the Ministry and the Minister is available at a press release after every funding cycle. The Government is informed about the Fund's activities by the Minister. The Parliament, in particular its Committee for Environmental Protection, is entitled to receive any information about the Fund it desires upon request.

8. Major Achievements

A sample of the Fund's achievements can be illustrated by a description of selected projects supported in 1996 and 1997. Activities and projects supported by the Fund in 1996 include:

- building 569 km of pipeline for gas heating for 13,475 homes and 98 public institutions; modernisation of 304 heating facilities, leading to a reduction of *air pollution* by 5577 t/year of SO₂, 4658 t/year of CO, 300 t/year of NO_x, and 5502 t/year of suspended particulates;
- reduction of VOC emissions by 250 t/year;
- reduction of excessive *noise load* (mainly from industrial sources) in 4 cities;
- laying 1206 km of *sewage pipeline* and building *sewage treatment plants* for 68,000 m³/d wastewater;
- building 10 *communal solid waste* disposal sites, with a total capacity of 3,255,000 m³, for 119 municipalities with 373,000 inhabitants;
- creation of incineration capacity for 500 t/year of *hazardous hospital waste*;
- prevention or reuse of *hazardous industrial waste* at 8 manufacturing companies;
- financial support for a national park, a protected plant field, landscape rehabilitation of an abandoned mine and a military site.

A selection of projects and activities supported by the Fund in 1997 includes:

- laying 2380 km of *sewage pipelines* and building *sewage treatment plants* for 33,500 m³/d wastewater;
- building 12 *communal solid waste* disposal sites, each with capacity for at least 20,000 inhabitants;
- creating sterilisation capacity of 500 t/year for *hazardous hospital waste*;
- the following materials were collected for recycling: 23,000 tons of car batteries; 25,000 pieces of refrigerators; 9710 tons of tires; 102,715 tons of packaging paper; 26,020 tons of metal packaging; 14,792 tons of glass containers; and 9811 tons of plastic packaging;
- support for the introduction of the Environmental Management System (ISO 14,000) at 16 small and medium-size manufacturing companies;
- *hazardous industrial wastes* were neutralized and/or reused at 5 animal slaughter houses.

9. Challenges and Future Prospects

The long-term objectives of the Fund are set in the National Environmental Protection Program through 2004. The most significant challenge will be to meet the environmental requirements of the EU, especially in the field of wastewater and solid waste management. However, the CEPF cannot disregard relatively more “minor” tasks, from air pollution abatement to the development of public environmental awareness. The Fund's most serious problem is that demand always exceeds the available budget, due largely to longer-term financial commitments associated with large investments (which may be implemented over two to three years). In order to improve the Fund's performance, technical assistance has been requested from the EU through the Phare Programmes's Country Operational Programme for 1998. Beyond the strategic concepts to be developed, a crucial point of this technical assistance will be the establishment of a comprehensive information system for the CEPF in order to keep all important data (like those provided in this survey) up-to-date and readily available. As for possible new trends and influences affecting the Fund, revenues may increase with the introduction of new product charges (e.g. on “information” papers, such as newspapers, leaflets, office papers and the like) and new charges for use and exploitation of the environment, which might then also imply some new spending priorities.

CHAPTER 6

LATVIA: THE ENVIRONMENTAL INVESTMENT FUND

*Gints Karklins*⁶

Acting Director, Latvian Environmental Investment Fund

1. Background and Objectives

The Latvian Environmental Investment Fund (LEIF or the “Fund”) was established by decree of the Cabinet of Ministers of the Republic of Latvia in March, 1997, following the initiative of the Latvian Ministry of Environmental Protection and Regional Development (MoE). The LEIF collaborates with domestic counterparts as well as foreign countries and international financing institutions in order to attract finance to support small and medium sized environmental protection projects in the public and private sectors.

Activities of the LEIF complement those of Latvia’s Environmental Protection Fund (LEPF), which is a statutory entity established in July 1996 to accumulate earmarked domestic environmental taxes and finance specific environmental projects. The LEPF has supported the establishment of the LEIF by using a portion of its annual revenues to help capitalise the LEIF; 28% of total LEPF revenues in 1997 and 1998 (or 1.5 million LVL annually) were contributed to the LEIF.

The LEIF’s main objective is to promote improvements in the environment of Latvia by supporting projects with positive environmental impact through soft loans, equity investments, feasibility studies, technical assistance, training, institutional development and other measures in accordance with national priorities established by MoE. Additionally, the LEIF should help Latvia fulfil its obligations arising from various international environmental agreements, strengthen domestic capacities for project cycle management and help the establishment of full-cost recovery policies.

The LEIF may engage in the following activities in pursuit of its main objective:

- participate in investment projects that result in a positive improvement in the environment;
- attract domestic and foreign finance for the purpose of furthering the goals of the Fund;
- develop environmental protection projects;
- monitor project implementation;
- provide institutional development support to recipients;
- popularise the benefits of environmental investment;
- financial leasing;
- market and public opinion research;
- management and business consulting, advertising and other business activities.

The Fund’s annual revenues and expenditures are illustrated in Table 6.1 below.

⁶ The survey also includes information provided in 1998 by Mrs. Indra Samite, former Director of the Fund.

Table 6.1: Total annual revenues and expenditures of the Fund (mln USD; nominal values based on average annual exchange rates).

	1997	1998
Start of year balance	0.00	2.48
Total annual revenues	2.58	2.86
Total disposable resources	2.58	5.34
Total environmental expenditures	0.00	0.67
Fund's overhead/administration expenditures	0.10	0.21
Total expenditures	0.10	0.88
End of year balance	2.48	4.47 ¹

Source: Table II.6.1 in Annex II.

Notes: 1) Total does not equal the sum of individual sub-components due to rounding.

2. Management and Administration

The Fund was established as a non-profit state owned limited liability company, independent from the State Budget and the MoE. The official founder of the Fund is the Cabinet of Ministers. The LEIF was established as a legally independent entity in order to:

- make the operation of the Fund cost effective;
- avoid undue political involvement in the Fund's day-to-day operations;
- enhance the Fund's acceptability to potential donors;
- maximise transparency in all aspects of operations.

The organisational chart of the LEIF is provided in Figure 6.1. The Fund's organisational and administrative framework is intended to guarantee the most efficient framework for autonomy, accountability, and transparency. As stipulated in the Fund's Charter, its governing bodies are the Shareholders' Meeting, the Board of Directors (the "Board"), and the Director.

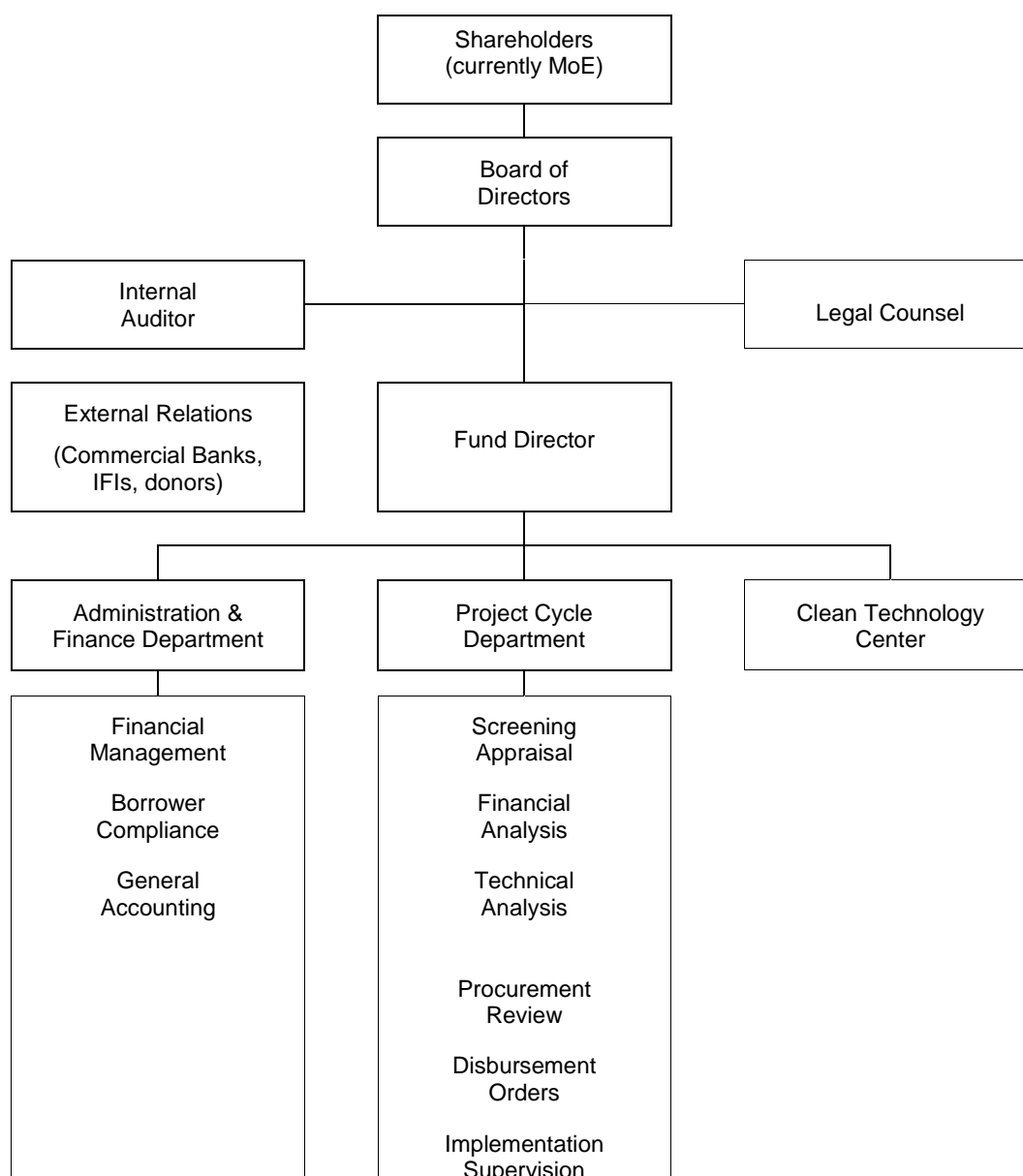
The highest decision-making body of the Fund is the Shareholders' Meeting. Reflecting the Fund's relationships with the State institutions involved in environmental protection and environmental financing, its shares are held by the MoE. An MoE official has been appointed as the "State Representative" of the shareholders.

The Board of Directors of the Fund must not exceed 12 members, who are appointed and dismissed by the State Representative. The State Representative appoints the Chairman of the Board from among its members. Donors and lenders to the Fund may have their own representatives on the Board. Such representatives shall be appointed based on mutual agreement between the shareholders, donors and lenders. The Board should incorporate the following types of expertise: environmental, financial, and relevant international experience.

The Director of the Fund is appointed by the Minister of Environmental Protection and Regional Development. The Fund currently has a staff of 10 people.

As an independent legal entity, the Fund has its own Charter, rules, project cycle procedures, separate accounts, etc., which allow the policy and operational control necessary to ensure compliance with national environmental strategies and sufficient autonomy to be credible to foreign donors and tax payers. The Board of Directors also has an important role to play in ensuring sufficient emphasis on environmental considerations in the selection of projects.

Figure 6.1: Organisational Chart of the Latvian Environmental Investment Fund.



3. Revenues

According to its Charter, the most important sources of revenue for the Fund are:

- income from business activities (e.g. loan repayments with interest, profits on financial operations);
- loans, gifts, donations and other unearned income;
- 28% of the LEPF's revenues in 1997 and 1998 (as agreed by the LEPF's Supervisory Board) for the establishment, initial operational expenditures, and lending operations of the LEIF.

As shown in Table 6.2 below, the *transfers from the LEPF* represent the large majority of revenues actually received by the Fund so far. The LEPF's revenues originate mainly from Latvia's Natural Resources Tax Act (01/96), the proceeds of which are earmarked for environmental investment purposes and (in part) are accumulated and managed by the LEPF.

Table 6.2: Revenues of the LEIF by source (mln USD; nominal values based on average annual exchange rates).

Revenue Source	1997	1998
Transfers from the LEPF (originating from Natural Resource Tax)	2.57	2.65
Loan repayment (including interest)		0.01
Revenue from financial operations and interest on bank deposits	0.00 ¹	0.18
Other	0.01	0.02
TOTAL	2.58	2.86

Source: Table II.6.2 in Annex II.

Notes: 1) Includes 3000 LVL which are not registered in the table due to rounding.

The EU's Phare Programme has committed resources within its Country Operations Programme for the LEIF, in the amount of 2 million Euro per year from 1997-1999. The first tranche of 1 million Euro has recently been transferred to the Fund. The LEIF has also signed a loan agreement with the Nordic Environmental Finance Corporation (in August 1997) for 3.5 million Euro for supporting small and medium sized water projects.

The following are also seen as possible sources of finance to support the LEIF's activities, either as direct contributors to the LEIF or as co-financing partners for specific projects.

- The *Municipal Development Fund* (MDF): Established by decree of the Cabinet of Ministers in 1995 as a World Bank supported pilot project to finance municipal infrastructure projects in environment, transportation and energy.
- *Public Investment Programme*: The single largest source of finance from the State Budget for environmental investment projects. The Ministry of Finance (MoF), in the context of each annual budget, determines the available budgetary resources as well as the foreign debt ceiling. The Ministry of Economy, working closely with the MoF and the line ministries, prepares and submits to the Cabinet the specific projects to be included within the Programme.
- *Bi- and Multilateral Sources*: A number of bi-lateral and multi-lateral sources provide soft loans and grants for environmental investments in Latvia. The scope of the projects supported by such sources may include the development of both physical and policy infrastructure. Examples of such sources are: the Nordic Investment Bank (20 million Euro available for project financing) and the European Investment Bank. The State Treasury has signed an agreement with the latter for 20 million Euro for project financing (including environmental projects to be managed by LEIF).
- *Other investment funds* (e.g. energy efficiency fund).

4. Spending Strategy

The starting point for the Fund's spending are the priorities of the National Environmental Protection Policy and the National Environmental Action Programme (NEAP). Within the framework of investment priorities identified in the NEAP, the Fund may consider financing environmental projects which fall into two broad categories:

- projects which yield a significant environmental benefit and generate a significant revenue stream, while not being financially viable at current commercial terms;
- financially viable projects; i.e. projects which themselves generate sufficient revenues to cover all costs including financial costs at current commercial rates.

Thus, the financial objective of the Fund is to support viable projects that address environmental needs and promise the ability to generate financial returns. The initial project pipeline will be composed of projects identified in the Phare financed “800+” study of safe drinking and wastewater treatment needs across Latvia. Feasibility studies are being prepared by Finnish, Danish, and Swedish consultants for 20 medium sized municipalities. In addition work is being done to select private sector projects in the clean technology and energy sectors. The Fund prepares annual spending plans; its top priorities for 1999 are projects in the water and energy sectors.

As the LEIF develops and acquires experience, its overall financing strategy will also develop and evolve. The LEIF’s annual implementation programmes will evolve similarly. Wide dissemination of the Fund’s spending strategy, yearly spending programmes and appraisal criteria will help potential recipients to prepare projects which meet LEIF goals and requirements.

5. Expenditures

In 1998, 9 projects were fully approved to receive soft loan support from the Fund. The LEIF also made its first disbursements for environmental projects in 1998. As Table 6.3 shows, these were in the air and water sectors. Figure 6.2, meanwhile, indicates that a range of different types of recipients may receive support from the Fund. By the end of 1998, the Fund had committed a total of 1 million LVL (~ 1.67 mln USD).

Table 6.3: Expenditures of the Fund by environmental sector (mln USD; nominal values based on average annual exchange rates).

	1998
Air (total)	0.54
<i>Incl.:</i> energy production/heating sector	0.53
other expenditures related to air pollution	0.01
Other (small hydro power stations)	0.13
TOTAL environmental expenditures	0.67

Source: Table II.6.3 in Annex II.

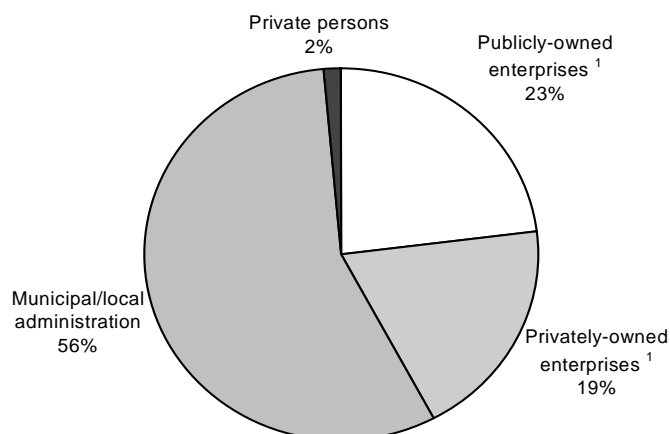
Figure 6.2 displays the range of recipients that received support from the Fund in 1998. Thus far all of the Fund’s environmental expenditures have gone for investment projects (as opposed to non-investment projects or activities).

The LEIF may finance environmental projects by using the following financing mechanisms:

- soft loans;
- loan guarantees;
- equity investments.

The Fund’s choice of disbursement mechanism for financing investments will, to some extent, be influenced by the level and range of revenues flowing to the Fund. The greater the Fund’s own revenue stream, particularly in the form of grants (e.g. from PHARE and/or the LEPF), and the more predictable its cashflow, the more flexibility it will have in softening its financial support. The Fund can soften its finance in various ways: it can offer loans with interest rates lower than those available commercially; longer payback periods and/or longer grace periods than available on commercial loans; it can provide equity finance on terms more attractive than those commercially available. As soft loans are expected to be the most common form of finance offered by the Fund, they are discussed in more detail below.

Figure 6.2: Environmental expenditures of the Fund in 1998 according to type of recipient (as a % of total Fund environmental expenditures).



Notes: 1) "Publicly-owned" refers to enterprises where more than 50% of shares are owned by the State. "Privately-owned" refers to enterprises that are 50% or more owned by private entities.

Soft Loans

The LEIF may extend loans to cover all types of hard and soft components necessary for ensuring successful implementation of a project. To all LEIF loans will be added a front-end fee of 1% of the loan principal to cover costs incurred by the LEIF related to: project preparation and appraisal; negotiations with other contributing sources of finance; finalisation of the financing package; and conclusion of the loan agreement between borrower and contributing sources of finance.

A LEIF loan would cover not less than 20% and not more than 80% of total project costs; usually the loan would cover up to 50%. The remaining costs would typically be covered by the borrower's own resources, grants and donations from other sources, and commercial loans. The payback and grace period of a loan is determined by LEIF based on the nature and cashflow of a project and borrower and normally does not exceed a term of ten years (including a grace period of one year after project implementation up to a maximum of 3 years). A commitment charge of 0.25% is levied on all committed and un-disbursed loan funds. The LEIF's lending interest rate is currently around 5-8%. (In comparison, the lending rate on the commercial market is 12-16%.) Normally a borrower pays interest during the grace period, but capitalisation of a part or all interest during the grace period may be considered.

6. Funding Cycle

Anyone interested in receiving financial support from the Fund must complete an application form. The Fund received 60 applications in 1998; more than 30 of these have received *provisional* approval. (As noted in section 5, financing agreements have been concluded for 9 of these projects.)

The most important criteria for selecting projects are financial viability and environmental effects. The Fund's Board is responsible for the formal decision-making process in awarding financial support. The Board meetings are called at least once a month.

The LEIF is continually developing its operational procedures. Currently the Fund is:

- establishing credit appraisal, approval, and monitoring procedures;
- developing procurement and disbursement training and support for clients;

- formulating uniform financial and technical specifications to be used among various domestic and foreign investment project participants.

7. Evaluation, Reporting and Public Information

Every year the Fund undergoes an independent audit performed in accordance with international accounting standards. The LEIF has also initiated an “Environmental Roundtable” and a newsletter to provide regular forums for the exchange and dissemination of information to facilitate co-operation between those implementing environmental projects and donors.

8. Challenges and Future Prospects

The most significant challenges faced by the Fund in progressing toward its long-term objectives are obtaining Phare technical assistance and developing good co-operation with IFIs. Another challenge will be to develop the Clean Technology Center recently established within the Fund.

CHAPTER 7

LITHUANIA: THE ENVIRONMENTAL INVESTMENT FUND

Zilvinas Martinkus

Director, Lithuanian Environmental Investment Fund

1. Background and Objectives

In Lithuania, as in all other Central and Eastern European countries, past and present neglect of the environment has created health risks for citizens, damage to nature and a significant economic challenge for the nation. As Lithuania transforms its political, social and economic systems there is a huge need for investments of many types in many sectors, including environmental protection. Recognising that the need for environmental investments greatly exceeds the resources available to finance such investments, the Lithuanian Ministry of Environmental Protection (MoE) established the “Lithuanian Environmental Investment Fund” to increase the financial resources available for environmental investment projects and to use those resources more effectively and efficiently in addressing the country’s environmental priorities. The Lithuanian Environmental Investment Fund (“LEIF” or the “Fund”), was officially registered in December, 1996 under the Law on Public Enterprises as a public non-profit enterprise.

The majority of environmental investments in Lithuania have been financed by resources allocated from the State Budget (e.g. through the Public Investment Programme); other finance sources have included loans and grants from foreign countries and international donor organisations, municipal funds and enterprises’ own resources. Today, most finance for environmental investments is spent on the construction of wastewater treatment plants and other municipal environmental infrastructure. However, the prevailing system for providing subsidies to municipal authorities has not been sufficient to ensure that the needed investments are implemented nor that the financial resources are used efficiently.

The LEIF was established to overcome some of these weaknesses in the environmental financing system. The Fund should accumulate financial resources which are additional to those traditionally available from the State and should provide financial incentives for waste minimisation and pollution prevention projects in both the public and private sectors. It is expected that the Fund will principally finance projects with soft loans. Hence, the Fund is envisioned as functioning to a large degree as a “revolving” fund. The Fund is also seen as a mechanism for facilitating greater involvement of the private sector in the financing of environmental protection in the country. In addition to providing soft loan finance for investment projects, the Fund is also able to provide grant support for activities such as protection of biodiversity, environmental education, and environmental monitoring and research. At this time, however, it is envisioned that such activities will be financed only from domestic sources of revenues to the LEIF.

In pursuit of its goals the Fund can engage in the following range of activities:

- issuance of loans on favourable terms (with low or no interest rates), loan guarantees and interest subsidies on commercial loans for environmental investment projects;
- provision of grants for environmentally beneficial activities and projects;
- preparation and evaluation of investment project proposals;
- participation in international investment funds/schemes;
- organisation of conferences, seminars, meetings and workshops;
- other activities helping to achieve the goals of the Fund which are in accordance with Lithuanian laws and the Fund’s Statute.

2. Management and Administration

In July 1998 a Financing Agreement was signed between the MoE and the LEIF stipulating:

- conditions on the use of the capital grant committed to the Fund by the EU's Phare Programme;
- requirements for the Fund's operational manual and accounting procedures;
- the need for the Fund to be sustainable and, to the extent possible, to revolve;
- the appointment of a Supervisory Board to consider and approve the provision of loans and to provide the Fund with a substantial degree of independence from the MoE;
- other requirements brought forward by both parties to the Agreement.

This Financing Agreement has been approved by the Phare Programme.

The Fund's Supervisory Board contains representatives of:

- MoE (the Vice Minister, the Secretary of the MoE, Director of the Environmental Strategy Department and Director of the Environmental Quality Department);
- Ministry of Finance;
- Ministry of Economy;
- Association of Lithuanian Municipalities;
- Lithuanian Green Movement;
- Lithuanian Tradesmen's and Employer's Association;
- Lithuanian Confederation of Industry;
- Advisory Board to the MoE.

Members of the Board are appointed by the Minister of Environment. The major tasks of the Supervisory Board include: approval of action plans and lists of priority projects which contribute to implementation of the National Environmental Strategy; establishment of principles and criteria for the appraisal and selection of project proposals; deciding which projects receive financial support from the Fund, what sort of support those projects receive (e.g. loan or grant) and the conditions of such support; approval of annual reports on the Fund's operations submitted by the Fund's Director.

The Fund is managed by a Director (appointed in March 1997) and a staff of 5-7 people. The organisational structure of the LEIF is depicted at the end of this chapter in Figure 7.1. The day-to-day activities of the Fund can be divided into two areas:

- technical - appraisal of the environmental and technical aspects of project applications;
- financial – appraisal of the economic and financial aspects of project applications, structuring financial agreements with successful applicants, disbursement, monitoring of long term loans, as well as maintaining the Fund's financial accounts.

It is envisioned that the Fund will contract the services of a commercial bank to help it carry out certain financial activities, including the financial evaluation, provision and administration of soft loans. In the case of loans, collaboration with a commercial bank may involve an agreement under which financial risks are shared.

3. Revenues

The EU committed to support the establishment of the LEIF with start-up capital of EUR 2.148 million. A high priority has been placed on maintaining the value of the EU's contribution, thus it is expected that these resources will be disbursed only as soft loans which will eventually be repaid to the Fund. The Fund's domestic revenues are expected to be generated largely by pollution charges.

The Parliament has very recently approved new legislation prepared by the MoE on pollution charges and waste management which directs 20% of the revenues be allocated to the Fund (in 1997, 20% of such revenues amounted to about EUR 3.5 million). This allocation will either go directly from the

MoE to the Fund (MoE's preference), or through the National Budget to the Fund, upon annual approval of the Parliament.

The new law also involves other changes to improve the effectiveness of Lithuania's environmental charge system. It has been recommended to change the list of regulated pollutants by decreasing their number and grouping them into toxicity categories. Charge rates should also be modified to better meet environmental protection objectives. In addition, the creation of new sources of revenues (e.g., product charges) is being considered.

4. Spending Strategy

At the end of each year, the Supervisory Board establishes spending priorities for the coming year based on the environmental priorities established by the MoE and elaborated in the Lithuanian National Environmental Strategy. The following priorities are defined in the Strategy:

- reduction of air emissions;
- protection of surface and ground water;
- improvement of household and hazardous waste management;
- clean-up of polluted areas, including former military sites;
- biodiversity protection and improvement of land-use planning.

5. Expenditures

The Fund is expected to begin disbursing financial support for projects from May 1999. Domestically registered public and private (small and medium sized) enterprises can apply for funding for projects which demonstrate a clear environmental benefit. Initially, the Fund will only provide financing for capital investments (e.g., the purchase of equipment, expansion and/or modernisation of facilities, etc.).

Interest rates on loans offered by the Fund will be determined on a case-by-case basis, taking into account the financial risks and other factors. It is anticipated that the Fund's interest rates will fall within the range of 4 % to 11 % per annum (interest rates in the banking sector at the beginning of 1999 varied from 9 % to 15 % p.a.). The Fund's interest rates will be fixed (i.e. will not change during the term of the loan). As a general rule, loan repayment periods will be up to 5 years. A grace period of up to 2 years can be granted before principal payment begins, based upon the individual cashflow condition of the borrower. Interest payments, however, will continue to accrue during the grace period. Loans extended by the Fund will not exceed 80% of total project costs. In general, the maximum loan amount will be 1,500,000 Lt. (~ 380 000 USD).

Grants cannot exceed 40% of total project costs. The maximum value for any grant will be set each year by the Supervisory Board. The aggregate value of grants awarded by the Fund in a given year cannot be more than 30% of the Fund's income in the previous year.

6. Funding Cycle

Considering that the Fund is expected, at least in its first years of operation, to principally provide soft loan finance, the funding cycle for loan applications is summarised here. The Fund may receive, and will consider, applications for loans from any source. Eligible Loan applications shall be evaluated according to four criteria:

- the environmental impact of the proposed investment in the target areas identified above;
- the technical soundness of the proposed investment;
- the cost effectiveness of the approach outlined in the application;

- the financial viability of the project proposal and the borrower.

The financial appraisal of loan applications includes an assessment of cashflow and debt service coverage of the project.

The appraisal process consists of three main stages:

Stage One: Eligibility Screening

Involves an initial screening of applications to ensure that the applicant is eligible according to the Fund's eligibility criteria, the application meets the lending conditions and the proposed project is feasible and worthy of technical appraisal. Applications which pass this stage of screening pass on to stage two for technical appraisal.

Stage Two: Technical Appraisal

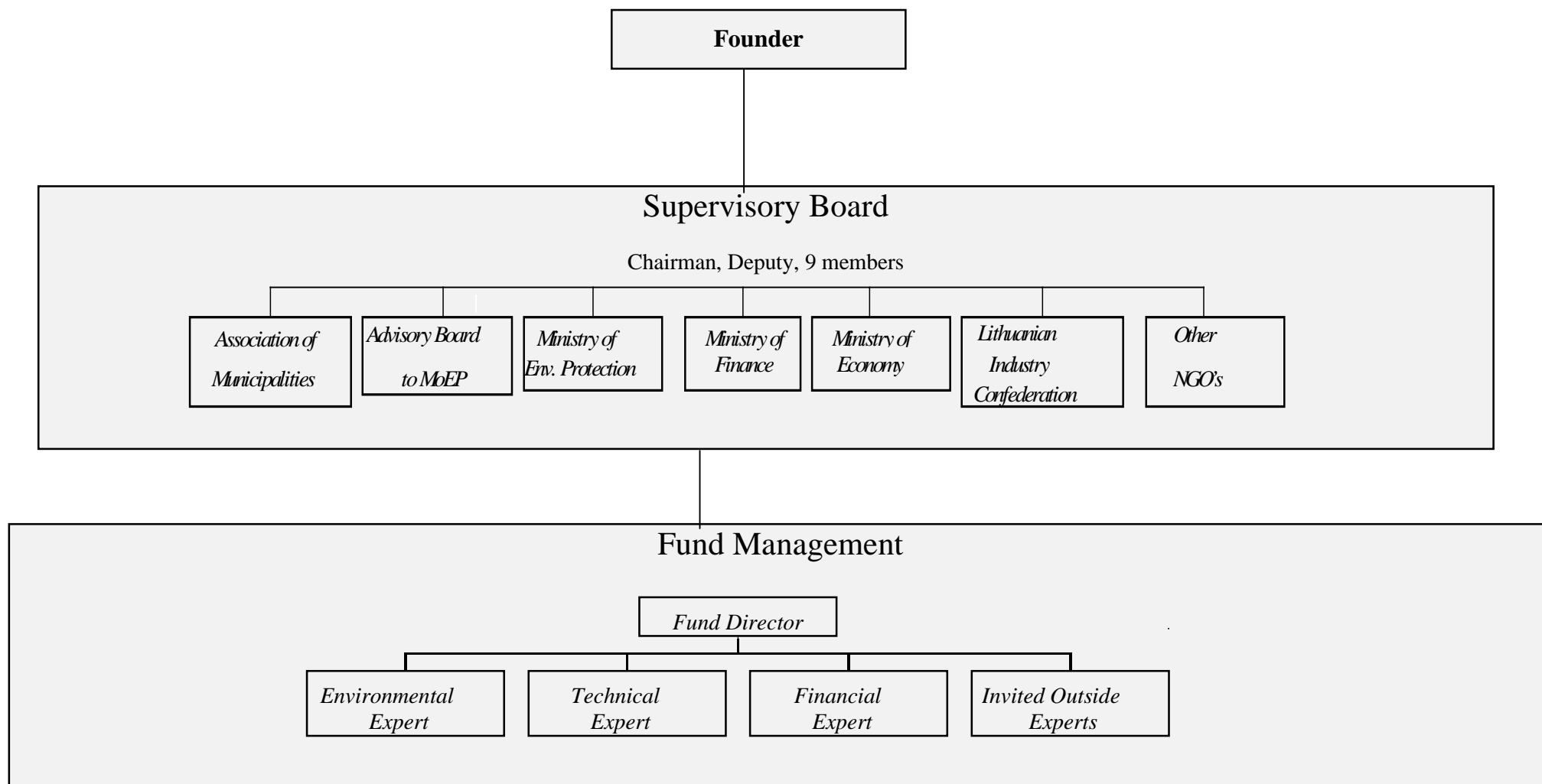
Involves an initial technical analysis of all proposals which passed stage one and development of a "short-list" of proposals; this is followed by a detailed evaluation of short-listed applications. The detailed evaluation will focus on: (i) technology assessment; (ii) environmental impact; and, (iii) state of preparedness of projects.

Stage Three: Financial Appraisal and Final Lending Decision

Involves appraisal of the financial viability of the proposal, credit-worthiness of the borrower as well as cashflow and debt service assessment.

In March 1999 the EU Phare Programme transferred the first tranche of its capital grant of EUR one million. Through spring 1999 the LEIF committed 1.5 million litas (about EUR 350.000) to be disbursed as soft loans to finance two investment projects in the air pollution prevention sector.

Figure 7.1: Organisational Chart of the Lithuanian Environmental Investment Fund.



CHAPTER 8

POLAND: THE NATIONAL FUND FOR ENVIRONMENTAL PROTECTION AND WATER MANAGEMENT

Staff of the National Fund for Environmental Protection and Water Management

1. Background and Objectives

The National Fund for Environmental Protection and Water Management (the “National Fund” or “Fund”) was created in 1989, just at the beginning of social and economic transformation in Poland. At such a time, the rapid political changes and myriad of new problems could have led to decreased interest in environmental problems and the reduction of investment in environmental protection. This, however, did not happen. On the contrary, environmental protection acquired new importance for Poland’s further development. This new, beneficial approach to ecology was possible due to the full support of society for environmental protection measures. Such support was the result of growing awareness of environmental threats and a common understanding of the need to improve and protect the environment. This understanding and support for environmental protection was taken by the Polish Government as a mandate to provide subsidised finance for environmental undertakings.

Obligations resulting from international agreements and treaties signed by the Polish Government also provided an important reason to increase investment in environmental protection. Another reason has been to achieve European environmental standards in a short period of time - part of the transition process for Poland to join the European Union.

Improvements in Poland’s environmental management system and the creation of a financing system based mainly on environmental funds has made significant increases in environmental expenditure possible. Environmental funds now represent a fundamental instrument for the subsidised financing of environmentally oriented tasks. The financial contribution of the National Fund to such tasks is summarised in Table 8.1, which shows the Fund’s total annual revenues and expenditures from 1993-1997.

Table 8.1: Total annual revenues and expenditures of the National Fund, 1993-1997 (mln USD; nominal values based on average annual exchange rates).

	1993	1994	1995	1996	1997
Annual revenues ¹	266.7	338.1	481.6	432.6	418.6
Environmental expenditures ¹	204.9	278.9	428.4	510.1	389.7
Overhead / administration costs	1.7	2.3	9.8	7.4	9.5
Other expenditures	0.8	2.9	0.8	2.6	2.0
Total expenditures	207.4	284.1	439.0	520.1	401.2

Source: Table II.8.1 in Annex II.

Notes: 1) Includes foreign sources.

The National Fund was created by virtue of an April 1989 law which amended the Environmental Protection and Management Act of 1980 and the Water Law. The Fund has been operational as a legal entity since the enactment of the amendment on July 1, 1989. (The amendment also enabled establishment of provincial environmental funds.) The Water Law and Geological and Mining Law also define the Fund’s activities and scope.

The Environmental Protection and Management Act of 1980 has been amended many times (most recently in 1997), but the most important amendment concerning the environmental funds was that of 1993. This amendment granted legal identity to the provincial funds and enabled establishment of local environmental funds. The Environmental Protection and Management Act, with its subsequent amendments, specifies revenue sources of the funds and the principles under which the revenues collected by the provincial governments shall be distributed amongst the Fund, provincial funds and local funds. Through its amendments, the Environmental Protection and Management Act specifies that the environmental funds shall be independent from the State budget and that the funds' financial resources shall be used exclusively for environmental protection.

According to the Environmental Protection Act, the general objective of the National Fund is the financing of environmental protection and water management activities so as to meet the requirements of sustainable development. To achieve this aim, more immediate objectives have been set for the provision of financial support for:

- production of equipment for environmental protection and water management;
- implementation of investments (including the modernisation of technology and facilities) in the environmental sector;
- environmental monitoring (measuring stations, laboratories, information processing centres);
- scientific research;
- ecological education.

The Fund also supports the efforts of the provincial and local funds for environmental protection and water management, which mainly entail:

- nature protection and the expansion of forested areas;
- use (and development) of modern technologies (e.g. for waste management, water and wastewater management, energy management, noise abatement, fuel production, the reduction of combustion gases, and cleaner production);
- prevention of environmental accidents and remediation of their consequences;
- health care of children living in areas where pollution norms are exceeded.

2. Management and Administration

The main principles of organisation and operation of the National Fund are also specified by the Environmental Protection and Management Act. In line with the Act, the Fund has two principal bodies, the *Supervisory Board* and the *Management Board*. The Minister of Environmental Protection, Natural Resources and Forestry determines the structure and membership of the Supervisory Board in a manner representative of different interest groups. The Minister appoints and dismisses members of the Supervisory Board, which usually consists of 13-15 members, among whom are:

- 4 representatives of different science fields;
- 3 representatives of the Ministry of Environmental Protection, Natural Resources and Forestry;
- 3 representatives of local self-governments;
- 1 representative of environmental NGOs, selected from candidates offered by such organisations and supported by the largest number of them;
- 1 representative of the Ministry of Finance;
- 1 representative of the State Inspectorate of Environmental Protection;
- 1 representative of a Provincial Environmental Department;
- 1 person representing the interregional Agreement of Provinces and Ecological Organisations.

The responsibilities of the Fund's *Supervisory Board* include:

- approving the selection criteria for activities to be financed by the Fund;

- approving the plan of operations and list of priority activities of the Fund for a given year, as well as principles for extending loans;
- authorising loan forgiveness;
- approving decisions of the Management Board regarding financial investments (e.g. the purchase of shares, emission and purchase of bonds) and capital operations;
- approving applications for loans and grants above Euro 300 000, and;
- approving annual reports and annual balance sheets of the Fund.

The Supervisory Board reports to the Minister on the operations of the Fund, supervises the activities of the Management Board, and determines the remuneration of the Management Board members and the employees of the Fund.

The *Management Board* consists of the President and Vice-Presidents (four as of today), who are appointed and dismissed by the Minister. The responsibilities of the Fund's Management Board include:

- elaborating work plans, including annual lists of priority activities;
- deciding which projects/activities will receive financial support from the Fund (except in the case of loan or grant applications requesting over 300 000 Euro);
- managing the Fund's finances;
- reporting the Fund's activities to the Supervisory Board;
- and employing personnel in the Fund's Office, which provides technical and organisational services to the Supervisory Board and Management Board.

Initially, at the end of 1989, the Fund had a staff of 24 employees. From 1990 onwards the Fund steadily strengthened its organisational and financial potential. As revenues, expenditures, and the number of projects to finance grew, the Fund increased the number of its employees, methodically improving their professional skills and qualifications. Significant increases in the number of staff were noted twice in the Fund's history. The first time was after the Fund took over from the Ministry of Environmental Protection, Natural Resources and Forestry (MoE) responsibility for the tasks previously carried out by the Environmental Strategy and Management Unit. The second time was at the turn of 1995 after the opening of the Fund's new office. At present there are around 220 employees, which includes water, air, soil and environmental protection engineers, financiers, specialists in the implementation of foreign programmes and others.

3. Revenues

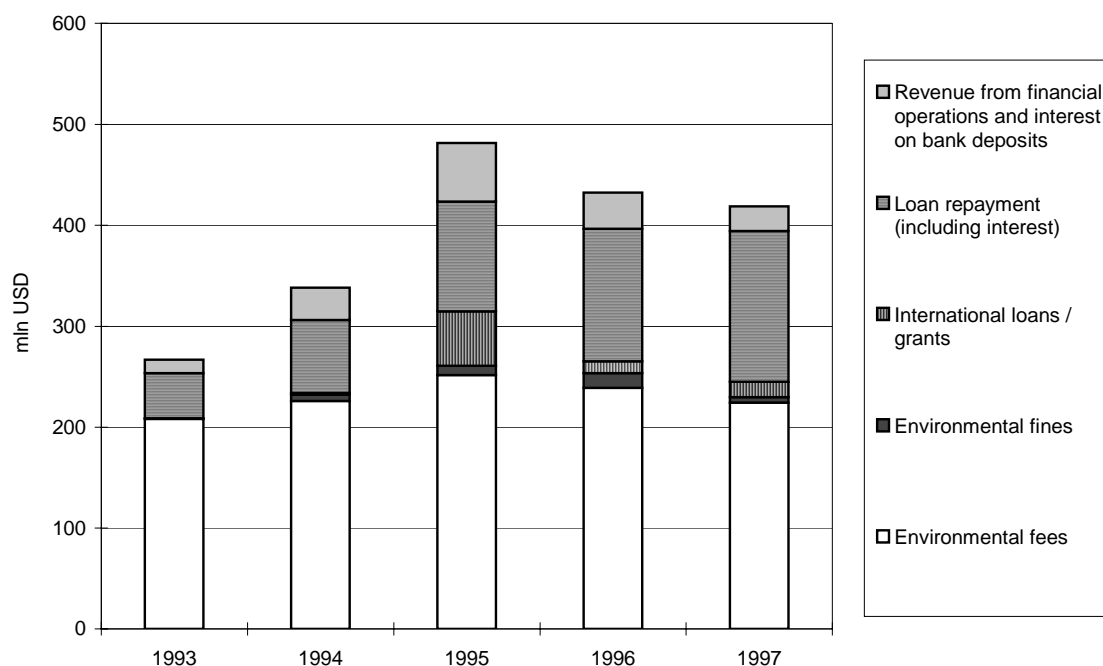
The financial means of the Fund come from the following sources:

- fees and fines imposed in accordance with the Environmental Protection and Management Act and the Water Law;
- operation and license fees for mineral extraction; fines for mineral extraction without a license or the violation of license terms, as provided for by the Geological and Mining Law;
- repayment of interest bearing loans extended by the Fund;
- financial transactions and interests in commercial companies;
- foreign and international sources.

More recent sources of revenue are fees and fines imposed in accordance with the Waste Management Act, which became effective in January 1998.

As is illustrated in Figure 8.1 below, the Fund's most important sources of revenue are loan repayments, fees for use of the natural environment and fines for the violation of pollutant emission limits. Fees and fines are imposed by the provincial governments and provincial inspectors of environmental protection. The rates of fees and fines are set by governmental regulation. The rates reflect State policy and are indexed according to the next year's expected inflation.

Figure 8.1: Fund revenues from 1993-97 by source (mln USD; nominal values based on annual average exchange rates).



Source: Table II.8.2 in Annex II.

Notes: The level of revenues shown for environmental fees and fines is an estimate based on the National Fund's share of total fees and fines in the entire fund system. See Table II.8.2 in Annex II for additional notes.

The National Fund is not the only institution to be replenished with the revenues generated from fees and fines; provincial and local funds for environmental protection and water management share the proceeds. (See Table II.8.3 in Annex II for aggregate environmental fee and fine revenues in Poland's entire fund system.) The principles for calculating, collecting and executing the fees and fines are as follows:

- local authorities fix the amount of fees to be paid;
- provincial inspectors of environmental protection impose any fines due;
- the provincial government and provincial inspector of environmental protection are responsible for the collection of imposed fees and fines, respectively;
- after collecting the revenues, the provincial government and provincial inspector of environmental protection are responsible for the distribution of collected funds; *through 1998* the law specified that local governments were to receive 10% of revenues from most sources and the rest was to be divided into two parts of which provincial funds received 60% and the National Fund 40%;
- local funds received 50% of revenues from waste storage and 100% of revenues from fees and fines for the cutting of trees and shrubs;
- 100% of revenues from fees and fines for nitrogen oxides emissions and salinified surface water went to the National Fund;
- according to new legislation, however, and corresponding to Poland's administrative decentralisation, *from 1st January 1999*, the National Fund receives some 16% of all revenues from fees and fines, provincial funds receive about 60%, county funds (a new administrative level) about 6% and local funds about 18% of all revenues;

- from 1999, the National Fund receives 100% of revenues from fees and fines for salinified mine waters and nitrogen oxides, and 28% from certain other sources (sulphur oxides, waste storage and others).

The Fund's revenues increased steadily and significantly from its establishment in 1989 through 1995, after which revenues stabilised. The revenue structure as per specific sources has changed systematically during those years due to two phenomena. On one hand the share of loan repayment and interest thereon has been growing due to the accumulated value of loans and revenues from capital investments. Financial transactions have also been on the rise too. On the other hand, after 1991, the share of revenues from fees and fines began to fall.

Fees and fines imposed in accordance with the Geological and Mining Law act also represent part of the National Fund's revenues, and in 1992 a special sub-fund was set up on the basis of mining operation fees. These revenues are earmarked for the financing of geological works and for the needs of the mining industry to reduce the burden imposed on the environment by mineral extraction. (These revenues are also earmarked according to geographic region of origin.)

Similarly earmarked is the appropriation of the National Fund's income from fees and fines on the salinification of surface water by coal-mines and for emissions of sulphur dioxide and nitrogen oxides. These revenues can only be allocated to eliminate environmental threats related to the concerned salinification and emissions.

Certain exemptions are available for polluters otherwise subject to environmental fees and fines. With the authorisation of the relevant authorities, the imposition of fines may be suspended if a polluter undertakes measures leading to the quantifiable reduction of pollution to compliance levels. If the measures prove successful, the fines may be waived. (Note that such exemptions are not granted for fee payments.)

As indicated in Figure 8.1 and the table below, the Fund also administers foreign resources allocated for environmental protection in Poland (e.g. PHARE, World Bank, bilateral assistance). Significant foreign financial support for Poland's environment started with the World Bank in 1989, when 18 million USD was allocated for a seven year Environmental Management Strategy Programme. (The project was initially administered by the MoE, and later transferred to the Fund.) A second Programme is now being negotiated with the Bank. Poland was, together with Hungary, the first participant in the Phare Programme. This assistance started in 1990 with 22 million Ecu directed for realisation of a multi-annual Environmental Programme. The multi-annual Programmes continued from 1992-98 and the 1999 Programme has been prepared according to the New Phare Orientation. Under a special agreement with Finland, revenues generated by the selling of certain Finnish food products have been administered by the Fund since 1992. (Projects financed from this source were completed in 1998.)

Table 8.2: Foreign financial resources administered by the Fund (*thousand* USD; nominal values).

Source	1994	1995	1996	1997
Phare	1 064	44 869	9 374	13 722
Phare: Environmental Partnership Fund	-	1 191	1 309	693
BITS (Swedish technical assistance)	297	386	381	425
EPA	-			61
Finnish Food Fund	316	151	136	100
The World Bank	-	7 186	376	
Total Foreign resources	1 678	53 783	11 576	15 002

Source: Table II.8.2 in Annex II.

4. Spending Strategy

The environment in which the National Fund is operating has undergone major changes. The number and magnitude of tasks that the Fund has helped finance has grown. Due to increased involvement in large projects, loans have become an increasingly important part of the Fund's portfolio. Given such changes, in 1996 the Fund began conceptual and analytical work aimed at making better and more effective use of its financial means and at increasing its leveraging effect. The Fund has developed a long-term financial strategy so as to maintain its financial strength in the years to come. In co-operation with foreign experts, plans have been developed to help broaden the scope of activities of the Fund and to introduce new or improved financing instruments (e.g. interest rate subsidies, as discussed in section 5 below).

“Operational” activities of the National Fund are based on an annual plan of activities prepared by the Management Board and approved by the Supervisory Board. This plan specifies the planned amount of revenues as per specific sources and expected expenditures as per different sectors. Planned expenditures in the different environmental protection fields provide an indicator of current priorities and trends in their evolution. The priorities of the National Fund are elaborated and published in the so-called “List of priority undertakings of the National Fund for Environmental Protection and Water Management designated for financing in a given year”. From 1997 the list of priorities groups the tasks in so-called programmes. In 1997 and 1998 the listing also provided information on plans for implementing those tasks through year 2000. This is due to the fact that the list is based on an official document - “Implementation Programme for the National Environmental Policy through the year 2000” – which is based on the environmental policy of the State. The Fund's list of priority undertakings reflects the proposals of the MoE and provincial environmental authorities. Listings of provincial environmental priorities are prepared by the provincial funds for environmental protection and water management. Such lists specify the most important tasks designated for financing in a given year from the means of the provincial funds and put forward the tasks to be co-financed by the National Fund.

The list of priority undertakings (programmes) of the National Fund for financing in 1999 and, in more general terms, through the year 2000, includes:

- water pollution control: protecting drinking water sources (particularly against sources of pollution with output capacity exceeding 2000 m³/day and sewage disposal systems with output capacity exceeding 300 m³/day); using existing sewage treatment plants to their full capacity;
- water management: expanding available water resources and improving flood control;
- air pollution control: reducing pollutant emissions by improving fuel quality, replacing fuel with cleaner alternatives, installing flue gas reduction equipment, modernising and replacing technologies, and conserving energy;
- land pollution control: rationalising waste management and eliminating or reducing human health and environmental hazards caused by so-called “inherited” pollution and human activity (transport, industry, the military, tourism);
- forest protection: preserving forests as the most important component of ecological balance in the biosphere;
- conservation of nature: conserving and preserving valuable nature resources and the diversity of flora and fauna (including genetic diversity);
- geology: projects and studies that support exploration of the country's geological structure and protection of its lithospheric resources. Priority should be given to protecting subterranean water resources and to projects concerning environment-friendly energy sources;
- mining: reducing the adverse environmental impacts caused by the extraction of minerals;
- environmental education: developing social attitudes and behaviour, spreading the ideals of sustainable development;
- interdisciplinary programmes: a wide range of activities, including the creation of a research and methodology base that will support the implementation of other activities and programmes.

5. Expenditures

It is estimated that in the period 1989–1997 the National Fund contributed 20–25% of total expenditures on environmental protection in Poland. The Fund's environmental expenditures in 1993–1997, and the share of those expenditures in the country's total expenditures on environmental protection (excluding some expenditures in the water sector such as water intakes and supply, water reservoirs, river and stream regulation, flood embankments and pump stations), is shown in the Table below.

Table 8.3: Role of the Fund in total environmental expenditures in Poland (*mln* USD; nominal values).

	1993	1994	1995	1996 ¹	1997 ¹
Total national environmental expenditure	1 272	1 369	1 716	2 797	2 786
Including: environmental protection	835	937	1 305	2 273	2 242
water management	437	432	411	524	544
Environmental expenditure of the National Fund ²	183	227	372	452	342
Fund's share of total environmental expenditures	14.4%	16.6%	21.6%	16.2%	12.3%

Source: Annual reports of the National Statistics Office and the Fund; Table II.8.4 in Annex II.

Notes: 1) Data for 1996 and 1997 are not readily comparable with earlier data because of changes in the definition of „environmental expenditure”. Since 1996, the definition was harmonised with international standards and thus broadened to include: construction of sewerage networks directing sewage to wastewater treatment plants and sewerage networks for rainwater; new fuel incineration technologies and the modernisation of heating boilers; construction/modernisation of water purification plants and water supply recycling systems. 2) Includes expenditures from *domestic* financial sources only.

As shown in Table 8.4, projects in the fields of water and air protection consume most of the financial means of the Fund. Significant support is also given to projects for nature and land protection, including rapidly developing investments in waste management. While the National Fund invests its resources mainly in the sectoral fields of environmental protection, support is also given to institutions operating for the sake of environmental protection in areas such as monitoring, forest fire management and rescue response, etc. The National Fund is also a major sponsor of environmental education.

Table 8.4: Fund expenditures¹ by environmental sector (*mln* USD; nominal values based on average annual exchange rates).

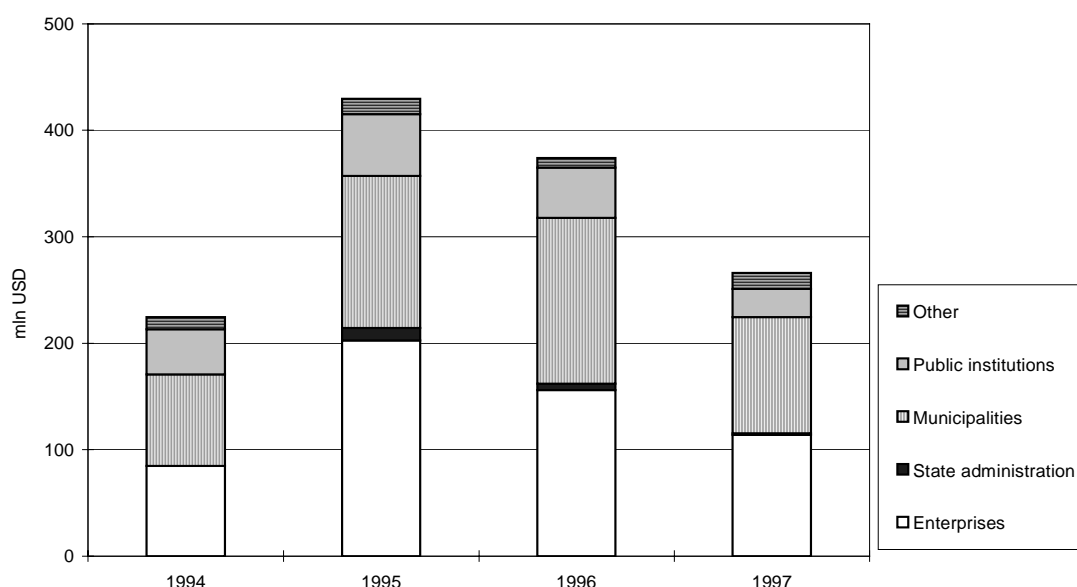
	1993	1994	1995	1996	1997
Air Protection	82.5	75.4	174.9	167.0	113.6
Water Protection	60.5	84.8	111.4	178.6	133.2
Soil/land protection ²	10.7	15.2	18.4	20.2	29.8
Nature protection/conservation	5.2	12.5	11.4	11.6	11.7
Monitoring and information systems	8.7	7.0	4.0	4.1	2.9
Environmental education and public awareness	2.1	1.8	4.0	6.2	5.4
Cleanup and prevention of accidents/emergencies	2.8	10.9	7.9	10.8	6.0
Mining related activities ³	4.1	12.9	24.9	29.9	7.0
Geologic activities ³	3.4	6.3	11.2	19.0	23.8
Others (research, expertise, awards)	3.1	0.6	3.4	4.9	8.4
TOTAL	183.1	227.4	371.5	452.3	341.8

Source: Table II.8.4 in Annex II.

Notes: 1) Includes expenditures from *domestic* revenue sources only. See Table 8.5 for the allocation of expenditures from foreign sources according to environmental sector. 2) Includes expenditures related to waste management. 3) Expenditures from the Mining and Geologic Sub-Fund.

Figure 8.2 illustrates the breakdown of financial commitments made by the Fund according to type of recipient, while Figure 8.3 shows that the large majority of the Fund's expenditures are devoted to investment project costs (as opposed to non-investment activities).

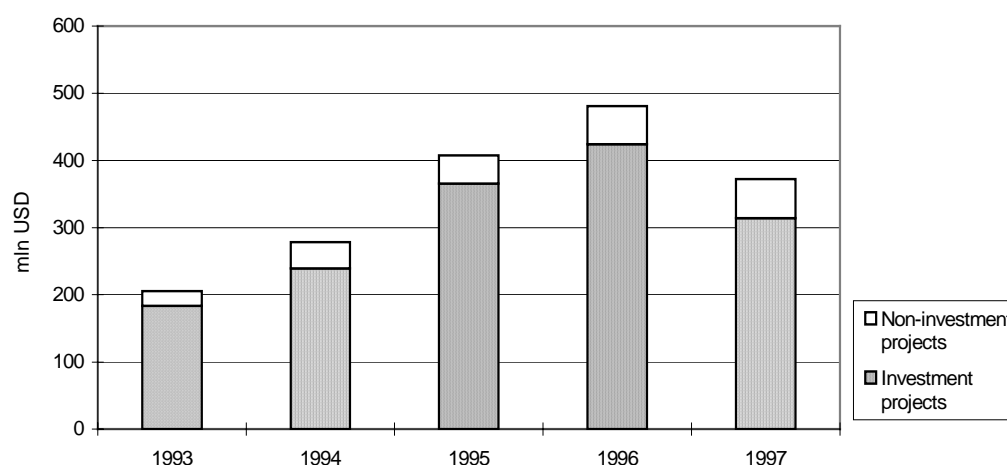
Figure 8.2: Financial commitments¹ made by the Fund according to type of recipient (mln USD; nominal values based on average annual exchange rates).



Source: Table II.8.5 in Annex II. See Table II.8.6 for a similar breakdown of financial commitments from foreign sources.

Notes: 1) Does not include expenditures from the Geology and Mining Sub-Fund.

Figure 8.3: Environmental expenditures of the Fund according to “investment” or “non-investment” project¹ (mln USD; nominal values based on average annual exchange rates).



Source: Table II.8.7 in Annex II. See Table II.8.8 for a similar breakdown of Fund expenditures from foreign sources from 1990-1997.

Notes: 1) See Table II.8.7 in Annex II for how “investment” and “non-investment” projects were defined here.

Financing Instruments, Terms and Conditions

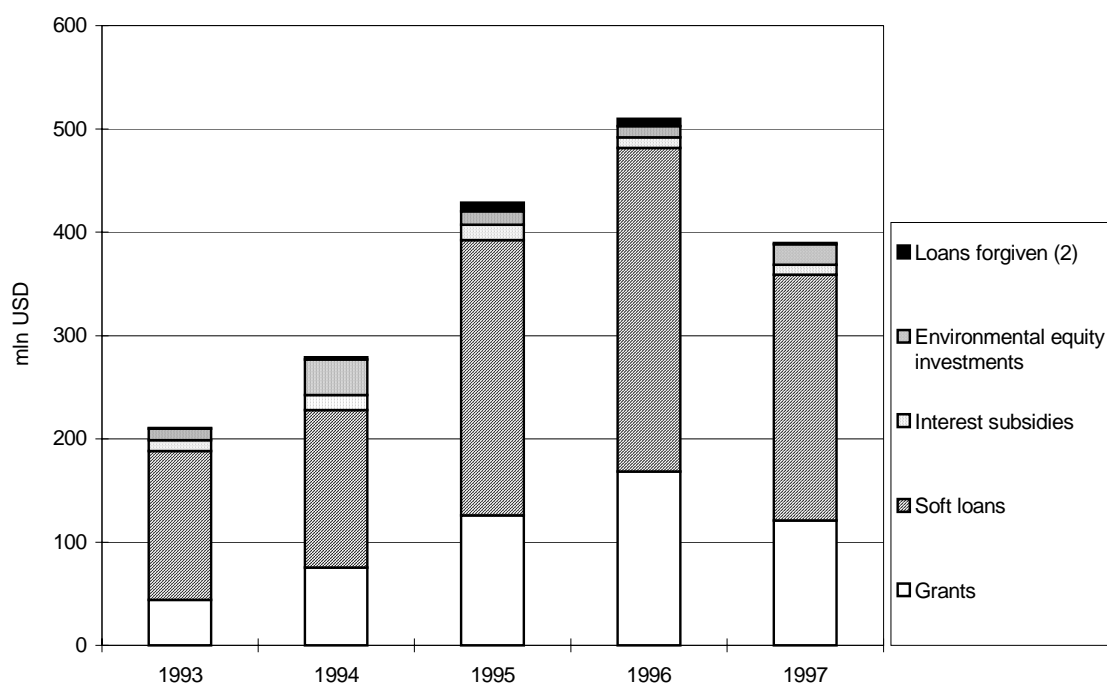
Financial aid is provided by the Fund on the basis of rules for extending loans and loan forgiveness, and rules for awarding grants. Both sets of rules are updated every year. These rules specify in detail the terms of applications for financial aid, terms of credit and the method of interest calculation, terms for partial loan forgiveness and terms and principles for awarding grants. They also define other requirements set forth by the Fund including provisions regarding tenders and bid offers.

As illustrated in Figure 8.4, for the financing of environmental projects, the Fund offers:

- grants;
- preferential (i.e. “soft”) loans;
- interest rate subsidies;
- and equity investments.

Loans granted on preferential terms are the Fund's primary form of financing. Key aspects thereof are preferential interest rates (i.e. lower than commercial rates), grace period for loan redemption and partial forgiveness. Partial forgiveness of a loan is possible only after all the National Fund's requirements have been met. This refers especially to the fulfilment of contract conditions in accordance with the time schedule and to the achievement of planned environmental impacts. In 1997, 63 loans have been partially forgiven with the forgiven amount totalling 12 289 000 PLN (~ 3.7 mln USD; less than 1% of annual expenditures). However, only about 1/3 of this sum effected the Fund in 1997 (amounting to 0.6% of the total value of loans awarded that year).

Figure 8.4: Fund environmental expenditures¹ by form of disbursement (mln USD; nominal values based on average annual exchange rates).



Source: Table II.8.9 in Annex II.

Notes: 1) Includes foreign sources, all of which have been disbursed as grant, and disbursements from the Geology and Mining Sub-Fund. 2) Forgiven loan amounts are effectively grants.

The interest rate on loans extended by the Fund is calculated on the basis of the National Bank of Poland's rediscount rate and varies from 0.5 to 0.7 of that rate. As of March 1998 the rediscount rate was 24.5%. (The interest rate on the Fund's loans, however, may not be lower than 8%). The interest

on a specific loan depends on the project. For example, a 0.6 coefficient is applied to projects for the reduction of “low stack” air emission. Loans are paid back in 4 - 5 years on average. It now often happens, however, that loans are granted for longer periods of time. The grace period is half a year or one year after completion of the project.

The loan value may not exceed 50% of the estimated cost of a particular project, or 70% in the case of projects undertaken by self-governed entities (municipalities and villages). The related percentages for grants can be up to 100%. In practice, the Fund’s loans usually cover 70% of project costs; grants - 30%. Grants are given mainly to budgetary entities and public utilities for projects on monitoring, nature protection and environmental education.

The Fund also provides interest rate subsidies with the aim of expanding the financial resources available for environmental tasks and easing the financial burden of the costs of commercial loans for environmental projects. The subsidies cover the difference between interest rates charged by commercial banks and the preferential interest rates applied by the National Fund. They thus allow the Fund to leverage commercial funds engaged in environmental protection. The Fund enjoys ongoing co-operation of this sort with Poland’s Environmental Protection Bank (in which the Fund is also a major shareholder).

The National Fund also promotes environmental tasks through equity investments. The Fund may take an equity interest in new or existing corporations operating in the environmental protection sector in accordance with the Fund’s list of priority undertakings. So far the largest corporation established by the National Fund is the Environmental Protection Bank (EPB), which is listed on the Warsaw Stock Exchange.

Co-financing and International Co-operation

From the terms and conditions under which financial assistance is provided by the Fund, it follows that in most of the cases such assistance is only one of the sources of financing, especially in the case of major projects. It thus becomes necessary for the Fund to co-operate with other institutions in financing the projects. Besides the Environmental Protection Bank, the Fund closely co-operates with provincial funds for environmental protection and water management, EcoFund (Poland’s debt-for-environment swap fund) and other institutions. Major projects are very often financed by consortiums consisting of the Fund, Environmental Protection Bank, commercial banks and foreign entities.

The Fund co-operates closely with foreign entities and administers financial resources provided by several foreign countries and international institutions (e.g. EU Phare Programme, World Bank, Danish EPA, Finland). Swedish financial assistance has been allocated by the Fund annually since 1996. These funds are directed for the operation of the Secretariat for the Joint Implementation activities, which Poland has conducted since 1996, according to the Climate Convention from the conference in Rio de Janeiro in 1992. Special co-operation with the Danish EPA began in 1998, whereby the Fund coordinates projects financially supported by DEPA, which is one of Poland’s most important bilateral assistance partners in the environmental sector.

Table 8.5 indicates that the foreign financial resources disbursed by the Fund from 1990-1997 have been allocated mainly for air protection activities, followed by water protection projects (combining for ~ 67% of all expenditures from foreign sources in Poland up to now). Land protection, nature conservation and monitoring have made up ~21% of all expenditures. The large majority of these resources, 89%, were directed for investment and pre-investment costs.

Table 8.5: Allocation of foreign financial resources by the Fund according to environmental sector, from 1990-1997.

Sector	% of total ¹
Air Protection	41.8%
Water Protection	26.2%
Soil/land protection ²	6.8%
Nature protection/conservation	7.6%
Monitoring and information systems	6.6%
Other (e.g. emergencies, environmental education, programme management, European integration)	11.9%

Notes: 1) The sum of individual sub-components does not equal 100% due to rounding. 2) Includes waste management.

6. Funding Cycle

General Information

Besides occupying itself with various methods of financing environmental protection tasks, the Fund spends much of its time applying principles and procedures related to the evaluation and selection of the tasks designated for financing. The guiding documents are:

- Project selection criteria for financing from the resources of the National Fund for Environmental Protection and Water Management;
- List of priority undertakings of the National Fund for Environmental Protection and Water Management designated for financing.

Project selection criteria are applied in the appraisal and selection of applications submitted for financial aid. They stipulate basic requirements for the tasks such as conformance with the national environmental policy, environmental effectiveness and economic efficiency, technical and qualitative standards and finally the scope of environmental impact. (For example, the costs of cleaning of 1 m³ of waste or elimination of 1 tonne of pollution are considered.) Besides, each criterion of the scope of environmental impact has its own value in the form of “marks” (i.e. points). The sum of the marks helps to rank proposed projects in order to grant any financial support by National Fund. In addition, an applicant has to fulfil formal requirements subject to legal regulations in effect and to the rules for loans, loan forgiveness and grants from the resources of the Fund.

Principles of financing, and evaluation and selection criteria, for projects in a given year are elaborated by the Management Board and approved by the Supervisory Board by the end of the preceding year. This information is made available, in the form of a brochure, at the office of the Fund and is widely disseminated in different publications, including the “Ekofinanse” magazine.

Lists of priority project areas are prepared and approved by the provincial environmental funds (according to law by November 30), and then by the National Fund by January 31. These priority project areas are later published in a manner similar to the Fund’s annual financing principles and selection criteria. This information is now also available on the Fund’s Internet web page (<http://www.nfosigw.gov.pl>).

Application Process

Application forms and related elements, as well as the list of documents required to enter into a contract, are available as written documents at the provincial environmental funds. They are also available in electronic form to be downloaded from the National Fund’s internet home page.

Before an applicant submits an application to the Fund, there is usually a less formal exchange of information. This applies in particular to new loan-takers, and involves on the one hand information on the Fund's abilities and requirements, and on the other information on the proposed task itself and abilities of the potential borrower to implement the project. Once completed, the application is to be officially submitted and registered at the office of the Fund in Warsaw.

In 1997 the National Fund received 1720 applications for financing, which together with the applications submitted at the end of the year before (after the last funding cycle) totals 2186. Of these 551 applications were rejected because they did not meet the specified criteria; the applicants themselves withdrew additional 58 applications.

Appraisal and Selection

Ecological-technical teams first assess whether an application is eligible under the stated financing criteria. They also evaluate eligible applications from an ecological and technical point of view.

Economic analysis of a typical application comprises the following:

- evaluation of financial abilities of the Fund, considering its financial plan and existing financial commitments;
- evaluation of the credit-worthiness of the applicant (in the case of a loan) and an assessment of the applicant's present and future financial standing;
- evaluation of the balance of sources to cover the remaining investment costs;
- evaluation of risks related to financing and project implementation.

A favourable result of this analysis makes it possible to submit the application to the Management Board which is to decide on financing. Applications are processed, evaluated and decided upon on a rolling basis. If the sum requested does not exceed Euro 300 000, the Management Board has authority to make the decision by itself. Requests for finance which exceed that level must be approved by the Supervisory Board of the National Fund. The Management Board examines applications at weekly meetings, joined by the managers of all departments in the Fund. The Supervisory Board meets once a month on average. Both the Management Board and Supervisory Board make decisions by means of majority voting. At the request of Management Board or Supervisory Board members, voting may be conducted by secret ballot.

Negotiations, Contracting and Implementation

After the decision on financing is handed down, the beneficiary is to present an updated implementation schedule, verified and signed by the person co-ordinating execution of the contract, and the authorised person from the Control Department of the Fund. This updated implementation schedule becomes an Annex to the contract. The next step is negotiations with the beneficiary. The purpose of the negotiations is to determine:

1. in the case of grants, the dates and amounts of payment tranches as well as forms of grant insurance;
2. in the case of loans, the dates and amounts of payment tranches, forms of loan and interest insurance (collateral), interest rates, dates and amounts of repayment of loan and interests.

After the negotiations stage is completed, the contract text is prepared. The contract with the beneficiary is signed by persons authorised by the beneficiary and by the members of the Management Board of the Fund. On the basis of the signed contract the beneficiary presents financial documents confirming realisation of particular elements of the contract (e.g. bills, VAT invoices and others). These documents are compared with the terms of the contract and, after this, serve as the basis of payment of the requested sum to the beneficiary's account. The Fund continuously monitors realisation of contracts. Additionally, once a year on average, experts of the Control Department in the Fund control each contract.

In the case of inappropriate or unsatisfactory use of the Fund's financial support, the Fund's Management Board (after the suggestion of the Control Department or the line departments dealing with the case) can decide to:

- order repayment of the money (i.e. in case of changes in the technical parameters of the components of the investment being financed by the Fund);
- suspend payments (i.e. in case documentation submitted by the beneficiary is incorrect or inappropriate or in case of delay in realisation of the investment);
- terminate the contract, which requires the immediate repayment of the funds together with the payment of any fines stated in the contract;
- in potentially criminal cases, notify the appropriate prosecutor.

Post-Project Implementation

After the completion of the investment, the beneficiary presents to the Fund documents:

- confirming full completion of the investment, signed by the contractor, beneficiary and supervising engineer who is responsible for completion of the investment according to the construction rules and the law;
- certifying the achievement of the ecological effect, to be issued by the State Inspectorate of Environmental Protection.

7. Evaluation, Reporting and Public Information

Operations of the Fund are subject to daily evaluation by the Minister of Environmental Protection, the National Fund's Supervisory Board, the Management Board, the Polish Parliament, and foreign donors. Nevertheless, one year is a basic settlement period in terms of financial operations and in terms of factual achievements of the Fund. Every operational year is evaluated in accordance with the Environmental Protection Act, which also stipulates reporting principles applicable to the Fund. Foreign donors control realisation of sponsored projects according to their specific rules.

The Management Board prepares and submits an annual report to the Supervisory Board. After the report is approved, it is submitted to the Minister of Environmental Protection, Natural Resources and Forestry. Based on information from the report, the Minister informs the Cabinet of Ministers about the Fund's activities. This is to be done every year before the end of May. Additionally, the Management Board of the Fund publishes information about its activities in the official newspaper "Monitor Polski". Short versions of the Fund's annual report are published in magazines covering environmental protection.

The annual report compares operational results with forecasts in the annual plan. The beginning of the report contains basic information on the activities of the Fund and its bodies i.e. the Supervisory Board and the Management Board, and on co-operation with the provincial governments, local governments and provincial environmental funds. Revenues from fees are then presented in the report, as are: the implementation of the financial plan; activities related to the financing of environmental tasks and mining/geological work; vindication of dead loans; capital activities; activities resulting from foreign co-operation; and the income statement. The last part of the report summarises the implementation of the financial plan defined in the State budget for a given year and includes several annexes with tables. In accordance with the Accounting Law, the annual report on financial operations (balance sheet, income statement, statement of changes in financial position) is subject to an audit and is examined by a chartered accountant. (Polish Accounting Law is based largely on European Union legislation, particularly on EU Directives 78/660/EEC "On the annual accounts of certain types of companies" and 83/349/EEC "On consolidated accounts".)

Statements, reports, annual plans and other important information on the Fund's activities are presented at press conferences. The most important press conference, which has the largest number of participants, takes place at the International Environmental Fair "Poleko" (at the end of November every year). At this conference, the Fund's financing criteria and principles for the coming year are presented for the first time. These most important aspects of the Fund's information policy and daily work related to its implementation are carried out by the Office for Information and Promotion together with the Press Officer of the Fund.

8. Major Achievements

In eight years of its activity (1990-97) the Fund has concluded more than 5500 loan and grant agreements for a wide range of projects, big and small. The estimated ecological effect of these projects includes:

- reduction of SO₂ emissions by around 1 million tons;
- dust by around 200 thousand tons;
- NO_x by 20 thousand tons;
- CO by almost 100 thousand tons;
- an increase in sewage treatment capacity by around 2.7 million m³/day;
- construction of 1800 km of sewage/wastewater collecting pipes;
- an increase in the retention of water reservoir capacity by more than 200 million m³;
- construction of 520 km of flood embankments.

In the *air sector*, the Fund provided preferential loans to install desulphurisation facilities in the power plants of Bełchatów, Łaziska, Konin, and Łagisza, leading to the *reduction of SO₂ emissions* and contributing to Poland's compliance with provisions of the "II Sulphur Protocol". Financing was also extended for the construction of a fluidic boiler in the Żerań thermoelectric power plant, the rehabilitation of the Turów power plant and the modernisation of the heating system in the Zabrze thermoelectric power plant. For the *reduction of nitrogen oxides emissions* loans were provided to power plants in Kozienice, Jaworzno III, Łagisza, and Siersza. As for the use of alternative energy sources, including renewable ones, the Fund provided its financial assistance for, among others, the construction of geothermal power plants in Pyrzyce and the Podhale region.

The Fund co-financed *wastewater treatment plants* in the region of Great Mazurian Lakes and in that of the "Green Lungs" of Poland (the northeast of the country). Since 1992, the Fund has been constantly engaged in supporting an international programme aimed at alleviating 132 so-called "hot spots". All of them require immediate action and 47 have been given the highest priority. "Hot spot" investments have been supported in Koszalin, Gdynia, Gdańsk, Bydgoszcz, Toruń, Kraków, Zgierz, Oświęcim, Poznań, Łódź, Zielona Góra and Wrocław. The Fund has also helped improve the quality of boundary rivers by supporting water treatment plants in the Odra and Bug catchment basins.

In the area of water management, finance was provided for large multi-purpose water reservoirs with the capacity of 20 to 35 million m³. From among floods protection projects, the following are worth mentioning: flood embankment construction in the Szczecin lagoon, Elbląg Canal, Toruń Lowland, Odra river, Żuławy region and in the Gdańsk Province along the Śledziowy Canal.

With regards to soil and land protection, the Fund gave financial support for: the construction of a large number of communal waste landfills; the introduction of selective waste collection and material recovery; the construction of waste composting plants; hospital waste management (of 23 medical waste incineration plants planned in the country, 17 are either completed or under construction); and the removal of environmental hazards (mainly oil derivative contamination) from former Soviet military bases (17 sites).

Besides the above mentioned projects, the Fund has financed many other tasks, like those related to the reduction of adverse environmental impacts caused by the mining industry and those related to geological activities, nature protection, environmental monitoring, extraordinary environmental hazards and environmental education.

9. Challenges and Future Prospects

Poland's near future environmental protection objectives have been defined in the National Environmental Policy Implementation Programme through year 2000. Implementing this Programme and meeting international environmental standards (particular those of the European Union) before joining the EU will require increased investment efforts. Since the potential of traditional finance sources is quite limited, other sources will have to play a greater role, including investors' own funds, resources of private businesses and special domestic and foreign funds.

Considering this, the Fund is going to face further challenging tasks. Besides using its own resources more efficiently, the Fund will have to engage itself more deeply into seeking new resources and in leveraging other sources to finance environmental protection. At present, the financial situation of the Fund differs from that of few years ago, when the Fund had a surplus of money due to the low absorptive power of the market of environmental investments. Increased demand for environmental finance, the Fund's participation in large, long-term projects as well as the cessation of growth in revenues and changes in their structure have resulted in demand exceeding supply.

Increased revenues from loan repayment and interest compensate for decreased revenues from fees and penalties. In the future, revenues from fees and penalties should grow due to the provisions of the Waste Management Act, which was passed in 1997 and came into force in 1998. This Act has introduced the following financial instruments:

- an entity producing waste is obliged to pay for its storage and landfilling, fees for which are to be determined by Council of Ministers;
- financial sanctions (fees calculated individually and fines) for failure to fulfil duties in the area of waste management;
- the Act states that income from fees and fines is to flow to the National Fund, provincial funds and local funds for environmental protection;
- a partial exemption from income tax on natural persons in case of using waste as raw materials has been established; the Minister of Environmental Protection and Minister of Finance are obliged to establish a list of waste uses which qualify for the exemption.

The destructive floods of 1997 are still affecting the country and the Fund. Devastated regions paid only part (or in some cases none) of their environmental payments due and spent the money on rebuilding. A special programme to eliminate the ravages of the flood, which badly damaged the environmental infrastructure of the areas affected, required changes in the priority and expenditure structure of the Fund.

In improving its methods of operation and elaborating a development oriented strategy, the Fund seeks to adapt its principles of operation and forms of financing to the rapidly changing economic environment. Long-term cashflow is guided by the Fund's financial strategy, the primary assumption of which is to maintain the Fund's resources at their present level. An expenditure portfolio in which the loans/grants ratio is carefully balanced and loan conditions periodically adjusted should stabilise the Fund and maximise its financial assistance in the long run.

With regards to financing instruments, the Fund expects to expand its use of credit lines designated for smaller investors, and to become more involved in consortium financing with foreign and domestic banks and financial institutions. According to Poland's Environmental Protection and Management Act, the National Fund for Environmental Protection and Water Management also has the possibility to use its full range of financing instruments to support investments located outside the Polish borders.

CHAPTER 9

POLAND: THE ECOFUND

Andrzej Czyz
Formerly Vice-President of the EcoFund

1. Background and Objectives

In the years 1971-1978, the Polish Government borrowed about 18 billion USD from 16 countries, in loans guaranteed by Western governments. Due to the inefficiency of the centrally planned economy of that time, these debts were not discharged, and in 1991 they ran up to over 32 billion USD. The deep economic crisis associated with the collapse of the communist system and the great cost of Poland's transformation towards a market economy prevented repayment of that enormous debt. So in April 1991 creditor countries, constituting the so called "Paris Club", agreed to reduce Poland's debt by 50 per cent provided the rest would be paid by the year 2010.

This agreement also provides for the possibility of a further 10 per cent of the debt to be cancelled in exchange for purposes as agreed bilaterally with the creditor countries. Since 1991, and still today, the Polish Government has taken the view that this part of the debt should be earmarked for environmental protection by means of a "debt-for-environment swap". As early as June of 1991, the Government of the United States approved this proposal, which made it possible to establish the "EcoFund" (or the "Fund") as an institution aimed at managing financial resources coming from the debt-for-environment swap. Up to now, Poland has signed agreements with several countries for contributions to the EcoFund, as shown in Table 9.1.

Table 9.1: Donor country commitments to the Polish EcoFund as of mid 1998 (mln 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
United States	1991	10	370.0
France	1993	1	48.0
Switzerland	1993	10	52.0
Sweden	1997	2	6.5
Norway ¹	1997	n.a.	0.4
Total			473.9

Notes: 1) The Government of Norway provided a direct grant to the EcoFund.

A debt-for-environment swap agreement had previously been signed with Finland (in 1990), converting 10% of Poland's debt, however the resulting proceeds of approximately 14 million USD have been administered by a special bilateral Polish-Finnish institution.

The statutory objective of the EcoFund is to support - in the form of grants - particularly important activities in the field of environmental protection in Poland. The proposed projects ought to be consistent with the National Environmental Policy as adopted by the Polish Parliament in 1991 and should contribute to Poland's compliance with obligations arising from international conventions and agreements. Basically, these activities fit into the four areas (i.e. sectors) defined in the statutes of the EcoFund, and considered to be of high priority internationally:

- limiting greenhouse gases emissions, and the phase-out of ozone depleting substances;

- reducing the transboundary flow of sulphur dioxide and of nitrogen oxides;
- reducing the pollution of the Baltic Sea;
- biodiversity conservation.

In 1997, waste management and contaminated soil reclamation was added to the above list of priorities and was opened for financing in 1998. Table 9.2 summarises the Fund's financial contribution toward these objectives.

Table 9.2: Total revenues and expenditures of the EcoFund (mln USD; nominal values based on average annual exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	8.85	10.16	29.64	31.30	33.58
Environmental expenditures	4.62	14.32	20.48	21.64	36.52
Fund overhead/administrative costs	0.29	1.04	0.56	0.74	0.84
Total expenditures	4.91	15.37 ¹	21.04	22.38	37.36

Source: Table II.9.1 in Annex II.

Notes: 1) Total does not equal the sum of individual components due to rounding.

2. Management and Administration

EcoFund is an independent, non-profit foundation established by Poland's Minister of Finance in 1992. The *Supervisory Council* and the *Management Board* are the two decision-making bodies of the EcoFund.

The *Supervisory Council* consists of representatives of the Polish state administration and the Parliament, as well as representatives of Governments from countries which have agreed to contribute to the EcoFund. The members of the Supervisory Council are appointed by the Founder (Minister of Finance), except for the Chairman, who is nominated by the Minister of Environment. The Managing Board is appointed by the Supervisory Council. All members of the Council and the Board are appointed individually for a 3 year term.

The Supervisory Council defines the EcoFund's general policy (programme priorities, eligibility and project selection criteria, and procedures of awarding grants), examines and makes final decisions on awarding grants from the Fund's resources for projects proposed by the Board, and approves reports of the Management Board concerning the implementation of approved projects.

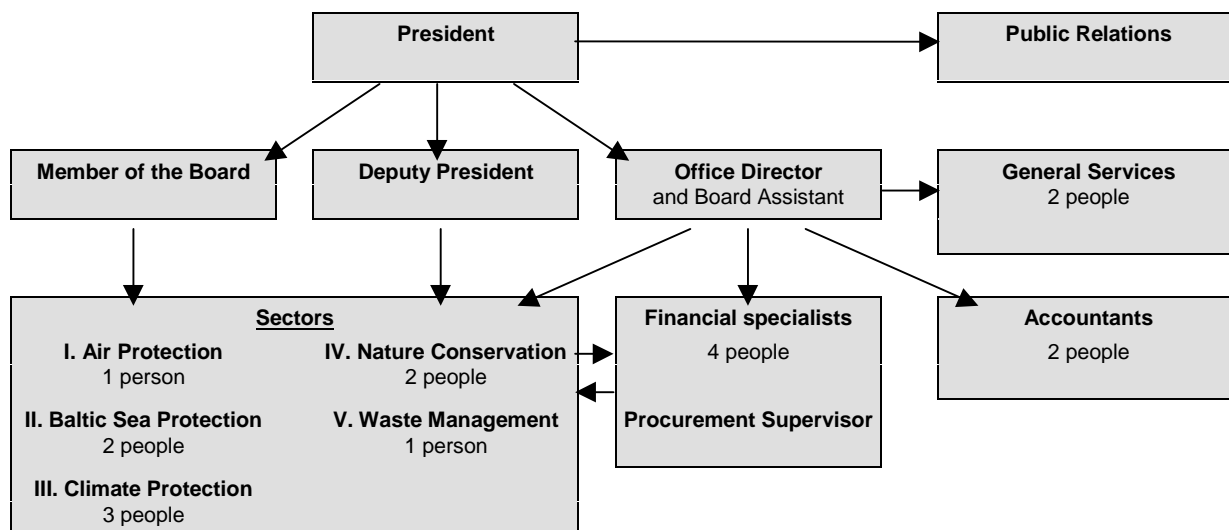
The EcoFund's *Management Board* is the executive body of the Fund, responsible for management of the day-to-day activities of the Fund and external contacts. The Board is responsible for initial project selection, and for the preparation of applications to be examined by the Council. The EcoFund Managing Board also monitors expenditure on approved projects and supervises their proper and timely implementation by investors (project sponsors).

In its everyday activities, the Board manages the office of the Fund which has experts engaged in the five priority investment sectors, as well as financial and accounting departments. If necessary, the Fund may commission independent experts and consultants for the appraisal of particular project proposals as well as for legal and financial advice.

The internal organisation of the EcoFund (as of mid-1998) is depicted in Figure 9.1. The staff is highly qualified and selected in a competitive manner. Most of the staff are university graduates and many have doctoral degrees, giving the Fund deep and wide experience in business, research and

financial institutions and administration. In 1998 three additional positions were created: Sector V (Waste Management) officer, tenders procedures supervisor and Board's assistant. This brought the total number of Fund staff to about 25.

Figure 9.1: The EcoFund's administrative structure.



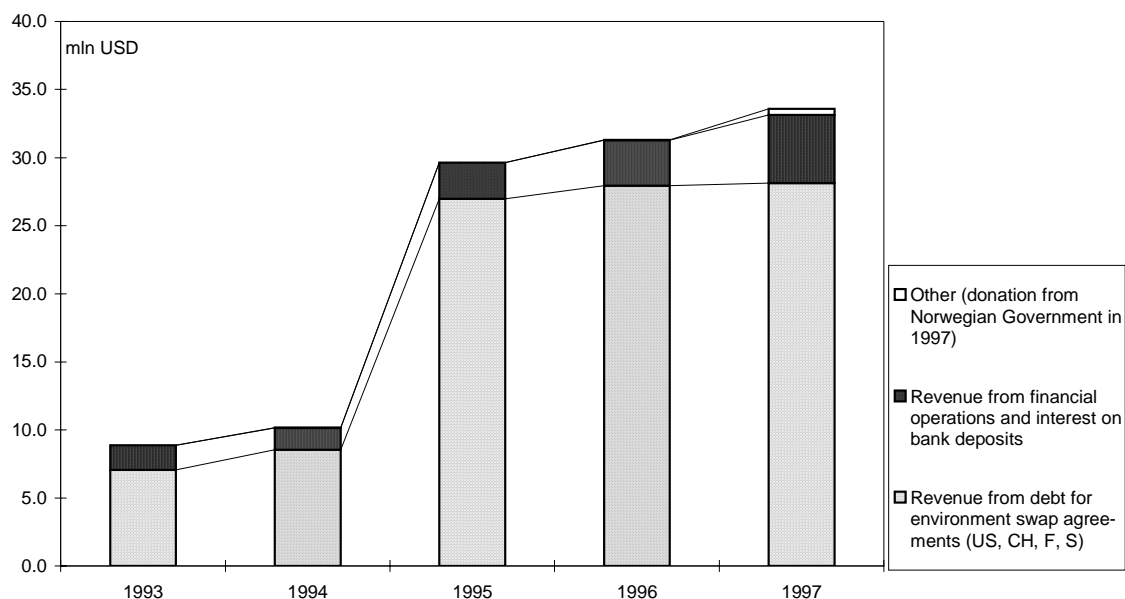
3. Revenues

As explained earlier, debt swaps are the principal (though not only) source of the Fund's revenues, as is clearly illustrated in Figure 9.2. The debt-for-environment swap agreements effectively oblige the State Treasury to transfer to the Fund the Polish Zloty equivalent of the foreign currency debt payments converted under the agreements. 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. Figure 9.2 also shows that the Fund generates not insignificant additional revenues through its own prudent fiscal management.

4. Spending Strategy

The Fund's basic environmental priorities are defined in the EcoFund Statutes and elaborated in greater detail in 3-year Action Programmes and annual financial plans prepared by the Management Board and approved by the Supervisory Council. Priorities and application procedures are publicised through brochures published and widely disseminated several times a year. The current 3-Year Action Programme presents an indicative allocation of resources into the Fund's five priority sectors of financing and a list of multi-year regional programmes planned for implementation, as well as a list of planned nation-wide competitions to be launched by the EcoFund. Annual Financial Plans include more specific data on those initiatives and also include a list of specific large projects which have "matured" for final approval and financing. Spending priorities within the Fund's original four priority sectors are described in more detail below.

Figure 9.2: Annual revenues of EcoFund (mln USD; nominal values based on average annual exchange rates).



Source: Table II.X.2 in Annex II.

In the area of *reducing emissions of greenhouse gases* (sector 1), the EcoFund may support projects aimed at:

- energy saving;
- promotion of renewable sources of energy;
- elimination of methane emissions;
- CFCs phase-out from industrial processes.

In sector 2 concerning reduction of SO₂ and NO_x emissions, projects addressing the following issues can be supported:

- removal of sulphur from fuels;
- modern technologies in energy generation;
- removal of SO₂ and NO_x from fuel gases.

Concerning protection of the Baltic Sea against pollution (sector 3) the following projects can be supported:

- construction of sewage treatment plants having significant positive impact on the Baltic Sea (in so called “hot spots” and/or coastal municipalities);
- construction of sewage treatment plants improving the purity of drinking water in the largest urban agglomerations.

In the area of biodiversity conservation (sector 4) the EcoFund may support projects concerning:

- investments aiming at the protection of wetland ecosystems;
- active protection of animal and plant species threatened with extinction;
- technical and educational infrastructure of the national parks;

- afforestation programmes.

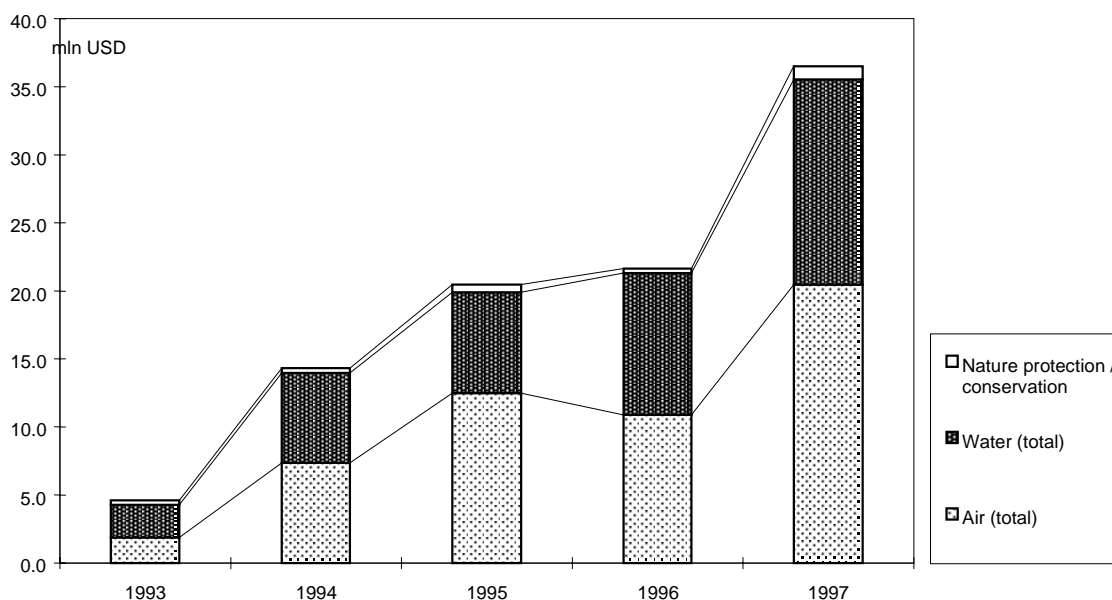
Of all the projects which comply with the above priorities, preference is granted to those representing value-for-money in terms of delivering environmental benefits at least cost and fulfilling at least one of the following specific conditions:

- promotion on the Polish market of innovative environmental technologies from the countries that contribute to the EcoFund (demonstrative installations, pilot projects);
- are of high importance to human health and/or to the society's environmental education.

5. Expenditures

Finance provided by the EcoFund constitutes approximately 1% of all environmental expenditures in Poland. Nevertheless, the real impact of the financial support offered by the Fund to potential investors goes far beyond this modest figure. Overall, projects financed with EcoFund's support have accounted for over 10% of all environmental investment expenditures in Poland during the Fund's life. The Fund's role is particularly important in project areas not considered a priority by other environmental institutions (e.g. reducing emissions of greenhouse gases, elimination of substances depleting the ozone layer). In other areas the EcoFund plays a catalytic role (a project receiving support from the EcoFund is in a much better position to secure other sources of financing) or may fill financial gaps (where finance from state or local budgets, commercial loans or loans/grants from other environmental funds is inadequate). Figure 9.3 illustrates the Fund's environmental expenditures according to environmental sector.

Figure 9.3: EcoFund's expenditures by environmental sector (mln USD, nominal values based on average annual exchange rates).



Source: Table II.9.3 in Annex II.

Note: Financing of projects in the Fund's newest priority sector - waste management - was to begin in 1998. "Air" includes EcoFund's priority sectors I (greenhouse gases) and II (SO₂ and NO_x). The dominant majority of the Fund's financial support goes to investment projects, however other types of costs e.g. education/public awareness raising, monitoring, research, emergencies, may be included in some projects, especially in the biodiversity sector.

Financing Criteria and Conditions

The EcoFund may provide financial support to investment projects (construction of installations or devices designed for the benefit of environmental protection), whereas it rarely finances “non-investment” activities such as research, or monitoring of environmental contamination. (See Table II.9.7 in Annex II.) The possibility of receiving financial support for non-investment projects only applies to projects in the biodiversity protection area. The EcoFund may provide financial support to the “investment stage” of investment projects (except in the nature protection area), which means that pre-investment studies are not eligible for assistance. The proposals presented ought to be backed up with both a feasibility study and a financial plan.

In case of projects which have both environmental and commercial objectives, the application must include a business plan encompassing the entire project, as well as a detailed justification of the need for subsidised finance for the implementation of the project’s environmental component.

The EcoFund provides financial support only in the form of *non-repayable grants* which typically encompass 10-30% of a project’s cost. Any applicant wishing to receive an EcoFund grant has to prove a substantial contribution to project implementation from own resources, and present credible plans for securing financial support from other sources (in the form of grants and/or loans).

In highly justified cases, when *local governments* (municipal or communal) are investors, the grant may cover up to 50% of a project cost. Also, *budgetary entities* launching environmental investment projects going beyond their statutory responsibilities may apply for finance encompassing up to 50% of project cost; in the case of nature protection projects which offer no financial return, the EcoFund cover even up to 80% of a project’s cost.

Both, *companies* (state-owned and private, including joint ventures with companies from countries which have joined the Polish debt-for-environment conversion programme) and *natural persons* involved in business activities also apply for financial support. Such support may only be approved in cases of the project fulfilling at least one of the following criteria:

- they cause the elimination or substantial reduction of environmental pollution beyond the local scale;
- they introduce innovative environmentally sound techniques and/or technologies onto the Polish market, coming particularly from countries which have accepted the Polish debt-for-environment swap programme (i.e. demonstration and pilot projects);
- they bring about the launch of own (domestic) production of environmental protection technology.

Any enterprise applying for an EcoFund grant should prove the following:

- a firm financial condition at the given moment, and clear-cut plans for the future;
- the innovative nature of the solution proposed in the context of Polish terms, and the possibility for replication thereof throughout Poland;
- the inability to launch the project without the financial support of the grant, due to the lack of economic profitability of the investment for the applicant;
- substantial share of own resources committed to project implementation.

The EcoFund can assign a grant covering up to 20% of the cost to projects fulfilling the above criteria, while in highly justified cases the grant can be extended up to 30% of the total cost.

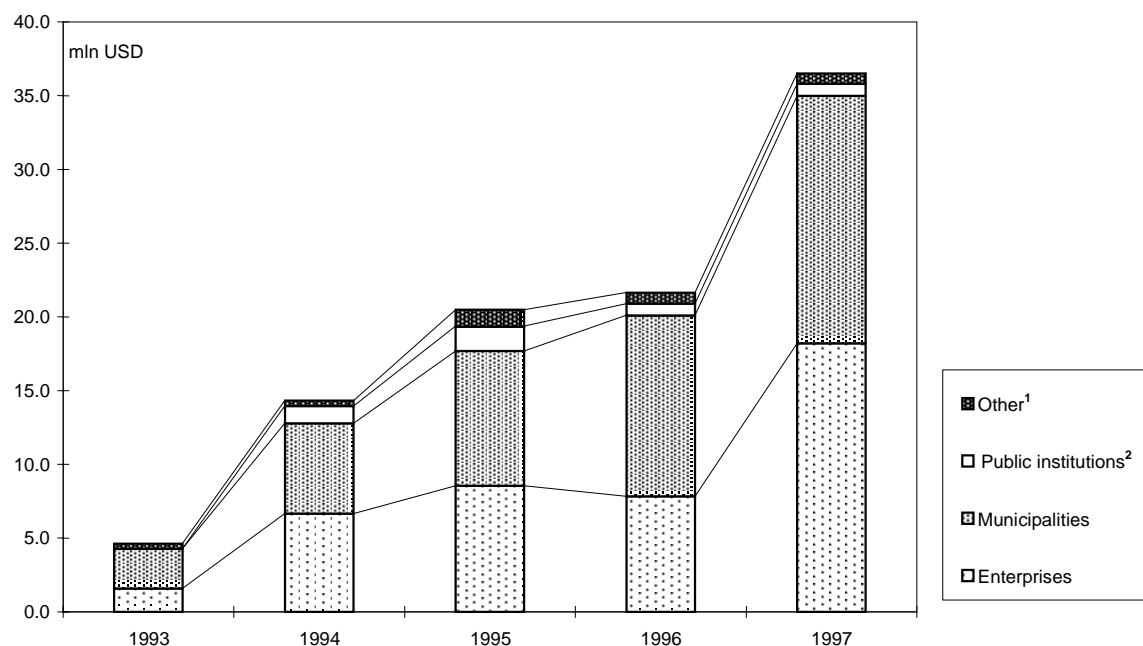
A *public entity, foundation, non-governmental organisation* etc., while applying for a grant should prove the following:

- recognised achievements in an area constituting an EcoFund priority;
- that it will be directly responsible for implementing the project;
- that it can account financially for works performed financed by the Fund.

In case of projects performed by such institutions (e.g. non-governmental organisations), and concerning biodiversity conservation, the financial support provided by the Fund can reach 80% of project cost. In case of projects applying to other priority areas, EcoFund grants may not exceed 50% of the total cost.

The Fund's expenditures according to type of recipient are shown in Figure 9.4.

Figure 9.4: EcoFund's environmental expenditures by type of recipient (mln USD, nominal values based on average annual exchange rates).



Source: Table II.9.4 in Annex II.

Note: 1) Includes state and regional administrations, NGOs and private persons. 2) Includes budgetary entities other than governmental administrations, such as schools and hospitals.

The EcoFund can support both new and ongoing investments. In the case of any new investment, internationally recognised bidding practices for goods, works and services must be used by tenders opened for companies from Poland and countries involved in debt-for-environment swap schemes. In the case of ongoing investments, the Fund may either waive the tender requirement (after performing an *ex post* analysis of the contractor and supplier selection process), or require the launch of a tender procedure for the project component not yet completed (e.g. for purchase of equipment, or works).

A "Grant Agreement" with the Fund may be signed only when the project's full financial "package" has been completed, to be proved by way of relevant documentation. This aspect of the project is always thoroughly examined. When a grant is awarded, the EcoFund retains the right to verify and propose modifications to the project, as well as to monitor the implementation thereof. Any investor applying for a grant or receiving financial support shall be obliged to provide any necessary data/documents allowing the Fund staff or subcontracted experts to examine the actual condition/status of the project.

Co-financing

Co-operation with other financial institutions is common practice, though it is usually informal and takes the form of working consultations during project appraisal and the evaluation of possible financial support. The EcoFund has entered into more formal co-financing arrangements with the provincial environmental funds in Cracow (for the elimination or modernisation of local boiler stations in the city centre), Katowice (a joint contest for projects on the elimination of low stack emissions in the Katowice area) and Gdansk (for reducing pollution in the Pucka Bay). Formally, however, each institution makes its own, independent financial decisions.

5. Funding Cycle

Project Selection Procedures

The EcoFund's project appraisal and approval process is presented in Figure 9.5 on the next page. This is usually a two-stage process. The first stage involves a "*Project Questionnaire*" being sent to the Fund by applicants; the form to be used is available at the EcoFund Offices. This questionnaire should contain basic technical data on the project and its compliance with the EcoFund priorities, environmental benefits expected, and details of contractors and project financing. Following evaluation of that information by the EcoFund staff a preliminary decision is made by the Management Board as to the possibility of providing financial support to the project from the Fund.

If a positive decision is made, the applicant is invited to submit a full "*Grant Application*" prepared in accordance with the EcoFund's guidelines. The application should:

- specify the objective(s) of the project proposed, and present the justification thereof;
- contain relevant documentation concerning the technology proposed and/or the methods for implementing the project, and expected environmental results thereof;
- provide information on the selected or proposed contractors/suppliers and/or the methods of selecting them;
- define a plan for project implementation (including the time-schedule); and,
- 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.

An application must include the necessary supporting documentation, in particular a feasibility study (and business plan for commercial projects) and an Environmental Impact Assessment.

For some types of projects, the EcoFund may call for "solicited and competitive project proposals" by inviting interested organisations/institutions to participate in a nation-wide contest for project support in the defined area. In the case of these special competitions project proposals and grant applications should contain all data and information as specified in the invitation for tender. In 1997, the EcoFund organized 8 such competitions including ones for the modernisation of urban heating systems, elimination of low stack air emission sources in the Katowice area, construction of small water power plants and protection of wetland areas as well as protection of endangered plant and animal species.

The application is subject to an appraisal performed by the Fund staff, and, in cases where the requested grant exceeds USD 300 000, by independent experts/consultants commissioned by the EcoFund. The analyses in question apply to the following aspects of the project proposal: technological, environmental, organisational, economic and financial. In co-operation with the applicant, the application may be subject to amendments and/or modifications due to requirements set forward by the Fund.

Should the appraisal bring a positive result, the Management Board shall approve the application and consequently submit it to the Supervisory Council. In accordance with the Statutes of the EcoFund, the Council shall make the final decision as regards the grant and the amount thereof concerned.

As regards large-scale investments at their initial stage of development (i.e. where the proponent is searching for potential financial sources after the completion of the (pre-)feasibility study, but no decision has been made in relation to technological options and/or any equipment and machinery supplies), the proponent may submit a *preliminary grant application* for financing, based upon any estimate figures possessed, as well as on project assumptions. In such cases, the possible positive decision made by the EcoFund Council is of a *provisional* nature, and specifies an estimate of the possible grant limits, including a list of any conditions and requirements upon which the ultimate grant decision may depend.

After the above mentioned conditions have been fulfilled and the project has reached a general “maturity” for implementation, the application - described in appropriate detail - is returned (in compliance with the procedures specified above) to the Fund’s Management Board and Supervisory Council for another approval; the Council then makes the final grant decision. With such projects (i.e. large-scale investments first submitted while at an initial stage of development), the time-span between the initial and secondary consideration by the Council should not exceed one year.

Negotiations of a Grant Agreement

The Council’s positive decision remains in force for six months and authorises the Management Board to conclude a “*Grant Agreement*” with a project proponent. The Council usually meets four times a year to examine projects and award financial support. In 1997, 87 projects were approved out of 269 applications submitted to the Fund.

After the Council has approved a project, the EcoFund Board holds negotiations with the applicant on the contents of the Grant Agreement. The framework agreement defines the basic rights and responsibilities of both the Fund and the Grantee. In the course of negotiations, the EcoFund pays special attention to the accompanying Enclosures, which include:

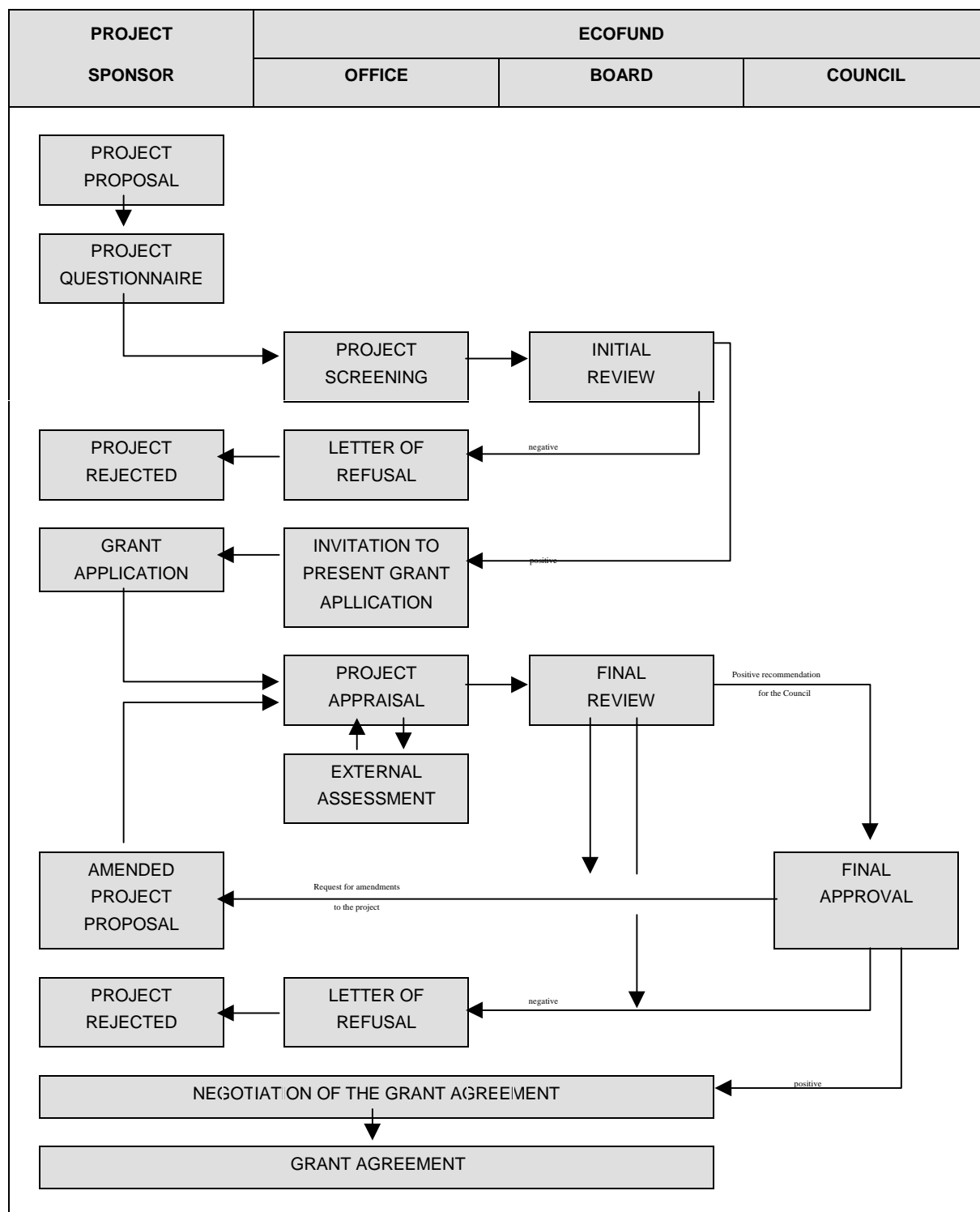
- Enclosure No.1, containing basic information about the entire project, the objectives and planned environmental benefits thereof, as well as project costs and financing;
- Enclosure No.2, the procurement plan, containing a list of the particular components of the project to be financed by the EcoFund;
- Enclosure No. 3, specifying the Timetable of financing (instalments).

In the course of negotiations, the substantive scope of the project to be financed by EcoFund shall be specified in more detail (as compared with the contents of the application). The level of detail of these specifications is to be compatible with the future settlement of the grant concerned, provided by way of invoices for work and purchases.

Preparation of the enclosures to the Grant Agreement may be initiated by either the Management Board or Fund staff prior to the final decision of the Supervisory Council, on a conditional basis. Accordingly, the Fund may advise the applicant in terms of developing the application and modifying the project to suit EcoFund’s requirements. The actual signing of the agreement is also dependent on the EcoFund obtaining a guarantee for full financial coverage of the project from all planned sources.

Should the Agreement not be signed within a period of six months from when the Council decides to authorise the award, the decision in question shall be subject to cancellation. Re-validating the award decision requires a re-examination of the application by the Supervisory Council.

Figure 9.5: The EcoFund's project selection and approval process scheme.



Project Implementation and Monitoring

Projects supported by the EcoFund are usually divided into implementation stages which are financed one by one. The Grantee may receive an advance payment at an amount foreseen in contracts with suppliers (up to 50% of the value of the particular project stage in the case of nature conservation projects run by NGOs). This is followed by the settling and reimbursing of invoices for costs incurred during a given stage. Purchases of equipment may be reimbursed immediately after delivery.

A given implementation stage is considered to be complete after the Fund approves the financial and brief progress report presented by the project proponent. These reports are to be accompanied by evidence that the goods and/or works concerned have in fact been purchased/performed. This evidence is, in turn, to be confirmed by the project proponent. The Fund has the right to make an on-site visit to inspect any substantive aspect of the work/service financed by the Fund. Financial settlement for a given implementation should be finalised within 14 days of proper documents being submitted to the Fund. In the case of larger and technically complex projects, the Fund may appoint an expert to evaluate implementation of specific project stages.

If, upon completion, a given stage of implementation costs more than the amount foreseen in the Grant Agreement, the excessive amount (if approved by the Fund) may be deducted from the amount due at the next stage of implementation. Any expenses not approved by the EcoFund shall be also subject to deduction. In case of delay in a particular stage of implementation and/or financial settlement, the grant assigned to the project proponent will be decreased by the amount of penalty fees calculated per each and every day of delay. Complete and on-schedule implementation and financial settlement allows for an advance payment to be granted for a subsequent stage of work.

The EcoFund performs on-site visits and inspections of projects through Board or Supervisory Council members, Office staff or consultants working for the Fund. The purpose of the inspections is to track project performance and to examine any problems or inconsistencies which may arise, especially in case of any delay in grant settlement.

The Fund retains the right of terminating the agreement with immediate effect should it be proven that: the Grantee is using the resources obtained from the EcoFund in violation of the primary purpose; is carelessly performing the works concerned; or is intentionally and persistently causing delays. In case of the agreement being terminated for any of the aforementioned reasons, the Grantee shall be obliged to return the entire amount disbursed up to that moment, and to make a penalty payment equal to 25% of the total amount.

In case of any major changes in the circumstances surrounding implementation of the project, it is possible to re-negotiate and introduce written amendments to the agreement, e.g. with respect to the performance schedule or the substantive scope of the project. Generally speaking, however, such changes may not affect the total grant amount.

Since the EcoFund covers only a part of project costs, it usually focuses its resources on key elements of the technology applied in the project. The said elements may be financed by the Fund even in 100 per cent (excluding VAT and customs duty). Besides simply monitoring the use of resources provided by the Fund, the Fund monitors the overall project performance irrespective of financing sources.

Final Evaluation

At the technical completion of the project, the Grantee is obliged to submit a final report concerning the whole project, its ultimate cost and environmental benefits attained. In case of large investment projects this report should be submitted after the construction/installation has been completed and the facility has begun to operate.

Endorsement of the final report is subject to approval by the responsible EcoFund project manager, who assesses the project's performance vis-à-vis the approved plan, the compliance of expenditure with the contents of the Grant Agreement and, in particular, the compliance of environmental results achieved with the project's objectives and targets.

The assessment of the responsible EcoFund project manager is examined by the Fund'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/or supervising next projects. More generally, semi-annual reports containing detailed information on the implementation of

approved projects and general conclusions are prepared by the Board and considered by the Supervisory Council.

7. Evaluation, Reporting and Public Information

The operations of the EcoFund are subject to annual financial audits conducted by an independent auditor. Findings from the audits, and Annual Reports prepared by the Management Board, are examined by the Supervisory Council and presented to the Fund's Founder (the Minister of the State Treasury), Minister of the Environment and (through the Minister) to the Parliament. The Annual Reports are made available to all interested parties and excerpts (main features and data) are published publicly.

8. Major Achievements

In the years 1992-1997, the EcoFund supported 240 projects that produced significant environmental benefits. A sample of total pollution reduced due to those projects is presented below:

Table 9.3: Environmental benefits resulting from projects financed by the EcoFund.

Pollutant	Amount Reduced
CO ₂	1 200 000 tons
SO ₂	100 000 tons
CH ₄	9 000 tons
Freons	500 tons
BOD ₅	22 000 tons (O ₂ per annum)
Phosphorus	2 000 tons/annum
Nitrogen	2 300 tons/annum

Approximately 600 low efficiency (high polluting) local boiler plants with no desulphurisation equipment were closed down and eliminated from operation. Over a dozen of projects aimed at coal-to-gas conversion in municipal heating systems were supported. Promotion of renewable sources of energy included 3 geothermal projects, the construction of 2 wind-mills, 5 small hydro-power plants and 4 biomass projects. The EcoFund supported about 60 projects for the construction or modernisation of sewage treatment plants of various size, including in 5 Baltic Sea hot spots. The Fund also helped finance the introduction of fluidised bed combustion in the Turów Power Plant, which was the largest project supported by the EcoFund to date.

CHAPTER 10

POLAND: THE CRACOW PROVINCIAL FUND FOR ENVIRONMENTAL PROTECTION AND WATER MANAGEMENT

Alicja Pryzgoda-Ciagło

Cracow Provincial Fund for Environmental Protection and Water Management

1. Background and Objectives

The Cracow Provincial Fund for Environmental Protection and Water Management (the “Fund”) was established on the basis of Poland’s Law on the Protection and Shaping of the Environment, which became effective in 1980. An amendment to the Law in 1993 allowed the provincial environmental funds to be established as legal entities in 1994. Previously the provincial funds operated under the direct authority of the provincial governments.

The activity of the Fund was inaugurated by a meeting of its Supervisory Council in July, 1993. Following a competitive procedure, the Provincial Governor appointed the Management Board of the Fund in October, 1993. In November 1993, the Fund opened its office and bank accounts and launched other activities necessary to start its operations. In the first year of its operation, the Fund continued to finance implementation of the provincial government’s environmental protection programme.

The Fund provides finance for projects in the field of environmental protection and water management which are consistent with national and provincial environmental policy. The role of the Fund in total environmental expenditures in the Cracow Province is estimated at about 20%. (The scale of the Fund’s operations is illustrated in Table 10.1.) The Fund may provide financial support to environmental projects through a variety of financing instruments, such as: soft loans, grants, interest subsidies on loans, the purchase of shares and bonds, and the purchase of equity in companies located in Poland or abroad. Currently the Fund only holds stocks listed on the Warsaw Stock Exchange. At the moment, the Fund does not own shares, bonds or equity in companies, however, it is planning to make such investments in the future, particularly by acquiring equity in environmental companies.

Table 10.1: Total revenues and expenditures of the Fund (mln USD; nominal values based on average annual exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	2.03	12.13	19.13	17.16	14.84
Environmental expenditures	1.00	5.79	6.51	19.05	17.03
Fund overhead/administrative costs	0.06	0.15	0.24	0.28	0.35
Total expenditures	1.06	5.94	6.75	19.33	17.37 ¹

Source: Table II.10.1 in Annex II.

Notes: 1) Total does not equal the sum of individual components due to rounding.

2. Management and Administration

The Fund has its own legal identity and independently manages its resources, which are formally the property of the State Treasury. The Fund is fully and exclusively liable for its obligations and is not liable for obligations of the Treasury. The governing bodies of the Fund are its Supervisory Council and Management Board.

A 1998 amendment to the Environmental Protection Law (which became effective at the start of 1999) establishes the composition and structure of the Supervisory Councils of all provincial environmental funds, which in the case of Cracow consists of:

- a representative of Cracow's Provincial Governor;
- a representative of the Provincial Council's⁷ Committee of Environmental Protection;
- the chairman of the Provincial Commission on Nature Protection;
- a representative of the National Fund for Environmental Protection and Water Management;
- up to two environmental experts appointed by the Provincial Council;
- two representatives of the Provincial Council;
- a representative of the province's NGOs as authorised by them.

Cracow's Provincial Governor appoints and dismisses the members of the Supervisory Council. The tasks of the Supervisory Council are as follows:

- establishing criteria for project selection;
- establishing (on the basis of the state environmental policy) the annual plans for the Fund's activity and lists of priority projects (to be formulated by November 30 each year);
- establishing the principles and rules of grant disbursements and loan disbursements and repayments;
- establishing the maximum amount of grants or loans;
- establishing procurement requirements and conditions which may be more strict than those in the national public procurement law;
- approving Management Board decisions to issue bonds or to purchase shares and bonds of other agents, to take loans and credits, to buy equity in companies as well as to disburse any grant or loan which exceeds 0.5% of the Fund's revenue in the previous year; (the "revenue" as referred to here, excludes funds carried over from the previous year);
- approving the annual reports of the Management Board and the Fund's balance sheet;
- establishing the rules of remuneration of the Management Board and the office staff;
- controlling and supervising the Management Board's activity;
- submitting reports on the Fund's activity to the Provincial Governor by April, 30, each calendar year.

Cracow's Provincial Governor approves the remuneration of the members of Fund's Supervisory Council and - on the motion of Supervisory Council - appoints and dismisses the Management Board of the Fund. The tasks of the Management Board are as follows:

- preparing the annual programmes of the Fund's operations, including preparing the annual lists of priority projects;
- appraising and selecting projects to be financed by the Fund;
- managing the Fund's resources;
- controlling and monitoring how recipients use loans and grants received from the Fund;
- preparing measures and analyses of the environmental efficiency of the Fund's operations;
- submitting reports on the Fund's operations to the Supervisory Council;
- employing the Fund office's staff.

The Management Board consists of three members: the President; the Vice President for Economic Affairs; and the Vice President for Technical Affairs. The President of the Management Board represents the Fund with respect to third parties. He or she also has the legal right to make decisions

⁷ The Provincial Council is the highest body representing local self-governments within the province (i.e. villages, towns, municipalities and communities). Whereas the Provincial Governor and his/her office represent the National Government at the provincial level.

concerning management and transfer of the Fund's assets. Apart from the President, two delegated persons are also authorised to make these decisions.

The Vice President for Economic Affairs manages the economic analysis team, the credit team, book-keeping, and staffing. The Vice President for Technical Affairs manages the appraisal, analysis and control team. The Fund also employs a legal counsel, and, administrative and technical staff. At present, the Fund in Cracow employs 16 persons.

The Provincial Governor:

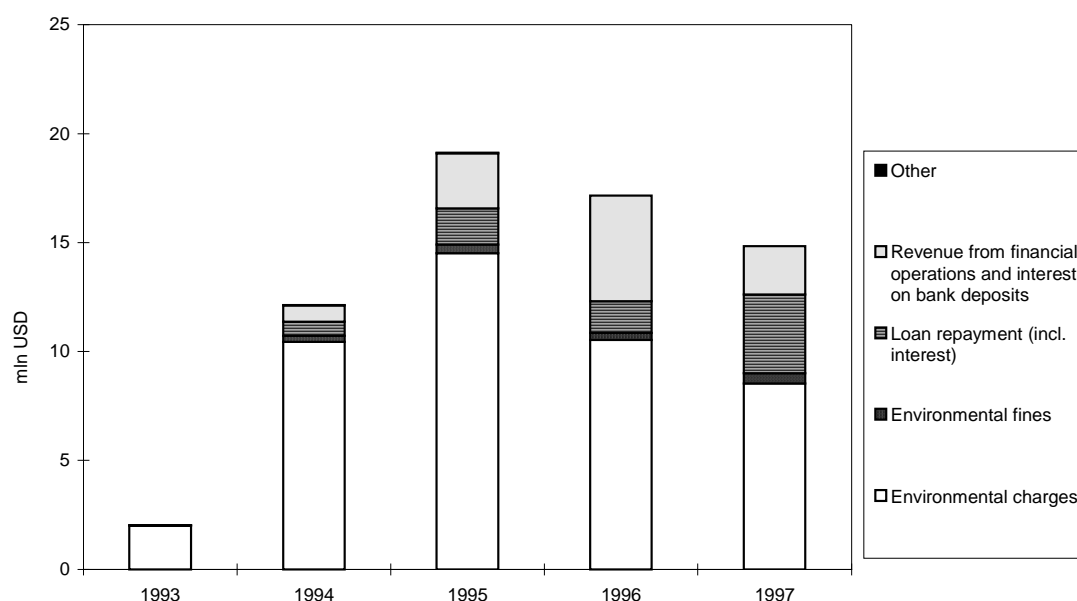
- grants the statutes of the Fund, which include the Fund's detailed legal regulations, its organisation and procedures for its activity;
- can negate a resolution of Supervisory Council.

3. Revenues

As shown in Figure 10.1 below, the main revenues of the Cracow Fund are environmental charges and fines, which are assessed, levied and collected on the basis of the Environmental Protection Law. The Fund receives:

- ~30% of all revenues from charges for waste disposal in the Cracow Province;
- ~50% of revenues from charges and fines for other kinds of economic use of the environment, except for the charges and fines for discharges of saline wastewater from coal-mining to surface waters, and the charges and fines on air emissions of nitrogen-oxide in the area of Cracow's Province. (These latter two revenue streams flow to the National Fund for Environmental Protection and Water Management.)

Figure 10.1: The Fund's annual revenues, by source (mln USD; nominal values based on average values based on annual average exchange rates).



Source: Table II.10.2 in Annex II.

Note: The item "other" includes revenues from: District Water Management Budget allocation; provision of services; repayment of unused grants from previous years.

The Fund may also derive revenues from:

- various undertakings organised for environmental protection and water management;
- voluntary payments from economic agents and donations of natural persons and institutions;
- any kind of monetary contributions from foundations;
- income on the Fund's equity investments in companies;
- the emission of the Fund's own bonds;
- bank credits;
- interest on loans given by the Fund;
- interest on bank deposits and the profits of projects financed by the Fund;
- other revenues and resources allocated by other funds;
- other revenues established by the Council of Ministers.

4. Spending Strategy

The Fund's fundamental strategy is to implement the Provincial Government's environmental policy. At the beginning of the Fund's operation, the main priority was air protection. At present, the long-term goal is water protection. According to the Environmental Protection Law, the Fund may provide financing for:

- environmental education and promotion of environment-friendly activities;
- environmental monitoring;
- retrofitting and other investments that serve environmental protection and water management;
- development and maintenance of green areas, tree and shrub planting, and development of landscape parks;
- implementation of projects for the re-use and disposal of solid waste;
- the prevention and minimisation of pollution and wastes, including clean production;
- nature protection projects, particularly concerning forests;
- prevention and elimination of extraordinary environmental hazards and accidents;
- scientific research and diffusion of its results, technical progress in environmental protection and water management;
- development and implementation of new techniques and technologies, in particular in the fields of wastewater, fuels and flue gases, waste utilisation, reduction of noise, radiation and water use;
- remedial health measures for children living in areas of particular environmental hazard;
- other projects related to environmental protection and water management, included in the Fund's operation plans and approved by the Supervisory Council.

The highest priority projects will receive financial support from both the Cracow Fund and the National Fund for Environmental Protection and Water Management. The Fund's spending priorities for 1998 were as follows:

- Water: protection of the catchment area of the Raba river and drinking water reservoir above the dam in Dobczyce; sewage treatment plant "Kujawy" serving Cracow; sewage treatment plant and sewerage system for Sulkowice; modernisation of sewage treatment plant in Skawina;
- Wastes: closing and reclaiming of compost disposal sites and building a new waste site in Sulkowice; management and utilisation of wastes with chromium compounds in the chemical plants in Alwernia;
- Air: modernisation of an agglomerating belt with electro-filters in the T. Sendzimir Steelworks;
- Noise: building acoustic screens in Cracow.

5. Expenditures

Table 10.1 indicated the level of the Fund's annual environmental and total expenditures. From Table 10.2 below it can be seen that projects in the air and water sectors have been the largest recipients of the Fund's support. Figure 10.2, meanwhile, indicates that the large majority of the Fund's expenditures have been for investment project costs (as opposed to non-investment activities).

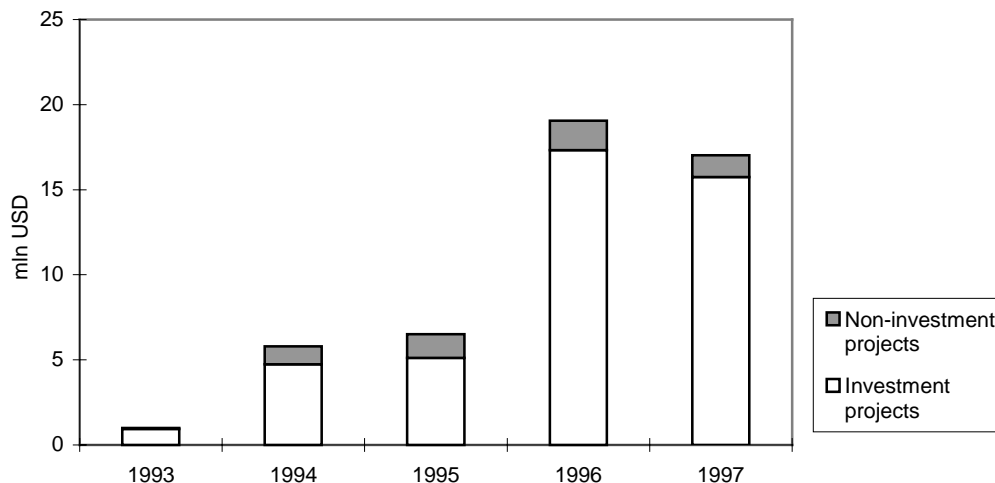
Table 10.2: Fund expenditures by environmental sector (mln USD; nominal values based on average annual exchange rates).

Environmental Sector	1993	1994	1995	1996	1997
Air	0.31	1.90	2.38	12.13	9.68
Water	0.54	2.30	1.93	4.14	4.33
Soil/land protection/nature protection	0.09	0.31	0.24	0.75	0.33
Monitoring and information systems	0.00	0.42	0.50	0.82	0.68
Cleanup of accidents/emergencies	0.00	0.26	0.62	0.40	1.16
Other ¹	0.05	0.61	0.84	0.82	0.85
TOTAL environmental expenditures²	1.00	5.79	6.51	19.05	17.03

Source: Table II.10.3 in Annex II.

Note: 1) Includes waste management, noise protection, environmental education and public awareness raising, research, and environmental health holidays for children living in highly polluted areas. 2) Totals may not equal the sum of individual components due to rounding.

Figure 10.2: Fund environmental expenditures according to "investment" or "non-investment" projects (mln USD; nominal values based on average annual exchange rates).



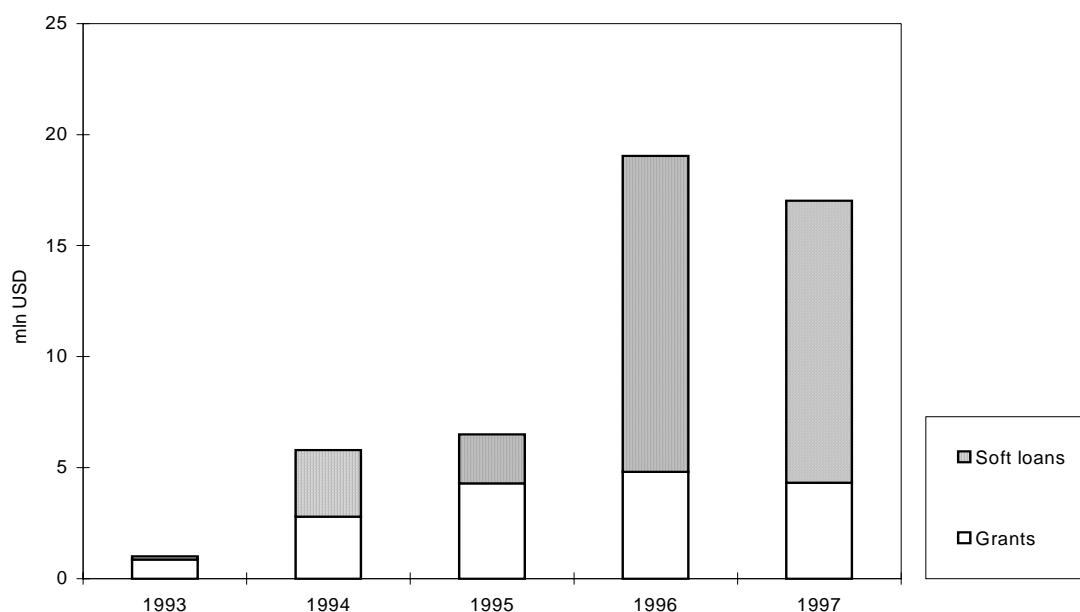
Source: Table II.10.4 in Annex II.

Note: The term "investment projects" here means capital expenditures associated with environmental technology/equipment and the construction of facilities (including operation and maintenance of such installations). The term "non-investment" projects here includes activities such as training/education and public awareness raising, environmental monitoring and research, nature protection through non-technological means, etc. (including computers and other office equipment for the support of such activities).

As displayed in Figure 10.3, the Cracow Fund has thus far disbursed its financial support as either grants or soft loans. For a given project, the proponent can receive either a grant or a loan (not both). The Fund disburses its resources under the condition that the project proponent provides convincing

evidence of the project's financial viability. Payments are made against original invoices or receipts for tasks or deliveries completed.

Figure 10.3: Fund environmental expenditures by form of disbursement (mln USD; nominal values based on average annual exchange rates)



Source: Table II.10.5 in Annex II.

Grants can be given to entities financed entirely by the state budget (e.g. schools, hospitals) and to NGOs. In addition, grants can also be given for selected types of projects implemented by municipal and public utilities. Generally, grants may cover up to 50% of project investment costs; more - upon approval of the Supervisory Council. Loans are extended to enterprises implementing environmental projects and to producers who manufacture environmental protection, monitoring and water management equipment. Loans are extended on the basis of sound banking principles. Loan maturity can reach up to 10 years and the grace period can not exceed 2 years. Loans can cover up to 100% of investment costs. The distribution of the Fund's environmental expenditures among its various beneficiaries is displayed in Figure 10.4.

In practice, grants provided by the Fund in 1997 typically covered 50% of projects costs; loans provided by the Fund covered 72% of projects costs. In 1998, both grants and loans typically covered 50% of project costs.

It follows therefore, that the Fund co-finances projects with other sources. These sources typically include:

- Municipal Funds for Environmental Protection and Water Management;
- the National Fund for Environmental Protection and Water Management;
- the Bank of Environmental Protection;
- other environmental funds.

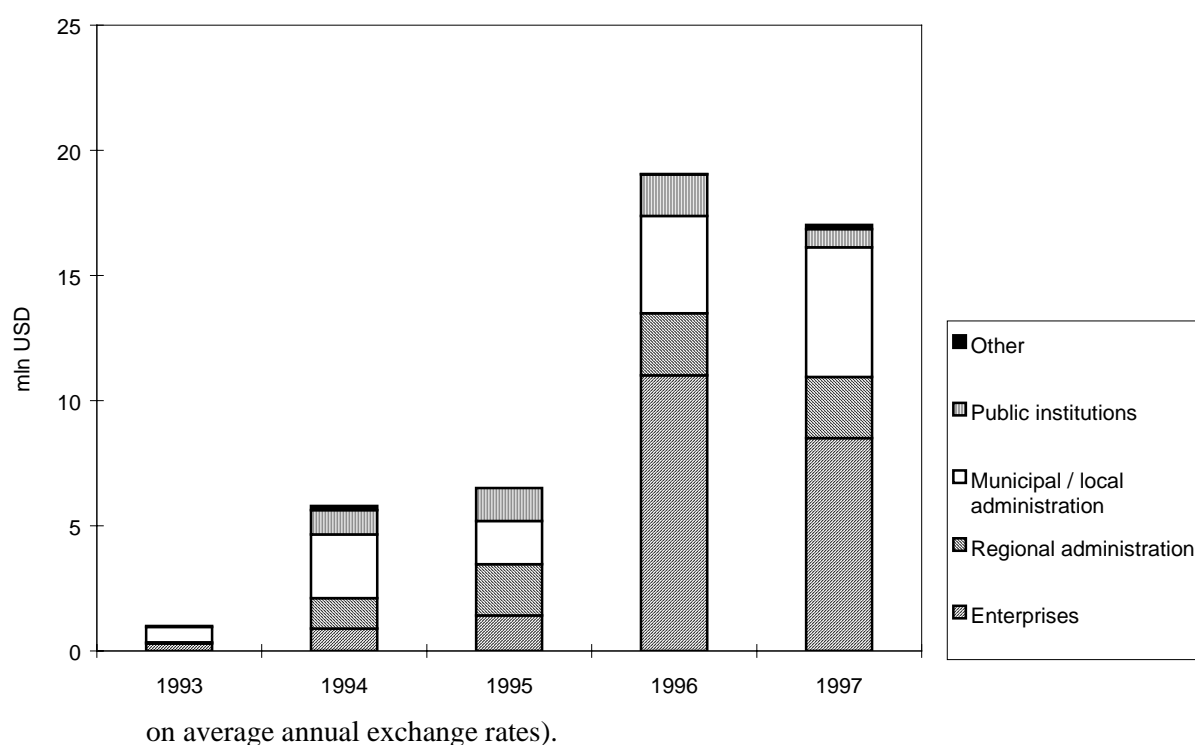
At the moment, the following nominal, annual interest rates are applied on loans:

- 8% for projects in the fields of water protection, waste management and use, protection of forests, nature protection, environmental education, elimination of extraordinary environmental hazards, health prevention of children in contaminated areas, for pilot projects, scientific research, monitoring, implementation programs;

- 9% for low stack emission projects;
- 11% for noise protection projects, modernisation of technologies and production processes;
- 13% for projects on de-sulphurisation of fuel inputs and fuel gases in the industry and energy sector;
- 15% for other environmental and water management projects.

For comparison, the average interest rate on commercial credit available in the 16 largest Polish banks is 24.5% on annual basis, whereas the inflation rate in 1997 was 13.3%.

Figure 10.4: Fund environmental expenditures by type of recipient (mln USD; nominal values based



Source: Table II.10.7 in Annex II.

Note: "Other" includes state administration; NGOs, and private persons.

The loans disbursed from the resources of the Cracow Fund can be forgiven to the following amounts:

- 60% of loan principal for water protection projects;
- 40% of loan principal for the elimination of low-stack emissions, purchase of waste removal vehicles and elimination of unauthorised landfills;
- 50% of loan principal for other projects.

Loan principal can be forgiven *only* if the following conditions are met:

- the project is implemented according to the agreed schedule;
- the project yields a timely achievement of environmental effects;
- preceding repayments of loan and interest were made according to the agreed schedule.

The Fund has found loan forgiveness, used under strict conditions, to be an effective financing mechanism. About 85% of the Fund's loans have been partially written off. This practice improves the financial discipline of borrowers, who are made aware about the possibility of partial loan forgiveness when they apply for a loan. Only after exhibiting strict financial discipline by repaying loan principle and interest according to schedule can loans be forgiven.

6. Funding Cycle⁸

The Fund uses transparent and objective procedures and criteria for the evaluation of applications. The Fund is obliged to follow, and has established, detailed procedures for every step in this cycle. The procedures used by the Fund for appraising and selecting projects to be financed were elaborated in co-operation with the Harvard Institute for International Development. The Fund has prepared a set of document forms to be used at each step. Completion of these forms is a necessary condition for the decision-making process to advance to subsequent steps. The Project Appraisal and Selection Process is described in more detail below. It shows the sequence of activities undertaken by particular agents involved in the screening and selection process, taking into account the division of roles among different units within the Fund.

Setting Priorities

Before the end of December, the Management Board of the Fund submits a Plan of Revenues and Expenditures for the next year to the Fund's Supervisory Council for its acceptance. The plan of expenditures is created by allocating portions of expected total revenues for particular categories of projects ("baskets"). The relative value of money allocated to a given basket reflects its position on the region's priority list of ecological problems, as described in the environmental policy of the province. For this purpose, the Fund relies on documents or opinions of the Environmental Department of the Provincial Government. In the absence of operational environmental policy the Fund additionally solicits the opinions of the members of the Supervisory Council, and official declarations of municipalities and NGOs.

Some baskets may be classified by the Fund as priorities for a period of time longer than one year. The Fund, after consultations with or upon the request of the Environmental Department of the Provincial Government, may declare its readiness to finance particular types of projects for a period of several years.

Project Identification

The usual project identification approach is passive. The Fund distributes information about opportunities for financing environmental projects through the media (paid advertisements), direct letters to municipalities and most polluting enterprises and through seminars. The Fund also can identify priority projects more actively. The Cracow Fund may announce a competitive call for projects to solve a very particular, priority ecological problem. The Fund may identify such problems together with the provincial and local governmental environmental institutions or with interested non-governmental institutions. A competition is announced for problems whose solution requires the implementation of many similar projects, and might attract a high number of applicants. The aim of announcing competitions is to find and select a package of projects that will achieve the given goal in the best and most cost-effective way. A committee consisting of officials from institutions and organisations outside of the Fund supervises the competition.

⁸ This section is largely based on information provided by Grzegorz Peszko, previously a member of the Fund's Supervisory Council.

Screening and Appraisal

The Cracow Fund uses a two-stage appraisal process. The first stage, pre-appraisal, focuses on the general eligibility criteria and on the critical features of project proposals. On the basis of general information on the project the Fund makes “*pass/fail*” decisions at this stage. The second stage is reached by project proposals that pass the screening test. The Fund requires detailed information about the projects in a standardised format to compare eligible project proposals. The Fund uses a system of scores and numerical weights to rank proposals.

Screening

The goal of screening (or “pre-selection”) is to remove from future consideration at an early stage those proposals which *do not* have a chance to be financed by the Fund. The second goal is to identify, as early as possible, those projects which might be eligible for financing from the Fund but are not adequately described or prepared. At this “pre-selection” stage, the Fund applies a set of “hard” formal criteria for making binary (yes/no) choices. If a proposal fails to meet even one of the criteria it is excluded from the Fund’s portfolio. This procedure enables applicants to avoid costly preparation that is required for full evaluation of projects. The set of criteria used by the Fund for pre-selection is made available to the public upon request. Only essential data about the project are required by the Fund to make pre-selection. The Fund uses 3-page Project Information Forms tailored to different types of projects (air protection, water protection and solid wastes).

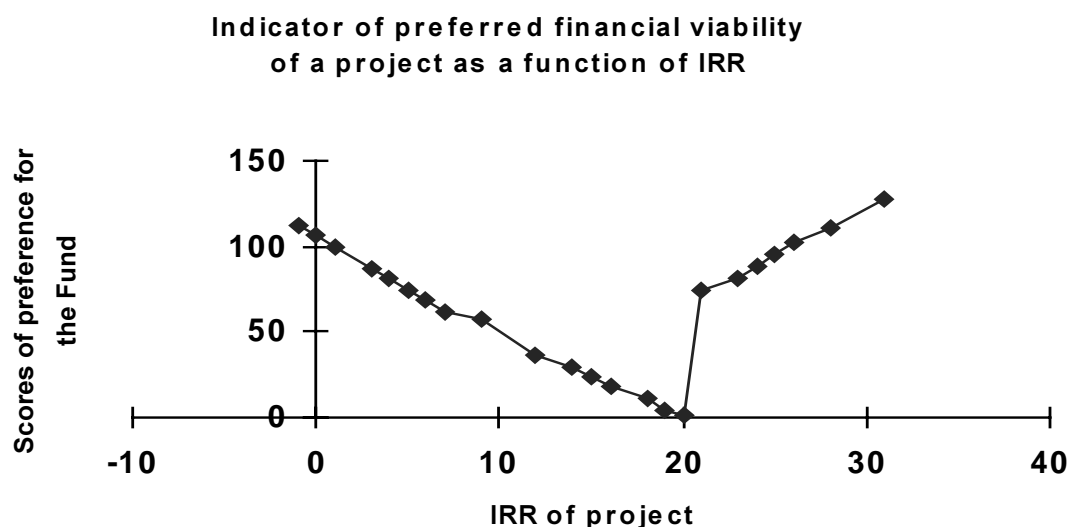
Appraisal and Prioritisation

If the project proposal successfully passes the pre-selection process the Fund invites the proponent to submit a full application package. After receiving the application forms together with supporting documentation the Fund’s Technical Division examines the ecological and technical components of the application according to the enclosed appraisal table. If needed, the Fund’s staff may consult external experts or request the applicant to provide additional explanation. The final outcome of technical appraisal is the calculation of the *aggregated ecological effect indicator* for the proposed project, which is shown as an absolute value “weighted” by the level of compliance with “soft” criteria used by the Fund in the process of project application appraisal (scores).

Simultaneously the Fund’s Economic and Financial Division carry out the financial analysis of applications. The outcome is an *aggregated financial indicator* which takes into account both the cost of a disbursement to the Fund (NPV of the Fund resources disbursed to the project or “NPVF”) and the indicator of preferred financial viability of a project (IPFVP) of the investment project itself. Projects which are estimated to be “very profitable” (having a $NPV_{20\%} > 0$ before taxes, and those which are “very non-viable financially”, (having a $NPV_{10\%} < 0$ before taxes), receive higher values of the indicator. Projects which involve a lower present value of the Fund’s resources receive lower values of the indicator. A lower value results in a better score on a ranking list. The relation between the value of the indicator and the project’s financial viability is illustrated in Figure 10.5. It can be seen that projects with very high and very low internal rates of return (IRR) have less chance of receiving finance from the Fund than projects with IRR in the range of 15-20%.

Once both the *aggregated financial indicator* and the *aggregated ecological effect* have been calculated, the Fund’s staff conduct the final appraisal. The final score is determined by using a special scoring table attached to the application by the Fund, and by using special computer software. The outcome of this final appraisal is the “*Ecological Project Efficiency*” (EPE) indicator, which is the basis for formulating a ranking list of projects. In the case of loans, after an application is placed on the ranking list, copies are sent to one of the Fund’s contracted banks. The bank estimates the creditworthiness of the applicant and sends its opinion to the Fund. On the basis of the ranking list of prioritised projects the Management Board (and Supervisory Council if required) makes the decision about financing.

Figure 10.5: IRR as an indicator of preferred financial viability for projects financed by the Cracow Fund.



By first financing the projects that have the highest EPE value the Fund achieves high ecological effects with low costs (taking into account additional elements like location, operation cost, etc.). Projects with lower EPE values *may* be financed depending on the availability of financial resources managed by the Fund (i.e. they may have to wait to be financed at a later time). The criteria used by the Fund for appraisal of applications are clearly defined and made explicitly known to the applicants. The Fund Office makes the criteria publicly available upon request. Any change in the criteria requires the approval of the Supervisory Council.

Support is awarded six times a year (every 2 months). The Fund received 173 requests for support (i.e. applications) in 1997; 135 of these requests received financial support. The Fund monitors and evaluates projects: once during project implementation, once immediately after the completion of the project, and once some time later to verify the environmental effect of the project. In each contract (loan or grant), steps are specified on what measures will be taken if use of financial support is not in accordance with the contract, or it is considered unsatisfactory or inappropriate by the Fund (for example: recovering the support with additional interest).

7. Evaluation, Reporting and Public Information

The Management Board of the Fund prepares and submits an annual report on its activities to the Supervisory Council and publishes this report in the official journal of the Provincial Government. The Provincial Governor sends the annual report to the Ministry of Environment by April 30 each year. Each year, an independent audit of the Funds balances is carried out according to EU accounting standards.

8. Major Achievements

The major environmental achievements of the Fund are summarised in Table 10.3.

Table 10.3: Major environmental achievements of the Cracow Fund, 1994-1997.

	1994	1995	1996	1997
Dust reduction (tons per year)	237	3024	258	70
SO ₂ reduction (tons per year)	165	167	312	61
CO reduction (tons per year)	351	527	397	112
NO _x reduction (tons per year)	28	25	18	6
Sanitary sewerage (kilometres)	18.24	8.2	5.3	47.6
Sewage treatment plants	1	8	6	2
Containers for sorting waste	1124	736	445	320

The major organisational achievements are:

- the development and application of comprehensive procedures and criteria for appraising and selecting projects, enabling the Fund to maximise its environmental effectiveness;
- financial management programme.

9. Challenges and Future Prospects

At the end of 1998 significant administrative reform occurred in Poland involving the restructuring of 49 provinces into 17 new, larger provinces. As a result, the environmental funds from Cracow and three other provinces have now been merged into a single, larger Fund covering the new, larger Cracow Province. The Cracow Fund has established branch offices in the sites of the previous funds.

The Fund would like to maintain its trend in increasing expenditures for environmental projects and also continue to expand the role loans in its portfolio. The most serious challenge faced by the Fund is a decrease of revenues due to diminishing pollution charge revenues from the Sendzimira Steelworks, the largest industry in Cracow. (The plant is reducing its pollution emissions.) Regarding financing instruments and their conditions, it is likely that interest rates on loans will increase and the provision of grants will be suppressed. Increasingly, the only kind of grants offered will be subsidies to reduce interest rates on loans from commercial banks.

CHAPTER 11

SLOVAKIA: THE STATE ENVIRONMENTAL FUND

Danka Jassikova-Thalmeinerova
HIID/Ministry of Environment
On behalf of the State Environmental Fund

1. Background and Objectives

The State Environmental Fund (the “Fund”) was established in 1991 by Act No. 128/1991 to support state environmental policy. Its main objective is to collect earmarked charges, fines and other subsidies and to use them to finance environmental projects, principally in the public sector, such as the construction of wastewater treatment plants, drinking water supply facilities and gas conversion projects. The Fund is a major economic tool, dedicated to creating conditions which support environment-friendly initiatives. The Fund integrated the previous State Water Management and Air Protection Funds; it was later enlarged to include waste management and nature protection project financing. The Fund also supports non-investment projects in the fields of nature protection, education and research. The scale of the Fund’s activities is indicated in Table 11.1 below.

Table 11.1: Total revenues and expenditures of the Fund (mln USD; nominal values based on average annual exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	31.89	30.51	35.59	40.19	30.99
Environmental expenditures	34.94	31.38	34.35	40.62	28.94
Fund overhead/administrative costs	0.19	0.02	0.05	0.27	0.86
Total expenditures	35.13	31.40	34.40	40.89	29.80

Source: Table II.11.1 in Annex II.

2. Management and Administration

The Fund is governed by state budgetary rules and operates under the authority of the Minister of Environment. The Fund Committee was established as an advisory body to guide and oversee Fund operations. Eleven experts from the Ministries of Economy, Agriculture, Finance, Environment (Directors of Divisions), as well as a representative of a bank, and the Association of Municipalities are members of the Committee. The Fund has a staff of 21 and is organised in three departments: finance and implementation, Fund revenue, and administration. The Director of the Fund is appointed by the Minister of Environment and as head of the Fund is responsible for its day-to-day operations. The Fund is a legally independent institution. As the Fund receives money from the State Budget, it is therefore subject to all general state financial requirements. Allocations from the Fund can be used only for environmental purposes.

3. Revenues

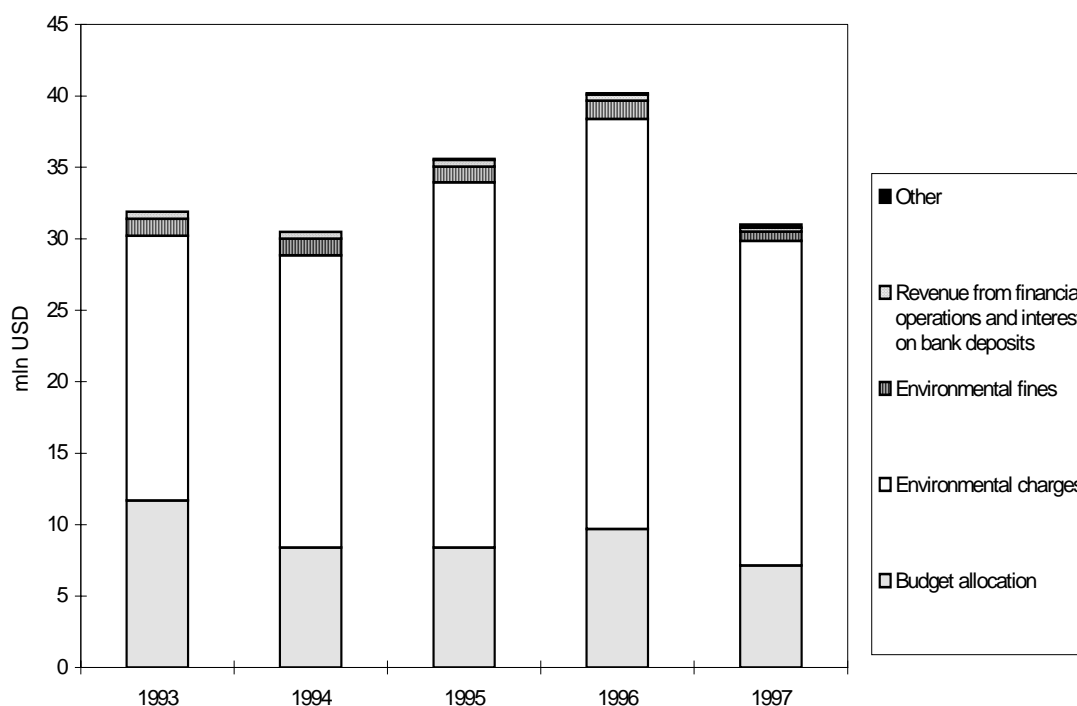
The Fund receives money from the following sources:

- charges for pollution (as specified in relevant permits) including air, water and special waste disposal charges;
- fines levied for failure to meet the requirements of legislation in the fields of water, air, waste, and nature protection;

- state budget contribution;
- administrative fees related to Environmental Impact Assessment processes.

The level and structure of the Fund's revenues is shown in Figure 11.1.

Figure 11.1: Fund annual revenues according to source (mln USD; nominal values based on average annual exchange rates)



Source: Table II.11.2 in Annex II.

Since 1996, water use charges (previously flowing to the Fund), have been earmarked to the State Water Management Fund. Also since 1996, the Fund has received 50% of surcharge payments on the disposal of waste at landfills which do not comply with standards. Revenues from the basic disposal charge and other half of the surcharge flow to the municipalities, which are obliged to use the surcharge proceeds for environmental investments.

Revenues are collected through the District Environmental Offices, which impose the environmental charges. Polluters are obliged to send the payments periodically to the account of the Fund. In the case of fines, in addition to the District Environmental Offices, Environmental Inspectorates may also impose payments. The Fund monitors the flow of revenues. In case payments are delayed, the Fund notifies the District Environmental Office. The District Environmental Office may enforce payments through legal proceedings or by seizing assets of the delinquent polluter. The efficiency rate of revenue collection is estimated to be 90-95%. The main factor affecting payment discipline is the insolvency of polluters. Tax authorities also play a role in monitoring the Fund's revenue flow. According to the air and waste management legislation, polluters have the right to withhold pollution charge payments to the Fund if they make environmental investments. Negotiations are held at the District Environmental Office and a decision with concrete conditions and time schedule is issued. In case a polluter fails to implement the investment according to schedule, or if the investment does not yield the planned ecological effect, the polluter may be obliged to pay all of the charges that were due.

4. Spending Strategy

The Ministry of Environment (MoE) has approved the following general priorities for environmental projects which may be entitled to receive financial support from the Fund:

- to address problems in areas of environmental degradation or to prevent extraordinary environmental deterioration, to minimise substantial threats to the environment, and to address the causes of ecological accidents;
- to support environmental investments in specially protected or transboundary areas, or of international significance;
- to support investments focusing on the conservation and rational use of energy and raw materials, recycling and utilisation of waste.

Following these priorities, the Fund has developed the following criteria for prioritising applications in each sector:

- preference is given to projects already under construction;
- projects must be viable;
- preference is given to projects where other co-financing is secured.

Specific priorities and criteria are discussed and set each year in November by the MoE. Following this the Fund develops its annual spending plan.

5. Expenditures

The main sources of finance for environmental investments in Slovakia are in the private sector (including enterprises which are partially owned by municipalities or the state). For example, in 1995, 66% of the investments were financed from the private sector, 16% from the state budget, 12% from the Fund and 5% from other state funds supporting environmental investments. However, many municipalities see the Fund as the main (if not only) source of finance for environmental investments. This results largely from the fact that there is a shortage of disposable money in the commercial financial market; banks do not provide long-term loans for environmental investments with interest rates that municipalities can afford. Additionally, the Fund provides financial support in the form of grants (only), thus its finance is very attractive to potential beneficiaries. Besides the Fund, state aid for environmental investments is also provided through other extra-budgetary funds, or directly through budget allocations (see Table 11.2). The Table also shows the environmental expenditures of the Fund, and the share of those expenditures in the total of all the listed sources.

The Fund's environmental expenditures are profiled in Table 11.3 and Figures 11.2 – 11.3.

Every year, demand for support from the Fund, as expressed by requests from applicants, far exceeds the potential of the Fund. For example, in the first half of 1998, 3 180 applicants applied for grants amounting 10 957.875 million Sk; only 766 applicants were successful. In 1997, from 4 932 applicants, only 1 037 were awarded grants. (See Table II.11.3 in Annex II for the number of grants awarded each year from 1993-97.)

The Fund co-operates with the Slovak National Bank, which is the main governmental bank, and with the First Communal Bank as manager of its financial resources. The Fund is required to maintain a minimum of 5 mln Sk of its financial resources in reserve.

Table 11.2: State aid for environmental projects from public, sectoral sources (mln USD; nominal values based on average annual exchange rates).

SECTOR	1993	1994	1995	1996	1997
Agriculture (includes water management)	94.74	8.37	32.62	16.56	10.06
Construction and public works	0.69	0.94	1.21	1.38	0.18
National defense	0.00	2.91	4.91	12.49	4.21
Health	2.12	4.61	4.95	6.01	3.39
Industry	14.41	0.81	1.10	2.77	0.99
Education	0.26	2.26	1.21	1.39	1.03
TOTAL	112.22	19.90	46.00	40.60	19.86
Total expenditures of the Fund	35.13	31.40	34.40	40.89	29.80
Fund's share	24%	61%	43%	50%	60%

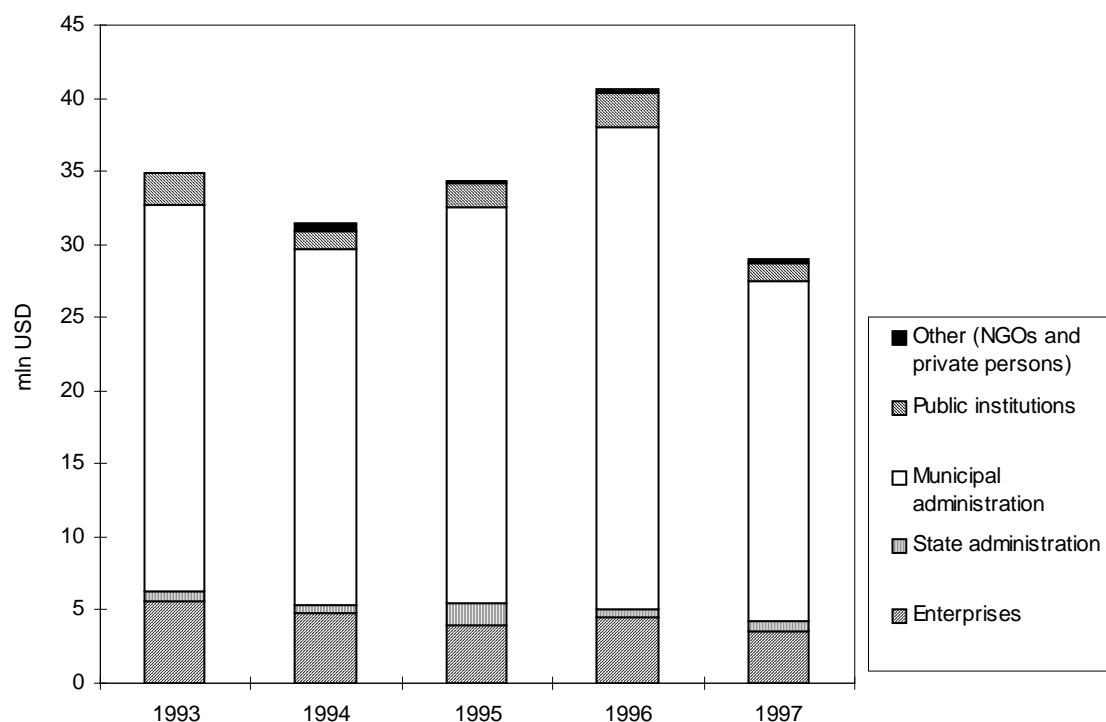
Table 11.3: Fund expenditures by environmental sector (mln USD; nominal values based on average annual exchange rates).

Environmental Sector	1993	1994	1995	1996	1997
Air	12.90	8.54	9.64	11.01	7.79
Water	14.96	14.96	16.72	21.20	15.90
Waste	2.65	4.09	4.08	4.93	2.75
Nature protection	0.24	0.26	0.35	0.61	0.68
Education/public awareness raising/research	0.49	1.10	1.16	1.22	0.70
Other ¹	3.69	2.43	2.41	1.72	1.11
TOTAL environmental expenditures ²	34.94	31.38	34.35	40.62	28.93

Source: Table II.11.4 in Annex II.

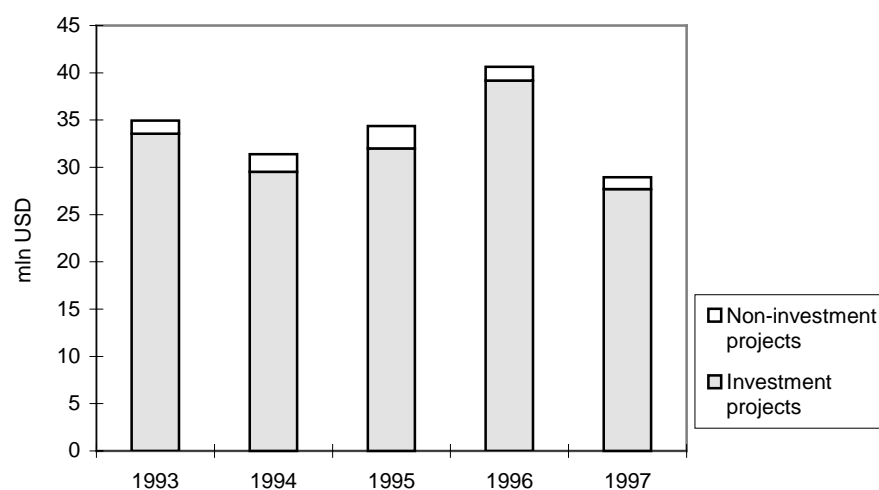
Notes: 1) Includes projects related to environmental accidents/emergencies and environmental health (e.g. spa for asthmatic children, photo therapy equipment, X-ray equipment). 2) Totals may not equal the sum of individual components due to rounding.

Figure 11.2: Fund environmental expenditures, by type of recipient (mln USD; nominal values based on average annual exchange rates).



Source: Table II.11.5 in Annex II.

Figure 11.3: Fund environmental expenditures according to “investment” or “non-investment” projects (mln USD; nominal values based on average annual exchange rates).



Source: Table II.11.6 in Annex II.

Note: The term “investment” projects here means capital expenditures associated with environmental technology/equipment and the construction of facilities (including operation and maintenance thereof). The term “non-investment” projects here includes activities such as training/education and public awareness raising, environmental monitoring and research, nature protection through non-technological means, etc. (including computers and other office equipment for the support of such activities).

6. Funding Cycle

The process begins with the collection of an application at a District Environmental Office (of which there are 79). Only applications which meet the general fund criteria are subject to further evaluation. Offices rank applications according to established criteria (business and construction plans, financial participation of the investor, environmental benefits for the region, etc.). Applications are accepted twice per year and are processed within three months on average. The Fund Committee and the MoE staff then evaluate the ranked proposals (generally the top five projects per district), and the list of projects is given to the Minister of Environment for final decision. The conditions for providing grants are stipulated in the Regulation of the Ministry of Environment No. 176/1992. Economic and ecological efficiency are the main criteria for project selection.

In order to use its resources effectively, the Fund conducts a number of investigations prior to approving or rejecting a project. These investigations include an assessment of the economic, environmental and technical reliability of the applicant. The intention is to avoid a situation in which Fund resources are used for non-productive ecological projects or for enterprises which have poor records. In the case of approved projects, a similar evaluation is conducted during project implementation. The process is such that the bank only disburses money for projects when specifically authorised to do so by the Fund. Grants may be audited with respect to compliance with the agreed upon schedule and substantive objectives of the project. For example, in 1996, an extensive financial audit was done by the Fund on 87 projects to determine if the resources were used for the intended purposes. The Fund withholds 10% of the total grant award until all bills have been submitted, financial accounts settled and other conditions of the agreement met.

The District Financial Administration of the Tax Office also monitors earmarked revenue and the spending and use thereof. In a case of failure of a recipient to meet the conditions, the tax authority will issue a decision and the recipient must return the grant, including an administrative interest charge and penalty.

7. Evaluation, Reporting and Public Information

The Fund periodically submits reports on its activities, the results of grant allocations and its annual plan to the MoE for discussion. In addition, the Fund is obliged to report the complete list of applicants and grant recipients as well as Fund revenues and expenditures to the Government and the Parliament. The Government pays special attention to the Fund's allocations, as the Fund is subject to the rules governing State Budget expenditures. Fund allocations are also published periodically in the Municipal News, Water Management Reporter and twice a year in daily newspapers. Written requests for information are very common and are dealt with within 30 days. The Fund is not obliged to undergo an independent audit, however, it is subject to audits performed by the relevant state body, as required by state budgetary rules.

8. Major Achievements

Through mid-1998, more than 4 500 projects were implemented with the Fund's financial support. The Fund allocated money mainly to the public sector, supporting the construction of wastewater treatment plants, sewage, drinking water supply systems and gas conversion.

There are many environmental issues requiring investments. Municipalities and cities face serious challenges to repair and/or construct appropriate water treatment plants. Historically, there has been extensive use of low quality solid fuels for heating. Many municipalities located in valleys face smog conditions in the winter. The Fund focused on supporting the conversion of heating systems towards to use of natural gas. Recently, the Fund also allocated money to projects aimed at the use of alternative energy sources, for example small hydro-power plants, solar systems, and the reuse of wood chips.

The waste management sector has also needed significant attention. Legislation has been extremely weak and, in 1991 for example, there were more than 800 illegal dumps of household and industrial waste. The Fund has supported the cleanup and recovery of numerous sites, the separation of household garbage and development of regional landfills.

In addition, the Fund granted support to non-investment projects in the fields of the nature/landscape protection, research, education and public awareness raising. Each year, the Fund allocates resources for the monitoring and/or surveying of protected bird, animal, and plant species. The Slovak Environmental Agency has received money for environmental education and information systems.

9. Challenges and Future Prospects

The Fund has scarce resources. Every year only a small portion of applicants can be satisfied. There are two major factors influencing the performance of the Fund. First, the revenue collected from the state budget and pollution charges has begun to decline. Secondly, stricter environmental legislation requires higher investments. Meeting environmental standards is a significant challenge for the public sector (e.g. insufficient water supply and wastewater treatment systems), which is not able to compete for loans from commercial financial institutions. Both industry and municipalities argue that they need help to meet new requirements resulting from changes to bring Slovakia into line with EU standards. The Slovak Government has accepted such arguments and instituted a grant programme through the Fund to support the needed investments. The Fund is expected to reduce its role in subsidising municipalities as they assume greater responsibilities (e.g. related to water services) and their financial capacity develops.

At the beginning of 1998, the Slovak Government amended the Act on the State Environmental Fund to allow for the provision of loans. According to the new Act, the resources of the Fund are divided into two parts. The portion of revenues collected from pollution charges, fines and the state budget will still be granted primarily to public sector environmental projects. The remaining revenues, including contributions from the National Property Fund, loans from banks, loan repayments (with interest), as well as domestic or foreign donations, could be used for soft loans. Projects applying for loans will be selected on the basis of their financial and ecological feasibility.

CHAPTER 12

SLOVENIA: THE ENVIRONMENTAL DEVELOPMENT FUND

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Slovenian Environmental Development Fund

1. Background and Objectives

The Environmental Development Fund of the Republic of Slovenia (the "Fund") was established under the Environmental Protection Act of 1993 as a public legal entity and organized as a joint stock company with 10 million SIT of capital. The Statute of the Fund was issued in the middle of 1994. The Fund actually began operating at the end of 1994, at which time its first staff members were employed. In 1995 the Fund's Standing Orders on the procedures and conditions for disbursement of funds were published in the Official Gazette. The Fund's capital was increased in 1994, 1995 and 1996 through the transfer from the Ministry of Environment and Physical Planning (MEPP) of the unpaid receivables of loans previously granted to beneficiaries by the MEPP.

In the event that Fund shares would be held by others than the Republic of Slovenia, such shares would be registered shares. Registered shares may not exceed 33% of the total capital stock and the holders of such stocks are not entitled to management of the Fund. At the time being, 100% of shares are owned by the Republic of Slovenia. The value of the Fund's capital as of Dec. 31, 1998 was 7 258 554 081 SIT. (For more detailed information about the Fund's shares and capital value as of Dec. 31, 1997, see Tables II.12.1 and II.12.3 in Annex II.)

The Fund is a non-profit financial organisation which shall in its own name and on behalf of others engage in channelling finance for environmental investment projects. The basic goal of the fund is to provide loans on preferential terms for investment activities in the field of environmental protection from own capital and from capital obtained from other sources. Revenues generated from the interest rate on loans should allow the Fund to maintain the real value of its capital and cover the operational costs of the Fund without profit.

The Fund provides loans on the basis of a public announcement (i.e., tendering procedure) for purposes defined as priorities in the Environmental Protection Act and the forthcoming National Environmental Protection Programme (NEAP).

The capital of the Fund should be used to support investment projects in the priority areas defined in the Fund's Statute as:

- state services for environmental protection in the public sector;
- compulsory local environmental protection public services;
- the purchase and development of equipment and technologies for environmental protection;
- the introduction of environment-friendly technologies and products;
- the support of polluters in the implementation of rehabilitation programmes.

The Fund may also provide services in terms of assistance in financial transactions or financial engineering. A summary of the Fund's revenues and expenditures is given in Table 12.1.

Table 12.1: Total annual revenues and expenditures of the Fund (mln USD; nominal values based on average annual exchange rates).

	1994	1995	1996	1997
Annual revenues	2.02	10.41	15.11	20.43
Environmental expenditures	0.00	0.60	10.52	17.81
Fund overhead/administrative costs	0.15	0.59	0.96	0.94
Other expenses (interest, commission expenses)	0.00	0.01	0.07	0.43
Total expenditures ¹	0.15	1.20	11.54	19.18

Source: Table II.12.2 in Annex II.

Notes: 1) Totals may not equal the sums of individual components due to rounding.

2. Management and Administration

The Fund is managed by an *Administrative Board* consisting of four members and a President, all of whom are appointed and dismissed by the Government. The Administrative Board:

- adopts the Fund's Statute and submits it to the Government for approval;
- adopts the annual programme along with the financial plan and submits them to the Government for approval;
- adopts Fund's investment policy and submits it to the Government for approval;
- proposes to the Government conditions for the issue of new shares and rights derived therefrom;
- adopts business reports and the annual balance sheet and submits them to the Government for approval;
- adopts standing orders, standing rules and other documents of the Fund and submits the standing orders from Article 20 of the Statute to the MEPP for prior consideration;
- adopts decisions on tenders and hears appeals concerning loan allocations;
- appoints and dismisses the Fund's Director, with approval of the Government, and issues guidelines and instructions for the Director;
- represents the Fund in relation to the Director;
- appoints permanent and temporary working bodies;
- decides on other matters defined by the Statute and other documents.

The Board conducts its business operations in accordance with the adopted standing rules and has a quorum if the majority of the Board members participate at the session. Each member has one vote. Decisions of the Board are adopted by majority vote.

The activities of the Fund are supervised by the *Supervisory Board* consisting of a President and nine members appointed by the National Assembly. The term of office of the Supervisory Board is four years. The Supervisory Board reports to the National Assembly on the work of the Fund at least once a year, or whenever the Assembly so requires.

The present staff of the Fund consists of eleven people. The internal organisational units of the Fund are:

- Office of the Director;
- project preparation and evaluation department;
- department for supervision of project implementation;

- financial department.

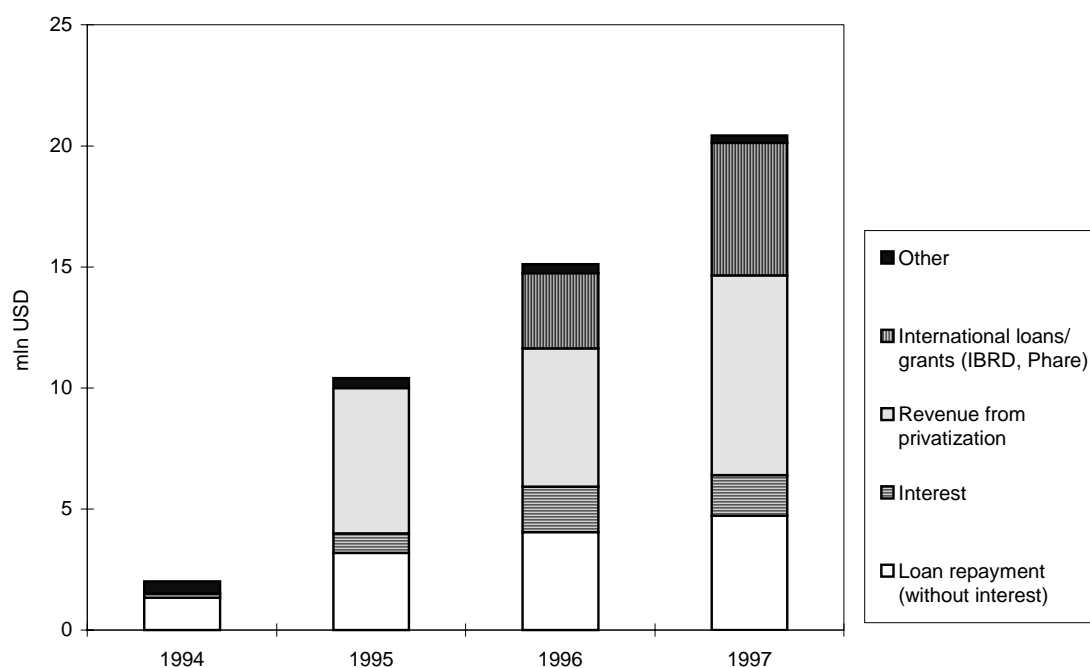
3. Revenues

The Fund's initial capital stock is formed from assets acquired by, or transferred to, the Fund according to article 10 of the Fund's Statute, and may include:

- payment of the Fund's founding capital;
- outstanding claims towards loans provided for environmental protection by the MEPP and according to the balance of those loans as of the day the Fund was founded (valued at ~ 14.76 million USD as of Dec. 31, 1997);
- revenues on the basis of the Act on Ownership Transformation of Enterprises;
- revenues on the basis of concessions granted for state public services in the field of waste management (so far the Fund did not receive revenues from this instrument);
- revenues on the basis of the Act on the State Budget;
- all other capital resources acquired by other legal means (e.g. land-use penalties).

The value of the Fund's capital increased by ~35% from Dec. 31, 1996, when it was 5 360 506 700 SIT to Dec. 31, 1998, when it was 7 258 554 081 SIT. The Fund's capital is composed of shares, subscribed capital, reserves, net profit and capital revaluation adjustment. The Fund's annual revenues in 1994-1997, according to source, are shown in Figure 12.1.

Figure 12.1: Fund annual revenues, by source (mln USD; nominal values based on average annual exchange rate).



Source: Table II.12.4 in Annex II.

The Fund serves as a financial intermediary for a World Bank project aimed at reducing air pollution from household heating systems and urban boiler houses. A preliminary pilot phase of the project,

which provides soft loans for the conversion of dirty fuels (coal, wood and other solid fuels, heavy oil) to cleaner heating systems (gas, district heating, low sulphur oil, heat pumps or solar systems) was completed in the region of Maribor in November 1995. During the pilot phase, the World Bank (IBRD) was preparing a DEM 30 million facility for the Fund to extend the fuel conversion scheme in Maribor and to other affected urban areas in Slovenia. The pilot phase allowed the Bank to test the competence of the Fund and the financial intermediary scheme.

To assist and prepare the Fund to receive and disburse the loan from the World Bank, in 1996 the Fund was awarded a grant of 400 000 ECU from the EU's PHARE Programme for the project "Technical Assistance for the Pilot Testing Phase of the World Bank Air Pollution Abatement Program". The largest portion of the project's budget was spent on a comprehensive public information campaign, and also on strengthening the Fund's project management capabilities, the purchase of computers, communication hard- and software, and, on improved computer literacy of the Funds staff.

4. Spending Strategy

The Fund has an annual spending plan called "Financial plan and investment policy of the Fund". This document is adopted by the Administrative Board of the Fund and submitted to the Government for approval. The official basis for the Fund's spending priorities are those priority areas defined in article 19 of the Fund's Statute, as noted earlier in section 1. While supporting investments in the priority areas, the Fund applies the additional criteria:

- the investments will make an important contribution to the preservation and improvement of the living and natural environment;
- the investments themselves will be environment-friendly;
- the investments will be comparatively cost-effective;
- the borrower shall be capable of repaying the acquired loan.

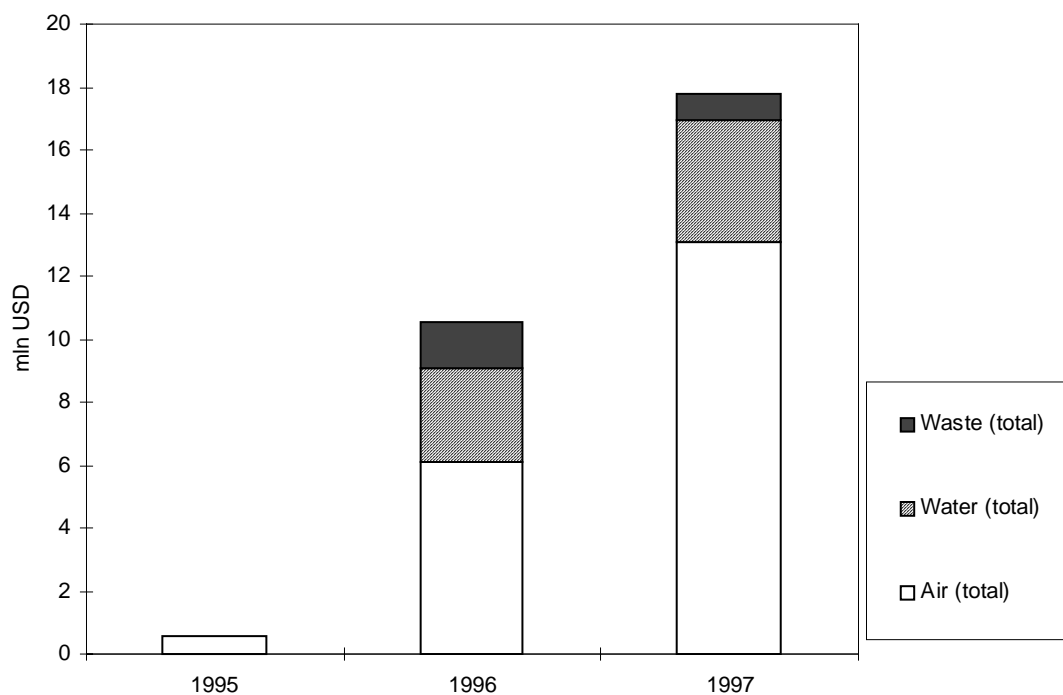
The Fund's annual spending priorities are defined in the close co-operation with the MEPP and take into consideration available funds for the subject year. The Fund's top investment priorities for 1998 remained unchanged from previous years: wastewater treatment, solid waste management, reduction of air pollution and new environmental technologies.

5. Expenditures

The financial resources at the disposal of the Fund are limited in comparison with environmental financing needs. Moreover, not all of the Fund's resources are available for financing projects. In accordance with regulations governing public financial entities (of which the Fund is one), the Fund is obliged to make not less than 30% worth of all its financial investments in securities or bonds guaranteed by the Republic of Slovenia. The Fund may invest available working capital in short-term deposits at banks. The financial conditions on such deposits, including the level of interest rate, are fixed by regulations.

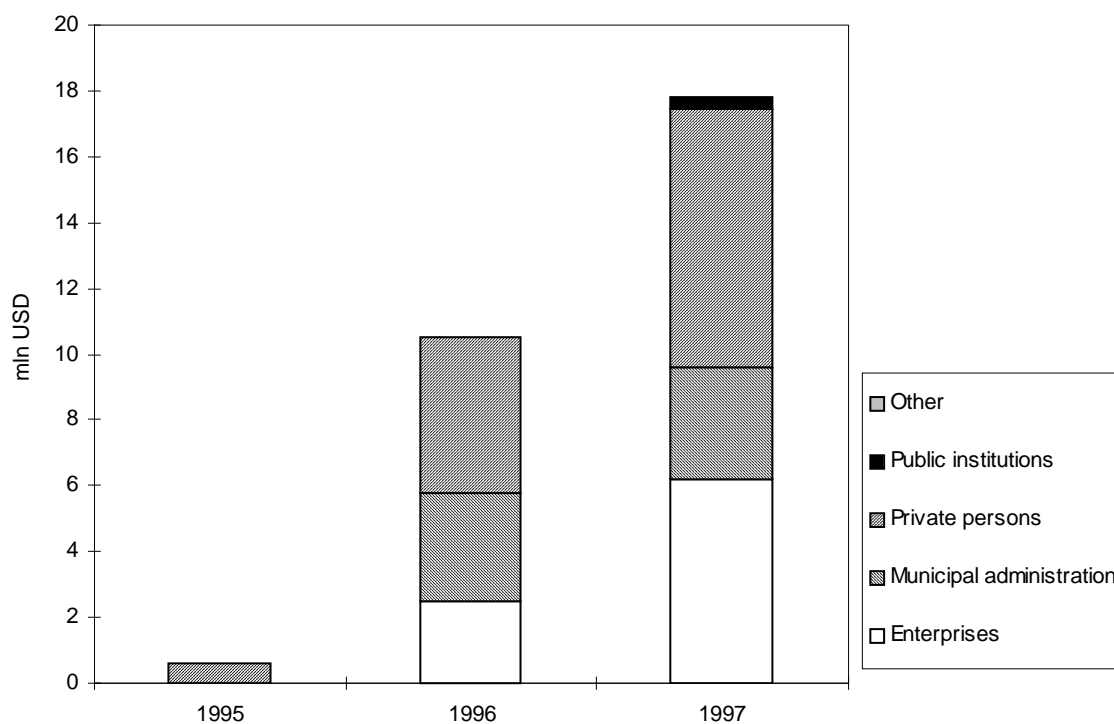
As noted earlier, the Fund provides financial support to environmental projects in the form of soft loans. Loans provided by the Fund go to cover investment costs (i.e. the Fund does not finance non-investment activities). The Fund's environmental expenditures are described below according to specific programmes, and are profiled in Figures 12.2-12.3.

Figure 12.2: Fund expenditures by environmental sector (mln USD; nominal values based on average annual exchange rates).



Source: Table II.12.7 in Annex II.

Figure 12.3: Fund environmental expenditures by type of recipient (mln USD; nominal values based on average annual exchange rates).



Source: Table II.12.8.

Air Pollution Abatement Programme: The Fund signed a loan agreement with the IBRD for the amount of 30 million DEM in June 1996 to finance conversions to cleaner heating systems. After the project's pilot phase in Maribor in 1995, it was gradually expanded to cover the entire territory of Slovenia. In 1997 approximately 1500 mln SIT were disbursed to approximately 2000 borrowers. The Fund contributes to this programme with its own money (25% of the loan amount), where the loan amount should not exceed 80% of total investment costs. Most investors apply for the highest percentage possible. The terms and conditions of such loans are as follows:

- the maximum loan amount for a legal entity is 55 million SIT; for individuals it is 1.1 million SIT;
- the repayment period is up to 10 years with quarterly installments for a legal entity, and up to 6 years for individuals with monthly installments;
- the interest rate: the World Bank interest rate is determined as a 6 month LIBOR for DEM + 2% (in first half of year 1998, this was about 6.03 % p.a.), and it is adjusted twice a year.

Municipal Infrastructure: Each year since 1995 the Fund has invited municipalities and municipal service companies to apply for loans for financing investments in sewage/wastewater treatment systems, solid waste disposal, drinking water pipelines, gas pipelines and local transportation. Annually approximately 7-10 million USD is offered through competitive tenders and the amounts requested in the applications exceeds the available resources. There is a huge need for investment in the local infrastructure, but there are (very low) legal limitations on how much municipalities can borrow, preventing them from applying for more loans. The terms and conditions of such loans are as follows:

- loans can cover up to 50% of the total investment cost, which is the amount usually requested; the remaining costs are usually covered by from municipal budgets;
- individual loans are usually in the range from 10 to 100 million SIT (~50 000 to 550 000 USD);
- the repayment period is up to 15 years, there is no grace period, but repayments (in quarterly installments) start only after completion of the investment;
- the interest rate: official yearly average inflation rate (at the moment approx. 9% p.a.) + 4% p.a. (with first class collateral);
- collateral: adequate insurance by the State or bank guarantee or mortgage on commercially viable real estate amounting to at least 3 times of the loan amount.

Reduction of Pollution in Industry: In June 1996, the Fund invited industrial companies to take loans for financing projects for pollution reduction in the areas air, water, solid waste, and the phase-out of ozone depleting substances. A 7.3 million USD loan facility was offered, but the response of industrial companies was relatively low - approximately 2 million USD were disbursed. Another tender with similar purposes was published at the end of 1996 in the amount of approximately 5 million USD of which only about 300 000 was disbursed. In 1997 a new tender for industrial companies was issued with a much wider scope of projects covered. Besides end-of-pipe technologies, also new environment-friendly technologies and products were included, as well as industrial rehabilitation programmes, originating from the privatisation process of Slovenian industry. Again, however, the response of industrial companies was relatively low. The terms and conditions of such loans are as follows:

- up to 50% of the total investment amount - companies typically request for the upper limit - the remainder is financed by companies' own funds or commercial bank loan;
- individual loans are usually in the range from 10 to 100 million SIT;
- the repayment period is up to five years (with possible exceptions), there is no grace period, but repayments (in quarterly installments) start only after completion of the investment;
- the interest rate: official yearly average inflation rate (at the moment approx. 9% p.a.) + 4% p.a. (with first class collateral);
- collateral: adequate insurance by the State or bank guarantee.

Phase-Out of Ozone Depleting Substances (ODS): The Republic of Slovenia was awarded a grant in the amount of USD 6.2 million by the Global Environment Facility Trust Fund (GEF). The grant agreement was signed in November 1995 with the IBRD acting as the implementing agency of the GEF. The grant was approved to six Slovenian companies for financing six investment projects. According to the grant agreement, the Fund was specified as the financial intermediary in the project, responsible for procurement and disbursement procedures and monitoring of project implementation. GEF funds are disbursed through the State Budget account (i.e. not through the Fund). The project was to be completed by the end of June 1998.

6. Funding Cycle

After a thorough analysis of the Fund's procedures for processing and approving loan applications carried out within the framework of a Phare financed project in 1996 and 1997, some changes - simplifications - were introduced in the Fund's procedures. The present procedures, adopted by the Administrative Board of the Fund in December 1997, are described in the Fund's Standing Orders for the Procedures and Conditions of the Disbursement of Funds.

The first step in the Fund's procedures is the annual investment policy, adopted by the Administrative Board and confirmed by the Government, in which the general outline of tenders for the given year are defined. After adopting the annual investment policy, the Administrative Board appoints a Committee for Public Tender Implementation, which is composed of at least three members, including at least one representative of the MEPP.

The Committee is responsible for the entire tender preparation and loan-approval procedure, including: preparation of the contents of public tenders, acceptance of applications and decisions on their formal eligibility, evaluation of applications and preparation of a priority list, approval of funds available under the public tender.

In preparing a tender, the Committee:

- defines the subject of the tender (i.e. type of projects eligible for financing);
- determines the amount of funds to be made available under the tender;
- specifies conditions for loan provision;
- specifies requirements for loan insurance (i.e. collateral);
- specifies contents of the application to be submitted by applicants;
- communicates relevant information to applicants;
- establishes the time limit and manner of submitting applications;
- specifies criteria for the evaluation of applications;
- specifies procedures for opening, evaluating, and selecting applications;
- specifies appeals procedures;
- sets the time limit during which applicants will be informed about the outcome.

The priority criteria are defined based on extensive exchange of information with the MEPP and marketing studies, if applicable, and information obtained on the field visits of previous Fund financed projects. Cost-effectiveness of projects is one of the most important criteria; projects with relatively low investment costs for a given level of environmental benefits are favoured.

When a public tender is published there is usually a two month period for the preparation and submission of applications. After this period the applications are opened by the tender Committee; incomplete applications are promptly refused. After the evaluation procedure (lasting 2-8 weeks, depending on the number of applications) the final decision is made by the tender Committee and all applicants are notified and have the possibility to appeal to the Administrative Board. Finally, the loan agreements are prepared and signed after all required documentation (especially concerning collateral) are obtained. The funds are

transferred to the account of each individual borrower up to the amount already spent on the project and directly to the accounts of suppliers or providers of work on the basis of monthly reports.

The Fund would like to issue at least one tender per year for local infrastructure projects and one tender per year for the industrial projects, because it is very important to build the awareness of the clients that they can rely on the Fund as a stable and favorable source of finance for their environmental investments.

Further simplification of the Fund's procedures might be possible, however, the Fund will want to avoid undue financial risks and ensure that positive environmental effects result from its investments. All the projects are controlled by the Fund in the phase of implementation and environmental effects are evaluated for a few years (depending on the project) after the project becomes operational.

7. Evaluation, Reporting and Public Information

The Government of Slovenia performs the most important oversight duties with regards to the Fund, for example it: appoints and relieves the Administrative Board of its duties and approves the Fund's Statute, investment policy and financial plan, annual accounts and report on the Fund's operations, as well appoints and dismisses the Director of the Fund. The Government also adopts decisions regarding any borrowing by the Fund, adopts decisions on loss coverage methods, adopts decisions on the issuing of shares, conditions for their issue, and their contents and determines remuneration amounts for the engagement of the Administrative Board members. The Fund's Supervisory Board also plays a role in supervising the Fund's activities. At least once a year, the operations of the Fund are audited by an authorised financial auditing organisation and by the Court of Auditors, in accordance with the law.

8. Major Achievements

Within the Air Pollution Abatement Programme, the Fund helped finance 3 245 conversions to cleaner heating systems through the end of 1997. The conversions were made as follows:

- 976 to gasoil;
- 1 279 to natural gas;
- 851 to LPG (Liquid Petroleum Gas);
- 81 to district heating;
- 8 to heat pumps;
- 16 to solar system, and;
- 34 boiler-house conversions.

Within the Fund's other programmes, more was achieved in the financing of local infrastructure than in the industrial sector. Within the local infrastructure programme, the Fund's loans helped complete:

- 4 wastewater treatment plants;
- 13 sewage systems;
- 12 waste treatment facilities and disposal sites;
- 30 water supply facilities;
- 13 district heating and gas networks, and;
- allowed the purchase of 36 environmentally cleaner buses (noise and exhaust emissions of these buses are in compliance with EU Directives).

In the industrial sector the Fund helped finance two wastewater treatment plants and the purchase of new ozone depleting substances technology.

9. Challenges and Future Prospects

Regarding revenues, the Fund expects a decrease of income received from privatisation of companies since the privatisation process is going to be completed soon. On the other hand, the Fund expects an increase of revenues from the State budget and revenues collected on the basis of concessions granted for state public services in the field of waste management.

It is expected that the NEAP will have finally been adopted in 1998. This document should not only clearly define priorities - taking into account EU accession - but also define the level of investments necessary to achieve desired effects. The NEAP should finally allow the Fund to plan its activities on a longer term basis; for the time being most of activities are planned only for one year in advance.

New fields of activities are likely to be explored by the Fund; one of them is the possibility of the Fund making direct investments in environmental projects. Another option is the possibility of the Fund serving as an implementing agency for EU financial assistance to support the accession process. It is expected that significant resources will have to be administered and disbursed in accordance with high international standards - standards which the Fund has already achieved in its operations. The Fund could also play the role of financial intermediary in the disbursement of state subsidies to environmental projects and could continue to play a role in the allocation of funds reserved for environmental purposes in the privatisation process.

In its primary field of activities - granting favorable loans for environmental investments - no major changes are expected. The thorough revision and simplification of the Fund's procedures in 1996-97 resulted in well designed tendering and evaluation procedures. Naturally, tendering procedures automatically mean a longer period between the completion of an application by an applicant and the eventual disbursement of the funds in comparison to commercial bank procedures, but tendering procedures are unavoidable in circumstances where there is more demand than public resources available.

Demand for environmental finance is expected to increase, especially in the context of EU accession. The implementation and enforcement of the NEAP will generate new needs as well. If the current limitations on municipalities for borrowing will be modified, additional investments in municipalities are to be expected. The Fund expects to learn more about the needs for investments in the year 1998 through a marketing study, planned in the framework of a Phare supported project.

No major qualitative changes in the role played by the Fund vis-à-vis other sources of environmental finance (commercial banks, municipal bonds, other funds, the EU, IFIs and donors, etc.) are expected. The Fund has undergone several evaluation missions by different institutions (including IBRD, Phare and very recently, the OECD) and has acquired a good reputation both domestically and internationally.

PART TWO

**SELECTED ENVIRONMENTAL FUNDS
IN THE NEW INDEPENDENT STATES**

CHAPTER 13

BELARUS: THE REPUBLICAN AND REGIONAL/LOCAL ENVIRONMENTAL FUNDS

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 Department of Natural Resource Use and Economics
 Ministry of Natural Resources and Environmental Protection

1. Background and Objectives

In 1990, as part of its efforts to introduce new economic instruments for environmental policy, the Ministry of Natural Resources and Environmental Protection (MoE) of the Republic of Belarus, (the State Committee for Environmental Protection at that time), initiated a Government Decree introducing pollution charges and establishing environmental funds to collect the revenues generated by these charges. In November 1992, the Supreme Council of Belarus passed the framework Environmental Protection Act. Article 19 of the Act stipulates that "The Republican, regional (including Minsk municipal), and local extra-budgetary environmental funds are established to finance environmental protection measures, environmental programmes, environmental rehabilitation, compensation for environmental damages and other environmental measures". In March, 1993, the Council of Ministers approved Decree No. 183 "On Extra-budgetary Environmental Funds in the Republic of Belarus", which established the regulations for administration of the extra-budgetary environmental funds. These regulations define the funds' revenue sources, revenue collection procedures and fields of expenditure. A subsequent Government Decree in January 1997 amended the funds' regulations, the major amendment stipulating that the funds are allowed to provide interest-free loans.

The environmental funds in Belarus, including the Republican Fund, have been operational in their current form since March 1993 (following the Council of Ministers' Decree No. 183). Pursuant to the 1998 Budget Law and a related Government Decree on Funds, all extra-budgetary funds have been consolidated back into the State Budget. Aggregated revenues and expenditures of the *environmental fund system* in Belarus from 1993-1997 are shown in Table 13.1. Estimates of the *Republican Fund's* revenues and expenditures (also shown in Table 13.1) can be derived by calculating 10% of the annual aggregated totals.

Table 13.1: Aggregated revenues and expenditures of the environmental fund system in Belarus and estimated revenues and expenditures of the Republican Fund (mln USD; nominal values based on annual average exchange rates).

	1993	1994 ¹	1995	1996	1997
Aggregated annual revenues	18.585	4.151	33.323	64.841	49.256
Aggregated annual expenditures ¹	15.609	3.934	29.720	64.351	48.227
Republican Fund revenues	1.858	0.415	3.332	6.484	4.926
Republican Fund expenditures	1.561	0.393	2.972	6.435	4.823

Source: Table II.13.1 in Annex II.

Notes: 1) The major drop in 1994 figures results from a significant change in the USD exchange rate.

2. Management and Administration

The Environmental Protection Act and Decree No. 183 of the Council of Ministers envisioned a multi-tiered system of environmental funds. Accordingly, the following funds have been established:

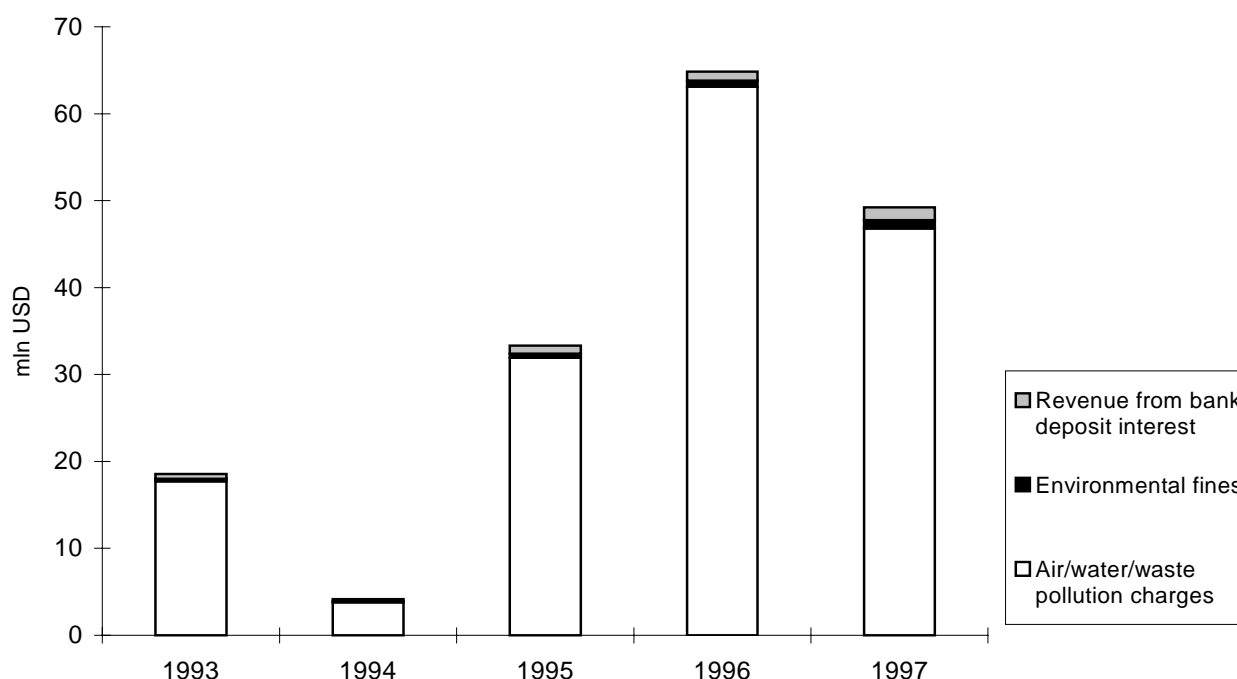
- Republican Environmental Fund under the MoE;
- six regional, and the Minsk municipal environmental funds, under the regional and Minsk Committees on Natural Resources and Environmental Protection (which are the regional and Minsk municipal bodies of the MoE);
- local environmental funds operating under local Inspectorates for Natural Resources and Environmental Protection (also bodies of the MoE).

The funds are, as implied above, functionally and legally part of the MoE and its respective regional/local bodies (i.e. they are not independent legal entities). The MoE and its regional/local bodies are responsible for the allocation and disbursement of the funds' financial resources. The Ministry of Finance also plays a co-ordinating role in the formulation of the funds' budgets.

3. Revenues

The funds derive their revenues mainly from: air and water pollution taxes; industrial and household waste charges; compensation for environmental damages; and fines for pollution and inappropriate use of natural resources. In addition, the funds may also receive voluntary donations from legal and natural entities. The pollution taxes and waste charges provide the overwhelming majority of the revenues (as shown in Figure 13.1.) As the funds begin to extend soft loans, it is expected that loan repayments will eventually become an additional source of revenue, expanding the funds' revenue base.

Figure 13.1: Aggregated revenues and expenditures of the environmental fund system in Belarus (mln USD; nominal values based on annual average exchange rates).



Source: Table II.13.1 in Annex II.

Air and water pollution taxes were established by the Act "On Taxes on the Use of Natural Resources", which was approved in December 1991 and became effective in 1992. Waste disposal charge rates are set by Government Decrees. Since 1992, charge rates have been revised nine times according to inflation coefficients. Since 1996, these corrections have been made annually. (The principal distinction between the "taxes" and the "charges" is that tax payments are collected by the State Tax Authorities and channelled to the appropriate local government budgets, while the charge payments are collected by the MoE.)

Revenues are initially collected by local Inspectorates for Natural Resources and Environmental Protection. They are then distributed as follows: 10 % to the Republican Fund; 30 % to the regional bodies of the MoE, as administrators of the regional funds, and; 60 % remain with the local bodies of the MoE as administrators of the local environmental funds. All revenues, regardless of the source, are strictly earmarked for environmental measures.

Polluters do not have the right to withhold payments of pollution taxes and waste disposal charges, regardless of whether they allocate resources for environmental measures (i.e. payments are not waived in exchange for commitments to invest in environmental protection). Unspent money, which remains on the funds' accounts at the end of the year, is carried over and available for the funds to spend the following year.

4. Spending Strategy

The range of possible activities the funds may support is defined in the funds' enabling legislation and subsequent regulations, and has been made available to the public through the mass media. These activities include:

- construction, modernisation and repair of environmental facilities and installations;
- environmental research and development, including laboratory testing;
- rehabilitation of natural sites; research on, and the protection of, flora and fauna;
- creation and maintenance of nature reserves, national parks, and other specially protected natural sites, including botanical gardens and dendrological parks;
- environmental monitoring and inventories of environmental sites and resources;
- protection and rehabilitation of aquatic ecosystems;
- raising public environmental awareness; organisation and maintenance of environmental information systems; dissemination of environmental information, environmental training and education.

5. Expenditures

The environmental expenditures of the overall environmental funds system in Belarus in 1993-1997 are presented in Table 13.2.

Prior to 1997, the funds could disburse their financial support only in the form of grants. As of January 1, 1997, however, the funds were empowered to provide up to half of their financial support in the form of interest-free loans. The procedures and conditions necessary for extending loans have not yet been sufficiently developed, thus grants remain the only disbursement mechanism used in practice.

With regards to financing the construction and modernisation of investment projects (e.g. environmental protection facilities, installations), the funds cover partial costs only, with additional finance being provided by other sources, such as the investor's or local government budget. Non-investment projects or activities may be financed in full by the funds.

Table 13.2: Aggregated expenditures of the environmental funds system in Belarus by environmental sector (mln USD; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Construction and renovation of treatment plants	7.7	1.8	21.4	44.8	34.3
Purchase of instruments and equipment	5.6	1.5	4.5	5.9	3.6
Monitoring, information systems and supervision	0.5	0.2	1.5	2.8	2.4
Soil, land, nature protection		0.1	1.0	8.0	6.7
Training of MoE staff, intern. co-operation, public awareness	0.1	0.0	0.1	0.9	0.8
Research	1.8	0.4	1.2	1.9	0.9

Source: Table II.13.3 in Annex II.

6. Funding Cycle

The funds' resources are spent on projects and activities approved in budgets: the Republican Fund's budget is prepared annually by the MoE; other funds' budgets are prepared semi-annually by their respective environmental committees. The budgets are also approved by the Government and are discussed in advance by all departments in the MoE and approved by the Minister. Disbursement of the funds' financial resources is done on the basis of contracts signed with the implementing organisations.

Economic entities, applying for support from the funds, must submit applications to the appropriate bodies of the MoE. These applications are considered by the corresponding MoE departments and regional/local environmental committees, which decide if a project/activity should be included into the budget to receive support from the fund.

CHAPTER 14

KAZAKHSTAN: THE NATIONAL ENVIRONMENTAL PROTECTION FUND

Bulat Esekin

Head of the Kazakh National Environmental Action Programme Center

1. Background and Objectives

With the aim of strengthening the role of economic mechanisms in natural resource management in the Republic of Kazakhstan and securing financial resources for environmental protection and rehabilitation measures, the Cabinet of Ministers issued Decree No. 1024 in October, 1993 (later amended in 1994) regarding the establishment of environmental funds. The Decree provided for:

- the establishment of the Republican Environmental Fund under the Ministry of Environment and Bioresources (renamed in 1997 the “Ministry of Environment and Natural Resources”);
- recommendations made to the heads of regional government administrations, and Almaty and Leninsk city administrations, to set up regional extra-budgetary environmental funds under their corresponding environmental and bio-resource departments;
- approval of Model Regulations for regional extra-budgetary environmental funds and the Republican Environmental Fund as well as of “Procedures for Collecting Pollution Charges.”

In 1997, amendments to Kazakhstan’s Environmental Protection Law (first enacted by Parliament in 1991), re-established the “National Environmental Protection Fund” as a legal entity, consisting of a National Fund and regional environmental protection funds. Following these 1997 amendments, regulations for the funds were drafted. More recently, however, the funds have lost their “extra-budgetary” status and their resources have been consolidated back into the state budget.

The objectives of the National Environmental Protection Fund (the “Fund”) are to support:

- the development and implementation of nation-wide environmental programmes;
- the rehabilitation of areas affected by natural disasters and the protection of natural sites of inter-regional significance;
- activities required to meet the country’s international environmental commitments;
- research and development work on cleaner and resource-saving technologies, environmental policies and standards, and environmental safety measures;
- the creation of environmental databases;
- international environmental co-operation, and the dissemination of international environmental management experience;
- development of the country’s environmental monitoring system;
- environmental education and awareness raising, including the training of environmental authorities and promotion of experience exchange, the organisation of environmental exhibitions, contests, etc., and the stimulation of more efficient environmental protection measures.

Total revenues and expenditures of the Fund in 1993-1997 are shown in Table 14.1.

Table 14.1: Total revenues and expenditures of the Fund (mln USD; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	10.30	4.03	1.79	3.45	9.73
Total expenditures ¹	9.20	2.87	1.68	3.12	3.46

Notes: 1) Within "Total expenditures", the Fund's overhead and administration expenses have not been reported separately.

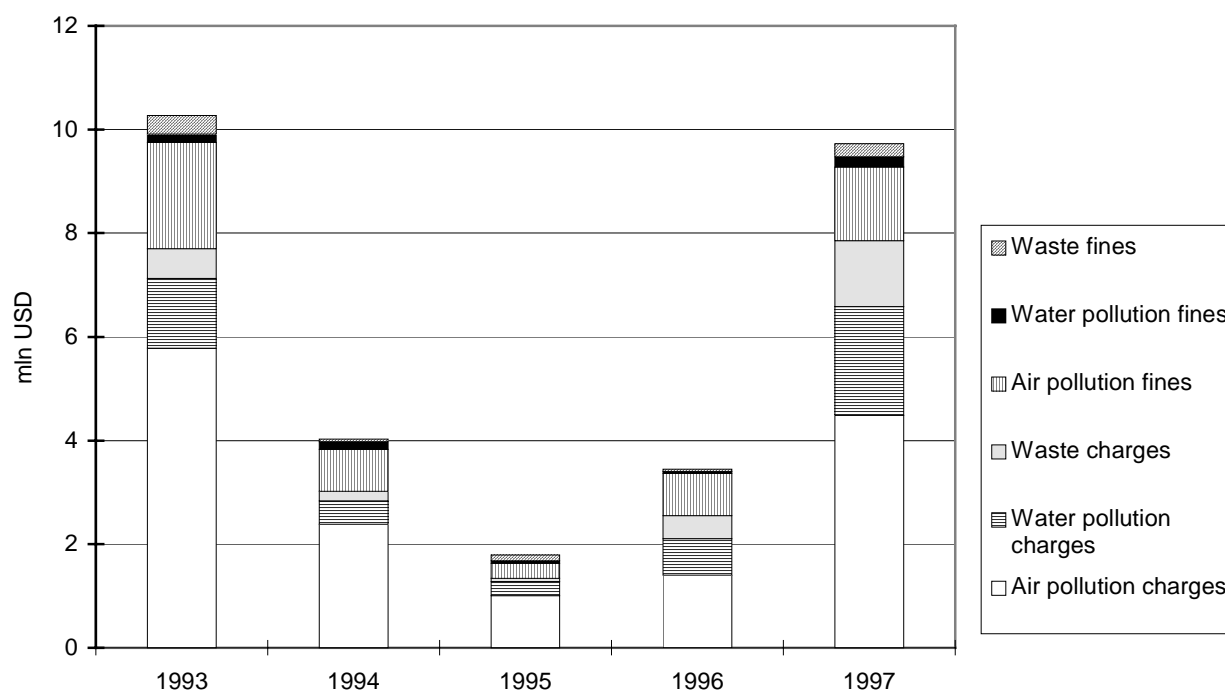
2. Management and Administration

Despite having its own legal identity, the Fund's resources are subject to the regular State Budgetary procedures. The financial resources of the Fund are held in a special account by the Ministry of Finance (MoF) and are disbursed by the MoF according to the Fund's budget. The Fund's budget is approved by the Ministry of Environment and Natural Resources' (MoE) Group of Senior Experts, and submitted for further review and approval by the MoF and eventually the Government. Regional environmental funds are managed by the regional governments.

3. Revenues

The various sources of revenue to the Fund are illustrated in Figure 14.1. The Fund's major source of revenue is pollution charges. Basic charge rates and charge payments due are calculated by the regional environmental authorities. Charges are collected by the Tax Authorities; 30% of collected charges are earmarked for the Fund and transferred into the general State budget account.

Figure 14.1: Fund revenues (mln USD; nominal values based on annual average exchange rates).



Source: Table II.14.2 in Annex II.

Other sources of revenue for the Fund include: fines for the violation of environmental legislation; income received from the sale of confiscated hunting and fishing equipment; and, compensation for

damages caused by environmental degradation. Compensation for environmental damages may be paid to the Fund or directly to victims (physical or legal persons). As it is difficult to estimate the amount of revenues which will be generated by fines and compensation claims, the Fund often receives more revenues than expected in its budget forecasts.

Existing legislation, however, allows polluters to reduce their pollution charge payments (e.g. through exemptions or reduced charge rates) under certain circumstances, including the:

- sustained reduction of emissions of harmful substances and waste quantities;
- production of environmental protection equipment, materials and reagents, devices and instruments for environmental monitoring and waste recycling;
- construction, modernisation and repair of environmental protection facilities; and,
- provision of environmental services.

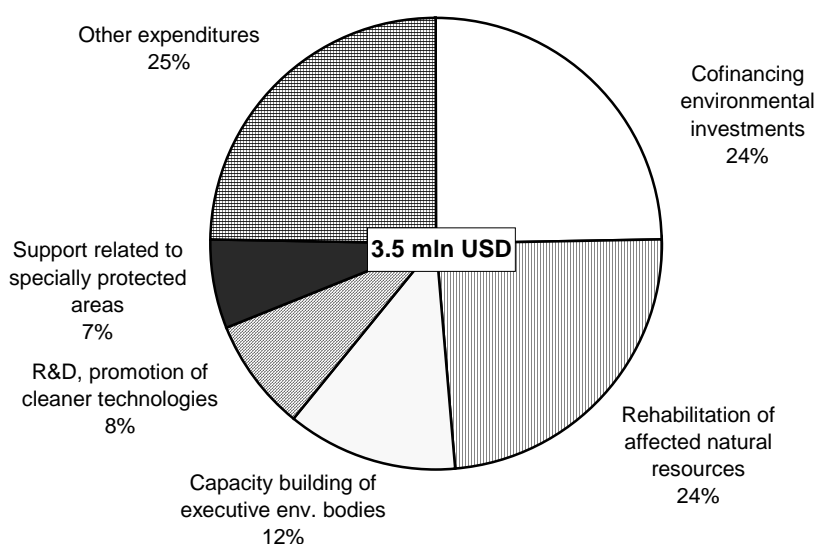
Each year the State Budget includes a special line indicating the amount available for the Fund to spend that year. As the Fund's revenues are governed by the Law on the State Budget, any unspent money that remains in the Fund's budget at the end of the year cannot be carried over and used by the Fund the following year.

4. Spending Strategy and Expenditures

The Fund's long-term spending strategy is broadly outlined in the MoE's "Plan of Priority Measures". These priorities are based on an analysis of the state of the environment and environmental factors adversely affecting public health.

The structure of the Fund's expenditures in 1997, all of which are disbursed in the form of grants, is depicted in Figure 14.2 (broken down according to the Fund's own reporting system).

Figure 14.2: Fund expenditures in 1997.



Source: Table II.14.3 in Annex II.

5. Evaluation, Reporting and Public Information

Annual reports on the use of the Fund's financial resources are reviewed by the MoE's Group of Senior Experts and are then submitted to the Government for approval. (Annual reports on the use of regional funds' financial resources are submitted by regional environmental authorities to the heads of their government administrations and the MoE.)

CHAPTER 15

KYRGYZSTAN: REPUBLICAN AND LOCAL ENVIRONMENTAL FUNDS

Valentina Nekrasova

Formerly Executive Director of the Republican Environmental Fund

1. Background and Objectives

In January 1990, the Commission for the Improvement of Economic Mechanisms within the USSR Council of Ministers agreed to conduct an experiment in a number of Soviet Republics, Kyrgyzstan amongst them, to introduce pollution charges. Since then, Kyrgyzstan has experienced a trend involving more active implementation of economic instruments in the regulation of environmental protection and use of natural resources. This trend, facilitated by the establishment of Environmental Protection Committees at the state and local levels, has also witnessed the establishment of environmental funds to collect and disburse the revenues generated from pollution charges.

Kyrgyzstan's Environmental Protection Act was adopted by Parliament in April 1991. In accordance with this Act, an integrated environmental fund system, having executive units at the Republican and local levels, was established by Presidential Decree in 1992 with the aim of: "...securing finance to support environmental protection measures, the stewardship of natural resources, the remediation of consequences from environmental accidents and disasters, and compensation for the damages they have caused...". A subsequent Presidential Decree in 1996 amended the previous Decree on environmental funds as part of broader changes made to the structure and composition of the Government and governmental agencies. An important element of the 1996 Decree was that as of 1 July 1996, the percentage of income that local environmental funds should transfer to the Republican Environmental Fund was raised from 15 % to 25%.

Total annual revenues and expenditures of the Kyrgyz environmental fund system from 1993-1997 are shown in Table 1.

Table 15.1: Aggregated annual revenues and expenditures of the Kyrgyz environmental fund system from 1993-1997 (*thousand USD*; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Total revenues	83.30	166.14	354.07	444.03	491.40
Total expenditures	78.40	162.45	345.38	445.75	460.38

Source: Table II.15.1 in Annex II.

Notes: These figures include the value of barter transactions facilitated by the funds and "pollution charge credits" awarded by the funds. Under the pollution charge credit scheme, polluters are allowed to withhold pollution charge payments in exchange for commitments to invest in pollution reduction measures. Revenue figures exclude payments made by the Kumtor Gold Mining Company directly to the Republican Fund.

2. Management and Administration

Prior to March 1997, the Republican and local environmental funds functioned within the administrative jurisdiction of the State Committee for Environmental Protection (now the Ministry of Environmental Protection "MoE"); the funds were not independent legal entities and did not have their own bank accounts. At present, however, the Republican Environmental Fund is registered at the

Ministry of Justice as an independent legal entity and has its own account at a commercial bank. The local funds are considered subsidiary units of the Republican Fund.

The Republican and local environmental funds are managed by an Administrative Board of seven members. The Board members are selected by the MoE's "Group of Senior Experts" for a period of three years. (The Group of Senior Experts is chaired by the Minister of Environmental Protection and consists of MoE Deputy Ministers, other senior officials from the MoE and a representative of the Prime Minister's Office.) The Board is also chaired by the Minister of Environmental Protection and its other members are: a Deputy Minister of Environmental Protection, the Executive Director of the Fund, a member of the Government, a Head of Department of the Ministry of Finance, the Director of the National Center for Environmental Strategy and Policy, and an academic from the National Academy of Science.

The Administrative Board:

- approves the regulations for the funds, amending them periodically as needed;
- prioritises programmes and projects to be supported by the funds (with advice from the National Center for Environmental Strategy and Policy) and allocates the funds' financial support among those programmes and projects;
- approves the funds' annual reports (e.g. activity reports, financial reports and balance sheets).

The implementing body of the Republican Environmental Fund is its Executive Office.

The Executive Office of the Republican Environmental Fund is responsible for:

- ensuring that 25% of the revenues of the local environmental funds are transferred as scheduled to the account of the Republican Fund;
- checking the balance sheets of the Republican and local environmental funds and submitting them for approval to the Administrative Board;
- controlling payments made by polluters to the local environmental funds;
- collecting data on the funds' revenues and expenditures, which are presented quarterly to the Chairman of the Administrative Board;
- implementing measures to improve the collection of pollution charges;
- reviewing and adjusting pollution charge rates;
- ensuring that pollution charge payments are calculated properly by polluters in accordance with the methodology approved by the MoE.

The Executive Office staff includes: an Executive Director; environmental economists; project experts; a barter expert; an accountant; and, a lawyer.

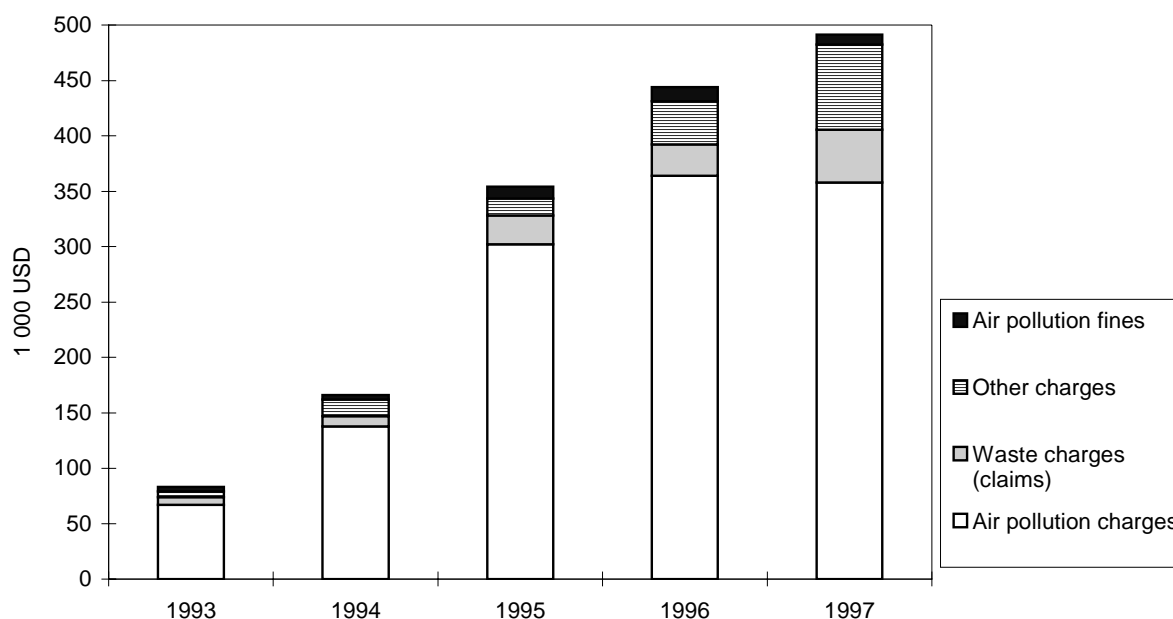
3. Revenues

As shown in Figure 15.1, the funds' main sources of revenue are pollution charges (~ 83% in 1997); pollution fines and other fees also contribute to the funds' revenue base. Pollution charges are collected initially by the local Control and Inspection Departments of the MoE and transferred to the accounts of the local funds. As of 1996, 25% of these revenues are to be transferred each year to the account of the Republican Fund. (All environmental charges and fines paid by the Kumtor Gold Mining Company are paid directly into the account of the Republican Fund.)

The revenue flow to the environmental funds is adversely affected by a number of factors: the existing financial situation in the country makes full and timely collection of pollution charges and fines difficult; the enforcement of environmental legislation is not as rigorous as it should be; and, the real value of the revenue collected is eroded by relatively high inflation. Weaknesses in the environmental monitoring system hinder detection of environmental violations, thus diminishing the amount of payments collected in the form of fines.

Pollution charge credits are commonly granted in Kyrgyzstan. Under the pollution charge credit scheme, polluters can, subject to approval by relevant authorities, withhold pollution charge payments in exchange for commitments to invest in environmental protection measures. The funds are obliged to monitor the implementation of such measures and to file a report once they have been completed. In practice, however, the criteria for defining what constitutes “environmental protection measures” are not adequately developed.

Figure 15.1: Sources of revenues of the Kyrgyz environmental fund system (*thousand USD; nominal values based on annual average exchange rates*).



Source: Table II.15.2 in Annex II.

Note: “Other charges/payments” includes revenues from: income collected at environmental checkpoints, fees for the use of land for construction purposes, and fees for environmental assessments rendered by fund staff.

4. Spending Strategy and Expenditures

The funds’ general priorities are to finance:

- the development and implementation of programmes and projects aimed at improving environmental quality and ensuring the environmental safety of the population;
- the construction and modernisation of environmental protection facilities;
- the design and implementation of resource-saving and clean technologies.

The funds’ spending priorities are also shaped by the “State Environmental Protection Programme up to the Year 2005”. This programme, developed by the MoE following the instruction of the Kyrgyz Security Council in August 1997, consists of three sub-programmes: short-term (1998), medium-term (1998 - 2000) and long-term (2000 - 2005). The programme sets out the necessary environmental measures to be taken, identifies sources to finance them and specifies the agencies responsible for their implementation. In follow-up to the programme, the Republican Fund has been given the task to identify and elaborate institutional options for: establishing an integrated state environmental monitoring system; preparing a strategy for the phase-out of lead in fuel; implementing the biological and landscape diversity conservation strategy; developing state ambient air quality norms and standards; and implementing the pollutants release and transfer register.

A number of environmental investment projects have been co-financed by local funds, typically in co-operation with local authorities and enterprises. These projects have included: conversions to electric heating; the construction of dams, dikes and landslide-protection barriers; the construction of wastewater treatment plants and sludge collectors, etc. For its part, the Republican Fund has, in 1998, allocated about 1/3 of its expenditures on such projects.

Table 15.2 summarises how the funds spent their resources from 1993-1997.

Table 15.2: Aggregated annual expenditures of the Kyrgyz environmental fund system according to area of support (*thousand USD*; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Regional programmes	21.31	66.51	85.03	88.60	185.28
Special protected areas	8.69	14.30	30.22	29.66	30.04
Monitoring	7.05	16.24	28.84	34.58	29.75
Environmental protection authorities	39.34	63.47	197.23	287.28	210.37
Environmental education	1.97	1.94	4.07	5.62	4.95
TOTAL expenditures	78.36	162.45	345.38	445.75	460.38

Source: Table II.15.3 in Annex II.

5. Evaluation, Reporting and Public Information

Each year, the Administrative Board prepares a report on the results of the funds' activities which is first considered and approved by the MoE's Group of Senior Experts before being submitted to the Kyrgyz Government. The mass media also periodically publish reports about the activities of the funds.

The Financial Inspectorate of the Ministry of Finance has audited the Republican and local environmental funds' financial accounts, which were found to be in compliance with state standards. The broader operations of the funds have not, to this point, undergone independent evaluation.

6. Major Achievements

In addition to the accomplishments of the local and Republican funds mentioned above, the following achievements and positive developments of the Republican Fund can be noted:

- six projects have been financed in nature reserves involving biodiversity and landscape conservation, thus protecting flora and fauna species of Kyrgyzstan;
- a programme for developing the concept of "Environmental Security" for the country has been approved. The programme elaborates the major principles, strategic objectives, targets and priorities for ensuring environmental security, as well as the concept of environmental quality assessments;
- a database of all polluters has been created which will aid monitoring of compliance with environmental legislation and the timely payment of pollution charges;
- the funds' financial accounting procedures have been systematised;
- control over the use of the funds' financial resources has been tightened.

7. Challenges and Future Prospects

The funds, and indeed the entire system of environmental management and protection in the country, face a number of important challenges. The various mechanisms currently employed in the system –

administrative, legal and economic – are not sufficiently integrated into a cohesive approach to environmental quality control, thus undermining their potential. Too little attention is paid to issues relating to compliance and enforcement with the existing environmental legislation. The lack of adequate financial resources prevents needed investments in environmental protection facilities, new technologies and other environmental measures as planned.

As for the funds themselves, their legislative basis should be updated and brought more into line with best practice in the CEE/NIS region. The funds should also, to the extent possible, focus their support on environmental investments (e.g. construction of major treatment facilities, implementation of cleaner technologies), and reduce their support for activities which should be financed through regular budgetary expenditures. Such a shift would take greater advantage of the special opportunities the funds offer as mechanisms for financing environmental protection during economic transition and should also strengthen the funds' ability to attract international financial assistance.

The funds should also revise their spending priorities so as to better address:

- problems related to the contamination of potable water and its treatment;
- the restoration of top soil (in agricultural and forest areas);
- pollution abatement;
- the management of uranium ore tailings; (the tailings are radioactive and contain heavy metals, and thus pose major environmental hazards).

On the disbursement side of the funds' activities, it would be helpful to develop additional financing mechanisms, such as soft loans. There are also long-term plans for augmenting the funds' resources by allowing them to make investments in commercial banks, equities and securities so as to generate additional revenues.

CHAPTER 16

MOLDOVA: THE NATIONAL AND LOCAL ENVIRONMENTAL FUNDS

Andrei Issac and Tatiana Pleshko
Environmental Policy Division, Ministry of Environment

1. Background and Objectives

Environmental funds in the Republic of Moldova were established by Government Decree No. 89 of 1990, which provided “Temporary Regulations for the Establishment and Use of Environmental Funds”. The Decree envisioned the establishment of more than 40 local environmental funds under local administrations and a National Environmental Fund under the State Department for Environmental Protection (now the Ministry of Environment). Subsequently, the status of environmental funds was strengthened in the Environmental Protection Law, adopted by the Parliament in 1993.

An excerpt from the Environmental Protection Act reads: “the extra-budgetary National Environmental Fund and extra-budgetary local and municipal environmental funds are established to mobilise additional financial resources for environmental protection measures and the restoration of ecosystems. Not less than 70 per cent of the financial resources of local environmental funds is to be used for pollution abatement and prevention measures, for environmental improvements and the mitigation of pollution consequences”.

Total revenues and expenditures of the National Environmental Fund from 1993-1997 are indicated in Table 16.1.

Table 16.1: Total revenues and expenditures of the National Environmental Fund (*thousand USD*; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	22.3	23.5	42.9	45.4	36.2
Total environmental expenditures	18.0	24.1	41.9	48.7	35.5

Source: Table II.16.1 in Annex II.

2. Management and Administration

The National Environmental Fund operates within the administrative structure of the Ministry of Environment (MoE), while local environmental funds are managed by local government administrations. The funds do not have their own legal identity. The National and local environmental funds are administered by Administrative Boards. The National Environmental Fund’s Administrative Board consists of five members: the Minister for Environment (who is Chairman of the Board); a permanent representative of the Government; a permanent representative of the Parliament; a representative of the National Center for Hygiene and Epidemiology; and, a representative of an environmental NGO. Administrative Boards of the local funds typically consist of: the Head of the local administration (Chairman of the Board); the Head of the local Unit of the MoE; a representative of the local unit of the Center for Hygiene and Epidemiology; a representative of an environmental NGO; and a representative of the regional Parliamentary Environmental Committee.

The Administrative Boards are selected for a period of four years. They are responsible for ensuring that the funds’ resources are used efficiently, pursuant to the existing legislation. The major functions of the Administrative Boards are:

- approval of the guiding documents for the funds;
- approval of the budgets and programmes of the funds;
- approval of the priorities of the funds;
- making decisions on the financing of projects, the structure and size of financial support, co-financing arrangements, etc.;
- and approval of quarterly and annual reports on the Funds' activities;

In the past, decisions on the allocation of the financial resources of the National Environmental Fund have been made by the Board Chairman. The Finance and Accounting Unit in the MoE is responsible for the book-keeping of the National Fund.

3. Revenues

The Environmental Protection Act defines the following sources of revenues for the funds:

- a portion of fees for natural resource use;
- pollution charges;
- fines, and claims for compensation for damages caused by the violation of environmental legislation;
- income from the sale of confiscated hunting and fishing equipment and hunting/fishing products;
- voluntary donations.

However, under the Law on the Budget System, natural resource use fees are envisioned as a major revenue source for local government budgets. Thus, this law, and some other legislative acts which pertain to activities of environmental funds, contradict each other and weaken the legal basis for the funds.

Similarly, pollution charges are not a major revenue source for most of the funds. Some local administrations decided independently to introduce pollution charges, but such charges are not collected throughout the entire country. In practice, only the Chisinau Municipal Environmental Fund collects revenues from pollution charges. Revenue from charges is also affected by pollution charge waivers. Such waivers allow polluters to withhold payments to the funds on the condition that these resources are invested in environmental protection measures.

The procedures through which revenues are channelled to the local environmental funds (except for the Chisinau Municipal Environmental Fund) are as follows: payments are first made by polluters to the accounts of the appropriate local units of the MoE. Of these payments, 63% are channelled to the local environmental funds, 32% to the National Environmental Fund and 5% remain at the local MoE agency for their own use. As most of the revenues are derived from pollution fines (and not charges, which are collected only by the Chisinau Municipal Environmental Fund) the overall volume is very small. The Chisinau Municipal Environmental Fund collects its revenues through pollution charge payments made directly to its account by polluters. These revenues are sufficient enough for that fund to finance the work of environmental economists at the Municipal Environmental Department. Of all revenues collected by the entire fund system in 1996 (approximately 324 286 USD), the Chisinau Municipal Environmental Fund accounted for 66%, while the National Fund's revenues (transferred by the local funds) amounted to 14%, and the other local funds 21%. Any unspent money which remains on the accounts of the funds at the end of the year is carried over and available for them to spend the following year.

4. Spending Strategy

The Environmental Protection Act stipulates that the funds' resources can be spent on:

- the development and implementation of local and national environmental programmes for the protection of biological diversity, reforestation, protection of riparian ecosystems and landscapes;
- the construction, modernisation and repair of environmental facilities;
- the purchase of technology, equipment, instruments, and materials for the MoE and its structural units;
- environmental research, as commissioned by the MoE;
- environmental training and experience exchange;
- the dissemination of environmental information;
- the initiation and maintenance of international environmental co-operation;
- bonuses for individuals and groups who have made considerable contributions to environmental protection.

Apart from these instructions, and some general guidelines provided in Government Decree No. 89, the funds do not have their own, unique long-term strategies for allocating resources. The Environmental Policy Division of the MoE develops annual spending plans for the National Environmental Fund. However, due to unstable cash flows and the use of the Fund's financial resources to finance short-term activities/projects, these plans often go unrealised.

5. Expenditures

The funds' expenditures are related primarily to the implementation of the National Environmental Action Programme, the fulfilment of international commitments and the implementation of projects aimed at reducing air, water and waste pollution. The National Fund is also in the process of establishing a special "reserve fund" for financing emergency needs.

Table 16.2 shows the primary areas of expenditure for the National Fund from 1993-1997. Because of the very limited resources at its disposal, the National Fund has not been able to finance capital investment projects.

Table 16.2: National Fund expenditures by sector (*thousand USD*; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Environmental protection/nature conservation ¹	3.85	1.23	1.11	2.67	5.61
Environmental education and public awareness ²	2.06	8.08	28.31	33.24	23.60
Monitoring/information systems and other needs of environmental authorities ³	12.09	14.74	12.44	12.83	6.33
TOTAL expenditures	17.99	24.05	41.87	48.74	35.54

Source: Table II.16.3 in Annex II.

Notes: 1) Includes support for local environmental programmes. 2) Includes expenditures for training environmental professionals and supporting exchange of experience, international and national seminars and conferences on environmental issues, and environmental publications. 3) Includes expenditures on laboratory equipment, instruments, technical hardware and transport vehicles for the MoE and its structural units.

6. Funding Cycle

Applications for support from the National Environmental Fund can be addressed personally to the Minister of Environment. Applications are reviewed by the Fund's Administrative Board (chaired by the Minister). If an application is approved for funding, the parties prepare a contract which is signed by the Minister, the MoE's Chief Accountant and the applicant. The money is then transferred to the applicant's bank account.

The funding procedures at the National and local funds could be improved in a number of ways: resource allocation decisions could be more transparent; application forms could be standardised; procedures for appraising and selecting applications could be more clearly specified and publicised; the use of the funds' resources could be more closely monitored and controlled, etc.

7. Evaluation, Reporting and Public Information

The local environmental funds, including the Chisinau Municipal Environmental Fund, report to the National Environmental Fund (quarterly and annually respectively) the amounts of the revenues collected and expenditures made over each reporting period. The MoE processes the data and submits the information to the State Statistics Department. The National Fund's accounts, and use of the Fund's resources, are monitored and controlled by the national Tax Inspectorate and the Environmental Prosecutor's Office.

8. Challenges and Future Prospects

The main challenges, faced by environmental funds in Moldova, are:

- establishing a sufficiently strong and consistent legislative and regulatory basis;
- establishing a common institutional basis;
- developing and applying clear management systems and procedures for the funds' activities;
- improving the standard reporting formats used by the funds;
- improving the transparency in decision-making;
- increasing, diversifying and stabilising the revenue base;
- designing and applying mechanisms for collecting payments and encouraging and/or compelling polluters to pay;
- making greater use of market-based financing mechanisms.

To address these challenges, existing legislation has been amended, and new laws and regulations developed. The Strategies and Programmes Unit at the MoE drafted a "Law on the Amendments to the Environmental Protection Law" and a "Law on Pollution Charges". These two laws were adopted by the Parliament in February 1998. Draft Regulations for the Environmental Funds have been submitted to the Government for approval. Regulations governing the activities of the funds' Administrative Boards and regulations concerning the environmental economic services of the local MoE agencies have also been developed and approved by the MoE. These laws and regulations have resolved some of the contradictions in the existing legislation and have established a common institutional base for the funds. It is also expected that the MoE and State Statistics Department will review the formats of statistical reports used by the funds.

The recent legislation and regulations also affect fund revenues. Pollution charges and other revenues are to be channelled directly to the bank accounts of local environmental funds (instead of first to the accounts of the local MoE agency). The introduction of pollution charges on a nation-wide basis will also increase the revenue base of the funds and help make both the revenue and expenditure operations more predictable. Other provisions of the legislation introduce new environmental charges. It remains unlikely, however, that the problem of non-payment of charges will be fully resolved in the near-term,

as the efficiency rate of collection of taxes and other charges is generally rather low, notwithstanding the sanctions envisaged in the existing legislation.

The most substantial changes in the new laws and regulations are associated with the funds' resource allocation and disbursement mechanisms. Project cycle procedures are being introduced, and only projects which have undergone proper appraisal will be able to receive support from the funds. The disbursement mechanisms have also been diversified; now funds can provide grants, interest-free or soft loans, loan guarantees, and interest subsidies. Furthermore, the new laws and regulations envisage closer co-operation between the funds and other financial institutions, such as commercial banks, other funds, etc.

To facilitate implementation of the new laws and regulations and more efficient operation of the funds, the MoE has prepared legal and methodological guidelines (including criteria, mechanisms and procedures), to assist staff who will identify and assess projects and monitor their implementation. The guidelines have been developed jointly by senior staff of the MoE and the Ministry for Economy and Reforms. The MoE also plans to organise training for fund staff on use of the guidelines.

CHAPTER 17

RUSSIA: THE FEDERAL ENVIRONMENTAL FUND

Vladimir Haimin

Deputy Executive Director, Federal Environmental Fund

1. Background and Objectives

The Russian Federation has a complex system of environmental funds which emerged in 1989-1991 following the Federation Council of Ministers Decree "On the Fundamental Restructuring of the Environmental Protection System in the Country" (1988). Funds were established at the Federal level (one), under the 89 "constituents" (subjects) of the country and at numerous local levels of government. The funds operated under the authority of the respective regional, district, and city Executive Committees of the Councils of People's Deputies and the Councils of Ministers of the Autonomous Republics.

To help implement the Federal Act "On Environmental Protection" of 1991, the Federal Environmental Fund ("FEF" or "the Fund") was established by Government Decree No. 442 entitled "On the FEF of the Russian Federation and on Environmental Funds on the Territory of the Russian Federation". In setting out provisional regulations for the funds, Decree No. 442:

- "recommends the state authorities of the Republics constituting the Russian Federation, the administrations of oblasts, krais, autonomous entities, the cities of Moscow and St. Petersburg, and local administrations to establish extra-budgetary funds and to approve regulations for these funds.
- stipulates that the Ministry of Environment and Natural Resources and the Ministry of Finance should provide the necessary methodological assistance in establishing the system of extra-budgetary environmental funds, and in particular, in developing the regulations for these funds.
- stipulates that 10% of the revenues collected by the sub-federal environmental funds in the form of pollution charges (air, water, waste charges) and charges imposed on other types of pollution, compensations for damages, fines as well as income from the sale of game harvested through illegal hunting and fishing, should be transferred to the FEF..."

Pursuant to Decree No. 442 and its regulations, the FEF's financial resources cannot be allocated for measures other than environmental protection. This is ensured through the Fund's project identification and selection procedures as well the control exercised by state financial authorities and the Government.

According to its regulations, the FEF functioned as an extra-budgetary fund from 1992 through April 1, 1995. Since then, pursuant to the Federal Law "On the 1995 Federal Budget", the revenues and expenditures of the Fund are listed as a special budgetary item for earmarked use. In spite of this apparent legal consolidation into the state budget, the FEF continues to operate as an extra-budgetary fund pursuant to the 1991 act "On Environmental Protection" and Government Decree No. 442 of 1992. Changing of the extra-budgetary status of the Fund in practice and bringing it into line with the 1995 Budget Law would require amendments to the 1991 Act and a new Government Decree.

According to the Fund's regulations, the major objectives of the FEF are to:

- finance federal programmes and research and development projects designed to achieve environmental improvement and environmental safety of the population;
- provide finance for the implementation of environmental programmes and measures; mainly through co-financing of projects;
- provide economic incentives for more efficient use of natural resources, for the introduction of cleaner technologies and construction of treatment facilities;
- support bio-diversity protection measures;

- support the development of international co-operation in the field of environmental protection, and finance environment-related programmes as part of this co-operation;
- help improve environmental monitoring;
- assist the development of environmental training and education.

The magnitude of the FEF's activities in pursuit of these objectives is illustrated in Table 17.1 below, which summarises the Fund's annual revenues and expenditures from 1993-1997.

Table 17.1: Annual revenues and expenditures of the FEF (mln USD; nominal values based on average annual exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	3.631	9.081	9.443	13.077	17.731
Environmental expenditures	2.620	7.301	8.271	12.759	16.327
Fund overhead/administration costs	0.121	0.181	0.137	0.356	0.661
Other expenditures	0.034	0.059	0.493	0.603	0.195
Total expenditures ¹	2.774	7.541	8.900	13.719	17.183

Source: Table II.17.1 in Annex II.

Notes: Totals might not equal the sums of individual sub-components due to rounding.

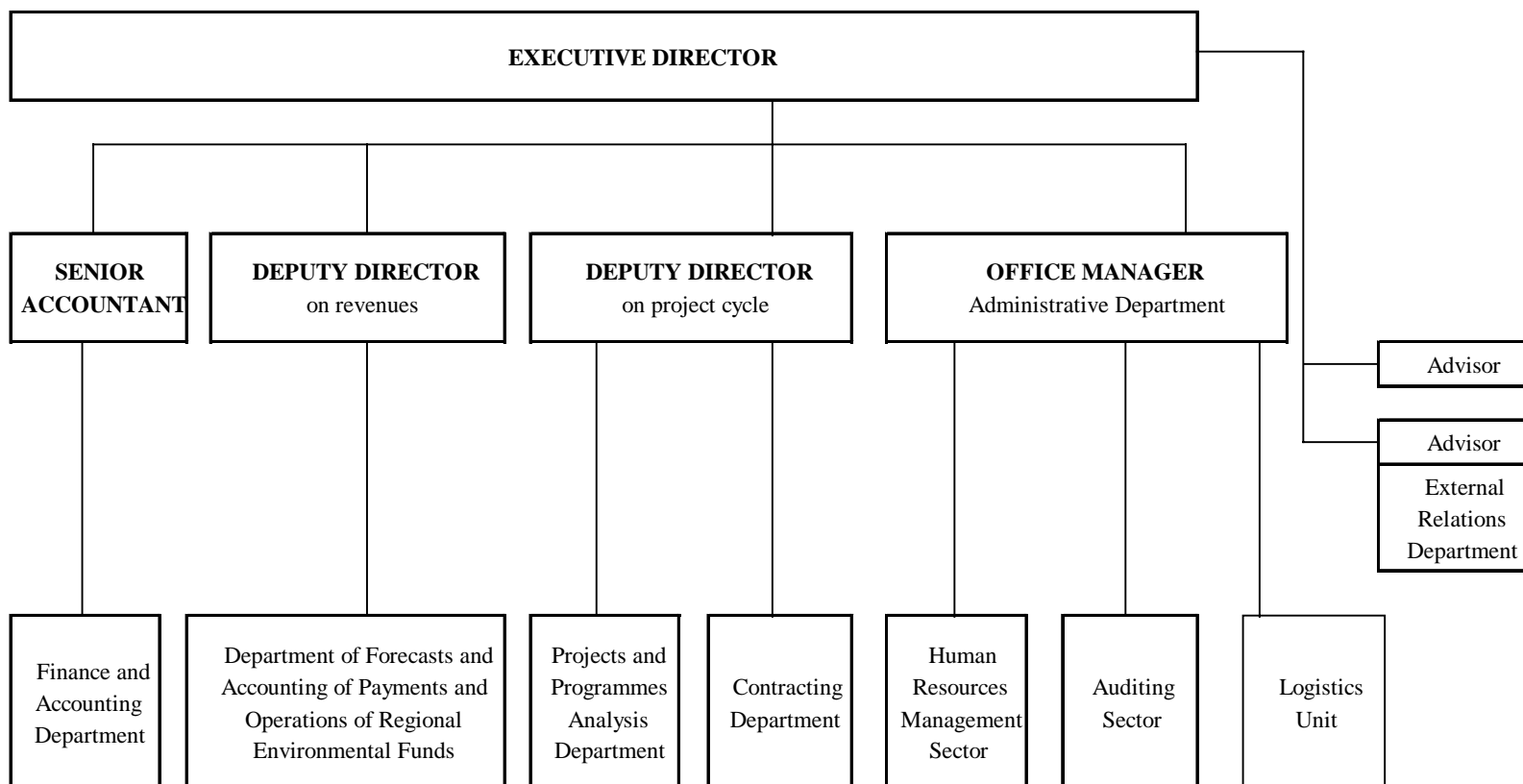
Editor's Note: 1) Some inconsistencies appear in the expenditure data reported for 1993-95, thus the data should be treated with caution.

2. Management and Administration

The FEF is supervised by a Board, whose members are selected by the "Senior Experts Group" of the State Committee on Environmental Protection (SCEP). The Senior Experts Group includes: three deputy heads of departments of SCEP; the Chairman of the SCEP of the Moscow oblast; the Deputy Governor of Nizhegorodsky oblast; the Deputy Director of the Institute of Geography of the Russian Academy of Science; the Editor-in-Chief of the "Green World" newspaper; the Director of the Environmental Research and Development Institute, and others. The Board members elect the Chairman of the Board by a majority vote. (The FEF Board Chairman is also a member of the Senior Experts Group.) Currently the Board consists of 18 members, including representatives of: Government, SCEP, Ministry of Natural Resources, Ministry of Economics, Ministry of Finance, Federal Agency for Hydro-meteorology, Forestry Service, Trade Unions, National Pollution Abatement Facility, President's Supreme Environmental Council, Regional Environmental Committees, and the mass media. All members serve for a period of three years. The Board works in accordance with its regulations, approved by the Senior Experts Group in 1994. The Board is responsible for;

- appointing the Fund's Executive Director;
- adopting the budgets and workplans prepared by the Executive Office;
- approving the pay of the Executive Office staff; and,
- making decisions on awarding financial support for environmental projects.

ORGANISATIONAL CHART OF THE FEF EXECUTIVE OFFICE



The Fund's day-to-day operations are carried out by its Executive Office, which is governed by regulations approved by the Board. The Executive Office prepares all documentation concerning the selection of projects for review and decision by the FEF Board. Senior management of the Executive Office, the structure of which is shown in the Organisational Chart, consists of an Executive Director, two Deputy Directors, a senior accountant, an office manager and two advisors. The Office also includes: a Finance and Accounting Department (5 people); a Payment Forecasts and Accounting Department (5); Programmes and Projects Analysis Department (6); Contracting Department (5); External Relations Department (3); Auditing Sector (2); Human Resource Management Sector (2); and Logistics Unit (2). The Executive Office staff have the administrative ranking of chief specialists and higher. The staff have university degrees, with three staff members holding Ph.D.s.

Managing the Fund's profits is the responsibility of one of the Deputy Directors. Financial control over the Fund's activities is exercised by a three-person Auditing Commission, whose members are appointed by the Senior Experts Group of the SCEP.

Pursuant to the FEF regulations, the Fund is within the competence of the SCEP. The salaries of Fund employees are based on the salary structure of the State Committee. Thus, it is in the authority of the SCEP, either directly or indirectly, to appoint the FEF Board, Executive Office staff and the Auditing Commission team and to review the FEF annual Activity Reports prepared for the sessions of the Senior Experts Group. As for broader issues related to environmental policy and financing, the Fund closely co-operates with the Russian Duma's Committee on Environment, (that is, Fund's representatives are invited to participate in the Committee's meetings), the Government administration, the SCEP, the Ministry of Natural Resources, the Hydromet, the regional environmental administrations and regional environmental funds.

3. Revenues

The main sources of revenue for the FEF are pollution charges and fines collected by the regional environmental funds, 10% of which are to be transferred to the FEF, as stipulated by law. (Figure 17.1 reflects the range and level of annual revenues.) As of September 1997, of 89 regional environmental funds 17 were consolidated into the budget. The revenue base of the funds is formed by pollution charges (imposed on air emissions, water discharges, waste disposal and other types of polluting activities) paid by a wide variety of enterprises and organisations, including: hospitals, R&D institutes, laboratories, etc. and even the Environmental Ministries of the Republics, which produce pollution via their large fleets of vehicles and garages, amongst other sources.

In order to set unified procedures for environmental funds to collect payments, the Ministry for Environment and the Ministry of Finance developed and agreed, in co-operation with the Central Bank of Russia, the Regulating Act "On Procedures for Payments to the State Environmental Funds, Made by Enterprises, Citizens, Foreign Legal Entities and Foreign Citizens" as well as the format of the State statistic reporting form. The procedures stipulate that enterprises and organisations as well as foreign legal entities and foreign citizens, that use natural resources on the territory of Russia, should be considered as polluters with obligations to pay pollution charges.

The percentage distribution of pollution charges and fines by type of pollution, as they are transferred to the FEF, reflects the distribution of charges as collected by the system of Environmental Funds of Russia. This means that when the FEF receives periodic revenue transfers from the regional funds, the individual component sources of these revenues (air charges, water charges, etc.), and their amounts are not specifically indicated. For most pollution charges, revenues are distributed among the three-tiered system of funds in Russia in the following manner: an initial 10% flows to the federal budget; 30% remains with the regional funds; 60% is distributed to the local funds; and, 10% is to be transferred to the FEF.

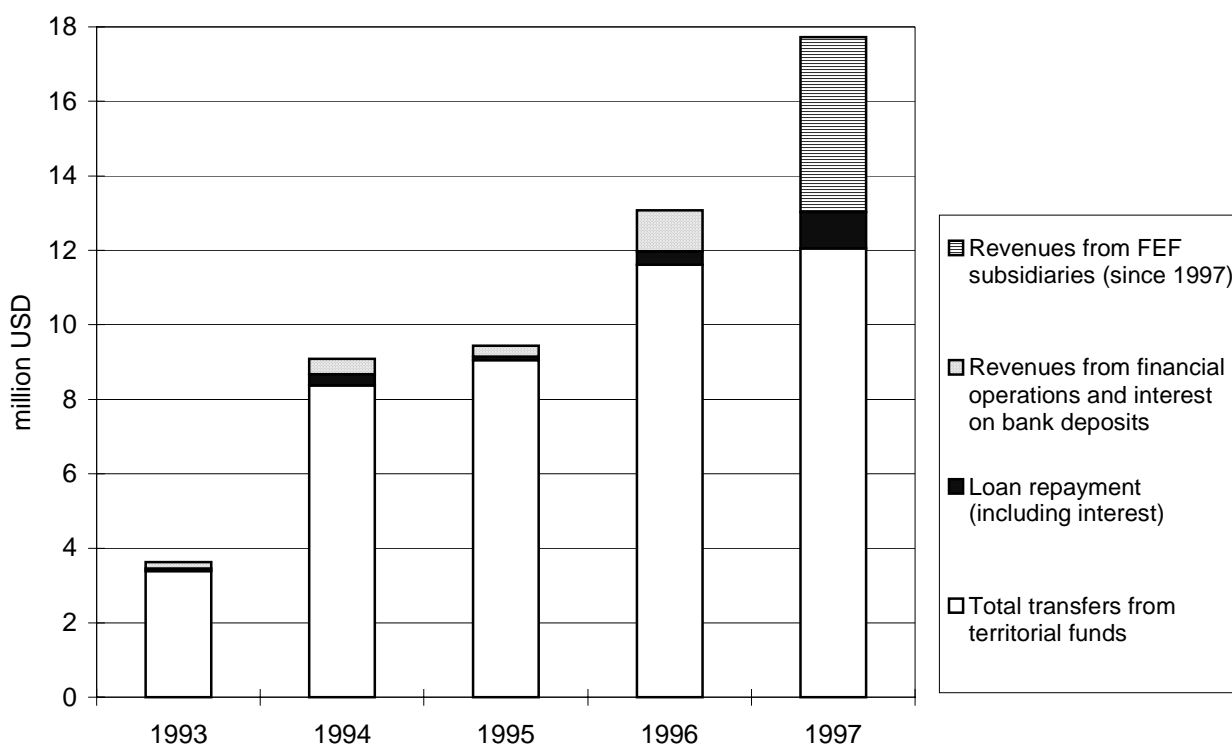
On average, over the period 1993-1996 only half of the expected 10% contributions from the regional environmental funds were actually transferred to the FEF. The efficiency rate of charge collection is

estimated at about 50%. In order to improve the collection rate the FEF takes various measures. For example, one of the FEF Deputy Executive Directors (and the corresponding Department) has as a major task to work closely with the regional funds in order to improve the money transfer to the FEF. The low collection rate is often due to the fact that regional environmental authorities sometimes waive pollution charge payment obligations of enterprises in return for their commitment to use the money for pollution abatement measures. This practice is very common but the actual scale of the amounts involved varies. The regional funds do not monitor the use of withheld payments, as this is an obligation of the regional environmental authorities.

Other sources of revenue for the FEF include profits obtained from financial operations carried out by the Fund and the loan repayments from borrowers. It is also worth noting that any unspent money which remains on the FEF account at the end of the year, is available for the Fund to spend the following year.

As of 1997, the FEF acquired two “subsidiary” units: the Far East Marine Fund (based in the town of Vladivostok) and the Northwest Marine Fund (based in St. Petersburg). These funds are structural units of the FEF which do not have the status of a legal entity, and operate on the basis of regulations approved by the FEF Board. The major revenue sources of the subsidiaries are fines and income from the sale of articles confiscated for violations in the exclusive marine economic zone of the Russian Federation.

Figure 17.1: Fund annual revenues (mln USD; nominal values based on average annual exchange rates).



Source: Table II.17.2 in Annex II.

Note: The item “total transfers from territorial funds” includes revenues collected from pollution charges and fines.

4. Spending Strategy

In September 1993 the Fund's Board selected the federal environmental programmes listed below as priorities to be supported financially by the Fund. These priorities are mainly based on data/information as published in the annual State of the Environment Reports.

- Waste;
- Production of Ozone-Friendly Refrigeration Equipment and Meeting International Commitments in Protecting the Ozone Layer;
- Protection and Efficient Use of the Natural Resources of the Lake Baikal;
- Efficient Use of Water Resources and Water Quality Improvement;
- Improvement of the Environment of the Volga Catchment Basin and Raising its Resource and Economic Potential (The Rehabilitation of the River Volga);
- Improvement of Environment and Health Protection of the Population in the Region of Tula over the Period 1993- 2000;
- Russia's Contribution to the Overall Environmental Improvement in the Catchment Basins of Seas of the Arctic Region;
- Protection and Regeneration of Flora and Fauna Biodiversity, Conservation of the Natural Genetic Fund.

Another priority for the Fund over the past three years has been the creation of an environmental monitoring system. The necessary means for its implementation have already been identified, including aerial, marine and mobile means. Additionally, the FEF is co-financing the implementation of various pilot projects for cleaner production and the purchase of resource-saving technologies and equipment, the construction of waste water treatment facilities, etc.

The Fund's official spending priorities have not changed since 1993, though changes may be considered in the near future. Such changes may not necessarily reflect new environmental priorities. Rather, they may be more associated with political changes. For example, if a foreign partner agrees to co-finance some project, the Fund might reallocate accordingly its financial resources already targeted for other activities, without abandoning that other priority.

5. Expenditures

The major disbursement mechanisms used by the FEF are:

- grants;
- interest free loans;
- soft loans;
- and environmental equity investments.

As can be seen in Figure 17.2, the share of grants as a value of total environmental expenditures is constantly increasing, from 14% in 1993, to almost 50% in 1996. (The annual number of projects receiving grants is also increasing, as shown in Table II.17.4 in Annex II.) During this period, the increasing use of grants was prompted by external constraints (i.e. to compensate for shortfalls in the state budget allocation for the environment). At the same time, the share of loans as a value of total environmental expenditures has decreased over the same period, dropping from 42% in 1993 to 4% in 1996. In 1997, however, the share of grants remained about the same as in 1996 (~50%), while the share of loans (interest-free and soft) increased to about 10%. The co-financing of joint ventures and capital investments has generally accounted for around 50% of the Fund's expenditures. About 62% of all FEF's expenditures have been allocated to programmes and projects contracted by the State Committee on Environmental Protection.

Loans are extended to financially viable projects. Interest-free loans are provided to state environmental organisations only, such as environmental protection committees, subordinated to the State Committee on Environmental Protection. Loans to private enterprises are provided at an interest

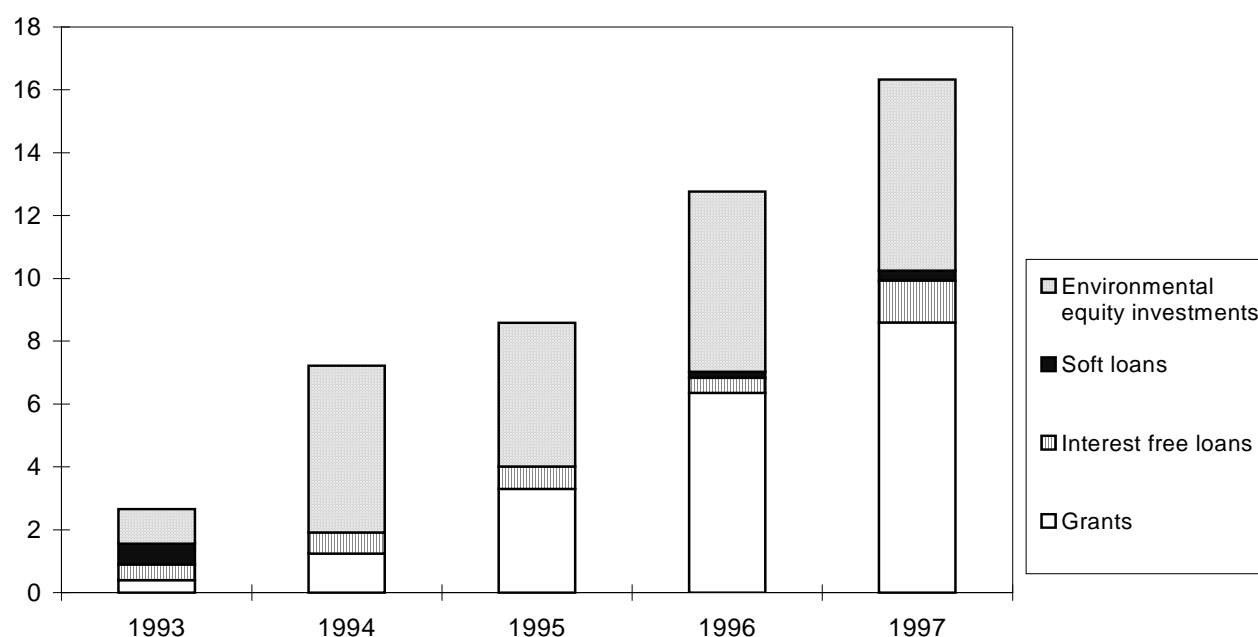
rate that is nearly one-third of the interest rate set by the Central Bank of Russia. While during the first years of its operation the Fund financed 50% or more of a project's cost, recently the Fund started covering only 20-25% of a project's total cost. However, this is not so much the case with grants. When inflation rates significantly increased, the loans were provided with adjustments for changes in US dollar exchange rates. The Fund is still making its first steps in co-operating with other financial institutions, such as the National EcoBank, the International Fund "Water of Eurasia" and the National Pollution Abatement Facility.

Up until now, the FEF has provided guarantees on two loans extended by the National Eco-Bank: in 1995 on a 50 million rouble loan to the Ecocenter of Moscow State University and in 1996 for a 300 million rouble loan to the Ministry for Environmental Protection of Northern Osetia. The Fund was able to cover these guarantees through its ordinary residual bank accounts. As both loans were paid back by the borrowers, the Fund did not make any expenditures on these guarantees.

Environmental equity investments represent financial support provided by the FEF for a project or enterprise (yielding environmental benefits) which entitle the Fund to some form of ownership rights (e.g. stocks or shares) of the project or enterprise or rights to future profits.

The expenditure structure of the Fund is shown in Figures 17.2-17.4 and Table 17.2.

Figure 17.2: Environmental expenditures by form of disbursement (mln USD; nominal values based on average annual exchange rates).



Source: Table II.17.3 in Annex II.

Note: "Soft" loans refers to loans with more attractive conditions for borrowers than those typically offered by commercial banks.

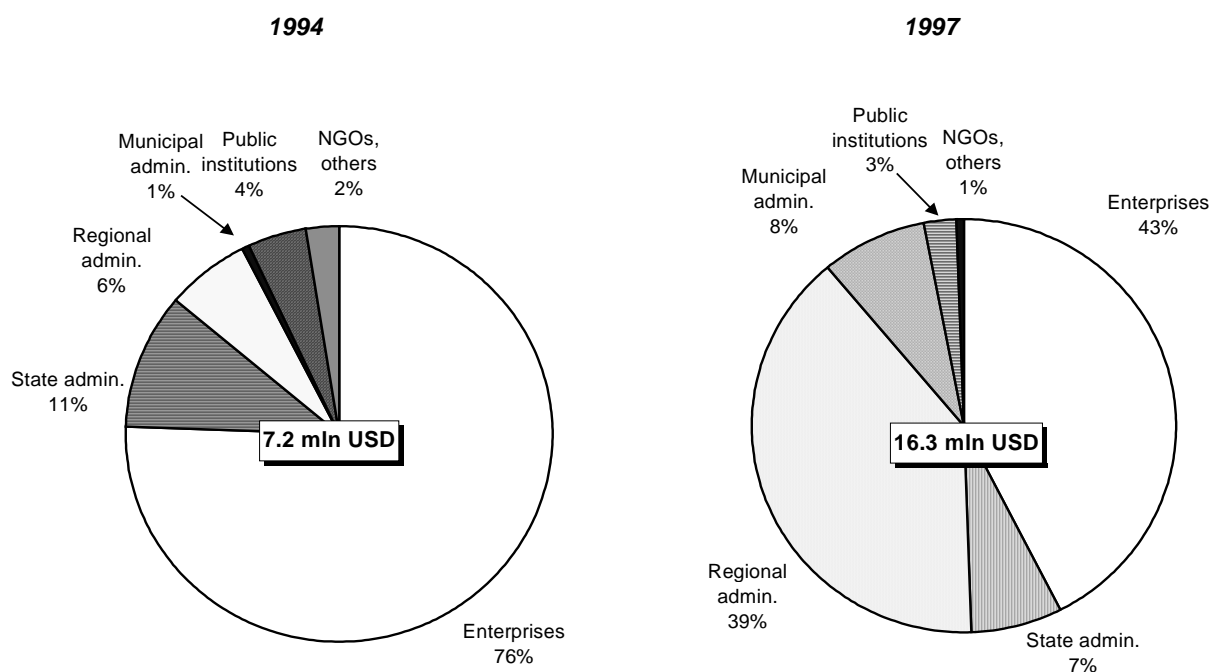
Table 17.2: Expenditures by environmental sector (mln USD; nominal values based on average annual exchange rates).

	1993	1994	1995	1996	1997
Water	0.5	0.3	0.1	1.3	2.2
Waste	0.8	3.1	2.8	3.7	3.3
Soil/land/nature protection	0.3	0.5	1.5	1.7	5.9
Monitoring/information systems	0.6	2.5	2.7	2.9	2.5
Environmental education; research	0.3	0.5	0.9	1.1	0.9
Other	0.3	0.3	0.6	2.1	1.5
Total	2.7	7.2	8.6	12.8	16.3

Source: Table II.17.5 in Annex II.

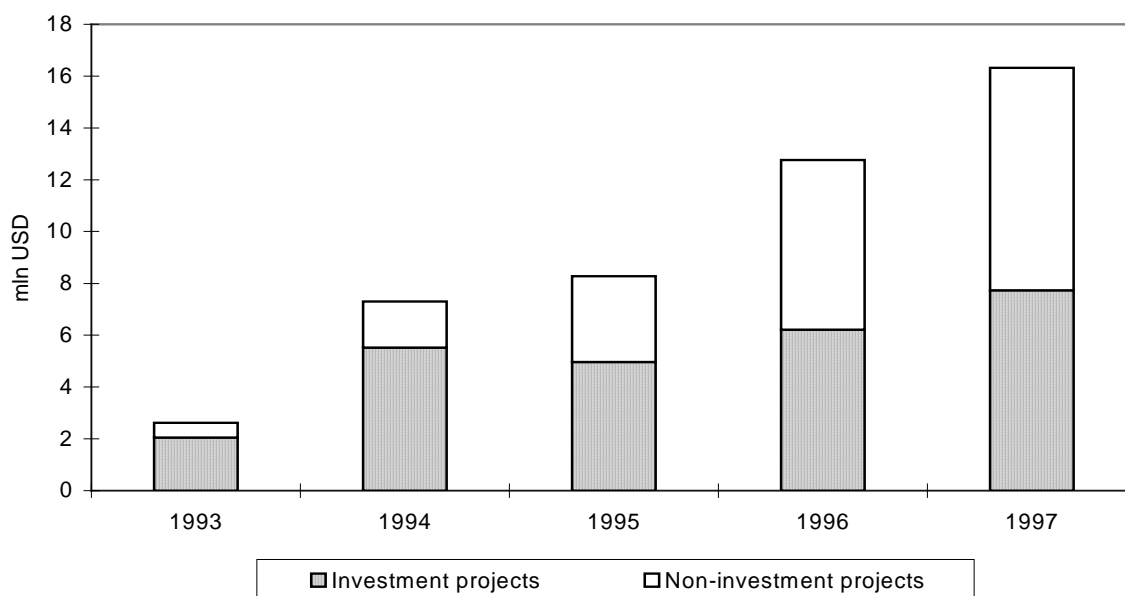
Note: The item "Other" includes expenditures in the areas: air pollution; cleanup of accidents/emergencies; purchase of EcoBank Statutory shares; the Putina 96 migration project and the work led by the Far East Marine Fund.

Figure 17.3: Environmental expenditures by type of recipient (million USD; nominal values based on average annual exchange rates).



Source: Table II.17.6 in Annex II.

Figure 17.4: Environmental expenditures according to “investment” vs. “non-investment” projects (mln USD; nominal values based on average annual exchange rates).



Source: Table II.17.7 in Annex II.

Note: The term “investment projects” here means capital expenditures associated with the purchase of environmental technology/equipment and the construction of facilities (including operation and maintenance of such installations). The term “non-investment” projects here includes activities such as training/education and public awareness raising, environmental monitoring and research, nature protection through non-technological means, etc.

6. Funding Cycle

The Fund’s resources are allocated in accordance with its budget drawn up for a given year, which is subject to approval by the Fund’s Board. Actual disbursements for specific projects are made according to contractual agreements, which also set out conditions for monitoring the progress of, and reporting on, the projects.

Applications for financial support are submitted to and reviewed by the FEF. The Fund reviews applications pursuant to "The Procedures for Review of Proposals, Submitted to the Fund and for their Preparation for Review by the FEF Board". These procedures have been approved by the Board (November 19, 1997) and were published (with sample application forms enclosed) in the "Green World" newspaper (No. 7, 1998), and in the “Ecos-Inform” magazine (No. 3, 1998). The project selection procedures are also described in these regulatory documents.

In accordance with the procedures cited above, the decision-making process goes through the following steps:

- interested applicants are provided with information on the Fund’s priorities prior to submitting their applications;
- application forms are prepared by the applicants in a format provided by the Fund (for example, investment and non-investment project application forms are different);
- applications are submitted to the Fund’s Executive Office where they are registered and assigned a registration number;
- initial screening occurs within 10 days of registration;
- full appraisal (for those proposals that pass initial screening);
- prioritisation of projects;
- final selection by Fund Board; and,
- monitoring and control of project implementation.

Project appraisal and selection is conducted in stages. First, some initial screening is conducted by the Executive Office staff with regards to the completeness and accuracy of the proposal, its compliance with the Fund's priorities, links to other international, federal or interregional projects and the possibility for replicating its results elsewhere in Russia.

Those projects that pass the initial screening, undergo full appraisal by a "Panel of Experts" selected by the Executive Office staff. The Panel consists of representatives of various environmental agencies, ministries, research institutes, independent experts, etc. The Panel members take all responsibility for the quality and objectivity of their decisions as well as for maintaining the confidentiality of commercially sensitive information. The Panel should prepare their opinion on the proposals not later than two months after the start of the appraisal process. The major appraisal criteria used by the Fund are: future environmental benefits to be obtained as a result of the project, accuracy of the technical justification, degree of innovation, cost-effectiveness (particularly important in evaluating investment projects).

The appraisal criteria are developed by the Fund's Directors jointly with the State Committee on Environmental Protection and are approved by the Fund's Board. Apart from the assessment made by the Panel, project proposals should be assessed by the State Committee on Environmental Protection and its respective territorial units. If there are significant discrepancies between the assessments of the Panel and the State Committee, an independent expert is invited to assess the project. The appraised projects are then arranged in "project packages" (project portfolios) and submitted for consideration and review by the FEF Board, which meets approximately 8-10 times a year.

Applications may also be submitted by the State Committee on Environmental Protection and its territorial units. In such cases, the applications are first considered and reviewed by the Finance and Economy Department and Environmental Programmes Department of the State Committee and then by the FEF Executive Office. These projects are selected depending on their priority as well as the availability of FEF resources under the budget line "Subsidies for Environmental Measures (Implemented by the SCEP)" for a given year.

Final decision on the financing of an individual project is made by the Fund's Board. The selected project is included in the Fund's Action Plan for implementation. The Fund signs agreements with those applicants whose proposals have been selected for financing. The Board also decides (as advised by the Executive Office) on the specific terms of the agreement, such as: size and form (loan, grant, etc.) of the support, interest rates (for investment projects), etc. If a project is rejected at this stage, it is returned to the applicant with a request for the proposal to be additionally developed. The Executive Office has the right to invite other co-financing parties to support the project or, upon applicant's consent, to offer the project to other financial institutions, such as the NPAF, banks, etc. In 1997 the Fund reviewed more than 500 application forms of which about 200 projects were supported.

Monitoring and control of project implementation are conducted by the Fund's Executive Office, regional environmental authorities, the Fund's Auditing Unit, various State control bodies (e.g. the Auditing Chamber of the State Duma, the Senior Control Directorate of the Presidency, the Public Prosecutor's Office, etc.). In the event of misuse of funds, claims are issued by the FEF and if a violation persists, a lawsuit may be filed against a violator. However, the filing of such lawsuits may be a complicated process.

7. Evaluation, Reporting and Public Information

Annual reports on the FEF's activities (including lists of all projects supported) and spending priorities are prepared by the Executive Office, considered and approved by the Board, and submitted to the Federal Government for review. The information provided in the annual reports is also published in the "Green World" newspaper and, since 1995, in the "Ecos-Inform" magazine, which are widely disseminated and made available to the general public.

Financial control over the Fund's activities is exercised by an Auditing Commission, whose staff is approved by the Senior Experts Group of the SCEP. In 1997, the Fund initiated an audit of its 1996 financial operations. The audit was conducted by the "PROFT" Audit Agency. The auditor's statement was reviewed at the Fund's Board meeting in 1997. The Fund is ready for, and interested in, periodical audits conducted according to international accounting standards.

The Fund has also developed a programme for providing financial support for information dissemination and publishing activities. The 1998 International Co-operation Plan envisages the preparation of information materials on the system of environmental funds in Russia, the FEF, implementation of investment projects and other projects, in both Russian and English. Since early 1998, the Fund has started working on a Report on the Efficiency of Foreign Technical Assistance to Russia as well as on creating a database of projects which have been and are being implemented in Russia, with the participation of donor countries and IFIs. The Fund has requested and is now processing the information provided by regional committees on project proposals submitted to them. This information will form the backbone of the project database (which is to be developed by the end of 1998) which will help better secure co-financing provided by foreign investors.

8. Major Achievements

As an illustration of the Fund's achievements a number of projects are described below:

- *Environmental protection boats* - The Fund, in co-operation with the Ministry for Environment and Natural Resources, financed the building of two environmental protection boats, equipped with environmental monitoring technology and a system of continuous sampling. Rather substantial intellectual input to the building of the boats (technologies and R&D work, which were not financed by the Fund) was also made by several defence industry enterprises (working in boat equipment design) in different parts of Russia. The boats, which are owned by the Fund, have been leased to the State Committee on Environmental Protection of St. Petersburg and Leningrad oblast and the State Committee on Environmental Protection of Astrakhan oblast. This project was granted a silver medal for technical innovation at the international fair "Eureka-94" in Brussels as well as the Henry Ford International Award for R&D achievements in the field of environmental protection for 1995.
- *Reducing industrial pollution* - The development of a pilot industrial scale installation for thermal detoxification and reuse of chemical waste of a Volgograd plant for concrete production is close to completion (the unit production output is 60 thousands tons annually). The project is being implemented jointly with "Khimprom" Co. Ltd. The construction of a plant for the reuse of electroplating sludge and other types of industrial waste is close to completion in Voronezh city (it is being implemented jointly with various city industrial enterprises). The Fund participated in financing and implementing some measures envisaged in the Federal Integrated Programme "Bratsk City Environment". These measures include the upgrading of a cellulose bleach production line to switch to the cleaner chlorine-free bleaching ("Bratskkompleksholding" Co. Ltd.) and implementation of dry treatment of electrolysis gases at "Bratsk Aluminium Plant" Co. Ltd. These measures will substantially reduce the level of pollution of the Bratsk water reservoir and air pollution in the city. It is worth mentioning that only domestically-made equipment is used for this project.
- *Improving water quality* - The FEF has invested substantial financial resources (as a co-financier) in the implementation of priority environmental improvement measures in Kemerovsky oblast. These measures include the completion of wastewater treatment facilities in the towns of Yaya and Tyazin and installation of filters for tertiary treatment of drinking water in Yurga.
- *Environmental monitoring plane* - The Fund financed the development and testing of a specialised airborne laboratory. This laboratory is to monitor the impacts of human activities on the environment at a regional level as well as assess the impact of environmental consequences caused

by industrial emergencies and natural disasters. Trial operations of the plane began in spring 1998, with full-scale operations scheduled for late 1998. Following recommendations made by the State Commission, the Fund has financed additional research work which will result in operating the plane laboratory at night and in difficult weather conditions.

- *Environmental monitoring vehicle* - In 1997, the development of standard multi-purpose mobile environmental laboratory, installed on a Kamaz truck, continued. The completion of the project and the commencement of operations were scheduled for 1998.
- *New environmental technologies and products* - In co-operation with "EcoPlus" Co. Ltd. (a joint-venture of the city of Ekaterinburg), technological documentation was developed, customised equipment was manufactured and an industrial-scale facility for the production of "EcoZole-401" wastewater treatment reagent was put into operation (the facility capacity is equal to 1000 tons of reagent per year). All industrial waste and drainage water of the "Uralmash" plant are now being treated with this reagent, helping the plant meet required environmental standards. The facility is now being expanded with the aim of increasing its production capacity to 2000 tons of reagent per year. "EcoPlus" Co. Ltd has applied for a permit issued by the Public Health Ministry which will allow them to use the "EcoZole-401" reagent for treating potable water as well. Co-operation with the "Mayak" industrial complex has resulted in the development and installation of customised equipment for the production of selective sorbents (for absorbing radionuclides and toxic heavy metals). The pilot batches of sorbents for wastewater treatment, contaminated by cesium and strontium, have already been produced. With co-financing from the Fund, the "Analitinvest" Corporation has developed technology for standard computerised laboratory to be used for environmental health purposes (certified by the State Committee on Standards). One such laboratory has been installed, set into operation and accredited by the Committee for Environment and Natural Resources of Kurgan oblast. The oblast has been identified as a test site for the development and adjustment of the oblast environmental monitoring system.

9. Challenges and Future Prospects

Taking into account the continuing economic difficulties in the regions, strengthening the Fund's revenue base is the most significant challenge for the FEF at the moment. The general preconditions for maintaining or increasing the flow of revenues are: standardisation of the legal status of the regional environmental funds, unification of their responsibilities, sources of revenue and spending principles and procedures.

Limiting the exemptions from payment to environmental funds, and ensuring stricter regulations on the size of payments due by polluters to the regional funds and the FEF respectively would be practical steps to stabilise Fund revenues. To this end, it is important to speed up the approval of the new version of the Guidelines on Pollution Charges (the new Guidelines clearly state that adjustment of payments due by polluters can be made *only after* the regional funds transfer 10% of their revenues to the FEF). According to expert assessments, the approval of the new Guidelines might result in a 2-fold (or even higher) overall increase of revenues from regional environmental funds to the FEF.

In addition, strengthening the FEF revenue base significantly depends on resolving some organisational issues (associated with accounting and information follow up on the 10% transfers from the regional environmental funds to the FEF). Better definition is needed of the sequence of actions required of regional authorities, the State Committee on Environmental Protection and the FEF Executive Office in terms of providing information about the regional funds' revenues and the 10 percent transfers to FEF in time. There is also a need to introduce an integrated and consistent approach for keeping track of payments between polluters and regional environmental funds on one hand and between regional environmental funds and the FEF on the other hand.

The possibility of placing FEF representatives with regional environmental authorities or other regional authorities should be considered. These FEF representatives could monitor and ensure timely

and complete transfer of payments to the FEF. In addition, FEF representatives would help strengthen the monitoring of the implementation of environmental measures and projects, co-funded by the FEF. Such FEF representatives might also co-ordinate activities of local environmental funds in a given region and provide consultations, information and guidelines, as necessary. If the representative would carry out these activities in parallel with his/her main responsibilities, for example, in a regional Office of the Representative of the President of the Russian Federation, he/she might substantially enhance his/her status in general and contribute to improving the overall FEF capacity.

The increase of the financial potential of regional environmental funds is another important factor in strengthening the FEF revenue base. To this end, more resources should be secured for funding R&D work on improving the legislative basis of the funds and their revenues. This should allow pollution charge rates to be set at more appropriate levels, the introduction of charges for pollutants which have not been regulated so far and improve the efficiency of charge collection. Developing and approving such documents (according to established procedures) and making them available to regional environmental authorities would help increase the revenue base of regional environmental funds (and, respectively, the FEF revenue base). In order to implement the above measures, it would be necessary to amend the Federal Law "On State Environmental Funds of the Russian Federation", which considers the system of environmental funds as the most important part of economic mechanisms of environmental protection and natural resource use.

All plans made by the Fund are based on the understanding that strengthening the Fund's capacity requires closer co-operation with other domestic and international financial institutions. With this in mind, the Fund's staff needs to gain more experience with the IFI project cycle procedures in order to improve their work efficiency. For some staff, other types of training would be necessary to improve their skills and build their experience.

CHAPTER 18

RUSSIA: THE NATIONAL POLLUTION ABATEMENT FACILITY

Valentin Katasonov

Deputy Executive Director, National Pollution Abatement Facility

1. Background and Objectives

The National Pollution Abatement Facility (hereinafter “NPAF” or the “Fund”) was established through a Loan Agreement between the Russian Federation and the World Bank (Loan No. 3806 RU, February 6, 1995) to finance the Environmental Management Project (EMP), and by a special Government Decree of the Russian Federation (No. 808, August 11, 1995) to implement the Loan Agreement and finance the EMP. The EMP includes a mix of measures and activities, which involve the application of the state-of-art international experience to address both environmental management and infrastructure issues and to invest in specific industrial and other economic projects to ensure environmental improvements. The EMP covers four interrelated components of technical assistance on:

- environmental policies and regulation;
- environmental epidemiology;
- water quality management;
- hazardous waste management;

as well as an investment component, in the form of the NPAF. Provision 5 of the Government Decree mentioned above states: “Under the Agreement, the establishment of the National Pollution Abatement Facility is approved as a mechanism to extend sub-loans to enterprises and organizations of the Russian Federation for the implementation of commercially viable projects that can contribute to environmental protection . . .” This same decree also approved the NPAF Regulations. The NPAF’s routine operations are regulated by “Temporary Guidelines”, which were approved by the NPAF Supervisory Board (June 4, 1996) and the State Committee for Environmental Protection (SCEP), the Ministry of Finance and the Ministry of Economy. After some period of time, during which the NPAF is expected to accumulate considerable practical experience, the Temporary Guidelines will become a permanent guiding document. The NPAF commenced operations immediately after the 1995 Loan Agreement came into force and suitable investment projects had been identified for funding.

The initial World Bank loan for the NPAF amounts to \$59 million, four million of which are expected to be used to cover the Fund’s operational costs through mid-2001. Repayments of the loans extended by the NPAF, (both loan principal and most of the interest), will be used to finance further investment projects, thus, the NPAF is envisioned to develop as a “revolving” fund.

Table 18.1: Total revenues and expenditures of the NPAF (mln USD; nominal values).

	1995	1996	1997
Annual revenues	59.000	8.000	0.090
Environmental expenditures	0.000	0.000	0.776
Overhead / administration costs	0.132	0.781	0.800
Total expenditures	0.132	0.781	1.576

Source: Table II.18.1 in Annex II.

Notes: Totals might not equal the sums of individual sub-components due to rounding. The Fund may carry over unspent money from one year to another, thus total disposable resources for environmental expenditure are consequently higher than the amounts indicated under “annual revenues”.

2. Management and Administration

Under the above-mentioned NPAF Regulations, the Supervisory Board is the NPAF supreme management body and includes representatives of the Ministry of Finance, the SCEP, the Ministry of Economy, the Federal Environmental Fund of Russia and other bodies and organizations. The Regulations of the Supervisory Board and the Board's personal composition are jointly approved by the SCEP, the Ministry of Finance and the Ministry of Economy.

The Supervisory Board approves lists of projects to be appraised by the NPAF, decides on the provision of advance payments for the development of pre-investment studies, and approves projects to be financed, all in accordance with the procedures, approval criteria and conditions pertaining to investment projects specified in the World Bank Loan Agreement.

The NPAF's operational management is carried out by the Center for Development and Implementation of International Technical Assistance Projects (commonly referred to as the Center for Project Preparation and Implementation "CPPI"). According to the CPPI's Statute, the Center is an independent non-profit organization for the promotion of environmentally safe development in Russia. The list of CPPI founders includes: the SCEP, the Federal Forestry Service and the Ministry for Natural Resources. CPPI in its turn, is the sole founder of the body named "The Executive Directorate of the National Pollution Abatement Facility" (NPAF ED). The NPAF's Executive Directorate organizes the collection, appraisal and development of investment projects according to the NPAF Guidelines, which are approved by the SCEP, the Ministry of Finance and the Ministry of Economy. The Executive Directorate also supervises the implementation of NPAF projects.

The Ministry of Finance has authorized the Executive Directorate to develop draft agreements with sub-loan borrowers in accordance with the Loan Agreement conditions and to supervise actual spending of the sub-loans in strict correspondence with the sub-loan agreements and World Bank procedures. The Executive Directorate evaluates the environmental and financial results of the implementation of projects, controls the timely repayment of sub-loans, organizes the preparation of documentation and auditing of the Facility as well as submission of information, as stipulated in the Loan Agreement.

The Executive Directorate has a staff of 20 employees. NPAF ED is headed by a Management Board, which consists of the Director and three Deputy Directors. The NPAF ED is composed of three structural units: environment and technologies; finance and economy; and, project portfolio management.

The NPAF Executive Directorate operates in close co-operation with the SCEP and the Ministry of Finance which, according to the World Bank Loan agreement, are responsible for the EMP and NPAF implementation. Currently, a draft three-party agreement is being prepared in which the NPAF Executive Directorate will be specified as an operating agent of the above agencies on issues pertaining to EMP's implementation.

Since 1997, the NPAF Executive Directorate has also co-operated with the Federal Environmental Fund in the development, assessment and funding of several environmental investment projects. For example, in 1997, a co-financing agreement was signed for co-funding a project in Nizhegorodsky oblast, namely the "Production of compost obtained from agricultural and industrial waste based on MiBAS technology". Closer cooperation between NPAF ED and the Executive Office of the Russian Federal Environmental Fund (FEF) on co-financing environmental investments is expected in the future.

3. Revenues

Currently, the NPAF has the following revenue sources:

- The World Bank loan of 59 million USD; 55 million USD is to be used to provide sub-loans to enterprises to finance environmental investment projects, including advance payments for project pre-investment studies; about 4 million USD is to be used to finance the operational costs of the NPAF Executive Directorate through mid 2001;
- A Swiss grant (SFr 12 million) is available to effectively “soften” the sub-loans (by mixing grant funds with the World Bank money in a ratio 20:80 for each loan);
- Sub-loan interest paid back by enterprises (a portion of which - about 30% - is earmarked to repay the Russian debt to the World Bank);
- 100% of sub-loans’ principal repayments paid back by enterprises;
- fees paid by enterprises for appraisal and supervision services provided by the NPAF for investment projects (appraisal fee = 1% of sub-loan; supervision fee = 0.25% of sub-loan).

Annual operational budgets are developed and approved according to established procedures. As can be seen from Table 18.2, starting in 1998, the “additional” sources of revenue (interest on repaid sub-loans and appraisal/supervision fees) are expected to play an important role in the NPAF operational budget.

Table 18.2: The NPAF Executive Directorate’s operational budget (mln USD; nominal values).

	1995 (Sept-Dec)	1996 actual	1997 actual	1998 forecast	1999 forecast	2000 forecast
The World Bank loan	0.132	0.781	0.600	0.600	0.600	0.600
Additional sources	0.000	0.000	0.200	0.200	0.200	0.200
Total budget	0.132	0.781	0.800	0.800	0.800	0.800

The NPAF is also actively seeking to expand its revenue base by attracting additional World Bank loans (for the time being, the Second World Bank Environmental Loan for Russia is being negotiated), funds from NEFCO (the Nordic Environmental Finance Corporation), grants of donor countries, etc.

4. Spending Strategy

The NPAF is in the process of developing its long-term spending strategy. A helpful basis for such a strategy is provided by the NPAF’s considerable project portfolio. Currently there are 12 projects in this portfolio, which have been assessed and approved by the NPAF Supervisory Board. However, development of a long-term strategy is complicated by the unstable economic situation in the country and possible financial problems faced by applicants.

The NPAF is expected to spend its resources on priority environmental projects which are commercially viable. Such projects are to be identified and appraised by using special environmental/cost efficiency methodologies. Those environmental projects which are identified in governmental programs and co-funded by commercial banks, environmental funds and other sources, are subject to preferential selection.

Environmental projects may be commercially viable by generating profits through improved efficiency of the major production processes and the manufacturing of additional products, which can be sold on both domestic and foreign markets. Although it is expected that the repayment of principal and interest on loans will be secured through the profits generated from the project, additional collateral for loan pay-back is sought in terms of: the viability and economic-credit worthiness of the enterprise itself is assessed and other specific guarantees may be required (e.g. bank guarantees,

guarantees from the administration or/and parent company in the case of subsidiary, "escrow" accounts, etc.).

5. Expenditures

The actual and budgeted *operational* expenditures of NPAF were reported in Table 18.2. In Table 18.3, actual and forecasted data on NPAF disbursements for investment projects are provided:

Table 18.3: NPAF expenditures for investment projects, 1995-2000 (mln USD; nominal values).

	1995 actual	1996 actual	1997 actual	1998 forecast	1999 forecast	2000 forecast
Total expenditures	0.0	0.0	0.8	11.8	27.7	31.7

Investment expenditures depend on the number of sub-loan agreements signed (for financing concrete projects), the size of sub-loans and how quickly enterprises manage to prepare project-related contracts for the procurement of goods and services. Borrowers are obliged to follow World Bank procurement procedures (tenders for supply of goods and services, tenders for selection of suppliers and contractors), which ensures efficient use of NPAF's financial support. (Money is actually disbursed according to these procurement contracts). Each year the NPAF ED provides the Ministry of Finance with information on anticipated annual expenditures to be disbursed in the form of loans.

Sub-loans may vary from 350 000 to 7 000 000 USD. They can cover up to 70% of total project cost. Annual interest rates on sub-loans (considering the current rates) vary from 9.4 to 11% (excluding possible commission fees), with a repayment period of up to eight years including a grace period of up to three years. Enterprises of various forms of ownership (public, private, mixed) are eligible to borrow from the NPAF.

Enterprises may receive advance payments, which they are required to repay, to prepare their pre-investment studies. An advance payment cannot exceed 300 000 USD. This amount helps applicants cover up to 80% of the cost for developing their project proposals. A decision to provide an advance payment can be made by the NPAF ED upon assessment of an applicant's request for an advance payment. Thus far, the NPAF Supervisory Board has approved two advance payments (total amount of 430 000 USD), but these agreements have not yet been signed by the Ministry of Finance.

A borrower has to cover at least 20% of the project cost. The NPAF attempts to involve other parties in the financing of projects, such as commercial banks (both domestic and foreign), various funds, investors, etc. The NPAF expects to become a focal institution for financing environmental investment projects, securing considerable resources from alternative sources in addition to its own budget. The most promising and most probable co-financiers of NPAF projects are the Federal Environmental Fund as well as the regional environmental funds.

It is expected that by the end of the year 2000, about 15 investment projects will have reached different stages of completion and financing. The implementation and financing of three projects are to begin soon. The NPAF will provide loans amounting up to about 17 million USD, with total project costs being more than 23 million USD, and the remainder being funded by the borrowers (enterprises). These projects are:

- Technical modernization of production in "Karton" Co. to reduce energy consumption and air emissions (6.995 million USD);
- Iron ore waste reuse and rehabilitation of Cheremshansky tailings' dumping site (5.6 million USD);
- Production of asbestos-free car engine cylinder block sealers from reinforced materials (2.544 million USD).

The first project on the above list is closest to completion (as of June 1, 1998, 72 per cent of the NPAF loan was already disbursed).

It is expected that after the year 2000, the major share of investment expenditures will be financed from repayments of NPAF sub-loans (including repayment of both principal and interest).

6. Funding Cycle

The NPAF project cycle includes five major stages:

- Assessment and pre-screening of applications for financing investment projects;
- Project appraisal;
- Project selection and the signing of a sub-loan agreement;
- Monitoring project implementation;
- Analysis and evaluation of project implementation results.

The NPAF has already gained considerable experience in dealing with the first two stages of project cycle management and has started to engage in the third and fourth ones as well. As no projects have been fully completed so far, the analysis and evaluation of project implementation results have not been conducted yet.

As of June 1, 1998, the NPAF Executive Directorate collected a total of 484 applications. After initial screening, 213 applications were rejected and 271 applications were accepted for further processing.

The NPAF uses the following major eligibility criteria for screening applications:

- environmental and technology-based criteria (environmental improvements resulting from a project's implementation, based on global, national and regional environmental criteria; use of modern and well-tested materials, technologies, machines and equipment);
- financial criteria (a rate of return on investment; financial viability of an enterprise and its capacity to finance its own share of a project's cost);
- economic criteria (sufficiently high cost-efficiency, employment benefits; possible use of a project as a model for other enterprises in the industry).

The second stage - full project appraisal - requires that the NPAF ED personnel and experts conduct an in-depth assessment of a project's justification (i.e. business plan). Projects with already completed pre-investment studies are assessed first. (The costs of some of these pre-investment studies costs have been covered by the Swiss grant to the NPAF). 46 pre-investment studies have been completed so far, and 12 more are planned. The full appraisal of 12 investment projects has been completed so far (evaluation reports have been prepared and approved by the NPAF Supervisory Board). Four more projects are currently under full appraisal.

The third stage - approving individual projects and signing a sub-loan agreement - starts upon approval of a project by the NPAF Supervisory Board. Three loan agreements, worth 15 million USD, have been prepared and signed. In addition, one loan agreement and two advance payments agreements (for conducting pre-investment studies) have been prepared but are not yet signed.

Three projects are under implementation. One of these projects is scheduled for completion for late 1998. Once a project enters the implementation stage, the NPAF Executive Directorate is authorized by the Ministry of Finance and the SCEP to perform the following functions: prepare and submit application forms to the relevant banks (NPAF's and the borrower's) to commence financing of the projects; supervise procurements of goods and services by borrowers (according to the World Bank procedures); monitor project implementation; report on project implementation; ensure timely repayment of debts according to loan agreements.

7. Evaluation, Reporting and Public Information

The NPAF ED periodically reports on the implementation of individual projects and its other activities to the World Bank, the NPAF Supervisory Board, the Ministry of Finance and the SCEP. In addition, the NPAF's activities are also monitored by other governmental bodies and agencies (e.g. the Tax Administration, the Control Chamber of the State Duma, etc.). NPAF's activities are subject to auditing within the overall NPAF and EMP auditing framework. Information on NPAF and EMP implementation is available to the public in periodic newsletters (e.g. "Environmental Management").

8. Major Achievements

As of June 1998, 46 pre-investment studies of environmental projects in different industries have been completed through the NPAF. These studies, the costs of which were covered by the Swiss grant, had a total cost of 1.7 million USD. 12 projects worth about 70 million USD have been appraised and incorporated into the NPAF's portfolio (with sub-loans envisioned worth about 52.6 million USD). Appraisal missions have been completed for another four projects and the reports on these are being prepared. Three projects are being implemented (total worth 23.5 million USD; sub-loans' share of 15.1 million USD). One project - the technical modernization of production in "Karton" Co. (which will reduce energy consumption and air emissions) - is nearing the completion stage.

9. Challenges and Future Prospects

The major challenges the NPAF faces are: the unstable and unpredictable overall economic situation in the country; the poor financial state of most Russian enterprises; the lack of incentives for long-term investment projects; difficulties experienced by enterprises in mobilizing necessary guarantees and collateral in applying for loans; insufficient project preparation capacity, etc. During the process of project identification and appraisal, an extremely high number of applications are rejected. At the stage of project implementation, problems are associated with the lack of experience of borrowers with the World Bank procurement procedures, the lack of financial resources for funding their own shares of the project, etc. As the NPAF is gaining more experience, some of the above problems are being mitigated (e.g. by recommending enterprises to hire advisors to organize procurement of goods and services for a project and to pay them from the loan).

In order to streamline project-related activities and reduce the excessive work-load of the Ministry of Finance (the Ministry signs loan agreements with enterprises and bears corresponding creditor's risks), now a structural adjustment of the loan scheme (for the World Bank loan) is being considered. Some possible options envisage loan schemes with the participation of the Federal Environmental Fund, commercial banks, investment facilities and other financial institutions, which might play the role of agents (financial intermediaries) for the Ministry of Finance.

The NPAF continuously tries to expand the financial base of its activities. Currently, a second World Bank environmental loan is being considered (worth approximately 200 million USD). However, this second loan is envisioned as being oriented towards selected regions and may involve the use of regional institutions in a facilitation or intermediary role for extending loans at the regional level.

CHAPTER 19

RUSSIA: THE NOVGOROD REGIONAL ENVIRONMENTAL FUND

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1. Background and Objectives

The Novgorod Regional Environmental Fund was established pursuant to the Federal Law on Environmental Protection of 1991, the key provisions of which have been further elaborated in subsequent acts adopted by the Novgorod Regional authorities:

- resolution No.145 of 30 March 1990 by the Novgorod Regional Council of People's Deputies "On the Experiment to Improve Economic Mechanisms for Nature Conservation in the Novgorod Region" (item 4: To set up the Regional Environmental Fund under Regional Executive Committee).
- resolution No.314 of 1 October, 1992 by the Lower Council of the Novgorod Regional Council of People's Deputies "On Approving the Regulations of the Regional Extra-Budgetary Environmental Fund".
- resolution No.133 of 11 April, 1996 by the Novgorod Regional Administration "On Approving the Regulations of the Regional Extra-Budgetary Environmental Fund".

The Fund operates under the authority of the Novgorod Regional Government and is not a separate legal entity. Within the constraints of its limited resources (summarised in Table 19.1 below), the Fund seeks to fulfill its major objectives, which are:

- mobilising resources to implement urgent environmental actions and programmes;
- funding programmes and research projects aimed at improving the quality of the environment, as well as ensuring environmental safety for the general public;
- providing support for further development of nature reserves, game reserves and national parks, and for preserving natural sites;
- participating in establishing and improving environmental monitoring systems;
- promoting environmental awareness and education;
- contributing to the development of the logistical base of environmental agencies.

Total revenues and expenditures of the Fund in 1993-1997 are shown in Table 19.1.

Table 19.1: Total revenues and expenditures of the Fund (mln USD; nominal values based on annual average exchange rates).

	1993	1994	1995	1996	1997
Annual revenues	0.237	0.809	0.543	0.715	0.623
Environmental expenditures	0.191	0.421	0.577	0.528	0.547
Other expenditures	0.016	0.052	0.081	0.060	0.119
Total expenditures ¹	0.206	0.473	0.657	0.589	0.666

Source: Table II.19.1 in Annex II.

Notes: 1) Totals might not equal the sums of individual components due to rounding.

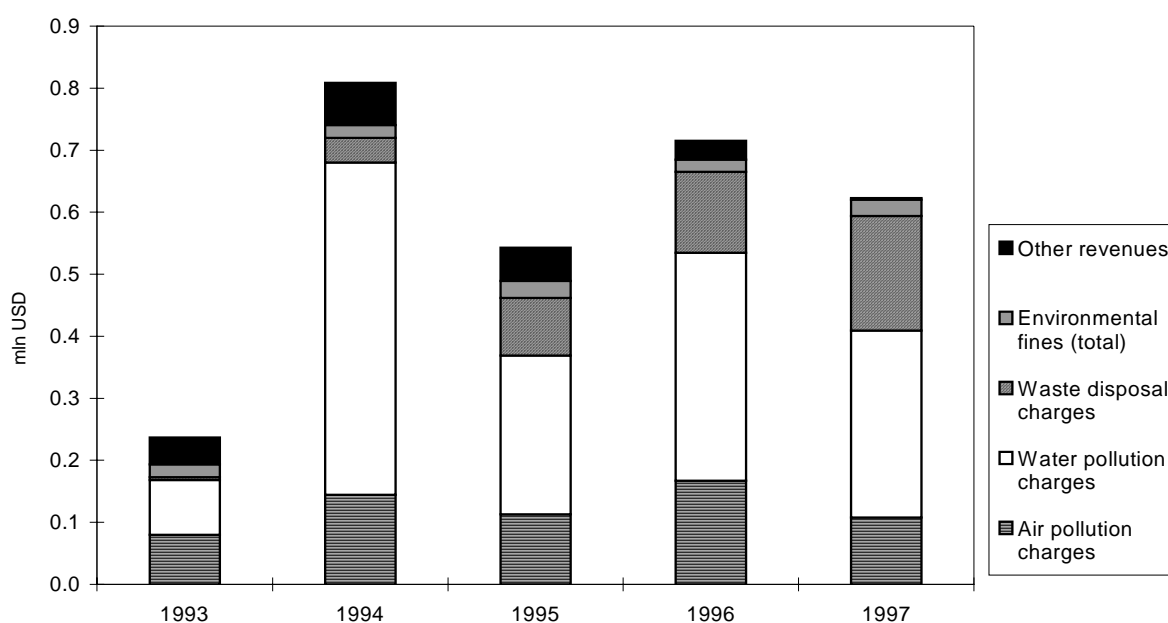
2. Management and Administration

The region of Novgorod has a system of environmental funds which consists of one Regional Fund and 22 district or municipal funds. The Novgorod Regional Fund, like the municipal or district funds, is governed by its respective government administration and is fully integrated into that administration. The Fund does not have its own administrative structure nor its own management body (i.e. no Board of Directors nor specialized management unit). As the Fund is part of the regional government, the ultimate decision-maker in determining the use of the Fund's resources is Novgorod's Regional Governor.

3. Revenues

The principal revenue sources for the Fund are: pollution charges (93-95%), damages awarded in lawsuits, fines for environmental offenses, and income from the sale of confiscated hunting and fishing equipment. These sources, and their levels, are illustrated in Figure 19.1.

Figure 19.1: Fund annual revenues (mln USD; nominal values based on annual average exchange rates).



Source: Table II.19.2 in Annex II.

As the strength and diversity of the Fund's revenue base greatly affect its potential as an environmental financing instrument, an examination of that base is helpful for a fuller understanding of the Fund itself. As noted above, the Fund's revenues are generated largely by pollution charges. At the regional level it is possible to examine the revenue structure of charges by type of environmental media (charges for water, air pollution and waste disposal) and by type of payment (for discharges within established limits, discharges above limits, etc.). Additionally, it is principally at the regional level that the dynamics of the pollution charge waiver system, and their effect on the Fund, can be analysed. (Pollution charge waivers involve the forgiveness of a polluter's charge payments in return for commitment by the polluter to invest that money in environmental improvements instead).

Pollution charge rates are set in accordance with the relevant federal regulations, using basic charge rates and indexing coefficients set on an annual basis. The fact that the charges are earmarked for environmental purposes allows the environmental funds to accumulate resources for environment investments; the charges also encourage enterprises to engage in sound environmental management. However, the incentive effect of the charges, as they are currently applied, is limited and they fail to reflect the full damage caused by users of natural resources.

The regional office of the State Committee for Environmental Protection (SCEP) calculates charges for the whole region, informs enterprises of the amounts to be paid, and monitors whether the revenues of the Fund arrive as scheduled. Charges payable to the Fund are collected as follows: charges and fines are transferred by companies and individuals to a single settlement account managed by the regional environmental committee, to be redistributed among the district, regional and Federal environmental funds at a ratio of 60:30:10, as prescribed by the Law. Staff members of the economic department of the regional environmental committee monitor receipts and maintain contacts with payers. Tax authorities are involved in collecting charges payable to the state budget.

As can be seen from Table 19.2 below, water pollution charges account for slightly more than half of the total charges. It should be noted that natural resource use charges (charges for the use of water, land, forests, etc.) are not transferred to the environmental funds.

Table 19.2: Revenue to the Fund from pollution charges by type of charge (mln USD; nominal values based on annual average exchange rates).

	1995	%	1996	%	1997	%
Air charges	0.113	25	0.165	25	0.107	18
Water charges	0.256	55	0.363	55	0.303	51
Waste charges	0.093	20	0.129	20	0.186	31
Total	0.462	100	0.657	100	0.596	100

Note: See Table II.19.2 in Annex II for total annual revenues to the Fund.

Whereas in 1995 water pollution charges accounted for 55% of the total revenues derived from charges, air pollution charges accounted for 2%, and waste disposal charges for 20%, in 1997 the ratio changed: water pollution charges - 51%, waste disposal - 31%, and air pollution charges - 18%. Waste disposal charges have shown an increase, while air emission and water pollution charges have been decreasing, the former to a greater extent than the latter.

Another trend has also become apparent: the proportion of charges within admissible standards has been going up (from 72% in 1995 to 83% in 1997), and charges paid by enterprises for pollution above admissible standards have been decreasing (from 28% in 1995 to 17% in 1997). This information is provided in Table 19.3.

Table 19.3: Ratios between charges for pollution within and above admissible levels (mln USD¹; nominal values based on average annual exchange rates).

	1995	%	1996	%	1997	%
Charges for pollution within admissible level	0.33	72	0.47	71	0.49	83
Charges for pollution above admissible level	0.13	28	0.19	29	0.10	17
Total	0.46	100	0.67	100	0.59	100

Notes: 1) Based on "old" rubles prior to re-denomination in 1998.

The change in the ratio has been caused mostly by two factors:

- There has been a reduction in the volume of emissions as a result of measures taken by polluters. For example, emissions by one major polluter, the Akron joint-stock company, have decreased from 30 thousand tons per year to 5-6 thousand tons per year as a result of closing environmentally hazardous facilities and implementing a series of environmental measures. Another example: since phase III of the wastewater treatment facilities in the city of Novgorod became operational, discharges have decreased by 640 tons per year.
- Worsening economic performance and industrial decline have also resulted in reduced emissions and discharges and, accordingly, in smaller pollution charges paid by companies.

The increase of amounts paid as charges for waste disposal can, at present, be explained simply by an increase in the number of resource users.

Major contributors to the Fund's revenues are: the Akron Joint Stock Company; the Novgorod heat and power generation plant; AO Novgorodmebel (a furniture company); the Novgorod water supply and sewerage company; road transport companies in the city of Novgorod; the refractory factory in Borovichi; the aircraft repair factory and water supply and sewerage company in Staraya Russa; joint venture Chudovo-RWS and OAO Flyderer-Chudovo in Chudovo; the veneer factory in Parfino; the Krestetsky logging and lumbering enterprise. The Akron company has been the single largest contributor to the Fund's revenues, with 30 percent in 1996, and 27.9 percent in 1997.

The most important factors contributing to the relatively low level of revenues collected by the Fund are:

- inadequate level of charges (low basic rates);
- the need to introduce charges for other hazardous types of pollution;
- low efficiency rate of revenue collection.

The main reason for the low efficiency rate of the revenue collection is the poor financial state of enterprises in the region. In such circumstances the unconditional obligation to pay charges does not seem to be justified. Some enterprises, though continuing to operate, are financially bankrupt. In the case of indebted enterprises owing money to the Fund, claims for payments to the Fund are placed with the relevant bank indefinitely in the 6th order of priority. (Salaries, taxes and other debts are paid first, and eventually pollution charges, if there is enough money to go around.) The effect is that the regional SCEP and Fund have little leverage in collecting debts amounts due from indebted enterprises. Fines for environmental offenses are so insignificant that they provide no further incentives for enterprises to implement environmental measures or to pay charges to the Fund.

As in many other regions of Russia, pollution-charge waivers are used in the Novgorod region. The use of waivers during a time of economic transition exhibiting conditions as described above, may help increase the amount of resources allocated by polluters for environmental measures. In 1996, such waivers amounted to 2.1 billion rubles, in 1997, to 1.7 billion. Some examples of environmental investments made under waiver agreements include: the Akron company building phase III wastewater treatment facilities, the Borovichi water supply and sewerage company building a sewerage pumping plant; the Okulov pulp and paper factory converting its heat and power generation plant to gas firing and renovating its wastewater treatment facilities; the Okulov furniture accessories factory building industrial wastewater treatment facilities; and AO Solntse recycling toxic wastes.

As shown in Table 19.4, the charge collection rate in 1992 was 95 percent, in 1994 it dropped to 86%, and in 1996, as a result of the worsening financial state of enterprises, it was only 73%. The main debtors are companies in the housing and municipal sector, including water supply and sewerage companies, machine-building and metal-working industries, forestry and wood-working industry, electronic industry, and agricultural enterprises.

Table 19.4: Pollution charge payments: collection efficiency and charge-for-investments waivers (mln USD¹; nominal values based on average annual exchange rates).

	1991	1992	1993	1994	1995	1996	1997
Levied charges	0.32	0.10	0.44	1.63	0.90	1.48	1.12
Collected charges	0.20	0.08	0.17	0.73	0.46	0.67	0.59
Swapped for investments (charge waivers)	0.10	0.01	0.19	0.68	0.22	0.42	0.29
% collected (incl. value of waived charges)	92	95	83	86	76	73	78
% collected (excl. value of waived charges)	62	82	39	44	51	45	52

Notes: 1) Based on "old" roubles prior to re-denomination in 1998.

4. Spending Strategy

The Fund's priorities are officially based on the Conceptual Programme for the Socio-Economic Development of the Novgorod Region and the various Regional Environmental Programmes (e.g. for the Baltic Sea and the Volga River catchment areas). The Fund's resources are disbursed in accordance with orders of the Novgorod Regional Government to resolve urgent environmental problems in these priority areas. A projection of revenues and expenditures is made annually. The Fund does not have a long-term spending strategy. Water management is presently the highest priority among the Fund's expenditures.

5. Expenditures

Because of the lack of resources, the Fund co-finances the few most significant projects in cooperation with enterprises using their own financial resources. The Fund's expenditures also act as a catalyst of environmental investments. Grants are predominant among the various forms of support provided by the Fund. This is due to the very limited resources of the Fund, the specific characteristics of the projects supported, and the poor financial state of enterprises. In 1997, the Fund supported 30 projects. Tables 19.5-7, and Figure 19.2 summarise the Fund's expenditures.

Table 19.5: The Fund's role in total environmental expenditures in the Novgorod Region (mln USD¹; nominal values based on average annual exchange rates).

	1991	1992	1993	1994	1995	1996	1997
Total environmental expenditures in the Novgorod region	n.a.	n.a.	4.23	1.63	3.16	2.70	1.75
Total Fund expenditures	0.31	0.08	0.38	1.09	0.80	0.95	0.86
<i>including:</i>							
- direct funding from the Fund	0.20	0.07	0.19	0.42	0.58	0.53	0.55
- pollution-charge waivers	0.11	0.01	0.19	0.67	0.22	0.42	0.31
Fund expenditures as a % of environmental expenditures in Novgorod	n.a.	n.a.	9%	67%	25%	35%	49%

Notes: 1) Based on "old" roubles prior to re-denomination in 1998.

Table 19.6: Sources of finance for environmental investments made by enterprises granted charge waivers in 1996 (mln USD¹, nominal values based on average annual exchange rates).

Enterprise	Own funds and other sources	Value of Waivers	Subsidies from the Fund	Total
Water supply and sewerage company in Borovichi	0.07	0.02	0.01	0.10
AO Solntse	0.04	0.00	0.00	0.05
AO Akron	0.94	0.23	0.00	1.17
Furniture accessories factory	0.01	0.00	0.01	0.02
Okulov pulp and paper factory	0.00	0.00	0.01	0.01
Water supply and sewerage company in Novgorod	0.00	0.01	0.00	0.01
Total	1.07	0.27	0.03	1.37

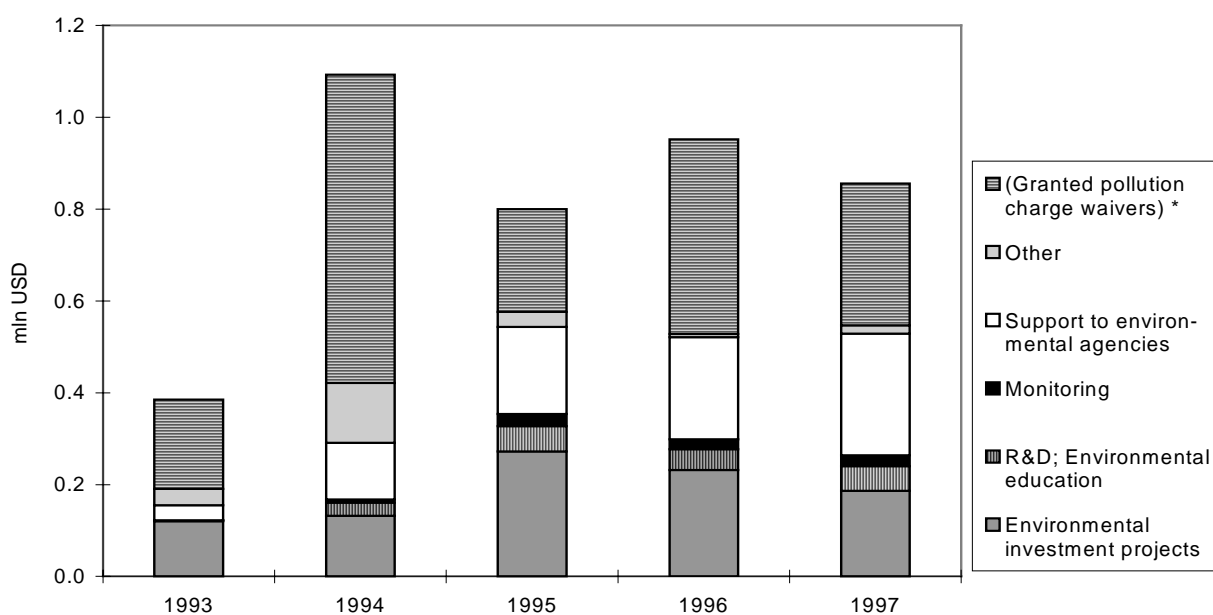
Notes: 1) Based on "old" roubles prior to re-denomination in 1998.

Table 19.7: Sources of finance for environmental investments made by enterprises granted charge waivers in 1997 (mln USD¹, nominal values based on average annual exchange rates).

Enterprise	Own funds and others	Waivers	Subsidies from the Fund	Total
OAQ Akron	217.20	9.18		226.38
Borovichi water supply and sewerage company	2.80	0.81	1.71	5.31
Borovichi refractory factory	54.63	2.25		56.89
Water supply and sewerage company in Malaya Vishera	6.59	0.66		7.24
Okulov furniture accessories factory	2.13	0.40		2.53
Water supply and sewerage company in Staraya Russa	15.85	4.97		20.82

Notes: 1) Based on "old" roubles prior to re-denomination in 1998.

Figure 19.2: The Fund's environmental expenditures, including waived pollution charges (mln USD, nominal values based on average annual exchange rates).



Source: Table II.19.3 in Annex II.

6. Funding Cycle

Applications requesting support from the Fund are typically sent by enterprises to the regional environmental committee, where they are considered before final decisions are made by the regional administration. Because of the poor financial state of enterprises, the number of new environmental projects in the region has dropped. Many of the projects currently in progress have been under implementation for years. These projects are closely monitored by the committee for environmental protection and routinely receive subsidies from the Fund every year (for instance, the Okulov furniture accessories factory, the Borovichi water supply and sewerage company, and the Okulov pulp and paper factory).

7. Evaluation, Reporting and Public Information

Every year, a report on the Fund's activities is compiled and submitted to the Regional Committee for Environmental Protection and to the State Committee for Environmental Protection. Information on the Fund is published in the annual report on the state of the environment in the Novgorod Region.

8. Major Achievements

The Fund's achievements can be grouped under the following headings: environmental investments; research and development; and, environmental education and awareness raising. Some of the activities supported by the Fund in these areas are briefly described below.

- *Environmental investments* - A significant amount of the Fund's resources has been spent on constructing or installing environmental protection facilities. For example, in 1995, 175 mln rubles were provided to the Akron Company for completing the plant's wastewater treatment facilities, while 70 mln rubles were provided to the Okulov Furniture Accessories Factory to build an industrial wastewater treatment plant. In 1996, the town of Borovitchi received 76 mln rubles for building a sewerage pumping plant and, in 1997, 70 mln rubles to purchase additional equipment for the same plant.
- *Research and development* - Over the years 1995-1997, the Fund provided 231.5 mln rubles to the Novgorod State University for developing the Environmental Strategy and Policy of the Region until the Year 2010 as well as the regional part of the Federal Programme for Improving the Environment of the Baltic Sea Catchment Basins and the Volga River. Support was also provided to the Regional Committee on Agriculture and Food (40 mln rubles) and the Novgorod Agriculture Academy (35 mln rubles) for research and development activities and publications.
- *Environmental education and awareness raising* - From 1995-1997, the Fund supported various environmental education and awareness raising activities, such as the publishing of books on environmental topics, funding of environmental expeditions, TV and radio programmes dealing with environmental issues, etc. For example, the Fund supported the Novgorod Regional Training and Methodological Center on Further Education in its organisation of an environmental expedition under a Russian-Swedish project entitled "The Waters of Lake Illmen and Lake Halmaren".

9. Challenges and Future Prospects

Notwithstanding the Fund's small budget, it is having an impact on the environmental investment process in the region. Controlled use of the pollution charge waiver system is encouraging enterprises to co-finance projects with the Fund. At a time when many enterprises are experiencing serious financial difficulties, and in the absence of more practical, robust administrative and/or legal mechanisms to enable the Fund to obtain payments owed to it by polluters, negotiated waiver agreements can help increase the amount of funds available for financing of environmental projects. As progress through the economic transition is made, it can be expected that pollution charge rates will be rationalised and that enterprises will increasingly pay their pollution charges in full and finance environmental investments from their own resources.

CHAPTER 20

UKRAINE: THE STATE ENVIRONMENTAL PROTECTION FUND

Nikolai Pilipchuk

Head of Economics Department, Ministry of Environmental Protection and Nuclear Safety

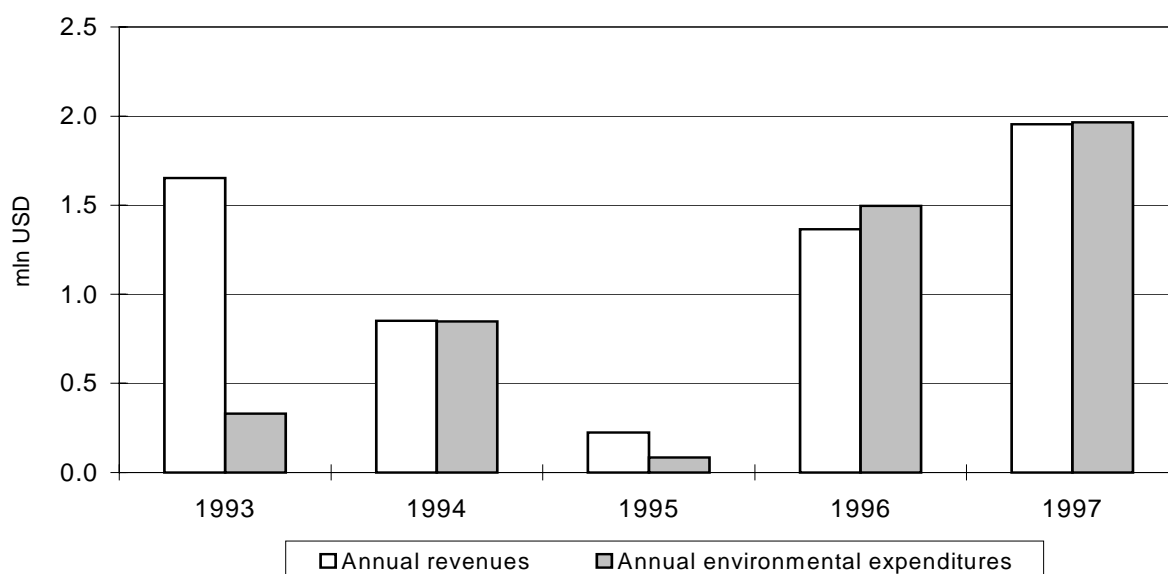
1. Background and Objectives

The State Environmental Protection Fund of Ukraine (previously referred to as the “Republican” Environmental Fund) was established by the Supreme Council Law “On Environmental Protection” in 1991. Article 47 of the law reads: “In order to finance environmental protection measures, a Republican and local extra-budgetary environmental protection funds shall be established”. Pursuant to the national law “On the 1998 State Budget” and 1998 amendments to the Environmental Protection Law, as of that year the State Environmental Protection Fund was consolidated back into the State Budget, while local funds were incorporated into corresponding local budgets.

The State Environmental Protection Fund (the “Fund”) became operational in 1992 after a Decree of the Cabinet of Ministers introduced pollution charges and approved the Regulations of the Fund. The Regulations define the Fund's revenue sources (pollution charges and fines) as well as the Fund's legal status and operational principles. As the Fund's status changed with the 1998 State Budget Law and amendments to the Law on Environmental Protection, new Fund Regulations were formulated and approved by a Decree of the Cabinet of Ministers in May, 1998.

As stipulated in the Law on Environmental Protection and the Fund's Regulations, the resources of the Fund may be disbursed solely as earmarked funding for environmental and natural resource conservation measures, (including environmental research and development work) and for measures leading to the reduction of negative environmental impacts on human health. The scale of the Fund's support for such activities from 1993-1997 is illustrated in Figure 20.1 below.

Figure 20.1: Total revenues and expenditures of the Fund (mln USD; nominal values based on annual average exchange rates).



Source: Table II.20.1 in Annex II.

2. Management and Administration

The operations of the Fund are fully integrated into those of the Ministry for Environmental Protection and Nuclear Safety (MEPNS). The Fund is not an independent legal entity and has no administrative structure of its own (i.e. no Director or Executive Office). As of 1998, the Fund's resources have been disbursed by the State Treasury upon authorisation of the MEPNS.

MEPNS is responsible for overseeing the use of the Fund's financial resources. Generally, this responsibility is carried out by the Ministry staff who deal with accounting and the financial planning of environmental measures supported by the Ministry. The activities of these staff persons are overseen by the Minister's Deputies and the Minister. Project managers of the water, land, air, and biodiversity programmes in the Ministry are also involved in the decision-making process on the allocation of the Fund's resources.

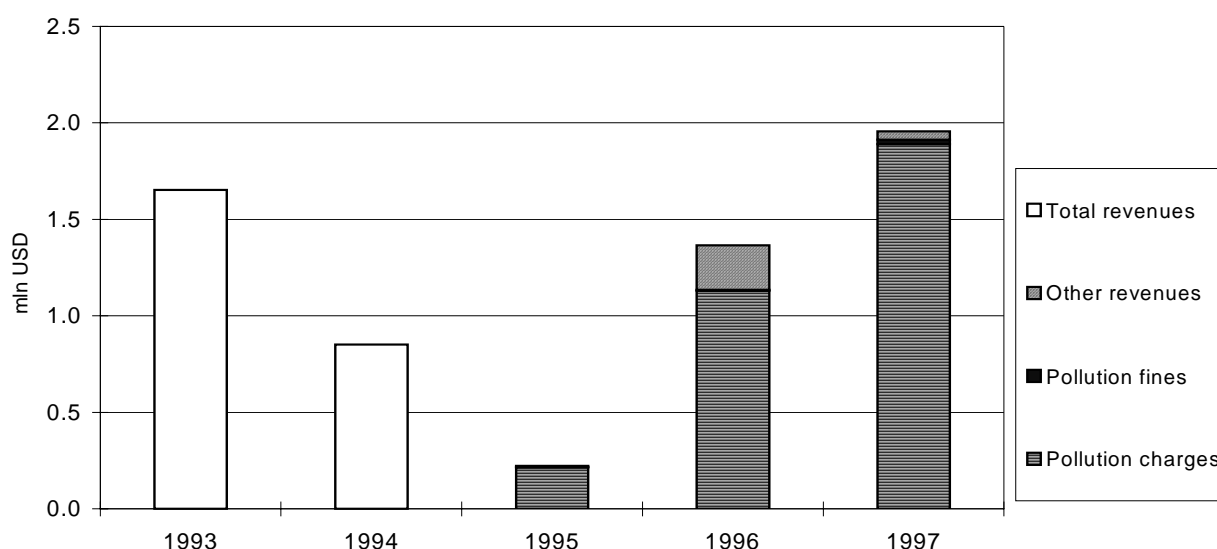
3. Revenues

As set out in the Fund's Regulations, its sources of revenue are:

- pollution charges and fines;
- charges for special use of natural resources (to come into effect in 1999; the charge rates will be set by the Cabinet of Ministers, subject to approval of the Supreme Council);
- voluntary donations by enterprises, organisations, and private persons;
- and other sources, including payments resulting from the violation of environmental laws.

As shown in Figure 20.2, the Fund's main sources of revenues are pollution charges and fines. In 1996, pollution charges contributed 83% of the Fund's revenues while in 1997 they reached 95%.

Figure 20.2: Annual revenues of the Fund (mln USD; nominal values based on annual average exchange rates).



Source: Table II.20.2 in Annex II.

Pursuant to the 1998 amendments to the Environmental Protection Law, 30 per cent of pollution charges are to be channelled to the State Environmental Protection Fund. Prior to these amendments, the share channelled to the Fund was 10 percent. The other 70% of pollution charges are distributed according to the following ratio: 50% of charges generated in a given region are channelled to the respective regional environmental fund; 20% are channelled to the respective local environmental fund. (Before the 1998 amendments, these shares were 20 and 70% respectively.)

Prior to 1998, the payment of pollution charges was monitored by local MEPNS representatives, who keep lists of all entities with pollution permits. Starting from 1998, the payment of pollution charges has been monitored and controlled jointly by the State Tax Administration and local environmental authorities.

4. Expenditures

The Fund's financial resources are disbursed according to its budget for a given year. The budget is approved by the MEPNS (in co-ordination with the Ministry of Finance) and includes an estimate of anticipated revenues and expected expenditures according to the major fields of disbursement (which includes a list of projects to be financed). The Fund is allowed to reserve up to 10 per cent of its resources for unplanned environmental measures.

The Fund's major fields of expenditure are:

- development and implementation of national environmental programmes;
- measures to reduce the negative impacts of pollution;
- maintenance of protected sites and natural reserves;
- financing measures in the event of environmental emergencies;
- environmental research and development;
- equipment support for environmental organisations;
- support for international environmental co-operation;
- conferences, seminars, exhibitions and other environmental events.

As the Fund's current Regulations do not provide for alternative forms of disbursement, all the Fund's support is provided through grants. Given the spending priorities listed above, the Fund's support is provided almost exclusively to national and local environmental authorities and other public, budgetary entities (e.g. research institutes, universities, hospitals, etc.) and only very rarely for capital investment projects.

5. Funding Cycle

After assessing the anticipated revenues of the Fund, the MEPNS disseminates the requirements for applying for financial support from the Fund to its local units. For this purpose, questionnaires are prepared requiring relevant project information from applicants. The information solicited in the questionnaires includes: amount of financial assistance requested; project justification; total project cost; other sources of financing; project duration; expected environmental benefits; cost-efficiency; acknowledgement of unpaid environmental charges (if any); opinion of other relevant environmental bodies on the merits of the project; etc. The local environmental authorities inform local applicants of the availability of such assistance and submit any applications they receive to the Ministry (in a standardised format).

First priority for the Fund's financial support is given to the fulfilment of international commitments and the implementation of special orders of the Parliament/Government (e.g. on nature reserves, monitoring, R&D), which are not sufficiently supported by the State Budget. If, after supporting such activities, the Fund still has available resources, the MEPNS selects applications submitted via the local authorities to receive co-financing support. The Fund usually covers only part of the costs of

local environmental projects (not more than 25% of total project cost); remaining costs are to be covered by other sources, including the applicant's own sources, local budgets, local environmental funds, etc.

Before the Fund begins to disburse any resources against a given grant award, the Ministry and applicant sign an agreement specifying all technical, financial and other conditions for project implementation. Such agreements are usually prepared by the MEPNS staff member in whose scope of work the respective project falls. Grant agreements are generally reviewed and approved by the financial, economic, R&D and legal departments at the Ministry as well. Agreements are then signed by the Minister (or a Deputy Minister) on behalf of the Ministry and by a duly authorised representative of the grant recipients. Project implementation is monitored by the MEPNS department which took the lead in drafting the agreement, while the project's financing is controlled by the Finance Department. If a project is to be implemented in a given region, the regional environmental authorities should monitor its implementation as well. In the event of project mismanagement, the agreement might be terminated without compensation.

Project activities are usually subdivided into several stages. Upon completion of a stage, the results of implementation to that point are evaluated. If the results are found satisfactory, the next disbursement is made. In justified cases, advance payments (20–30% of project costs) may be made.

6. Evaluation, Reporting and Public Information

The Fund's expenditures are controlled and audited by the Ministry of Finance and other Governmental organisations authorised to control the use of State funds. MEPNS submits annual reports on the use of the Fund's financial resources to the Ministry of Statistics (using "Environmental Funds Statistical Reporting Form No. 1).” Information on the Fund's revenues and expenditures is published annually in the National State of the Environment Reports.

7. Major Achievements

The establishment of the State Environmental Protection Fund has secured the earmarked use of revenues - from pollution charges and, starting in 1999, natural resource use fees - for environmental protection purposes which might not otherwise have been provided by the State Budget. Given the budgetary difficulties, experienced by the country, such an achievement is significant as the Fund has become an additional source of finance for environmental programmes of national importance. These programmes include: the Programme for Long-Term Development of Natural Reserves; the Programme for the Rehabilitation of the Dnieper River; and, measures required for the implementation of international conventions (e.g. the Montreal Protocol on Ozone-Depleting Substances, the Climate Change Convention, the Convention on Long-Range Transboundary Air Pollution, the Biodiversity Convention, etc.).

The Fund's financial resources have also played an important role in other fields, such as: co-financing activities aimed at reducing negative environmental impacts on human health; supporting the institutional capacities of local environmental authorities (for example, by financing environmental equipment and monitoring instruments); environmental research; and the drafting of environmental acts and regulations.

8. Challenges and Future Prospects

There are plans for the future to reform the State Environmental Protection Fund to be more adaptable to market economy conditions. Such changes would likely involve:

- giving the Fund its own legal identity;
- transforming the Fund into an extra-budgetary entity;
- enabling the Fund to provide soft loans.

With the aim of achieving these objectives, the existing environmental legislation is being revised and amended, taking into account the positive experience of other countries in this field.

CHAPTER 21

UZBEKISTAN: REPUBLICAN AND SUB-NATIONAL ENVIRONMENTAL PROTECTION FUNDS

Sergei Samoilov

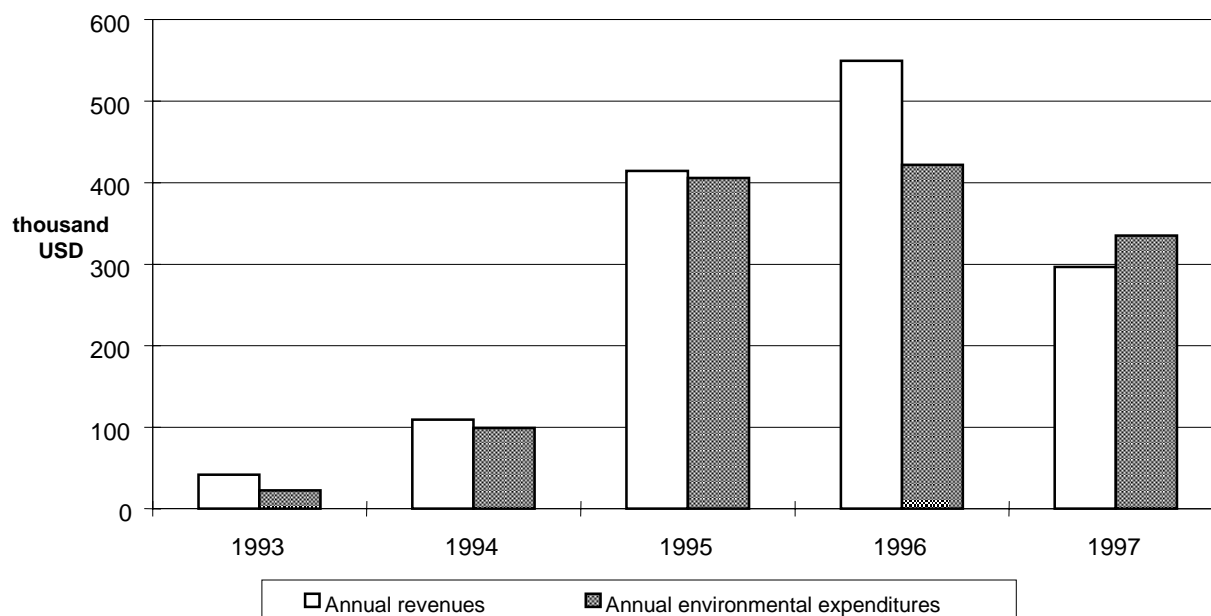
Head, Department of Natural Resource Use and Economy
State Committee on Environmental Protection

1. Background and Objectives

Uzbekistan's Environmental Protection Act of 1992 provides the legal basis for the establishment and operation of the country's environmental funds, which include the Republican Fund as well as regional and local funds. Section VIII of the Act, concerning "Economic Measures to Ensure Environmental Protection", stipulates that: "a Republican Environmental Protection Fund and local environmental funds shall be established under the State Committee on Environmental Protection with the aim of securing earmarked finance for environmental protection measures of national and international significance, eliminating past environmental damages caused by human activities, and supporting other environmental protection activities". The Republican and local funds have been operational in their present form since 24 May, 1993.

Revenues and expenditures of the *overall environmental funds system* in Uzbekistan for 1993-1997 are shown in Figure 21.1.

Figure 21.1: Revenues and expenditures of the overall environmental funds system in Uzbekistan (*thousand USD; nominal values based on annual average exchange rates*).



Source: Table II.21.1 in Annex II.

Notes: Annual expenditures includes the Funds' overhead/administrative expenses. See Annex II.21.1 for more detailed data.

2. Management and Administration

As noted above, Uzbekistan has a two-tiered system of environmental funds which is composed of a Republican Fund and 14 regional/local funds. Both the Republican Fund and regional/local funds are managed by boards. The Chairpersons of the respective Environmental Protection Committees (at the national and regional/local levels) also Chair the fund boards. The boards collectively decide on major issues relating to funds' activities, such as: identifying the funds' spending priorities and the most appropriate forms and terms for financing environmental measures. The boards meet once or twice a year, as needed, to decide upon the allocation of the funds' resources and other urgent matters.

The Republican Fund's Board consists of environmental officials, leading scientists, environmental experts and representatives of non-governmental organisations. The members of the Board serve in a voluntary capacity and are not compensated for their work. The Board does, however, select and employ staff, who are approved by the State Committee on Environmental Protection. This staff is responsible for carrying out the routine work of the Fund. Staff salaries and other administrative costs are financed from the funds' own resources. The Republican Fund has a staff of four people regional/local funds typically employ 2-3 people.

The funds do not have their own legal identity, however, they do have their own bank accounts. Unspent money, held by the funds at the end of the year, may be carried over into the next year for use.

3. Revenues

The funds' main revenue sources, as specified in the Regulations on Environmental Funds (approved by Decree of the Cabinet of Ministers in 1993) are payments for pollution above admissible levels as well as non-compliance fines and payments for violation of environmental legislation. 25% of these revenues are to be transferred to the Republican Fund, while 75% remain at the regional/local level where they are initially collected.

On an annual basis, polluters themselves are obliged to calculate payments. Actual payments should be made quarterly. In the event of emergencies, technological failures or other events which result in excessive pollution, the polluter is obliged to recalculate his or her payments. If a polluter fails to make his/her payment to the appropriate regional/local environmental fund within 10 days after the end of a reporting period, the respective environmental protection committee may file a law-suit in court requiring the payment to be made. Polluters do not have the right to withhold payments. New regulations currently being proposed are expected to provide additional, alternative incentives for polluters to make their payments.

Revenues are not earmarked according to environmental media source. (In other words, payments resulting from air pollution may be used to support activities addressing water pollution, for example.)

Taking into account the economic and financial conditions in the country, there are plans to gradually expand and reform the system of economic instruments in environmental policy. Presently in effect are payments for air emissions, discharges into water and waste disposal which exceed admissible levels. The next stage of development envisages the introduction of charges for pollution within admissible levels. (The necessary laws and regulations are being drafted by experts of the State Committee on Environmental Protection and other institutions, and will eventually be submitted to the Parliament for review and approval.) A third stage of development in the system of economic instruments would likely involve charges for the use/consumption of natural resources (water, soil, forests, mineral resources, etc.). The full development process is scheduled to be completed in 2010.

4. Expenditures

The Republican and regional/local environmental funds allocate their financial resources in accordance with annual programmes prepared by the fund boards and approved by the respective regional/local government administrations and ultimately the Cabinet of Ministers. According to the funds' regulations, 15% of the funds' resources are earmarked to be spent as salary bonuses for individuals, or groups of individuals in state, public and other enterprises, institutions and organisations, for significant achievements in the field of environmental protection.

The financial resources, accumulated by the Republican Environmental Fund, have allowed it to finance urgent environmental protection measures, environmental research and development, and the drafting of legislative and methodological documents for the State Committee on Environmental Protection. The funds do not typically finance all the costs of a given activity, i.e. they provide co-financing. The Republican Fund may also provide financial assistance to local environmental funds for the financing of local priority environmental measures.

Activities supported by the funds' expenditures include:

- construction, modernisation, and repair of environmental technology and facilities;
- research and development of environmental technologies, including monitoring equipment;
- rehabilitation of environmental resources damaged by pollution;
- the creation of water-protection zones; protection and restoration of small rivers and other water bodies;
- creation, development, and maintenance of nature reserves and other protected natural areas and sites;
- protection of flora and fauna, etc.

5. Funding Cycle

Activities financed by the environmental funds are often initiated and designed by the environmental committees or other state, public institutions. Collectively, these activities form the annual programmes upon which the funds' spending is based. Individuals and/or organisations, which might be interested and capable of implementing the various activities, are provided with descriptions of the tasks to be performed. Prospective contractors may then submit their proposals for carrying out the activities. The proposals are evaluated by the fund boards, which then determine which contractor will be awarded a given project.

The criteria for evaluating proposals include: least cost solutions, expected environmental benefits, and completion schedule. Use of the funds' resources is monitored against an approved work schedule. Project implementation, which is usually broken into stages, is monitored by regional and local authorities. Upon project completion an implementation report is issued.

6. Evaluation, Reporting and Public Information

The boards of regional/local environmental funds submit quarterly reports (using standardised forms) on the use of the funds' resources to the State Committee on Environmental Protection (or, in the case of the autonomous Republic of Karakalpakstan, to the Republic's Supreme Council), and the executive authorities of the regional governments. The Republican Fund also plays a role in monitoring and controlling the spending of the regional/local environmental funds. The State Committee on Environmental Protection is obliged to submit annual reports on the use of the Republican Fund's resources to the Cabinet of Ministers.

7. Major Achievements

A sample of the activities, implemented with support from the Republican Fund, is provided below:

- development of a methodology for environmental zoning of the Republic of Uzbekistan;
- assessment and forecast of fish stocks in the Aral lake system taking into consideration fishing, hydrological and climate factors;
- development and testing of a methodology for environmental impact assessment of toxic waste dumps;
- design of instruments for measuring hydrogen fluoride in industrial flue gases;
- an Uzbek-Japanese project for the improvement of water supply networks in six towns of Southern Uzbekistan near the Aral Sea;
- development, testing and evaluation of the efficiency of “Rodnik” filters for tertiary treatment of potable water in the Karakalpakstan Republic;
- publication of the “Endangered and Extinct Animal Species of Uzbekistan” newsletter and an environmental education manual;
- development of technology and a scheme for treating poultry wastewater discharges using a highly active biological oxidant;
- development of environmental standards for the levels of hydrogen fluoride in ambient air with regard to its effect on flora in an arid climate zone;
- development and publication of a “Compendium of Research Works on the Natural Reserves of Uzbekistan” and a monograph on “Artificial Renewal of Underground Water Stocks at Water Intakes of the Aral Sea Area”.

8. Challenges and Future Prospects

The introduction and use of economic instruments for managing the environment in Uzbekistan requires serious improvements in environmental legislation. In recognition of this, the staff of the State Committee on Environmental Protection has undertaken to amend or initiate the following acts: a new Environmental Protection Act; an Act on Specially Protected Natural Sites; a Soil Act; and an Ambient Air Quality Act (adopted by the Parliament in 1996). The Committee has also drafted a number of environmental decrees for adoption by the Cabinet of Ministers.

The next stage in the development of economic instruments in environmental policy in the country should involve the introduction of charges on pollution within admissible levels and the gradual imposition of payments for the use of natural resources. It is anticipated that these developments will lead to increased revenues for the environmental funds. Additionally, the following measures would also improve the effectiveness and efficiency of the funds:

- broadening the range of disbursement mechanisms beyond grants (e.g. the provision of loans);
- more active use of co-financing arrangements and the attraction of finance from other sources (e.g. International Fund for Saving the Aral Sea, “Ecosan” International Fund, etc.);
- and, creation of an environmental insurance fund.