Establishing an Environmental Fund

Practical Aspects for Decision Makers and Fund Managers

Working paper

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June 2006
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1. BACKGROUND AND OBJECTIVES
The Ministry of Environment and Physical Planning of the Republic of Montenegro is considering the establishment of an environmental fund in the Republic of Montenegro. At present, the Law on the Environmental Fund is being drafted. Before taking the decision on initiating the process of establishment of an environmental fund in Montenegro, all relevant stakeholders need to be informed about opportunities and challenges related to the establishment of the fund and the key issues which need to be taken into account. The publicity of the idea of the environmental fund’s establishment is one of the most important pre-conditions for successful establishment of the fund.

In order to address this need, training was conducted for key fund stakeholders by the REC and the Federal Ministry of Agriculture, Forestry, Environment and Water Management of Austria in 2005. The main objective was to provide a sufficient amount of information to the key stakeholders on initial challenges and opportunities related to the fund establishment which will result in better understanding of its future.

This report is based on key themes discussed at the training on the establishment of an environmental fund in the Montenegro. The report reviews all key aspects of environmental fund operations which should be taken into account while establishing an environmental fund or any other environmental expenditure programme.

Although this report focuses on fund development in Montenegro, it can be used in other countries in which an environmental fund or other environmental expenditure programmes are planned, as well as by the decision makers in Montenegro for further development of the fund. The report is designed to provide an overview of preparatory work which needs to be done before the fund becomes operational. At the same time, the report presents the concrete situation in the Montenegro, which can be used as a reference point for action needed in other countries.

The methodology in developing a report is based on considering the following aspects of the environmental fund operations: types of environmental funds; budgetary aspects; programming; project selection; forms of assistance; project administration; tasks of the ministry; and administrative aspects.

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2. SITUATION IN THE REPUBLIC OF MONTENEGRO

The aim of this chapter is to provide the reader with a summary of key information about the Republic of Montenegro which might influence the establishment of the fund and its operational form.¹

**General information**

Situated in the western Balkans, Montenegro borders Albania and is across the Adriatic Sea from Italy. Its neighbours to the north are Croatia and Bosnia and Herzegovina. Montenegro has recently voted to split from the Republic of Serbia, thereby dissolving the State Union of Serbia and Montenegro.

Montenegro has commenced the process of transposing EU environmental acquis into national legislation. With regard to key investment heavy EU directives in the air sector, the Law on Ambient Air Quality is expected to be adopted in 2006, which will harmonise the key principles and requirements of the EU Air Quality Directive. On the other hand, provision of the EU Large Combustion Plants Directive is expected to be implemented only by 2017, according to the Annex II of the Energy Community Treaty for South Eastern Europe. Developments in waste sector regulation are more advanced. The national Law on Waste Management incorporates the requirements of the EU Directives on landfills, incineration and sewage sludge; however, the hazardous waste directive is not expected to be fully transposed until 2009. The government adopted the National Policy on Waste Management in 2004 and the Master Plan for Waste Management in 2005, which serve as key policy documents for the waste sector.

Concerning the water sector, the legal basis is provided in the national Law on Water and several by-laws, which regulate the measuring and monitoring of drinking-, sea- and bathing-water quality; wastewater emission; and designation of water categories and protection zones, among others. However, these regulations do not ensure full harmonisation with EU directives. The Programme for Infrastructure Development prepared for Montenegro highlights the need to develop and improve water supply and wastewater treatment infrastructure. Other policy documents such as the *Report on the State of Environment* and the long-term strategy *Developmental Directions of Montenegro as an Ecological State* identify development objectives and propose measures in the fields of air, biodiversity, soil and water protection.

At present, there are two documents defining the environmental priorities of Montenegro:

- the *Strategic Framework of Sustainable Development of Montenegro*, adopted by the Government of Montenegro in 2001; and
- the *Agenda of Economic Reform of the Government of Montenegro*, adopted in 2003. The agenda is a five-year sectoral plan for achieving sustainable development and strengthening the country’s economy.

Montenegro is in the process of implementing several reforms, two of which aim at decentralisation: public administration reform and local government reform.

The framework for cooperation of the Republic of Montenegro with the European Union is provided by the Stabilisation and Association Agreement. Within this framework, the milestones for improving the environmental situation by adopting EU standards are set. In order to implement this framework, Montenegro is establishing the basic legislative framework for environmental

¹ More information about the environmental situation in the Republic of Montenegro can be found at <www.uneca.org>.
protection. Over the course of 2005, several strategies were prepared to streamline the association process. These include the Action Plan for Implementation of European Partnership; the Communication Strategy of Montenegro in the Process of Association with the EU; the Economic Reform Agenda (and its revision two years afterward); and the Millennium Development Goals Report. Furthermore, sectoral strategies for the waste management, wastewater treatment and energy sectors were developed.

Major achievements in this respect are that the EU’s Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA) and Integrated Pollution Prevention and Control (IPPC) directives are in the process of transposition, with final versions expected for adoption by 2006. In addition, the Environmental Protection Agency is under establishment. A range of other regulations on noise, waste, ambient air quality, protection from ionising and non-ionising radiation, and the establishment of the Environmental Fund are in development. The Parliament has also adopted a declaration on preventing construction of a dam in the Tara River Canyon. Montenegro is part of regional environmental initiatives, such as the Regional Environmental Reconstruction Programme for South Eastern Europe (REReP) and the Environmental Compliance and Enforcement Network for Accession (ECENA) — formerly the Balkan Environmental Regulatory Compliance and Enforcement Network (BERCEN) — to enhance institution building.

For 2006, several other regulations (on waste management, chemicals, access to information and justice in environment issues, and public participation in decision making) in line with EU provisions are planned for adoption. Further efforts will be made to develop national energy efficiency and a transport strategy. During 2005-2006, attention will be given to integrated coastal zone management, biodiversity, climate change and sustainable development. In the future, cooperation with Serbia should continue on environmental issues. And for the implementation of environmental policies, institutional and regulatory reforms need to be accelerated.

There are 21 municipalities in Montenegro, making up the population of 650,575 citizens. Montenegro has a coastline of 293 kilometres. Although classified as Mediterranean, Montenegro occupies a mountainous area with 60 percent of its territory more than 1,000 metres above sea level. There are four national parks in the country: Durmitor, Biogradska Gora, Lake Skadar, and Lovcen. The town of Kotor and the Tara Canyon are under UNESCO protection.

Montenegro has not been officially divided into regions, but in terms of climate, natural resources and distinctive culture, it could be divided into three regions: northern (mountainous and mostly undeveloped); central (with its administrative offices and valleys); and southern (the seaside).

The current status of the environmental infrastructure can be summarised as follows:

- The drinking water supply of settlements amounts to approximately 45,000 litres per second. The capacity of spring water is around 75,000 litres per second, but this capacity is not fully used. There are problems with supplying drinking water to settlements in coastal areas. At present, a project involving the regional water supply system along the coast is being financed with the support of the United States Agency for International Development (USAID).
- The strategy for waste management in Montenegro was prepared with financial support from the European Agency for Reconstruction (EAR). Currently the project of the World Bank, Sanitation and Construction of a Regional Landfill for Kotor/Tivat, Budva and Bar by EU Standards is under implementation. Other coastal municipalities do not have long-

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term solutions for waste management. There are presently 24 municipal landfills, out of which only one is considered sanitary.

- The best situation in relation to wastewater collection is in the central part of the country, where the most developed cities are located. In larger settlements, sewage networks cover only town centres, and septic tanks are the predominant system for wastewater collection. The system of sewage collection is most developed in Podgorica, Niksic, Berane and Pljevlja; there are no towns with pumping stations for sewage. In the northern and central regions, approximately 62 percent of the population is not connected to a central sewage system. In southern Montenegro, a master plan has been developed with the financial support of the EAR. The plan shows that in the area an average of 35 percent of households are not connected to sewage networks. In Budva, 100 percent are connected, while the connection rates in Kotor and Tivat are only 40-45 percent.

- A master plan for wastewater treatment prepared with the financial support of the EAR has been developed. There are four wastewater treatment plants in Montenegro; the plant in Niksic was constructed in 1970 and abandoned in 1990, with all mechanical and electric equipment removed. The plant in Podgorica is working, though out-of-date and overloaded; the plant was constructed for 55,000 people, but Podgorica’s population today is 200,000. This plant currently treats wastewater from 80,000 people, and all wastewater collected at the plant is treated. Kolasin uses two lagoons for wastewater treatment; in town, around 60 percent of the population have a sewage connection, but only 10 percent are connected to the wastewater treatment plant.

**Financial conditions of local governments**

In Montenegro, local government is responsible for public service provision and for owning the majority of public-service assets. In order to provide the financial means, municipalities are entitled by law to collect additional revenues and to define their own priorities for resource allocation. Public-private partnerships are at an early stage of development in Montenegro, though some examples can be cited in relation to concessions for water supply. In addition, municipalities are legally able to form associations, and the Union of Municipalities of Montenegro was established in 1972.

Municipal borrowing is possible on both short- and long-term bases; however, borrowing from commercial banks still requires governmental approval. For operating purposes, only short-term loans are allowed to be taken. There is a ceiling on debt service as well: The municipality can borrow only if the total amount of the loan instalment plus interest to be paid in a given year, does not exceed 10 percent of realised revenues collected the year prior to borrowing. Since the official currency in Montenegro is the Euro, borrowing is made easier. Nevertheless, borrowing abroad for municipalities can be done only with government approval, taking into consideration the provisions of the Law on Local Self-Government Finance. The government can also provide loan guarantees upon request. Municipalities are obliged to report regularly on budget, debt amount and debt service to the Ministry of Finance, which can request an audit of the municipality budget. In cases of debt amount or debt service limit excess, the Ministry of Finance can suspend inflow to the municipality budget from the state budget.

Despite the fact that some international finance institutions, e.g. the European Investment Bank, offer loans for municipality environmental projects, no such loans have taken place. There is an opportunity for public companies founded by the municipality to borrow, provided approval is received from the founder.

The general revenue sources of municipalities include personal income tax; real estate transfer tax; local taxes; interests on unpaid local taxes; fees (e.g. local communal fees, fees for constructing or maintaining roads); state budget subsidies; revenues generated from municipal activities and other
local revenues (e.g. proceeds from property sale, revenue from loans). However, water, sewage and waste fees currently do not cover operating and maintenance costs of the related environmental infrastructure. Thus, in cases of loans taken by the municipality for capital investment in environmental infrastructure improvement, charges for the service are expected to increase. Considering the financial situation of municipalities in general, few can report minor operational surpluses: In 2004, 10 of 21 municipalities reported a surplus of EUR 3.4 per capita on average, and the average per capita revenue concerning all 21 municipalities in Montenegro amounted to EUR 147.7 in 2004. In this year, 22.5 percent of total expenditures was spent on capital investments by municipalities. With regard to setting tariffs on public environmental services, municipalities enjoy full independence, and each has its own decrees to regulate and propose tariff rates. Current tariff rates are designed to cover operation and maintenance cost — though not investment cost — but the collection rates are generally low. In general the financing of the environmental sector is insufficient, as less than 0.1 percent of the GDP is devoted to fund environmental protection programmes.

3. ESTABLISHING A FUND

In this report, establishment of an environmental fund is discussed. It must be noted that the term “environmental fund” is not important in comparison to the purpose of such a tool. In this document, the phrase “environmental fund” is used for simplicity’s sake to express a mechanism which serves as a tool for financing precisely defined environmental projects. In practice, such a mechanism can have any title acceptable in local (national) conditions, e.g. “expenditure programme” or “investment programme.” These mechanisms can take different organisational forms, different levels of independence and different forms of assistance.

The decision to establish this kind of tool reflects the strong willingness of the responsible body (i.e. the government or ministry) to reach the envisioned long-term policy goals. From this perspective, an environmental fund should serve to achieve policy goals beyond day-to-day politics through making money available for the fixed purpose.

In practice, all public funds are exposed to and influenced by political changes (e.g. election results) and new approaches to expenditures of the fund might occur. Nevertheless, the core purpose of a fund should remain stable and the fund’s structure should reflect a long-term perspective and policy goals. This can be achieved if the fund is based on the highest possible legal level (e.g. a specific act) in the country where the form, structure and objectives of the fund are laid down.

**Benefits of environmental funds**

In many countries, the financial resources for implementing policy reforms are scarce. Environmental policy is only one of several state sectoral policies. Therefore, environmental protection is in continuous competition with other state tasks such as health, education or economic growth. The balance between these and all state policies must be defined and decided by society, represented normally by the government and/or the parliament. Environmental policy priorities are usually low in the overall policy agenda of developing countries, and it is therefore very difficult to find justification for supporting and encouraging the establishment of an environmental fund.

In this situation, a look at the broader benefits of the environmental fund is needed. In particular, benefits should be seen in correlation with economic and social benefits; in developing new environmental infrastructure according to policy principles, for example, the polluter-pays principle should be implemented. At the moment, this principle is not fully implemented in many developing countries, especially in relation to users of municipal services such as waste collection and treatment, water supply, and wastewater collection and treatment. If tariffs for service use are
increased, affordability problems will immediately be created for households with the lowest income levels. In this context, state aid channelled through the environmental fund, e.g. subsidising society’s poorest members might assist in mitigating the social aspects of environmental policy reforms.

In relation to economic benefits, areas with higher environmental standards provide more economic and legal stability. The risk for new environmental regulations — and unforeseen investment — is lower in environmentally sound regions with lower pollution levels, making it easier to attract private investment. This condition also stimulates pro-environmental businesses such those in eco-technology, eco-tourism and ecological farming.

In many cases, environmental subsidies also bring benefits to the overall political agenda of the country. In Montenegro, which is committed to the Stabilisation and Association Process, compliance with EU legislation is a priority of the political agenda: The accession process requires compliance with all EU legislation before the date of accession unless a transitional period is granted, but it is very difficult to earn derogations. In the case of the 10 new EU member states, few transitional periods were granted and these only for a limited scope. That the legislation must be transposed, implemented and enforced presents a major challenge for the country.

As the experience of new EU member states shows, one of the biggest challenges of compliance lies in implementation of the environmental acquis, especially for key EU investment heavy directives. For the public sector, the task is to increase the level of investment even in those regions where the GDP is lower and the poverty level higher than in many new EU member states. Compliance with the EU environmental acquis is also relevant for the private sector and industry, because they must face the upcoming environmental regulations. Environmental subsidies can help to reduce the economic burden of the single household or the enterprise by sharing it with the general public (i.e. taxpayers) and sometimes with future generations. State debt for environmental investment such as wastewater treatment plants or sewers is justified, because these improvements create value for at least 50 years; the environmental fund can play a role in financing these infrastructures with grants or loans.

Establishment of an environmental fund also brings the positive message that the government cares about creating better living conditions for the society through environmental protection and that a long-term strategy for achieving environmental goals is secure, despite elections and policy changes.

The long-term perspective of the environmental fund is a key characteristic of funding and its effectiveness. The longer the perspective of the environmental fund, the more success the fund promises. Justifications for providing a long-term perspective for the fund are the following:

- Relevant stakeholders should see the fund as trustworthy following the long-term perspective. This trustworthiness goes beyond one legislative term. This is especially relevant if the fund’s attraction of additional financing sources — such as international organisations and donors — can be foreseen.
- Environmental investment is often investment in infrastructure, which proves very costly. It is assumed that the infrastructure should serve for at least two generations, with environmental benefits also serving future generations. Therefore planning for national implementation requires a long-term financial perspective for the fund.
- The ministry of environment (or any other institution in charge) should be able to plan environmental development in a secure atmosphere. Environmental and economic priorities should be developed and implemented in a predictable way: Such predictability provides better solutions. It is assumed that not the cheapest but the projects most sustainable over the long term should be financed. A longer perspective stimulates higher cost effectiveness.
• Smaller environmental projects with a long-term planning and implementation period can achieve higher effectiveness in meeting environmental goals. A long-term perspective for the fund gives a safeguarding message to municipalities and investors that their planning for environmental improvement projects may be financed.
• An environmental fund can be also a flexible mechanism which allows changes within environmental policy goals.

If there is only a short-term budget in the fund and money is not secured for future years, the fund can finance only small inexpensive projects, providing smaller environmental effects. With a long-term perspective, the same amount of money can be dedicated to one large project, which results in achieving much more dramatic effects and a better cost-benefit ratio.

Finally, the strategic approach of such a tool should allow the creation of proper management solutions. New forms of administration may be created which are more effective than standard ministerial administration. For this approach, a fund external to the ministry is an opportunity to escape existing structures and create a more efficient solution.

**Types of funds**

There is no one-and-only successful fund. As already indicated in the definition, funds can vary widely and be successful although developed from different approaches. It is necessary to adapt fund structures and key elements of the national political system, and success depends on the country’s legal structures, political framework and work ethic. In theory, any organisational structure is possible, as long as the long-term perspective is kept in mind and the fund assists in achieving long-term policy goals in an effective and efficient way. Deciding the type of the fund is just the first step in establishing the fund. All steps must be discussed with stakeholders to get a common vision of the future mechanism.

One of many different typologies of funds is the characterisation by budgetary aspects. The most popular types of funds within this kind of categorisation are characterised in Table 1 below.

**Table 1. Characteristics of the main types of funds**

<table>
<thead>
<tr>
<th>Type</th>
<th>Characteristic</th>
<th>Advantage</th>
<th>Disadvantage</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Budgetary fund</strong></td>
<td>Defined budget line in the state budget.</td>
<td>Opportunity to have money to disburse, even if revenue sources delayed.</td>
<td>No legal provisions for existence of the fund.</td>
<td>Can operate efficiently if common agreement on a long-term strategy exists.</td>
</tr>
<tr>
<td></td>
<td>Volume of expenditures and origin of funds often fixed.</td>
<td></td>
<td>Difficult to attract donors.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annual budgeting.</td>
<td></td>
<td>Implementing projects the main driver, as money has to be spent in a budget year.</td>
<td></td>
</tr>
<tr>
<td><strong>Extra-budgetary fund</strong></td>
<td>Separate institutional set-up.</td>
<td>No problem with annual budgeting.</td>
<td>Importance of a stringent control system to stay in line with long-term objectives.</td>
<td>Similar rights to influence fund (as in budgetary funds) often reserved by ministries of finance.</td>
</tr>
<tr>
<td></td>
<td>Can be designed as a legal entity.</td>
<td>Easier to attract external donors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refinancing capabilities of the fund legally determined.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>International donors fund</strong></td>
<td>Money channelled through one institution.</td>
<td>With proper administration</td>
<td>Depends more on political objectives of</td>
<td>Combination with budgetary and/or</td>
</tr>
</tbody>
</table>

*Establishing an Environmental Fund*
Debt for environment swap

<table>
<thead>
<tr>
<th>Debt for environment swap</th>
<th>National debts paid to the fund as a source of revenue according to negotiated rules with a donor country.</th>
<th>Mechanism created with multi-year perspective.</th>
<th>Importance of a special unit to coordinate policy goals.</th>
<th>Without transparency, cannot be integrated into national funding scheme.</th>
</tr>
</thead>
</table>

Legal set-up

The fund should be integrated into the country’s legal hierarchy and founded on the highest possible act or regulation. If environment is a constitutional task, the financial aspects of environmental protection may be mentioned. A separate act should include the goals of the fund, sources of revenue and institutional set-up. Simultaneously with the act, specific regulations or guidelines should be established.

The main tasks of the act and guidelines are presented in Table 2 below.

Table 2. Differences in legal set-ups

<table>
<thead>
<tr>
<th>Act</th>
<th>Guideline or regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>General policy goals</td>
<td>Specific goals and funding conditions must be set. Technical, ecological, economic and administrative requirements must be specified in detail.</td>
</tr>
<tr>
<td>Goals of the fund</td>
<td>Flexibility should be introduced to react to the needs of the market and the environmental situation.</td>
</tr>
<tr>
<td>Sources of revenue</td>
<td>Guidelines are to be revised in three to five years.</td>
</tr>
<tr>
<td>Institutional set-up</td>
<td>This should be issued by government or environmental minister and is addressed to the fund.</td>
</tr>
<tr>
<td>Act to be revised in 10 years</td>
<td>The fund implements guidelines for everyday work and informs the public about funding criteria.</td>
</tr>
</tbody>
</table>

Typically guidelines legally bind only the fund administration and not the applicants. Potential applicants are free to decide if they wish to use money from the fund, but there is no legal obligation to finance a given project. Guidelines are published only to inform the applicants about funding opportunities and the appraisal criteria of fund administration. Therefore, if funding is requested in improper fashion and the fund manager did not indicate as such, the individual applicant is not to blame.

Possible elements of such guidelines include:

- more detailed definition of the fund’s goals;
- eligible and non-eligible measures;
- administrative conditions;
- technical conditions;
- economic conditions (i.e. a sound financial plan);
- ecological conditions;
- form of selection and priority-setting scheme (not the priorities themselves);
- maximum rates of subsidies and method of calculation;
- forms of subsidies (e.g. loans, grants);
method of payment including timetable, required documentation, etc.; and
control and payment conditions.

Regardless of which source of revenue the fund receives, when and how the revenue will be available for the fund must be specified. Negotiations with the ministry of finance and some banks regarding the account and account conditions must be carried out. If fund management is also responsible for the management of revenues (i.e. income from fees, fines and polluter charges), an effective inspection and payment system must be established; administrative costs of this system must usually be covered by the revenue. All further steps should be taken after the regular income of the fund has been secured.

Tasks

The form of the fund (i.e. private or public) must be fixed in the funding act. On the basis of this act and after the budgetary setting, concrete steps for creating a funding unit may be taken. Regardless of fund administration, necessary steps include strategy, appraisal, approval, administration, payment and control. All of these tasks, aside from those of strategy and control, can be performed by a single institution.

According to the available budget and proposed goals, qualified people must be hired for these duties, which can be located within the administrative structures of the fund or externally, depending on the workload. Staff should have a basic knowledge of the tasks and have the proper economic/technical/administrative background; additional training must be provided in parallel with the first actions of the fund. The managing institution can take many different forms. A variety of good examples show that management is important — not the form of the institution.

Possible management systems

Possible management systems include:

- Unit within the ministry. Technical units are responsible for the selection process, economic units for the cost-benefit analysis and the payments and the strategic department also for the approval. This organisational form requires emphasis on the control circles. If everything is done in the same ministry, and strategy and implementation are not separated properly, the result is a system of poor transparency. Moreover the funding duties require specialised staff and therefore intensive training measures would be necessary.

- Ministerial unit outside the structure of the ministry. Such cases, as in the Czech Environmental Fund, are widespread in Europe. The funding manager and staff belong to the ministry, which reduces costs and at the same time allows the fund freedom in decision making (so long as said decisions remain in line with set guidelines). This brings more flexibility and — as the staff are civil servants — stability to the system. Such organisational separation could also prevent political corruption and reduce pressure on each individual employee.

- Decentralisation. A special form of outsourcing within the administrative structure is empowerment of regional administrations with some funding tasks. Starting from the pure appraisal process (as partly seen in Austria in wastewater treatment) up to delegating shares of the capital to regions (for their own purpose but also as co-financing means for central decided actions as the vojvodship funds in Poland). This structure requires a very mature system, because many institutions are involved and must be trained and informed about possible changes to the process. On the other hand, this structure strengthens the regions and the environmental emphasis of regional administrations.
• Outsourcing to private structures. In practice, almost all tasks can be outsourced. For technical, economic and ecological appraisal and ranking in many countries external staff is hired. Expert panels (as in PHARE projects) perform tasks on the basis of individual contracts. Administration and payment duties of the fund may be outsourced to banks which act strictly within the rules of the ministry (for example, in Austria the administration of housing subsidies are managed by banks). External control for evaluation and financial matters may be found on the national or international market. In some countries, all such tasks are outsourced to a single private body (e.g. to the Kommunalbank Austria, a subsidiary of an Austrian bank, in Austria). Strategy, approval and control must be undertaken separately.

• Hybrid systems. Many funding systems are not pure in form but use elements of different types. State funds often use regional authorities for the formal eligibility check and information measures, and external technical consultants for ranking projects. The involvement of different organisations also reduces the danger of financial corruption but is a challenge to transparency requirements.

All of these steps are needed for the fund to become operational. Developed strategies and guidelines must be simplified in order to be more easily communicated to potential project applicants. Information leaflets and seminars for consultants and the envisioned major target groups must be organised. Particularly in the first two years of a fund’s existence, a significant amount of money should be spent on proper information and public relations activities; these could reduce unrealistic approaches and reduce applications to a feasible number.

**Comments and recommendations**

The following conclusions can be made:

• Through establishment of the fund, the government shows its commitment to the environmental improvements.

• In countries where there is constant competition between different sector policies, a proper argumentation of benefits from having a fund is needed, especially in relation to economic and social benefits.

• The type of fund (budgetary, extra-budgetary) chosen is not as important as the fact that the fund should have a long-term perspective tailored to local conditions and management structure, so that long-term policy goals can be achieved despite political changes, and so long-term sources of revenue are secured.

• The fund should be founded at the highest possible level as an act of general content. The act should be followed by lower-level legal documents such as guidelines which specify detailed goals and funding criteria.

• The type of fund chosen should ensure that goals are achieved; therefore, negotiations with all stakeholders are needed.

• All developed documents for the fund should be simplified to make communication with potential project applicants easier.

In Montenegro, the Law on the Environmental Fund has already been drafted. There is ongoing discussion between the Ministry of Environment and the Ministry of Finance regarding the choice of budgetary or extra-budgetary fund. In this situation it can be recommended that:

• The Ministry of Environment should analyse the long-term policy goals to be achieved and decide on the best type of the fund based on this.

• Focus should be on social and economic benefits of the fund, especially in relation to the tourism industry, a major opportunity for Montenegro.
4. SOURCES OF REVENUE

Available financial resources for the fund are a key aspect of fund operations. The more money available, the more activities can be financed. In practice, enough money is never allocated to achieve the intended goals through this resource only. From this perspective, the efficiency of budget management becomes a leading principle for fund operation. Nevertheless, the first step in the long-term strategy of a financing mechanism is to assess the fund’s needs and goals. Even knowing that reception of the proposed amount is illusory, the fund should be discussed on a broad scale and national consensus reached. If the problem is described properly, a long-term financial perspective may be established to cover the required actions.

After this exercise, the first aspect of budget management is to determine the financial resources available. This question is relevant for both the current year and the future. Such an assessment should include money available from the direct fund’s regular and irregular revenues and from other sources (e.g. EU funds, if channelled through the fund) as well. Additionally, money bound to the fund by explicit legal regulations and pre-determined co-financing sources are important to take into account.

This step must be followed by financial planning regarding the number of projects (with costs of a single project to be determined on a technical level) which can be implemented with the available budget over the years. The difference between the budget considered as necessary to reach the national goals and the available amount should be clear from the beginning. Closing this gap is the task of politicians and not of fund management.

Another important aspect of budget management is determination of when the money granted must be paid to the beneficiary. The bigger the project, the longer the period between approval and payment becomes. Financial management must be designed in a way that the money needed for payment is definitely available on time, including potential interest rates of intermediate investments. It is necessary that the investors (beneficiaries) can rely on the fund and that contracts can be fulfilled on both sides. Either the treasury can provide this security of payment in time or the money is transferred after the contracting to an account.

The time difference between approval and payment can also help the fund begin the activities with less money available. In this case, however, financial management must be done in such a way so that there is enough money available at payment time through short- and medium-term planning. This also requires greater pressure on the beneficiary to adhere closely to the contracted time-frame.

Another budgetary aspect is the one-year alignment of public budget plans. Normally, the public sector operates based on a year-by-year plan. This could cause some difficulties in the project management, if, for instance, one or more projects cannot be granted in time because there is insufficient money available in the fund for the current year or, if at the end of the year, some money remains. For this, it turned out to be very useful to have a multi-annual granting frame, which enables the fund to optimise project management.

The budget available for the fund is also related to revenue sources. Different revenue sources are described in Table 3.
Table 3. Overview of revenue sources

<table>
<thead>
<tr>
<th>Revenue source</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>General budget lines</td>
<td>Revenue and budgeting are tasks for the treasury. The budget is agreed upon in the annual state plan. Amounts are precisely defined in the planning phase of the state budget, but subject to annual negotiation between ministers. This gives a clear picture of how much money will be available. Exceeding defined amounts does not usually occur.</td>
</tr>
<tr>
<td>Environmental fees and charges for products (e.g. fuel)</td>
<td>Earmarked taxes, fees and charges are very common. In most cases, management of the revenue is in the hands of the treasury but is transferred (ex-ante or ex-post) to an account of the fund. The volume of income depends on consumer habits, and is therefore not easily predictable. If the fees are on products which cannot be substituted for other products, revenue can be more precisely determined. In such a case, the general state of the economic forecast is very important. In most cases, there is no steering effect intended, but rather a clear link between revenue and expenditure (e.g. tobacco taxes go to the health service, fuel taxes go to road construction and environment).</td>
</tr>
<tr>
<td>Environmental fees and charges for using the environment</td>
<td>In many cases, management of revenue is in the hands of the Ministry of Environment. This can turn out to be very ineffective because inspectors and tax collectors must be trained and do double duty as the professionals from the Ministry of Finance. On the other hand, calculating charges (e.g. water fees, CO2 emission fees, waste treatment fees) requires a technical background. Revenues are unpredictable and depend on the behaviour of the users. Normally, this kind of revenue has a high steering effect with a tendency to reduce environmental impact and revenues.</td>
</tr>
<tr>
<td>Foreign donors</td>
<td>If established well and working properly, the fund can also channel foreign donor money through its own administration. In a win-win situation, the foreign donor must build up an independent administration, and the fund can create optimised co-financing packages.</td>
</tr>
<tr>
<td>Fines</td>
<td>Usually, income is relatively small compared with other types of income. Fines have an envisioned steering effect and require a dense, effective control system. The budget of the fund should not rely on this type of income in long-term planning. Availability depends on the efficiency of the administration to collect fines.</td>
</tr>
<tr>
<td>Income from privatisation</td>
<td>Income from privatisation might be significant but it happens only once. In this case, revenues must be assessed on the stock markets and serve as a depot for investment for some time. There is a need for high qualifications in know how of finance management, done by a special banking staff.</td>
</tr>
<tr>
<td>Money management income</td>
<td>If the fund provides loans, constant revenue from payback rates must be managed. The management is rather complex and depends on management skills of the fund or a bank. In any case, management must avoid speculation over investing in solid and secure lines. An adequate control system must be implemented to avoid inefficiencies and misuse of money.</td>
</tr>
</tbody>
</table>

Calculated and received revenues from charges and fees are paid into the state budget or a separate account (i.e. the fund account) and are used for purposes set in the fund law. Fund revenues must be used in accordance with this law, the statute and the programme of the fund. The fund is responsible for its liabilities with all its possessions.

Comments and recommendations

The following conclusions can be made:
- There can be many sources of revenues for the fund.
- In the case of a draft law for the fund in Montenegro, the following sources of revenue are foreseen:
  - budget;
  - air emission charges;
  - charges on dangerous products to the environment, e.g. fuel, ozone depleting substances, plastic bags;
  - charges on depositing hazardous waste and vehicle emission charges;
- fines under the fund law and environmental law;
- international and domestic loans;
- financial activities of the fund as repayment of loans given by the fund; and
- revenue from privatisation earmarked for environmental protection, and other.

- It is expected that the yearly revenues of the fund will be in the area of EUR 1-2 million, and therefore efficiency of budget management should become a priority.
- Analyses should be made regarding how secure the abovementioned sources of revenue will be. Many types of revenue come from various fees and charges, thus analyses should determine the volume and predictability of the revenue.
- Time differences in payments between approval and payment should be calculated. This may help the fund to begin more activities with less money available. Nevertheless, it should be assured that there are secured resources for approved projects either at present or at payment time.

5. PLANNING OF EXPENDITURES
Planning of expenditures is one of the most important stages of preparing the fund for operation, as planning for expenditures will determine the general objectives to be achieved. The key question at this stage is “Which types of projects should be financed?”

Types of projects
The annual expenditure plan must reflect which types of activities should be covered during the project cycle. The types of activities that receive support from environmental funds are described in Table 4 below. Normally governmental implementation units, most environmental funds support investment projects. However, environmental funds will often reserve a small share of the budget to environmental education and awareness, training, and research. A special class of environmental funds — conservation trusts — often supports management costs for protected areas, NGO capacity, and land acquisition.

Table 4. Types of projects to be supported

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>Support for projects involving construction and installation of process or</td>
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<tr>
<td></td>
<td>abatement control equipment</td>
</tr>
<tr>
<td>Equipment procurement</td>
<td>Purchase of equipment used in environmental and natural resource management</td>
</tr>
<tr>
<td>Research</td>
<td>Support for environmental research, typically to universities, research institutes and NGOs</td>
</tr>
<tr>
<td>Education and</td>
<td>Support for environmental education and awareness programmes, administered</td>
</tr>
<tr>
<td>awareness</td>
<td>by agencies, local governments, NGOs, universities and schools</td>
</tr>
<tr>
<td>Training</td>
<td>Support for natural resources training to increase capacity of institutions and stakeholders</td>
</tr>
<tr>
<td>NGO capacity</td>
<td>General support for staff, buildings and equipment; capacity building of staff through training</td>
</tr>
<tr>
<td>Management support</td>
<td>Direct support for staff and equipment needed to manage nature parks and</td>
</tr>
<tr>
<td></td>
<td>protected areas, restore habitats, and provide complementary infrastructure</td>
</tr>
<tr>
<td>Land acquisition</td>
<td>Purchase of land for parks and protected areas, habitat protection, buffer zones; may also include purchase of development rights</td>
</tr>
<tr>
<td>Habitat restoration and protection</td>
<td>May involve some capital and infrastructure investments, species propagation, etc.</td>
</tr>
<tr>
<td>Contamination cleanup investments</td>
<td>Removal of contaminated material from sites that may impact protected areas</td>
</tr>
</tbody>
</table>
List of priority projects or priority categories

The way priorities are elaborated in the national strategy document will have important implications for the development of the annual expenditure plan. Usually strategies elaborate a set of general goals or objectives, but the associated implementation plans must specify a list of priority projects, a set of priority categories, or both. In any case, the fund’s annual expenditure plan will raise challenges that may require analysis and discussions to ensure accordance of the plan with national priorities.

List of priority projects

If a fund is obliged by its enabling legislation or statutes to follow or comply with a national list of priority projects, the following differentiation must be considered:

- The fund must finance projects according to their given (political) ranking of projects on a list. This does not mean that the highest ranked project type must be funded first automatically, then the second, and so on. As projects of types highly ranked on the list are sometimes not developed properly, they can be postponed. But for projects meeting the requirements of the fund, the allocation of fund resources must follow the ranking.

- The fund is bound to finance only projects on the priority list. This serves — but also affords — more flexibility for the fund, especially if the highest ranked projects are very costly and require several years to complete.

In both cases, the number and costs of projects on the priority list will be important factors in determining how the fund prepares its annual expenditure plan and its institutional capacity to administrate several projects. A positive side effect of the priority list is that the fund will deal with a smaller number of projects during the application phase. Project appraisal will therefore be easier for the fund’s staff but is more politically influenced than in the case of an open call for projects.

If the process for establishing the priority list has been guided by sound environmental and economic criteria and all relevant stakeholders have had the opportunity to propose certain projects and/or to comment on the priority list, the only major drawback of aligning the annual expenditure plan with the priority list is to discourage new projects. This problem can be partly overcome if the national priority list is updated on an annual basis. However, these lists are often updated at less frequent intervals. A further problem could be that at the time of establishing the list, major criteria, such as cost-effectiveness, are not available because the projects are not prepared at this deep technical level. This could end in financing of important but ineffective projects, and incentive for technical and/or financial improvements are not given because the project receives financial resources anyway.

Priority categories

In cases of too many limitations in place (as listed above) for financing projects from the priority list, the alternative is priority categories. This means that project categories must be identified and agreed upon politically; categories of minor environmental relevance but greater social or economic impact, e.g. waste projects at tourist centres, will also have a share of the financing secured. This earmarking of the annual budget should be in line with the environmental strategy, the annual work programme of the ministry, and the real needs of the applicants. Following the political decision of the priority categories, the annual budget should provide an indicative budget allocation for each priority. This information, communicated to potential applicants, can help them determine the fund’s interest in supporting projects in various categories. Unless the annual expenditure plan is tied to the national priority list, the fund can have some flexibility to deviate from the ex ante allocations. It is difficult for the fund to predict how applications will be distributed to priority-
category projects. In some years, certain project categories will be in short supply and others in excess. If the plan is too rigid, then disbursement in the “under-subscribed” sector will be ineffective (while incorrectly prepared and insufficiently effective projects may gain support), while a number of exemplary and necessary projects in another sector may be rejected simply because resources have been exhausted. For this reason, allocation of resources as stipulated in a fund’s operational programme should be specified as an indicative level only, based on worst-case expenditure plans with the opportunity to transfer money across sectors after a revised political decision.

**Large or small projects**

Typically, large projects are of greatest significance for the country as a whole. These projects are usually mentioned by name in the implementation programme of the national strategy, though a fund often has inadequate resources to finance a large number of these. Assuming the fund has some flexibility in determining whether large projects will be supported, it should analyse the potential benefits from supporting a few large projects versus many small projects. Often the fund can find some balance between small and large projects, partly by limiting the share or total amount of funding provided (cap). Additionally, analysis as to whether larger projects in the country belong to the private or public sector and the limits of available support from the fund should be undertaken.

**Commercial or non-commercial projects**

Regardless of the investor (private, public, or public private partnerships), we speak of commercial projects able to generate a profit in addition to the investment costs within a few years. Non-commercial but socially viable projects do not necessarily yield profits; if they do so, it is due to an applied discount rate of zero or slightly higher, and the profit is made in ten years or more. In practice, public funds are often used to support non-commercial projects, especially for public sector environmental projects in which the social impact is visible.

If the fund supports commercial projects, the rate of the subsidy should be determined carefully. If projects are commercially viable and have positive internal rates of return, they should ideally be financed under market conditions and without any subsidies. In addition, for certain activities in the commercial sector (e.g. renewable energy projects), the very strict EC state aid rules allow subsidies because of the market failures. Thus, if commercial investments are to be prioritised, the fund must conduct thorough analysis of capital markets and review rules that may apply to the provision of subsidies to private firms. Commercial projects should not be excluded from subsidies because private investors can also assist in financing expensive projects. PPP models or contracting can help to attract investment. In such cases, the fund should provide expertise for the contracts in order to avoid misuse of public property.

**Support for new or ongoing projects**

Another decision must be taken as to supporting only new projects with prepared documentation but implementation not yet commenced, or to support ongoing projects as well. Ongoing projects occur in several cases, such as:

- A project applying for funding after the start of implementation. For such ongoing projects, the question as to whether additional funding is really necessary to implement the project must be answered very seriously. Furthermore, the impact of the fund on the project configuration is reduced to zero. Finally, the risk of taking along effects is very high, so that the fund’s effectiveness, in terms of spending public money only when a real and justified demand exists, decreases. Clearly, the recommendation here is not to support such projects.
• A project divided into several construction phases. There are cases in which investors must separate construction into several phases. Sometimes, sewerage is already in place before the wastewater treatment plant is planned; sometimes a new plant is constructed with only a small sewer net. In both cases, the criteria for a positive decision from the fund are fund experts’ level of influence and to what extent improvements to the whole system are still possible.

**Support for innovative projects**

Another dilemma facing a fund supporting environmental projects is the degree of support offered to innovative projects, i.e. those for which no reference installations exist in the country or are even a novelty in international terms. Such projects contain much more risk of failure to achieve anticipated environmental benefits than typical projects do. In contrast, innovative projects are those that are crucial to progress in environmental protection and the mission of environmental funds is to support this progress. This also applies to the transfer of the best foreign technology to the country, and therefore a national environmental industry may also be developed. Naturally, a number of comprehensive engineering, economic, and marketing studies should be carried out before a decision regarding support for innovative projects or technology transfers is taken.

Industries manufacturing environmental protection equipment or producing electric power or heat from renewable sources are now among the most rapidly developing industries worldwide. Chances are that this steep upward trend will not slow down in the coming decades and may even gain momentum. Since environmental protection is a new branch of science and technology, more innovations are to be expected. World-leading engineering solutions introduced ten years ago are now considered obsolete. As a result of ongoing optimisation, environmental protection installations have become increasingly effective, reliable, durable and energy-saving. Installation of features, which are extremely important in the course of system operations, win in competition over other solutions, even if the latter are available at a considerably lower cost.

Thus, a fund may want to consider whether to support innovative projects and, if so, to determine the scale of support offered to innovative solutions; in this way, the fund stimulates the development of domestic industry manufacturing environmental protection equipment. In the absence of customs barriers and fully exchangeable national currencies, the easiest way is to import the necessary installation or system components not manufactured in the country. In many cases, this is also the most reasonable solution. However, the national implementation programme strategy should represent a comprehensive approach that takes account of scientific R&D work, the development of new industrial specialisations, and the possibility of creating new jobs.

In a practical sense, such a focus on innovative projects can be managed by differentiation of aid intensities. Higher innovation and technological risks deserve a higher subsidy.

**Comments and recommendations**

The following conclusions can be made:

- In small countries where all environmental problems are well known, it might be wise to have a list of fixed priority projects and to focus on implementation of these projects in order to more quickly achieve policy goals.
- If the solution with the priority list is chosen, the decision must be followed by broad public participation and consultation to ensure transparency and understanding as to why these projects are on the priority list.
- In the case that there are not many data available (e.g. cost-benefit analyses) it might be wise to have priority categories, not priority projects, to ensure a constant supply of well-prepared projects to the fund.
- Although analyses of potential applicants are done, predictions of applicant behaviour are impossible to make; therefore flexibility is needed to reallocate money between categories.
In Montenegro, all kinds of environmental projects should be financed from the environmental fund; a model with several categories is therefore suggested. Due to the small amount of money available within the fund, a list of priority projects within the selected categories should be developed.

If the WWTP for Podgorica is to be realised, an additional budget decision is necessary because the project will exhaust the available budget of the fund for several years. Projects with a size of over half of the fund budget should be handled on the national level in order to secure the budget. Preparation and administration should be done within the fund.

6. PROGRAMMING

Long-term programming is one of the main steps in the life cycle of the fund and acts as the main source of justification for spending money. Unlike programming, which is mostly a political process and a government responsibility, appraisal, selection and financing of individual projects is a technical process conducted by a professional management body held strongly accountable for its performance. Figure 1 shows a schematic of the interrelation between the programming and project cycles which shape the management structure of a fund. This is a generic structure and deviations in the individual elements may occur, depending on the specific circumstances of a given country/institution, but in principle each of these elements should be present in the overall programming cycle of a fund.

The project cycle

The project cycle consists of the following main phases: identification, preparation, appraisal, selection, implementation, monitoring, and evaluation. The project cycle provides a useful logical framework which may help the fund achieve a high level of efficiency and transparency in its operations. The project cycle can be a very practical tool, providing that each stage of the cycle is clearly defined and supported by detailed transparent operational rules and procedures.

Before launching a project cycle, the fund must ensure that a number of major formal and institutional measures are in place, including:

- identification of investment needs, related opportunities and limitations on the part of entities eligible for public financial support;
- development of procedures for preparation and submission of project proposals and operational rules for staff for dealing with project proposals;
- setting of rules and criteria to be applied by the fund staff in the appraisal and selection of projects for financing;
- setting of rules for awarding financial support to beneficiaries and for supervision of the project implementation process; and
- determining the policy objectives which should be achieved as a result of the fund operations.
Figure 1. Interrelations in fund management structure between programming and project cycles (taken from the St. Petersburg guidelines of the OECD)

Box 1. Conditions for an effective project cycle

Application of any type of project cycle management should lead to cost-effective solutions. Key conditions for an effective and well-functioning project cycle are:

- Clear and understandable eligibility and appraisal criteria and procedures tailored to the specific needs of the fund. These procedures should be formally approved by the supervisory body.
- Good quality of project information delivered by the project applicant. Potential applicants must be informed in advance about all information requirements.
- Availability of information on the fund’s project cycle to the public, e.g. through seminars, press conferences, and assistance lines, to better communicate the rules of assistance. Direct contact with potential applicants should be aimed at providing general information on procedures, encouraging
them to prepare and submit projects, which increases the fund’s chances to get access to additional project proposals. Targeted visits to potential clients may also help improve understanding of the fund’s operating procedures.

- Well-designed and standardised application and appraisal forms.
- Professional staff capable of conducting project appraisal and selection. Discussions on a specific project with an individual applicant should be reduced to a minimum, as such situations are prone to corruption and may raise incorrect expectations on the part of the applicant. Well-prepared and experienced specialists are not easily available on the labour market. General rules of payment to civil servants may prevent selection of the most qualified experts. The system must take all of these defects into account. The main instrument to achieve highly skilled staff in this context is investment in regular training and a corporate identity which includes an independent high-qualified staff.
- Clearly divided and defined lines of responsibilities among technical staff, fund management and supervisory boards. These should be laid down in legal documents of the fund. Responsibilities should go hand in hand with accountability and liability for individual decisions.

An effective project cycle requires adequate decisions at every stage of the process. Processing the information on a specific project results in a chain of partial judgments that form a sequence of decisions needed for a project to be finally accepted or rejected. The project cycle requires intensive communication and interaction among fund staff and between staff and applicants.

A collection of partial decisions is an important supplement to project appraisal, ranking, and selection procedures and can simultaneously be used as a tool of verification for these procedures. Such a flowchart should reveal the sequence of actions, the actors responsible and time limits. The flowchart should provide, at minimum, clear answers to the questions regarding what is done, when it is done, who does it, how much time is needed, how it is done, and why it is done.

Usually, a taken decision closes a specific phase of project analysis and advances the appraisal process to the next phase, shifts the process back to an earlier phase, or terminates the process through final rejection or acceptance of the project. At the same time, decisions taken at every stage of the process verify the accuracy of the analysis by confirming its results or recommending new analysis after correction of errors, provision of additional information, and/or modification of assumptions. Project appraisal procedures cannot be continued without a decision that approves the results of the preceding phase. Thus, the fund should, in applying a project cycle, introduce a formal sequence of actions and a system of interactions between staff members taking part in the analysis, bodies authorised to take decisions, and the applicant.

An example of a flowchart of decisions is given in Figure 2 below (written and designed by Gottfried Lamers).
Figure 2. Flowchart of decisions
Table 5. Compatibility check

<table>
<thead>
<tr>
<th>Submission and Information</th>
<th>Formal appraisal</th>
<th>Technical appraisal</th>
<th>Financial appraisal</th>
<th>Administration unit</th>
<th>Consultations with different stakeholders</th>
<th>Approval</th>
<th>Contracting</th>
<th>Disbursement</th>
<th>Control</th>
<th>Reporting</th>
<th>Data management</th>
<th>Strategy and guiding the process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submission and Information</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
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<tr>
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<td>Administration unit</td>
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<td>Consultations with different stakeholders</td>
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<td>Strategy and guiding the process</td>
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</table>

Establishing an Environmental Fund
Separation of competences

When discussing an issue of separation of competence, the competences of persons and institutions involved must be clear. This provides a transparent controllable picture and is therefore a very important weapon against corruption, as it provides evidence as to who is responsible for unfair decisions.

In general, the following tasks should be covered within the fund: strategy; identification and appraisal; approval; and project management and control.

A clear separation or demarcation of competences determines the scope of the different tasks as well as the person who must perform these tasks. When designing an environmental fund, it must be borne in mind that some of these tasks shall not be merged in the same institution or done by the same persons. For example, merging strategy, appraisal and approval leads to a situation where the strategy follows the needs of a smooth approval.

The Compatibility Check table (written by Michael Aumer) on the previous page presents tasks that can be merged into one administrative unit and which tasks should be kept separately.

Project selection (identification and appraisal)

The project appraisal process should be conducted in an interactive way. Very strict formal eligibility criteria exclude small-scale and inexperienced applicants and are thus subject to various interventions. Necessary applicants should be requested to provide additional information on and clarification of the submitted project instead of terminating the appraisal process. In addition, particular pieces of information may be double-checked with the applicant and project features important for the fund are thereby revealed.

Each phase of project appraisal must be concluded with a decision and have a specific purpose and task to fulfil. Taking the project to the next phase of the appraisal process means that experts’ conclusions and opinions, revealed through the analysis during the preceding phase, have been accepted. In each successive phase, many questions on environmental, technical, organisational, legal and like issues must be clarified.

The number of intermediate steps (i.e. partial decisions) depends on the quality of input information and the project size. The greater the requirements (i.e. when most of the information required has already been provided and processed), the smaller the number of partial decisions. In practice, the fund may stray from the flowchart of partial decisions by skipping some phases in which necessary information has been verified at an earlier stage (e.g. in competitions) or because of the requested budget. For a waste incineration plant project, there is a deeper need to explain the merits of the project as opposed to a subsidy for an environmental NGO. Though both projects must tackle the same questions in principle, the appraisal effort of the fund should reflect a balance between requested capital and appraisal costs themselves.

Decisions, both positive and negative, taken at a particular stage should always be justified and made transparent to the applicant as well as for monitoring reasons. In either case, reference should be made to the results of project analysis conducted in each specific phase. The justification should be recorded in an appropriate document, and reference made to it in all correspondence with the applicant.

A time limit for each phase of the project appraisal process should be set in order to induce staff discipline in processing applications and meeting strict deadlines, as well as compelling the applicant to adhere to the timetable. The time periods allowed for each specific phase of the project appraisal process is an important element of the overall project cycle. These time periods may be
extended, if there are legitimate reasons, e.g. increased labour and/or time needed to collect and submit the information required. Applicants should be encouraged to adhere to the time limits for each specific phase in order to ensure smooth processing of the application.

**Strategy (development of priorities)**

It is clear that it is impossible for the fund to co-finance all environmental projects requesting support. The fund’s resources in most cases should not be disbursed on a first-come-first-served basis. National environmental strategies can provide some guidance as to the fund’s role (as one of several instruments) in reaching a certain environmental goal and the possible project coverage that should receive prior public support is determined. With a lack of proper political guidance, the need for serious programming is even more important.

In order to develop a meaningful and realistic expenditure programme, the fund should seek to conduct its own expenditure programme, either corresponding to or even as a substitute for the national strategy. However, the total cost of projects or types of projects for implementation in a certain time, as usually identified in national policy documents, will significantly exceed the financing available from the fund. This gap is the responsibility of the government, and fund management can plan and programme within the budgetary framework only. Nevertheless, this gap must be mentioned and discussed so that all stakeholders are aware of the limited outcome of the funding instrument, and that no one expects miracles.

There are two main ways of establishing fund priorities: the passive approach and the active approach. In the passive approach, a minimum of advance planning is involved in establishing priorities. This is a good approach if the scope of the funding mechanism is very narrow and priorities had been identified in the programming stage. In this case, the fund supports projects on the basis of “first is best.” This is an effective approach to situations in which all projects are more or less equally important and can also be effective in launching a technology programme. The purpose of such a programme is to enable new technology to enter the market.

In the active approach, the fund elaborates expenditure priorities in advance of the project cycle; there should be a precise definition of the scope of the priority fields. Ideally, the choice of priority areas should be supported by unambiguous substantive analysis in accordance with the national strategic and financial programme or consistent with other types of enabling documentation or agreements with funding sources.

If priorities are too broadly defined, some of the most beneficial projects may not be funded and fund resources may be spread too thin among many projects. Such a situation is not very different from the result of following a passive approach of prioritisation.

In contrast, if priorities are defined too narrowly, too few applications may be received for the fund to disburse all of its available resources. Such a situation may lead to a weak performance by the fund in implementing national environmental strategy and can be followed by a loss of available means (when unspent, the money reverts to the state budget or, even worse, the next year’s allocation will be reduced because of perceived carry over). Even more, this situation may be an incentive to lower the qualitative requirements for projects capable of obtaining support.

**Relationship between annual plans and long-term strategies**

The main document for codifying priorities is an annual investment or expenditure plan. The development of this plan is often guided by a long-term strategy. Solving environmental problems requires that a country develops, adopts, implements, and revises as needed an environmental strategy or sustainable management plan that describes short-term (two to five years), medium-term (five to 10 years) and long-term priorities (10 to 25 years). For the short and medium terms, the
strategy should also include a detailed implementation and financing programme that describes the range of policy and financial tools to be used in performing priority actions within the specified timeframe. Long-term strategies may cover a broad spectrum of environmental and natural resource problems or are focused on a set of problems for one medium, e.g. water or waste. In some cases, strategies are developed and tailored to the requirements of international treaties, regional treaties or regional agreements.

Table 6. Developing an annual plan under different long-term strategy scenarios

<table>
<thead>
<tr>
<th>Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental strategy non-existent</td>
<td>Decisions taken by the fund on priorities may be easily criticised. The fund should develop its own policy with clear justification of the priority areas chosen and types of eligible projects, and should rigorously observe the rules adopted. In the process of setting priorities, the fund should seek opinions from a mix of stakeholders. The fund should develop a multi-year strategy document to guide the annual priority-choosing process.</td>
</tr>
<tr>
<td>Strategy lacks an implementation programme</td>
<td>The national strategy is merely a “wish list” of actions without an implementation programme. The fund should have a strong position in justifying its choices of annual priorities.</td>
</tr>
<tr>
<td>Strategy implementation programme is incomplete</td>
<td>Too many priorities are specified in the strategy, suggesting that “everything is equally important.” The fund must analyse the priorities, choose a set of sub-priorities to be included into the expenditure plan, and demonstrate that the targeted priority list is both analytically consistent with pre-established criteria and is consistent with the anticipated budget for projects.</td>
</tr>
<tr>
<td>Appropriate strategy and implementation programme extant</td>
<td>The fund has clear guidance regarding areas on which to focus. If there are several funds in the country, competencies are clearly defined and separated in order to avoid duplication of effort, while the ministry is effective in coordinating all activities. In this scenario, the financing institution or fund provides support to the projects placed on the ranked list in the strategy or meets the criteria defined in the implementing programme to guide project selection.</td>
</tr>
</tbody>
</table>

Environmental and natural resource priorities

The majority of funds and financing instruments support a variety of environmental and natural resource activities. Typically, national environmental funds will finance projects that promote improvements in water quality, air quality, effective waste management and nature protection. Other financing institutions may be more restrictive in the types of problems they target for funding, when their business policy is not targeted at specific environmental projects.

Within each general environmental or natural resource category, priorities may be delineated in several ways. At the most general level, priorities are simply expressed as projects to promote water or air quality. Concretising within categories may be desirable, particularly when budgets are inadequate for supporting a large number of projects. Illustrative differentiation of priorities within general environmental and natural resource categories are presented in Table 7 below.
Table 7. Environmental and natural resource priorities

<table>
<thead>
<tr>
<th>Medium or natural resource category</th>
<th>Group within category</th>
<th>Individual problem within category</th>
<th>Technology or process within category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air quality</td>
<td>Combustion pollutants</td>
<td>Sulphur oxides, ground-level ozone</td>
<td>Fossil-fired boilers</td>
</tr>
<tr>
<td></td>
<td>Toxic air pollutants</td>
<td>Cadmium, asbestos</td>
<td>Vehicles without catalytic converters</td>
</tr>
<tr>
<td></td>
<td>Global air pollutants</td>
<td>Carbon dioxide, methane</td>
<td>Cement kilns</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Biological pollutants</td>
<td>Biological oxygen demand</td>
<td>Wastewater treatment facilities</td>
</tr>
<tr>
<td></td>
<td>Chemical pollutants</td>
<td>Micro-organisms</td>
<td>Water supply and treatment</td>
</tr>
<tr>
<td></td>
<td>Anthropogenic and natural sources of radiation</td>
<td>Nitrates and phosphates</td>
<td>Food processing plants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pesticides</td>
<td>Agricultural operations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heavy metals</td>
<td>Household sanitary facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste management</td>
<td>Household and commercial waste</td>
<td>Plastics, newspaper, glass</td>
<td>Landfills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Construction materials</td>
<td>Waste treatment facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hazardous waste</td>
<td>Municipal and hazardous waste</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Materials contaminated with low-level radiation</td>
<td>incineration</td>
</tr>
<tr>
<td></td>
<td>Industrial waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medical waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water supply</td>
<td>Combustion pollutants</td>
<td>Combustion pollutants</td>
<td>Combustion pollutants</td>
</tr>
<tr>
<td></td>
<td>Toxic air pollutants</td>
<td>Toxic air pollutants</td>
<td>Toxic air pollutants</td>
</tr>
<tr>
<td></td>
<td>Global air pollutants</td>
<td>Global air pollutants</td>
<td>Global air pollutants</td>
</tr>
<tr>
<td>Nature protection</td>
<td>Protected areas</td>
<td>National parks</td>
<td>Land acquisition and relocation</td>
</tr>
<tr>
<td></td>
<td>Biodiversity and habitat</td>
<td>Designated biosphere areas</td>
<td>Public education and awareness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Endangered species (large cats, migratory birds, etc.)</td>
<td>Species breeding</td>
</tr>
</tbody>
</table>

Such a detailed determination as defining priority groups within a category, targeting individual problems within the category, or even stressing a particular type of technology or process within the category may yield dual benefits. Firstly, from a cost-benefit or cost-effectiveness perspective, differentiation of priorities within a category may allow the fund to promote projects that are most desirable to society. Such differentiation will simultaneously improve the fund’s accountability for the expenditure programme. Secondly, these refinements will reduce the number of applications that the fund will need to assess in selecting projects, enabling more effective use of staff resources.

However, if priorities are defined too narrowly, the fund may receive too few applications for funding, which can result in two consequences: either the fund will not be able to spend all of the resources budgeted for expenditures, or the fund may have to select projects of poor quality or limited benefits if budget resources cannot be carried over to the next year.

Environmental and natural resource priorities may be distinguished in other ways as well, including the following:

- to promote specific national objectives, e.g. to improve human health, to promote sustainable use of water resources;
- to address regional or local problems, e.g. to improve water quality, to address local pollution hot spots;
- to meet national regulatory requirements, e.g. emission or discharge standards; and
- to fulfil obligations of international conventions or treaties, e.g. the Montreal Protocol on Transboundary Pollutants, the Kyoto Protocol, or agreements on regional cooperation.

Comments and recommendations

- For Montenegro, a sample of good assessments of environmental needs already exists, with some of the projects identified under the Priority Environmental Investment Programme for the South Eastern Europe, making them a possible basis for priority
7. PROJECT SELECTION

Project preparation and processing of applications

In more complex projects, a two-round application process can be introduced in order to save time and resources of the fund and applicants. During the first step, an applicant submits a project identification note (or PIN) which contains all basic data on and the concept of the proposed project. The project concept is then checked against eligibility criteria and, if eligible, is passed to the next phase. Collecting, processing and verifying the information submitted carries costs for the fund and is also time-consuming for the applicant. The fund should therefore ask only for the data necessary to assess the project’s eligibility for financing, because there is no need to burden applicants with preparation of detailed technical requirements at this stage.

The objective of pre-appraisal is to reveal those projects which have no chance of fund financing. The second objective is to identify, as early as possible, projects that may be eligible for financing but are not well-prepared and require further development. The next stage involves preparation of a more detailed project proposal based on the detailed outline prepared by the fund. In the case of infrastructure projects, a pre-feasibility study is often requested. Project preparation is the clear responsibility of the applicant. In order to ensure the good preparation of the project, it is better that the applicant puts in enough time and resources in advance. In order to prepare proper infrastructure investment projects, experience shows that project developers must spend an average of approximately 6 percent of the total project’s costs.

Choosing an application cycle and appraisal process

Appropriate handling of applications requires choosing the most suitable application cycle. In order to avoid peaks in the application cycle, the fund can choose between two options: periodic and ongoing application process.

Periodic application cycles are based on competitions (or calls) with strict deadlines or time-limited windows under a specific programme. The aim of such competitions (tenders) is to encourage as many applicants as possible to apply. A higher number of applications provides the fund with a broader basis for selecting the best and most cost-effective projects for financing. In this case, the fund receives a great number of similar projects aiming to achieve similar environmental results. Tenders are usually organised for standard and easily comparable projects. In this case, projects compete against each other. When a competition is announced by the fund, the competition documentation provides information on all criteria used to assess project eligibility. Applications submitted as part of a competition usually have similar topics and can be subjected to a common appraisal, ranking and selection procedure, which is why the pre-appraisal process may be omitted and a one-stage appraisal process used. Prepared specifically for the competition, selection in this case takes the form of scoring or, when topics across projects are less similar, expert opinion may be used to make such assessments. Competitions could be organised several times a year.

The ongoing application process is best applicable with projects of regional consequences and unique projects; infrastructure investment projects are usually of this type. Because of their complex nature, such projects should undergo two stages of appraisal, namely eligibility screening (pre-appraisal) and full appraisal. In this case, projects compete against a reference project set as a benchmark. Experience shows that the average rejection rate in the first stage is approximately 80
percent, whereas projects that successful pass the eligibility test have a rejection rate of 10 percent. When precise information on terms and criteria for support from the fund are provided in advance, this may formally be used as a substitute for the first pre-screening stage, in which the applicant can assess his project against the established criteria. By the same token, the first stage of the appraisal process should not be treated as a substitute for a lack of a proper information policy in the fund.

**Assistance to applicants**

The project preparation process, and project appraisal for large and technically complex projects, is an extremely interactive process between fund staff and the applicant. In many cases, applicants request additional information from the fund and/or have questions for clarification. The main principle is that all potential applicants and interested parties should have equal access to information with regard to the fund’s criteria, rules and procedures.

Contact between fund staff and applicants during project preparation should not be limited to information exchange and correspondence between the two. Rather, these contacts should also offer an opportunity for an exchange of opinions on fund requirements. The fund may use all possible channels to distribute relevant information to potential participants and interested parties, ranging from preparing project application documentation on paper, to distributing it in an electronic form, or posting information on the Internet. Direct contact may include open seminars, training and workshops; most important is that such events should be open to all, with no group of beneficiaries or regions getting preferential treatment or more information than others. Group meetings, rather than contact with individual applicants, are advisable and should be the practice, as they limit the scope for corruption on the part of the fund. Such an open policy may help increase the fund’s credibility and is a guarantee for developing good and honest working relations between applicants and the fund from the outset.

While providing such assistance to potential project proponents, there should be a rule regarding separation of the fund’s role in providing assistance to applicants and in conducting appraisal, ranking and selection of projects.

One common problem in many countries is the lack of skills and knowledge in the preparation of good projects. The general level of project preparation capacity is low and is reflected in the quality of projects submitted to the environmental funds in the region. In addition to the lack of technical skills, many project proponents lack the financial resources to hire consultants to assist in developing the project. For this reason, the fund may receive requests to provide support for project preparation. The risk of providing such support is the creation of incorrect expectations on the part of applicants in which they take this support as a commitment by the fund to finance the project. In order to avoid such misunderstandings, the fund should develop a clear policy for such cases. In principle, the fund should not provide support to project preparation.

Nevertheless, in the case of a successfully prepared project, these costs become an eligible part of the total investment costs and may even be financed in the preparatory work of programming if included in the fund’s policy in advance. In particularly complex or controversial cases, the fund may use external experts and consultants to provide competent advice. This advice and opinions can be of great significance in resolving technical or financial problems related to a given project or be otherwise useful as a further source of knowledge for the fund when similar applications are submitted.

In addition, a potential conflict of interest can result when the fund hires consultants to help with the appraisal of more complex projects. The issue is that these same consultants hired by the fund would go and help applicants develop projects for submission to the fund. In principle, if applicants using such consultants provide truly well-developed projects, no problem exists. The real problem exists in the possibility that consultants, knowing the appraisal system of the fund, would also know how to manipulate data to best fit into the fund’s criteria and receive a high project ranking, thus
increasing the chances for financing projects that may then face problems in the implementation phase.

In order to avoid such situations, it is advisable that the fund’s contracts with consultants should include a clear provision requiring consultants not to provide services to applicants who will submit projects to the fund for at least two years after their last contract with the fund. Another way to prevent such situations is the fund itself hires consultants or establishes a project preparation office to assist applicants in project preparation. This should be a very limited practice and restricted mostly to innovative projects with higher risks but deemed worthy of fund support. If there are few experts in the country and these are known to the fund but not to the applicant, the fund may provide this information to the applicant. In order to avoid favouring individual consultants or consultancy firms, the fund should keep a list of their consultants and provide this information to all applicants.

In making contacts with, and providing assistance to, interested clients, the fund must be aware that it conveys information of real market value that could distort the relevant market should treatment of clients fail to be provided equally to every applicant. All protectionism, political pressure and private sympathies introduce a non-authorised element to the procedures leading to the selection and financing of individual projects. The general principle should be that information is made available and used in written form, since this can be passed on to many clients. The effectiveness of assistance and expected quality of project proposals will be determined by the quality of the information made available by the fund.

**Eligibility criteria**

As previously mentioned, it is advisable to introduce a two-stage appraisal process for more complex investment projects. In the pre-appraisal stage, the fund applies a set of “hard” or “knock-out” formal eligibility criteria for making binary (i.e. yes/no) choices. If a project proposal fails to meet even one criterion, the project is excluded from subsequent stages and financing.

During this stage, the fund assesses the eligibility of a project against formal criteria. Each project must be screened against a number of environmental, technical, financial and legal criteria. The optimal package of eligibility criteria is described in Table 8.

**Table 8. Optimal package of eligibility criteria**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistency of project with fund objectives and priorities</td>
<td>A comparison of project objectives with fund objectives must be undertaken. Fund objectives should be clearly defined in terms of environmental media, sectors, regions, project types, beneficiaries, forms and levels of support. When listing regions of support, whether the eligibility is determined by the address of the applicant or by impact of the project should be stated.</td>
</tr>
<tr>
<td>Reliability and acceptance of expected environmental benefits</td>
<td>Expected environmental benefits together with assumptions and calculation methods are to be estimated. The benefits of reduced in pollutant emissions should be shown in quantitative terms, e.g. biological oxygen demand (BOD), chemical oxygen demand (COD), of tonnes of nitrates the year before and after the project. Lack of information, or vaguely presented information make the project ineligible. The fund may ask for additional information on environmental benefits based on similar projects implemented in the past.</td>
</tr>
<tr>
<td>Feasibility of proposed technology</td>
<td>The engineering maturity of the proposed project, especially regarding the question of whether the technology will eliminate an environmental hazard, must be checked. Proposed projects with inefficient technology should be rejected. New technologies unchecked in the country might be also a subject of concern. The fund may consult on such innovative technologies and support them as pilot cases.</td>
</tr>
<tr>
<td>Completeness and clarity of the financial plan and</td>
<td>A realistic project budget, correctness of the financial plan, and availability of planned financial resources must be checked for. In cases of own funds, the fund should check documentation of these resources, and a financial plan showing a financing gap cannot be accepted. If a bank loan is used to cover this gap, the fund must check if the applicant can...</td>
</tr>
</tbody>
</table>
In cases of mandatory co-financing (e.g. by the region), the co-financing statement can be an eligibility criterion.

In order to obtain the necessary information to assess a project’s eligibility, the fund should develop a standard, mandatory questionnaire/rapid assessment form for all applicants to use. The questionnaire used in the pre-appraisal stage should be made available to all potential applicants along with instructions for completion. Instructions to staff on evaluation of the pre-screening form, on verifying the information provided, and on handling omissions and issues for clarification should also be prepared by the fund.

At the same time, however, in order to avoid rejecting potentially good projects at this stage, the fund should ensure that over-reliance on these formal criteria does not “kill” such projects. When such projects are noted in which the applicant has failed to provide sufficient information or has presented information not understandable enough, the fund should clarify all issues with the applicant before a final decision on the project is taken. Omissions, oversights or mistakes on the part of the applicant should not result in immediate rejection of the project at the stage of formal examination, providing that the noted deficiencies are duly corrected. The fund may even suggest modification of a project should, for example, the technology proposed be obsolete or threaten to cause further environmental damage.

**Assessment of Project Eligibility**

Assessment of project eligibility by fund staff starts with checking the application forms for completion. The applicant should provide all required information in a concise but clearly formulated and understandable manner. Both sparseness of detail and excessive wordiness should be considered as signals that information requires more careful examination. Insufficient information or omission of important details may indicate that the applicant is not fully aware of the problem or has only general ideas. An excess of insufficiently documented or unnecessary information in the project questionnaire also indicates that the partner lacks professionalism. In both cases, the project questionnaire requires the provision of additional, more precise, information.

After all the necessary information is collected, fund staff should verify its correctness and reliability. The information provided should be up-to-date and describe the project as of the submission date of the project questionnaire. Some of the most common problems encountered include:

- in terms of environmental benefits, applicants present excessively optimistic estimates of benefits that need to be corrected;
- in terms of engineering solutions, applicants claim unjustified efficacy of the technology; and
- in terms of financial data, applicants often present data on resources planned to be obtained by different financing institutions as already awarded or secured, instead of stating that they have merely applied.

In addition, information and data should be cross-checked and compared with results from similar projects previously appraised by the fund. In case of doubt, the fund should always request explanations and supplementary information from applicants.
Before the actual screening, it may be useful to check whether the fund has already received other projects from the same applicant and, if so, the subject and quality of the project. Another important consideration is the way in which the applicant responded to the fund’s request for additional information and explanation in the former project proposal, and how quickly and in what form these additional explanations were provided. A few other questions worth considering include:

- Who personally prepared the project questionnaire submitted now and previously?
- Did the previous project questionnaire lead to assessment of the project as eligible?
- Was fund support finally awarded and properly used?
- What were the actual results?

All this information will help the fund to prepare for cooperation with the applicant. In addition, the fund should also check if a similar project questionnaire has not already been submitted by another applicant. This can be important especially in infrastructural projects, as the fund should avoid providing simultaneous financial support to a number of entities that implement the same or very similar projects.

Once the questionnaire is considered complete and all relevant information verified, the project can be subjected to the formal screening procedure. Screening involves comparing the information provided in the project questionnaire with the fund’s eligibility criteria. The criteria are checked one after another, and questions and opinions are formulated.

The result is a list of discrepancies between project objectives and fund priorities. These may be subject to further explanations or be adopted as an end result of the screening. The final list of discrepancies closes the project screening stage. These discrepancies are assessed, and a final consideration and decision on the eligibility of a project are made by the fund’s management board.

After verifying the information submitted by the applicant, this information can be entered into a project sheet. The project sheet represents a synthetic registration of data on the project objectives, methods, results and costs collected on the basis of the standard application form and attached annexes. This processing of information allows for separate identification of required data. The responsible fund employee (e.g. the project coordinator) prepares the project sheet along with his/her comments on each of the criteria. In addition, the project sheet is presented at the approval stage (i.e. the ministry and/or advisory board) for discussion. This discussion may lead to additional comments and requirements for improvement.

In both cases, whether the project is deemed as eligible or ineligible, the applicant should be duly informed about the result. If rejected, the reasons for rejection should be clearly explained in a letter to the applicant. When a project has been found eligible, the letter can also include an invitation to submit a complete application. In this case, the full standard application form along with the instructions for its completion should be attached to the letter. In addition, the invitation should be supplemented by the fund’s current rules for granting financial aid. This is particularly important when such rules are subject to periodic (e.g. annual) changes.

**Appraisal criteria**

**Environmental and technical criteria**

The criteria used by the fund to assess the environmental and technical qualities of a project should allow an assessment of the project’s environmental impact after its implementation. Three major sub-criteria are discussed in Table 9.
Table 9. Breakdown of assessment criteria

<table>
<thead>
<tr>
<th>Sub-criterion</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of pollution source</td>
<td>This criterion may favour larger projects, as these bring the greatest environmental improvements. Assessment of the size and importance of pollutant sources is based on quantitative parameters that provide information about the degree to which pollutant loads are to be reduced.</td>
</tr>
<tr>
<td>Technical scope of the project</td>
<td>Environmental effects depend on the project scope. The technical scope might include: population of the area covered by the project; percentage of coverage in the municipality/region; size of the project; enlargement opportunities for future requirements; and reference technologies and projects. The substantive scope of a project is treated as the most important technical criterion.</td>
</tr>
<tr>
<td>Assessment of probability of achieving stated environmental effects</td>
<td>Assessment of how reliable the stated environmental effects will follow project implementation. In many cases, environmental infrastructure installations do not reach their peak loadings immediately after beginning normal operation. Similarly, a project can be divided in several phases and built over a period of several years, with the full environmental effect achieved only when the entire system is finished. Possible attainment of anticipated environmental effects later than the actual implementation period should be considered in the appraisal process, but the causes for the delay must be clearly identified, thus adding a greater element of realism to overall project assessment.</td>
</tr>
</tbody>
</table>

**Economic criteria**

The appraisal aims to determine whether the investment costs of certain tasks within a project are comparable to those usually observed in similar cases. A practical and widely tested method of calculating project costs is a comparison of selected quantitative costs of different tasks against reference values. The major condition for successful application of this method is access to reliable data on similar costs incurred in previous investment projects, sometimes in other countries. The use of this method is justified where national or regional databases on unit costs of similar tasks are available. When such external databases are missing, the fund may choose to develop its own database containing information on projects implemented previously by the fund. The main condition for conducting an effective appraisal of unit costs is the proper choice of reference data to be used as a benchmark with which to compare the indicators calculated for each project. A database should contain verified and reliable information and must be updated periodically.

Indicators of unit costs calculated for each project should be comparable with the selected benchmark values. Regional differences in prices, technical conditions affecting project implementation and the specific requirements for each project must therefore be taken into account.

In conducting proper economic analysis of a project, there are two major sub-criteria that must be assessed: the project’s cost-effectiveness and financial viability. Both sub-criteria are calculated indicators. Cost-effectiveness identifies projects that have the lowest cost in meeting legal environmental standards, whereas the financial viability indicator shows whether a project is commercially viable or needs public support to be implemented. While calculating financial viability is straightforward and well-established techniques used by all banking and financial institutions exist, the calculation of cost-effectiveness deserves special discussion, as different institutions use different methods of calculation.

**Regional criteria**

Regional criteria serve to characterise and assess the impact of a project on a specific environmental component, determining if the project will have a major impact on the state of the environment in a specific region or protected area. Economic criteria or prioritisation of environmental problems, e.g. the needed urgency in addressing the issue, can also be tackled within these criteria. The criteria may also include an assessment of the threat posed by pollution sources to naturally valuable areas.
such as national parks and nature reserves. Attention must be paid to the natural features of protected receiving waters, such as resistance to degradation. This parameter is particularly important when the impact of wastewater treatment projects on lakes or coastal waters is assessed. Thus, location criteria may concentrate on the distance of a particular investment from a water body or coastal waters.

**“Point of time of realisation” criteria**

Organisational criteria allow the fund to assign a higher rank to those projects that bring environmental benefit rapidly. In selecting parameters that may be assessed within the framework of these criteria, the fund should pay attention to the degree of progress in project implementation as well as the time needed for completion. Using the duration of the implementation period as an assessment parameter serves to mobilise investors with regard to proper organisation of the investment process and aims to encourage investors to implement the project as quickly as possible. In addition, the degree of progress of a project may also be useful when the fund chooses to cover previously incurred project costs.

**Information about applicant**

The minimum of information about a large-project applicant required by the fund should include:

- the legal status of the applicant;
- the legal title to property and ownership of assets to be built with fund support;
- the applicant's financial situation, including financial statements and reports;
- bank opinions on the applicant’s creditworthiness;
- opinions of tax authorities; and
- opinions of environmental authorities with regard to the applicant’s compliance with environmental regulations and payment of pollution charges.

Small projects (under the *de minimis* or other adequate limits) could also pass with less information if there are no major concerns about the applicant.

Information on the legal status of the applicant is of particular importance with regard to the financial agreement to be signed by the applicant and the fund. In addition, financial information on the applicant is crucial for evaluating the applicant’s overall performance and managerial skills as an early warning of potential risk.

An overview of information to be submitted by the applicant is presented in Table 10.

**Table 10. Key information to be provided by the applicant**

<table>
<thead>
<tr>
<th>Type of data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>A description of the location of environmental impact is undertaken, including all important environmental facts to check if the applicant pays environmental charges and non-compliance fees, and to verify property rights issues and permits relevant to project implementation.</td>
</tr>
<tr>
<td>Technical</td>
<td>A detailed description of proposed technology and technical parameters of the installation must be done. Additional information can be added such as population of the area covered by the project; percentage of coverage in the municipalities; size of the project; enlargement opportunities for future requirements; reference technologies and projects. It is important to require the applicant to justify the proposed technology and explain its optimality under given conditions, as well as to demonstrate compliance to environmental standards in terms of reduced pollution. The project’s substantive technical implementation schedule is to be provided with project stages clearly defined. If the fund is to provide support for a specific phase of project implementation, extraction of the incremental project scope, i.e. phase, from the full project scope is necessary, including incremental costs and incremental benefits which are based on the difference between the state of environment before and after the project. In addition to extracting incremental...</td>
</tr>
</tbody>
</table>
costs of the project, applicants should obtain information on eligible tasks and concomitant costs to be financed by the fund. Such eligible tasks are functionally, technologically or temporally separable (i.e. identifiable) parts of a project necessary for proper project implementation and operation. The technical implementation schedule should show the degree of project implementation progress of each activity (i.e. completed, in progress or planned).

### Financial
Submission of the project’s financial plan is to include cash flow, structure of financing and sources of finance. Tasks which are ineligible for financing should be communicated to applicants in advance. Usually these costs include building of access roads or power links, construction site management, etc. Fund should provide instructions to applicants on information on payments for implemented tasks. Payment documents and the dates of respective payments will then allow for the separation of authorised tasks from others, while the revaluation coefficients introduced additionally allow for comparability and for calculating total costs incurred.

### Ranking of projects
It is the sovereign right and responsibility of the government to establish project appraisal and selection criteria for the fund as well as the principles (rules) of providing loans and grants. The optimal package of appraisal criteria should include environmental, technical, social, financial and economic considerations. The fund must aggregate these into one coherent, internally consistent, methodical system that allows the fund to perform reasonable comparisons and make meaningful choices. In addition, the fund may introduce numerical scores and weights that could help convert considerations of different types into comparable units and aggregate them into a uniform unambiguous indicator to be used in ranking comparable projects. Different options, formulas and algorithms for arriving at such an indicator are possible.

#### BOX 2. Features of a good appraisal system
- The system enhances transparency and objectivity of project selection.
- Scores are directly linked to quantitative project data. This requires clear guidelines for fund staff and introduction of point values for each criterion rather than bracket values.
- Discretion of assigning weights is also limited through point values or specific guidelines.
- Criteria are unambiguous, not excessively numerous and, in principle, independent from one another. Multiple counting of the same parameter in several scores is avoided if no prioritisation is envisioned.
- Criteria (including environmental, technical, financial and economic) are state-of-the-art in the given field.
- Scores are meaningfully aggregated into one single indicator.
- Assumptions used in forecasting certain unit costs and rates are standardised. In order to ensure comparability and integrity, the fund should publish and require the use of standard assumptions and formulas.

For ranking purposes, projects can be compared either against each other (true ranking) or against past projects and/or a benchmark (i.e. a reference/model project). In addition, alternative project scopes and designs of the same project can be considered. In the latter, the applicant is typically required to provide this analysis in defending the choice of project technology.

### Comments and recommendations
- Montenegro should consider covering the full scope of environmental investment needs by the funding instrument. Waste facilities, wastewater and natural parks should be financed, as well as environmental training and/or awareness raising; this situation requires a sound planning process. As recommended in the previous chapter, a separation of tasks within categories should be done. In Montenegro, both approaches are possible. In the smaller budgetary categories, a system of tenders may be implemented. Thus, the politically sensitive subsidies for NGOs can also be carried out with the outmost transparency and choice from a large sample size.
- In the case of Montenegro, a lot of information is already available from pre-feasibility...
studies carried out in recent years. These studies could serve as recommended PINs; the first attempt of the fund should be to actualise and verify the available project ideas.

- Due to the small budget, only a few projects should be selected to submit additional information and enter the second appraisal step.
- If there is significant demand for “project preparation grants” in Montenegro, the fund may decide to open a special grant programme for project preparation. All such projects must be submitted, appraised, ranked and selected for financing as any “normal” projects in other priority areas of the fund. The fact that some projects have received grant support by the fund in the preparation phase does not commit the fund to further financing. Once such a project is fully developed, it should apply to the fund in accordance with all procedures and requirements, and undergo a full appraisal process. In reality, these are two completely different methods of supporting projects and will be evaluated and appraised in accordance with different criteria. The time for granting such subsidies for project preparation should be the positive response to the PIN and the request for further information.

### 8. FORMS OF ASSISTANCE

After the projects have been appraised and ranked, those ranked highest receive financing from the fund. The number of projects selected for financing depends on available financial resources.

One of the major issues is the rate of assistance given to the project. The rate should encourage investments while at the same time supporting the most cost-efficient solutions. Optimal rates are usually different in different countries and can vary even between regions, depending on any number of environmental, economic, regional and social criteria.

Aid intensity is a critical issue in subsidised financing that requires close monitoring. By providing state aid, governments should ensure that these subsidies do not distort competitiveness, and should seek to encourage restructuring of and innovation in the industry/sector by supporting investments which result in more environment-friendly consumption.

In many countries where the construction of environmental infrastructure is mandatory, subsidies are needed to comply with EU environmental requirements. In other economies in transition, however, the major purpose of public support is to provide incentives to local communities and enterprises to undertake environmental investments by spending more of their own resources. Therefore, the rate of support should be set in such a way to ensure that it does not replace the recipient’s spending. Thus, environmental funds should be seen as a last resort for covering the financing gap of an environmental project.

Projects that can be financed by state budgets, local budgets, the enterprises themselves or commercial financial institutions should not be financed by the fund due to the principle of additionality. For this reason, the level of the subsidy should be kept at the absolute minimum, which can be defined as the rate of assistance that makes potential environmental projects economically viable. Experience has shown that, the lower the aid intensity, the more it helps to save limited public means and leverage additional resources from private and international sources, thus bringing higher environmental benefits at lower external costs.

However, if designed and implemented improperly, a public financing scheme may create considerable distortion and inefficiency. While in most cases, this level is determined on the basis of a political decision taking into account environmental, economic, regional and social specifics, managers of public expenditure programmes may contribute a great deal in further refining and revealing the effective level of the assistance rate needed to ensure additionality and equity. Furthermore, as an economy grows, the economic situations of both enterprises and municipalities

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*Establishing an Environmental Fund*
also change. The levels of assistance rates must therefore be regularly revisited and adjusted in line with such new changes.

The process of finding a rate of assistance requires political consensus of all major stakeholders, including industry lobbies and municipality associations. Experts’ contributions and participation are particularly important as these will provide the robust arguments to politicians making final decisions. Needless to say, any decisions must be preceded by a detailed study of the real demand for subsidised financing versus other sources of financing, in terms of sectors, regions, project types and project owners that need subsidies from this particular scheme, as well as the eligible costs that the fund will cover. Based on the findings of such a study, aid intensities could be considered in a way that would ensure the leveraging effect of the resources disbursed by the fund.

In considering the levels of aid intensity, some general requirements and important framework conditions need to be taken into consideration. These could cover:

- The specific character of environmental infrastructure investment projects. The “polluter-pays” principle requires that all compliance costs should be borne by polluters in both the competitive and non-competitive sectors without any subsidy. While this is correct for the competitive sector, the pure public-goods character of environmental infrastructure investment projects justifies demand for public support. In addition, such projects generate significant external positive environmental and social benefits, making them economically viable. For these reasons, government intervention and public subsidies are needed to encourage investments. Moreover, the need for higher assistance rates for such projects is also recognised.

- Social/affordability considerations in meeting legal environmental requirements. The water supply and sanitation sector is a clear example of this issue’s particular importance, as many governments have taken on privatisation, are considering privatisation or are introducing private-sector management practices in the sector. The only way, however, to have a private operator undertake such a project is to make the sector profitable, requiring charging the full cost of the service. In such a case, many of society’s poorer members cannot afford clean water. As access to water is a basic human right, it is the obligation of the government to provide public support to poor households. While this problem must be recognised, the cost-recovery principle should not be undermined for social reasons. Rather, affordability should be dealt with separately by identifying households that need support and by providing targeted subsidies for such households. The same applies for economically underdeveloped towns, cities or regions, and politicians may choose to support such municipalities or regions by allowing higher assistance rates. In this case, rates can be based on regional GDP or per capita income. In addition, aid intensity will depend on the strictness of environmental standards and requirements, in addition to their affordability at national and household levels.

- The importance/urgency of certain environmental problems. Certain environmental emergencies, such as hot spots, may require quick solutions due to significant health problems in nearby areas. Public support for such regions is rightly justified and politicians may choose to give such regions priority by covering higher portions of costs of projects located in hot spot areas.

- National versus international requirements, e.g. EU guidelines on state aid, WTO rules, Organisation for Economic Co-operation and Development (OECD) guidelines. Another major criterion that must be considered in setting assistance rates are international requirements that are legally binding for the country, such as the EU state aid policy or WTO rules on competition. The EU policy distinguishes between the competitive and non-competitive sectors and mostly deals with competitiveness issues related to enterprises. The
limits of aid provided to the competitive sector for compliance with mandatory standards are much lower than the aid limit envisioned for enterprises undertaking voluntary actions. Likewise, there are similar rules on state aid within the WTO framework which regulate the enterprise sector.

- Other legal and formal requirements. While in the EU, rules on aid intensities for support to enterprises exist at supra-national and international levels, the legal framework for the non-competitive sector is fairly wide open and left mostly to national governments. The major requirement is that whichever aid intensities are chosen should be clearly communicated to potential beneficiaries well in advance. The risk element for a potential beneficiary should be reduced to whether the subsidy is awarded and not the amount of the subsidy. This can only help project developers to prepare their projects better and to attract other sources of financing.

Key elements which define terms of financing are presented in Table 11.

**Table 11. Elements of defining terms of financing**

<table>
<thead>
<tr>
<th>Element</th>
<th>Characteristics</th>
</tr>
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<tbody>
<tr>
<td><strong>Definition of eligible costs</strong></td>
<td>Aid intensity always refers to eligible costs. In general, eligible costs include all costs deemed reasonable and necessary to ensure completion of a project. These are costs directly linked to the achievement of environmental objectives stated by the project and supported by the fund. The EU has defined eligible costs in state aid which are binding for member states. These definitions may be used as benchmarks by transition economies. In addition, the OECD Pollution Abatement and Control (PAC) expenditure methodology, particularly with regard to investment expenditure in integrated technologies (i.e. process-integrated investments as opposed to end-of-pipe technologies), may also provide a useful benchmark in defining eligible costs. The difficulty associated with investments in integrated technologies is in establishing the proportion of the total investment expenditure to be allocated to pollution abatement and control. In principle, the cost difference between the integrated plant and what would have been spent on a cheaper, viable, less environmentally friendly plant should be recorded as a PAC expenditure. From a state aid approach, environmental or other infrastructural projects can also be handled as a project requesting regional or all other types of state aid. For this reason, it is useful to investigate project needs and all opportunities for state aid. Furthermore, the limits of community state aid rules can sometimes be combined, especially with regional environmental limits.</td>
</tr>
<tr>
<td><strong>Form of subsidy</strong></td>
<td>The exact cost of environmental infrastructure projects is difficult to calculate up front, which is why it is better to fix aid intensity as a percentage of eligible costs rather than as a lump sum. In some cases (e.g. when eligible costs of smaller projects of a similar nature are considered), aid may also be provided as a lump sum.</td>
</tr>
<tr>
<td><strong>Limits of aid and investment cost</strong></td>
<td>Before fixing aid intensity, its lower (entrance) and upper limits need to be agreed. Entrance limits aim at generating projects of a certain size. In addition, setting entrance limits also allows eliminating very small projects submitted for financing from the fund, thus reducing staff administrative burden. There could be other public finance schemes in the country which support small projects and where such projects will better fit in. On the other hand, upper limits have the reciprocal effect and prevent the financing scheme from being emptied by a small number of projects only.</td>
</tr>
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</table>

**Systems for calculating aid intensity in investment costs**

There are four main ways to calculate aid intensity. A short description of each follows.
Minimum need of the beneficiary (closing the gap)

In this case, aid intensity is calculated as part of the appraisal process by the fund on the basis of project data. It requires the calculation of the maximum amount of the beneficiary’s contribution and the maximum annual operating costs, including interest rates on commercial loans, while taking social and regional criteria (e.g. GDP, income per capita) into account. This system is often the fairest and most effective, as each of the beneficiaries gets what they need, but is not transparent if the appraisal process is conducted improperly and causes discrepancies between comparable municipalities. Poor municipalities get higher subsidies than richer municipalities, which could be seen as a reward for poor management practices in some cases. This could soon lead to political influence and a permanent justification for the existence of the funding system.

This system is rarely consistently applied, but some countries try to differentiate the amount of aid to municipalities in this way. Aid intensity in the Austrian subsidy system for wastewater varies according to the specific costs of the investment. The specific costs of a wastewater investment per capita in cities are lower than in rural areas due to the higher number of connected inhabitants per metre. This indicator provides the basis for adjusting the aid intensity from 20 percent up to 60 percent in rural areas. This system is backed by knowledge about the reasonable level of expenditure needed in the respective region.

Given percentage of eligible investment costs

This system is the most commonly used in calculating aid intensity. Based on the evaluation of average costs and financial needs, the average aid intensity may be fixed. This can be done for different types of investments and different types of municipalities, considering population, regional GDP, etc. The system of different aid rates should be published and made known to all interested parties as well as periodically revised. The advantage of this approach is that it is very transparent and easy to handle. However, this method works with averages and does not reflect the beneficiary’s real financial situation. Average systems also show a tendency to become stagnant. As such systems do not reward projects which seek to implement new technical or financial solutions because additional risks are not covered by the system, the proportion of progressive projects in this system is very small.

Standardised percentages are common in many countries and have the advantage of easy application. If all beneficiaries in a defined group are treated equally, without taking into account their different financial or technical background, this system is easily employed. Project appraisal is also made simpler, because no in-depth assessment of real financial need is necessary. In most transition economies, this system has been used as a starting point in establishing environmental funds. As experience accumulates over time, environmental funds typically begin using other calculation systems.

Module system

This system implies that, starting from a certain basic intensity, the applicant has the opportunity to gain higher intensities by taking additional actions, e.g. improving environmental performance or certain management practices. These higher subsidies could be expressed as a percentage of the project’s eligible costs or lump sums, e.g. money per metre. This system is very flexible and allows the state to introduce new objectives or to speed up certain developments such as public-private partnerships. For instance, starting from a given basis, an enterprise applying for state aid can get a higher subsidy if it aims at investing in innovative technologies, has introduced the Eco-Management and Audit Scheme or has gained an environmental label. The risk in this approach is that this system helps rich municipalities because they can afford higher standards and get higher interest rates as long as the total amount of the beneficiary’s own contribution increases.
Lump sums or average cost per measure are widely known in funding systems, which need a high level of standardisation. In Austria, for example, sewers for small WWTP are standardised and a certain amount per metre of sewer is used in calculations, thereby giving applicants incentive to find inexpensive solutions in order to reach higher aid intensity. While the amount of metres remains the same, a decrease in aid intensity may also be introduced to enable both beneficiary and state to profit from decreasing costs, an important incentive mechanism.

**Tendering process (auction)**

In the auction system, applicants are asked to choose the level of aid they need and compete against each other in terms of lowest aid requested. The less the applicant requests, the better the chances of receiving support from the public financing scheme. In this system, aid intensity is used as an appraisal criterion. Experience has shown this system’s advantages and has helped reveal the real demand for public support. As a result of such an auction, aid intensity decreased dramatically for the specific group of projects. At the same time, while aid intensity calculated on this basis supports projects that bring the highest environmental effect per monetary unit, it creates the risk that only rich municipalities get support in the beginning, and these may not necessarily be those that need public support most urgently from an environmental point of view.

Another risk inherent in this system is the possibility of the beneficiary’s bankruptcy. This is related to the fact that the relatively low aid intensity does not reflect future developments with the project/beneficiary and often turns out to be insufficient to complete the project. In order to protect this system, no tolerance should be accepted after decisions on financing are made. All major project indicators, i.e. environmental benefit, requested amount of support and implementation time, should be fixed in a financial agreement with the beneficiary and should not be subject to any further changes.

This system is best used for similar projects which are comparable from a technical or economic points of view. Various forms of tender exist and, in designing tenders, the competitive elements of the system can be tightened or loosened over time. In the auction system, all risks are fully borne by the beneficiary.

**Calculation and comparison of aid intensity in different financing instruments**

Financial assistance can be provided in different forms, such as grants, loans, interest subsidies, loan guarantees and equity investments. For the purpose of providing a subsidy, these financing instruments, though very different from one another, can have similar effects. In order to know and compare the level of subsidy provided to different applicants in different forms, the fund must be able to calculate it.

While the level of subsidy in grants is clear and straightforward, i.e. the subsidy value equals the amount of money given by the fund, it is not so simple with other forms of subsidy. When the fund disburses a soft loan, the subsidy’s value is not equal to the total amount lent. Rather, the subsidy depends on the difference between the fund’s terms of the loan and the terms that would have been offered by a commercial bank. Therefore, the subsidy content of a soft loan can be measured as the cumulative difference in interest payments under the subsidised loan and the market interest rate. The bigger the wedge between market and soft loan interest rates, the higher the loan’s aid intensity. The subsidy content can be viewed as the grant equivalent of the soft loan.

Of the other instruments, only loan guarantees have higher relevance and are used as a common subsidy instrument in the export sector; in such cases, these state guarantees cover political (and not economic) risks. In the field of environment, these guarantees may cover additional technological risks or the low rating of some sectors, e.g. agriculture. With these guarantees, applicants get the opportunity to enter the financial markets. The commercial loans achieved are, in most cases,
insufficient for financing the project, so loan guarantees are often provided in parallel with other forms of subsidies; of course, state guarantees may also be seen legally as state aid.

There are different approaches to comparing the grant equivalent in different financing instruments. The conversion of aid expressed as a present net value is one of the most commonly used approaches. This approach is also used by the European Commission to get a clear picture of aid intensities Europe-wide, regardless of differing tax schemes in member states and on the basis of the EC-developed and -issued “reference interest rate.” One key requirement in such an approach is standardisation of parameters, such as interest rates (the “reference interest rate” in the case of EU member states), repayment period, inflation rate and other benchmark market terms.

Whatever the choice of financing terms adopted by the fund, they should be well communicated to all potential applicants and interested parties. The terms of financing should be part of the eligibility criteria/appraisal criteria and conditions for financial commitment or transfer.

**Grants versus loans**

The question of whether grants or loans are better sometimes becomes a matter of faith. Essentially, state loans make sense if other loan sources are difficult to find for investors in the environmental project. Such difficulties may result from an underdeveloped capital market, generally high interest rates or the investor’s poor credit rating. Before opting for a relatively complex and, more importantly, long-term loan scheme, one should first examine whether the problems can be solved more easily. As the decision to establish a public loan scheme also constitutes a massive intervention into the national bank sector with the state acting as competitor to the banks in the long term, it must also be justified vis-a-vis international financial markets. Loans definitely require a huge amount of money. Yearly revenues of fines and taxes will cover the financial needs of an ongoing programme, as it represents the net present value of the subsidy, but not the needs of a new programme.

Furthermore, by granting loans (and similarly, loan guarantees), funds incorporate the repayment risk, so it is unclear as to whether the money lent to the beneficiary will be repaid along with the risk of “losing” money that can result in additional administrative workload for years.

In the case of a new programme, who will provide money for loans must be determined. If the ministry of finance is responsible, it also takes the responsibility for the interest on the money on the international markets and repayment. Sometimes the administration unit (or fund) gets the allowance to procure money from international markets as a loan or an environment obligation. If so, this allowance must be laid down in an act.

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**Box 3. Differences between commercial and state loans**

The main difference between commercial and state loans is in the risk assessment, which is a way for a bank to learn of potential risks of failure and as a basis for their decision regarding interest rates. High risk causes high interest rates, and high interest rates are not affordable. A state institution offers soft loans and therefore has no possibility to involve risk analysis in the decision about interest rates. In this case, analysis has the function of a yes/no or ranking criterion. Nevertheless, risk analysis works only with risks, i.e. possibilities for failure. A large investment is never foreseeable and therefore the decision upon projects always leaves problems of possible cheating or errors in the financial plan. In any case, a decision on the basis of possible failure gives a lot of room for discussion or intervention.

In order to reach a sufficient grant equivalent, loans for large infrastructure projects have very long payback periods: up to 25 years. This means that administration of one project should be planned over the length of the loan period and any administrative change must be discussed under these auspices. The long period of the given loan makes enlargement of the financed measure or reinvestment possible, which can bring a change in overall costs, aid intensity, payback time and the beneficiary’s revenue. There is also a chance that the relevant funding conditions and rules change. These changes in running loans are very restricted in commercial banks but common in state funds. Only with decent banking software and very accurate work is handling this problem possible.
Grants are a suitable tool, particularly on developed money markets, because fewer public funds must be raised and assistance can be tied in with loans. Interest-rate and annuity subsidies to commercial loans are a mixed form of support combining elements of loans and grants. The problem of providing grants is the limited timeframe, which never covers the duration of the investment or even the financing timeframe (this is more or less also the case for loans because, after contracting the loan, the creditor’s influence is rather small). This means that additional regulations regarding the regular operation of the investments, e.g. water acts with detailed norms for running such plants, should be included. It is also necessary to involve or create administrative bodies to control the success of the investment after completion of the funding phase.

It is evident that major infrastructure projects require funding from external sources. In this context, it is necessary to provide adequate security for outside capital. Accordingly, related instruments must be established for municipalities raising external funds; this may require amendments to financial (or constitutional) legislation. State guarantees for municipalities or regions should be the standard in each country, but these guarantees must be bound to strict regulations regarding loan amounts, conditions and payback requirements. The guarantee should become valid only in a maximum of 10 percent of cases. State guarantees for municipal investments should be possible for more tasks than environment, but environment should have priority as laid down in the national environmental strategy.

<table>
<thead>
<tr>
<th>Comments and recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The optimum rate of support should be researched and analysed in detail, so that it both encourages investment and supports the most cost-efficient solutions.</td>
</tr>
<tr>
<td>• Before choosing the instrument, the financial capabilities of beneficiaries should be checked for stability and accountability. Moreover, each form of assistance requires a different scheme for gathering funds to be able to gather a sufficient amount of resources over a particular time. Finally, there is also a need to control the instrument. It means that the instrument must have clear and stable rules which can be evaluated in terms of total costs of the system, effectiveness of the system, and prevention of misused funds. This means that if the government can afford to place a huge amount of money for a long period of investments (a question of debt policy), a system with loans will be the cheapest with no yields for private enterprises. If private capital provided by commercial banks or IFIs is available, then a grant system together with state guarantees for the commercial loans would be the best system, because efforts to establish and run loan schemes cause more state involvement (especially in the financial area) than necessary or sometimes even possible.</td>
</tr>
<tr>
<td>• The type of beneficiary should not influence the process of choosing the optimal instrument. Beneficiaries will always follow the rules given and might propose cost-effective and innovative solutions. The beneficiary should have freedom in designing a financial strategy for its projects.</td>
</tr>
</tbody>
</table>

9. PROJECT IMPLEMENTATION AND MONITORING

Monitoring project implementation and subsequent evaluation are the last stages of the project cycle. Supervision and monitoring of project implementation begins with a signature of financial agreement and continues until all tasks are implemented, completed and financially settled. This is true for the implementation of both substantive (technical) and financial tasks.

Project implementation monitoring (first-level control)

Project implementation monitoring requires that a number of checks and measures are introduced to ensure proper monitoring and supervision on the part of the fund’s staff and avoidance of costly failures at this stage. Some of these measures include:

• assigning the responsibility for close and regular monitoring of a project’s progress to a dedicated fund project coordinator;
• substantive verification of technical and financial documents;
• on-site visits;
• preparation of substantive interim and final reports by the beneficiary;
• involving external experts on an as-needed basis;
• opening special disbursement accounts;
• developing a policy to deal with changes in project costs both in terms of savings and cost overruns; and
• continuous monitoring during the operational phase of a project.

Supervision of technical tasks should be exercised by a project coordinator. The aim of such supervision is to ensure compliance and timely completion of the substantive part of the project in accordance with the schedule and conditions detailed in the agreement. Supervision is conducted via on-site visits and substantive verification of documents submitted by beneficiaries. Financial supervision is exercised by an expert in this area to ensure that fund resources are spent appropriately. Financial supervision requires the verification of financial documentation submitted as project implementation progresses but also necessitates checks made at the beneficiary’s offices. At this stage, it is important to check the disbursement of the beneficiary’s own resources also, as stated in the financial plan to the agreement.

The complete and timely settlement of a phase in project implementation can be pronounced only after the fund has accepted the technical work implemented and related costs, and has approved the interim reports at the appropriate stage. Only when these conditions are met can the fund proceed with subsequent disbursements.

When a given stage is completed later than agreed upon, different possibilities to deal with such situations exist. One way is to reduce the level of funding by the amount of the interest accrued due to the beneficiary’s delay. The length of the delay is determined by the difference between the date of settlement of a certain stage and the date on which documents arrive at the fund and are registered. A reduction in the level of financial assistance may also occur when the substantive scope of the project stage is reduced during project implementation or fund resources were improperly used by the fund.

Monitoring is necessary in order to ensure there are no discrepancies between what is included in the contract and the actual state of implementation as described in reports submitted by the beneficiary. If such discrepancies are established, the fund should use its legal rights as fixed in the contract to put the project back on track.

It may happen that the fund’s resources are used for purposes other than those agreed upon. Such situations should not be accepted by the fund unless the beneficiary has given notice to the fund of his intentions, and the fund has agreed to such changes. However, any changes to the original contract should be included as new annexes to the financial agreement. Any new disbursements should be stopped until the situation is cleared up.

The beneficiary may also seek to get benefits by implementing certain project tasks at a lower price than stated. The fund should then operate on the principle of an equal share in these benefits, through retaining an equivalent percentage share of its committed support. Field checks to the investment site should aim to verify congruence between declared and implemented technologies. Any deviation from the substantive technical and financial plan must be justified by the beneficiary.

Underestimation or failure to pay attention to discrepancies between the agreement and actual implementation of a project may create many legal and financial difficulties for the fund. For example, if the beneficiary has used fund resources to pay for tasks not agreed with the fund but most (or even worse, all) of the support has already been transferred, there is little the fund can do to recuperate its money. Litigation may be an option, but this is very costly and a waste of resources. In addition, such cases create an environment of suspicion and mistrust around the fund.
Therefore, in order to avoid such costly failures, the fund must put as many preventive measures in place as possible.

Monitoring and supervision during implementation are a responsibility of the fund staff managing individual projects. When projects are large or complicated, it may be useful to use external experts to assess the accuracy of task implementation. Each project should be checked both substantively and financially at least once during the implementation phase, but not without prior notice to the applicant and agreement on time and issues to be discussed. Therefore, both internal and external control procedures are essential for monitoring progress in project implementation as well as avoiding costly failures at this stage.

The implementation of an agreement is considered complete after the fund has approved all of its tasks and achieved environmental effects. If the deadline for completion of the part of the project supported by the fund does not coincide with the completion date of the entire project, the final report should be submitted in accordance with the agreement. The final report should show that the equipment/installation has been properly tested and is ready to enter its normal operation phase. It should also confirm the actual achievement of environmental benefits. This confirmation should be given by an authorised environmental protection inspectorate based on actual measurements of the environmental improvements.

A positive assessment of the report constitutes the basis for formal closure of the project. In this context, the fund should develop clear rules of reporting on project progress. It is advisable that progress reports are standardised and that beneficiaries are required to submit these in a standard format developed by the fund. Such standardisation will facilitate the work of fund staff when tracking project progress and results. Monitoring project implementation progress could be greatly improved if the fund develops and puts into place a relational database to generate quick management reports on queries related to different projects.

In order to ensure effective implementation of the project and attainment of environmental benefits as stated in the agreement, the fund may choose to ask the beneficiary to open an escrow account which may be serviced only with the consent of the fund. For example, the Polish EcoFund and the Austrian Kommunalkredit Public Consulting Ltd. keep 5 percent of each grant in such an account and allow disbursement only after final reports have been submitted by the beneficiary. Such a guarantee serves to discipline beneficiaries and compel them to inform the fund of substantive environmental effects achieved following closure of that part of the project supported with fund resources. This shows the need to continue monitoring during the project’s operational phase as certain environmental benefits can be achieved only after the equipment has reached its full operational capacity.

In addition, the fund must also develop a policy for cases in which project costs change. In the case of savings, both the beneficiary and the fund have savings. Therefore, in order to ensure that the fund gets its fair share of the benefits arising from cost saving, cost reporting should be carefully monitored.

If there are cost overruns at this stage, the fund should adhere to the principle of not agreeing to increase its support. On the contrary, with the amount of the subsidy fixed, the rate of the aid decreases and fewer resources are transferred to the beneficiary. In the Austrian example, if overruns are more than 15 percent of the figures given in the initial application, the whole procedure must start again with the subsidy element lowered.

**Post-implementation monitoring and evaluation (second-level control)**

An evaluation of project results should close the project cycle. This evaluation should look at the fund’s internal operations during the project cycle; systematic evaluation is a critical learning device...
and a prerequisite for building capacity and skills to improve future project cycle management. Evaluation reports indicating all mistakes made, analysing causes of the project success/failure in projects supported, and assessing the fund’s ability to detect and prevent major breakdowns should be prepared. The reports should also contain recommendations for improving the project cycle management, including the process of project identification.

Such ongoing evaluation is also important with regard to changing economic conditions and market trends, and the need for the fund to adjust terms and conditions of its financial offers. In addition to the first-level control by the Kommunalkredit Public Consulting in Austria, a random sample of investment projects (5 to 10 percent of projects or granted resources) are subjected to in-depth evaluation by external auditors on an annual basis. Both the correctness of application procedures and actual environmental benefits achieved as a result of the subsidy are evaluated.

### Comments and recommendations

- Ensuring that proper measures are chosen for monitoring helps to avoid costly failures from the beginning of the project.
- The project coordinator plays the key role in project implementation and monitoring. The project coordinator supervises technical tasks, especially in ensuring compliance and timely completion of the project.
- The fund should develop clear procedures as to what must be done in cases of a beneficiary’s non-compliance with agreed conditions in the contract.
- Evaluation of the project should close the project cycle and should also include an evaluation of the fund’s internal operations.

### 10. ADMINISTRATIVE ASPECTS

In the process of establishing and operating the fund, it is important to determine the role and tasks of the Ministry of Environment and/or other ministries. The ministry should perform the tasks of strategy, approval and control. It is important to determine the exact roles and responsibilities and to keep in mind that some tasks and roles should not be conducted by the same person in order to avoid conflict of interest.

#### Strategy

There is a need to develop a strategy that shows the link between environmental goals to be reached and which projects financed by the fund would contribute to achieving these goals. In the developing countries all types of projects usually require state support. Therefore, the strategy should analyse to which extent state aid should be given. Projects which have the greatest effect on national environmental goal achievement should be preferred by the fund (i.e. the decision between a lot of small projects or a few big projects).

The long-term strategy of the fund should determine the funding activities for the goal to be achieved, e.g. water supply or wastewater management systems for a certain percentage of the population. This is followed by a determination of the total volume of money. The long-term strategy should be valid for a period of 10-25 years, especially if infrastructure projects are also considered. A high-level political agreement on the strategy document such as parliamentary approval is not necessary, but it is wise to obtain approval by the institutions involved, such as the ministry of finance and/or a consulting body.

On the basis of a long-term funding strategy, short-term (two to five years) and mid-term (five to 10 years) plans for the fund should be elaborated by the ministry of environment. These plans should
cover also a financial forecast due to the envisioned actions which also should include annual expenditure plans. These plans concretise and thus help to evaluate the effects of the funding system and are therefore a very important controlling instrument. The basic outline of the content of the long-term strategy should be incorporated into the act, and other plans outlined can be regulated in the regulations.

**Approval**

Approval of projects to be funded is always a very sensitive element of the fund’s project cycle. There are always numerous institutions which would like to have the right to approve the final decision on chosen projects. Fund administrators must coordinate the process, while at the same time allowing that the decision on projects is based on a wide consensus of institutions involved. It is useful to form a consultative body, which consists of all institutions desiring to be involved and to comment on the results of the appraisal process.

On the other hand, approval raises the possibility of corruption. The approval process should therefore be very transparent, and the approval decision should be associated with justification which would highlight all pros and cons of the appraised projects and the opinions of the consultative body and/or a minister.

**Involvement of stakeholders**

The participation process of including all interested stakeholders should be conducted between appraisal and approval of projects. This process serves to ensure taking various interests of lobbying groups into consideration, and it a very good tool against corruption. This is usually done by appointing an advisory body (e.g. and inter-ministerial committee or IMC) that is responsible for preparing decision recommendations for the minister on the basis of the work done by the fund and in conformance with the legal framework, e.g. laws, guidelines, rules governing the setting of support policy. The advisory body could consist of representatives from other affected sectors, representatives of political parties (one for each party represented in the Parliament), interest group representatives, NGOs and scientific experts. The chair should be taken by the Ministry of Environment; whereas a majority of votes from the Ministry of Environment in the IMC is not advisable, given that the minister takes the final decision. This composition is to be regulated by the act, in order to avoid too great a fluctuation. The way the IMC should work is preferably stipulated in the rules of procedure.

The main tasks of the advisory body include:

- development and approval of the rules of procedure;
- approval of meeting minutes;
- review of the quarterly report prepared by the fund (e.g. application trends, special items);
- review of the fund report on developments relevant to support;
- advice and recommendations in the formulation and preparation of legal framework;
- involvement in the development of rules governing the setting of a support policy, support priorities, technical criteria, eligibility rules for programmes and investments; and
- advice and recommendations on individual projects on the basis of the opinions of the fund and applicants.

**Transparency**

Transparency is a very important tool in enabling a proper and effective control system. Transparency also has two more positive aspects. First, transparency helps to generate better projects for the funding system and to strengthen confidence in the fund. Transparency must be provided to all stakeholders; transparency of decisions and regulated methods of intervention (e.g. making complaints must be possible within the funding system and should be dealt with in a transparent manner) lead to public awareness and additional control. If the decision and reasons for approval (and even more importantly, for disapproval) must be published, as rejected applicants
may create permanent pressure for justification. Also political (i.e. non-monetary) corruption may be avoided more easily with transparency rules.

<table>
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<th>Box 4. Methods of transparency</th>
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<tr>
<td>A few simple guidelines for achieving transparency are the following:</td>
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<tr>
<td>- clear funding rules and decision criteria, published eligibility criteria, and reports about all formalised projects;</td>
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<tr>
<td>- making information available to the applicant regarding proposed funding conditions or reasons for rejection;</td>
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<tr>
<td>- documentation and justification of every single decision, especially if later action corrects a decision within a previous step, and the minister’s mandatory comment on his or her decision if it differs from the suggestion of the appraisal unit;</td>
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<tr>
<td>- published results of the appraisal process, including the main data from funded projects;</td>
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<td>- model funding contracts in order to avoid surprises after approval, e.g. a project which cannot fulfil funding obligations or payment rules;</td>
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<tr>
<td>- published final reports of a project (possibly done on a webpage) with a comment from the control unit;</td>
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<tr>
<td>- all decisions for granting money prepared according to regular procedures, including those projects not based on an application but on a government initiative;</td>
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<td>- division of project appraisal and project decision;</td>
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<tr>
<td>- project appraisal done by an independent entity, which must adhere only to given rules, so that intervention from the decisive body and others is possible;</td>
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<tr>
<td>- implementation of the “four-eyes principle” on all levels — all relevant decisions should follow this principle on a personal level (i.e. two signatures on each letter) and on an organisational level (all decisions of an institution must be signed and controlled by the next level);</td>
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<tr>
<td>- division of the decision-making process into defined steps, each finalised by a written report of recommendations or decisions, with procedural steps assigned to different organisational units;</td>
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<td>- any deviation from the recommendation of the previous organisational unit documented with the reasons for this deviation;</td>
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<tr>
<td>- the entire fund, i.e. the decision-making process and implementation of contracts, must be audited comprehensively according to international standards (see the Council of Europe Criminal Law Convention on Corruption, January 27, 1999);</td>
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<td>- a random sample of investment projects and of small grants evaluated annually with regard to correct operation of procedures and actual environmental effects of the measures supported;</td>
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<td>- main responsibilities determined in a formal act, thus preventing opportunistic assignments of responsibilities; and</td>
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<tr>
<td>- a system of account statements included in a report to parliament must be implemented to allow broad supervision of operations.</td>
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**Control**

A good system of control makes the fund more efficient and, through this, more trustworthy and attractive for the stakeholders.

Control measures for the inner and outer circle should be conducted.

The inner circle:
- As far as possible, the four-eyes principle must be established for every single decision.
- The applicant must be checked by the payment authority on a regular basis and by the strategic unit in 5 to 10 percent of cases.
- The appraisal unit must be checked by the strategic unit regarding compliance with guidelines on a 5 to 10 percent basis and by an external unit (i.e. a court of auditors) to a rate of 2 percent in each of the three to five years.
- The entire project cycle — not a single project — should be controlled by an external unit on a three- to five-year basis.

The outer circle:
- The results and strategy should be evaluated by an external unit on a three-year basis and with aggregated data.
- The control unit should be controlled on an annual basis by a court of auditors or external units. International donors may be interested in checking the control unit, and full access should be given to these control instruments.

In appraisal or payment, it is a basic principle that, in controlling actions, the more independent from the primary responsible persons and institutions the controllers or controlling institutions are, the better. In this context, it becomes obvious that controlling actions must be clearly separated from approval.

<table>
<thead>
<tr>
<th>Comments and recommendations</th>
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<tr>
<td>The fund must develop a long-term strategy to be followed by developing short- and mid-term implementation plans.</td>
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<tr>
<td>The approval process of projects after appraisal is one of the most sensitive issues. It is important to clearly set roles and responsibilities for all parties involved. A consultative body might be created to comment on the results of the appraisal process.</td>
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<tr>
<td>Other interested stakeholders should have the opportunity to give comments. This can be done through the establishment of an advisory body.</td>
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<tr>
<td>Transparency of fund operations is a key aspect for an efficient and trustworthy fund; transparency should occur in all aspects of fund operations.</td>
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<tr>
<td>The fund should establish internal and external control procedures; usually, the more independent the control body is, the more efficient the fund operation.</td>
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