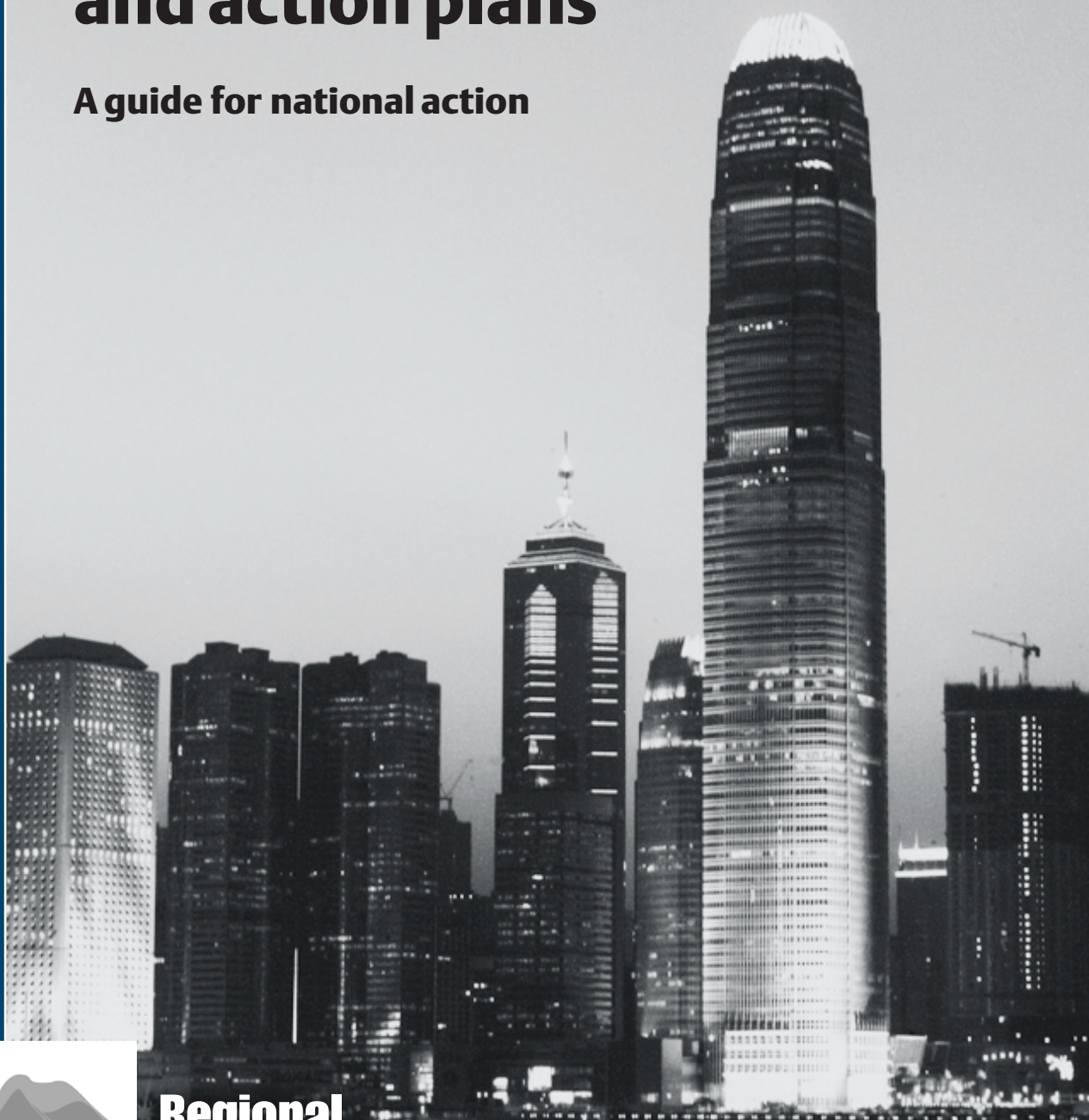


# Financing the implementation of regional seas conventions and action plans

A guide for national action



**Regional  
Seas**

This report was prepared by the Regional Seas Coordinating Office and the Coordination Office of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), both of the United Nations Environment Programme (UNEP). It is based on a previous 2006 report prepared in cooperation with the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA).

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# **Financing the implementation of regional seas conventions and action plans**

**A guide for national action**

# Foreword

The Regional Seas Programme (RSP), launched in 1974 in the wake of the 1972 United Nations Conference on the Human Environment held in Stockholm, aims to address the accelerating degradation of the world's oceans and coastal areas through the sustainable management and use of the marine and coastal environment. At present, there are 18 regional programmes, six of which are directly administered by the United Nations Environment Programme (UNEP [www.unep.org/regionalseas](http://www.unep.org/regionalseas)).

The global Regional Seas Programme coordinated by UNEP is facilitating the enhancement of sustainable financing within the RSPs. This responds to one of the six global RS strategic directions agreed upon and endorsed by the chairpersons or their representatives of the Conference of the Parties and Intergovernmental Bodies of the Regional Seas Conventions and Action Plans, at their 6th Global Meeting in Istanbul, Turkey in 2004. These strategic directions aim at strengthening the programme at the global level, while continuing to implement the work programmes of the individual RSPs.

At their 7th Global Meeting in Helsinki, Finland in 2005, the RSPs discussed the challenges of sustainable financing with particular focus on financing at the level of the secretariat, the programme itself and at the national level. The substantial increase in funding necessary to reach the goals of the RSPs in the sustainable management and conservation of their marine and coastal environment requires the involvement of all member countries in close cooperation with international partners and donors. In addition, short-term funding through grants, donors, and subsidies will be essential until the necessary level of sustainable, long-term financing has been established.

This report addresses the financing process as a whole: how to determine financing needs, how to choose the plan that best fits these needs, as well as the challenges Regional Seas Programmes will face while moving forward with the next phase of activities. Since programme implementation will largely be at the national level, this report will focus on domestic resource mobilization and national action plan implementation through National Programmes of Action within the framework of the Global Programme of Action for the protection of the marine environment from land-based activities (GPA). The RSPs provide a policy framework for the regional implementation of the GPA. The report identifies some international and regional examples as well as introduces methods, tools, economic instruments and mechanisms that can assist the Regional Seas Programmes, their secretariats and member countries in creating a larger pool of long-term sustainable financing. It is our hope that this report will provide options for regions and their countries to systematically address the financial constraints that they are facing in the sustainable management and conservation of the marine and coastal environment.

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# Acronyms

ADB	Asian Development Bank
ADF	African Development Fund
AfDB	African Development Bank
BOO	Build operate own
BOT	Build operate transfer
CAC	Command and control
CAS	Country Assistance Strategy
CEP	Caribbean Environment Programme
DAC	Development Assistance Committee of OECD
DEG	Deutsche Investitions- und Entwicklungsgesellschaft
EAP	Environmental Action Programme
EBRD	European Bank of Reconstruction and Development
EC	European Commission
ECA	Export Credit Agency
EECCA	Easter Europe, Caucasus and Central Asia
EF	Environmental Fund
EFS	Environmental Financing Strategy
EI	Economic instrument
EIB	European Investment Bank
EPF	Environmental Protection Fund
EU	European Union
€	Euro (currency)
FC	Financial cooperation
FSL	Fixed-spread loan
GDP	Gross domestic product
GEF	Global Environment Facility
GNI	Gross national income
GPA	Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
IADB	Inter-American Development Bank
IBRD	International Bank of Reconstruction and Development
ID	Islamic Dinar (currency)
IDA	International Development Association
IDB	Islamic Development Bank
IFC	International Finance Corporation
IFI	International Financial Institution
IMF	International Monetary Fund
KD	Kuwait Dinar (currency)
KFAED	Kuwait Fund for Arab Economic Development
KfW	KfW Kreditanstalt für Wiederaufbau
LBS	Land-based sources of pollution
LE	Egyptian Pounds (currency)
MBI	Market based instrument
METAP	Mediterranean Environmental Technical Assistance Program
MIGA	Multilateral Investment Guarantee Agency
NGO	Non-governmental organization
NPA	National Programme of Action
NTF	Nigerian Trust Fund
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
PA	Programme of Action
PAC	Pollution abatement and control
PADH	Physical alteration and destruction of habitats
PAME	Protection of the Arctic Marine Environment
PERSGA	Programme for the Environment of the Red Sea and Gulf of Aden
PIP	Public Investment Programme
PPC	Project Preparation Committee
PRSP	Poverty Reduction Strategy Paper
PW	Programme of work



ROPME Sea Area	Regional Organization for the Protection of the Marine Environment of the sea area surrounded by Bahrain, I.R. Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates
RPA/LBS	Regional Programme of Action for the protection of the Red Sea and Gulf of Aden from Land-based Sources
RSP	Regional Seas Programme
SAP	Strategic Action Programme
SEE	South East Europe
SME	Small- and medium-size enterprises
UK	United Kingdom
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
US\$	United States Dollar (currency)
VAT	Value added tax
VSL	Variable-spread loans
WTO	World Trade Organization

# Financing Regional Seas Programmes

## 1

A solid foundation for long-term sustainable financing must be developed

Funding is required for a secretariat, the programme, and actual implementation at country level

### 1.1 Introduction

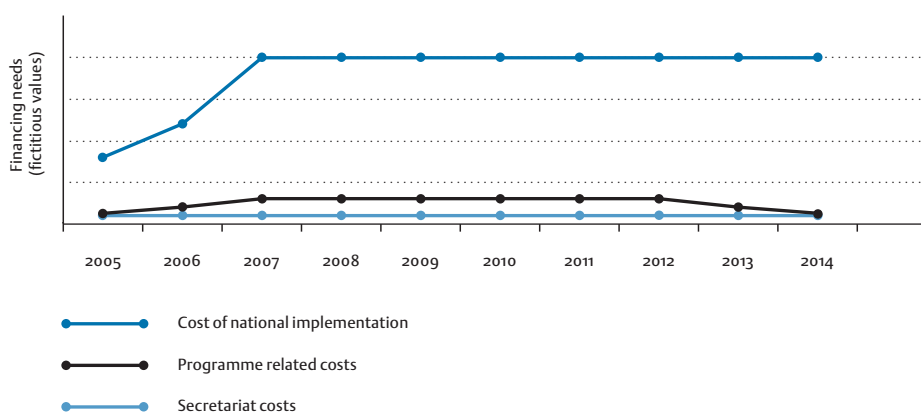
To finance the ambitious activities ahead, the Regional Seas Programmes (RSPs) and member countries must find and develop a solid foundation of long-term sustainable financing by strengthening domestic commitment and resources. Just as the Regional Seas Programmes differ in focus and scope, financial options and solutions vary from region to region as member countries have different economic structures and are at varying stages of development. But in all cases, the Regional Seas Programmes have certain operational costs that cannot be avoided. These costs fall under one or more of the following categories:

- *Secretariat:* The Regional Seas Programme secretariats oversee and facilitate the development and implementation of Regional Seas Programmes as well as the programme of work as agreed at the Conference of Parties. The core costs of running a minimal secretariat included staff salaries and office rental, among others.
- *Programme of work:* The cost of implementing the agreed Regional Seas Programme of work (PW) and additional regional projects on an ad hoc basis. Such costs could include additional staff and programme components like capacity and monitoring projects, detailed studies, and demonstration projects.
- *National implementation of Regional Seas conventions and action plans:* At a national level, Regional Seas Programmes are implemented by the respective national or sub-national authorities and typically take the form of a national programme of action (NPA). NPA costs can include funding institutional and capacity activities as well as the funding of national and/or local programmes, such as biodiversity or infrastructure investment projects.

Long-term sustainable funding comes primarily from three sources: the domestic public-sector through direct or indirect transfers, polluter and user-pay schemes, and/or foreign international grants. While loan financing and other forms of future repayment options can bridge a short-term funding gap until a sustainable financing framework is established, these bridging mechanisms will ultimately increase the need for available domestic resources at the time of repayment.

As the programme of work becomes more ambitious and as the Regional Seas Programmes are more often requested to expand their scope of activities, the financing necessary to facilitate the RSPs will continue to increase. With current funding deficiencies, the gap between what is spent and what is required grows larger by the day and can greatly affect the secretariats' ability to function. To overcome this, some Regional Seas Programmes have embarked on cost-saving measures and explored creative strategies to secure in-kind contributions for activities such as translation costs, meeting hosting, and staff secondment.

Figure 1.1 shows the financing needed (only proportional) to sustain a Regional Seas Programme, illustrating how the cost for national level implementation far exceeds the cost of the secretariat and its programmes.

**FIGURE 1.1** Financing demands for Regional Seas Programmes and related activities

## 1.2 Financing a Regional Seas secretariat

### Secretariat costs

In the current situation, most Regional Seas Programme secretariats suffer from financial inconsistencies, such as irregular member payments and occasional non-payments, or funding deficits, both of which drive the secretariats' focus away from its intended activities and programme-related work toward fundraising. As the programme of work becomes more ambitious, the core costs to facilitate the secretariat will increase. Therefore, it is necessary to secure stable and sustainable funding for these activities at all levels, which will facilitate the activities expected of the secretariat.

**Operational core costs for a RSP secretariat are relatively low but vital...**

Secretariats have operational costs that cannot be avoided regardless of the financing available. These core costs include: expenses for staffing, meetings, housing and operational facilities, support for Regional Seas Programme activities in the lower-income member countries, expert assistance, and limited consultancies (Box 1.1 and Figures 1.2, 1.3 and 1.4).

#### BOX 1.1 Expenditures of selected Regional Seas Programmes

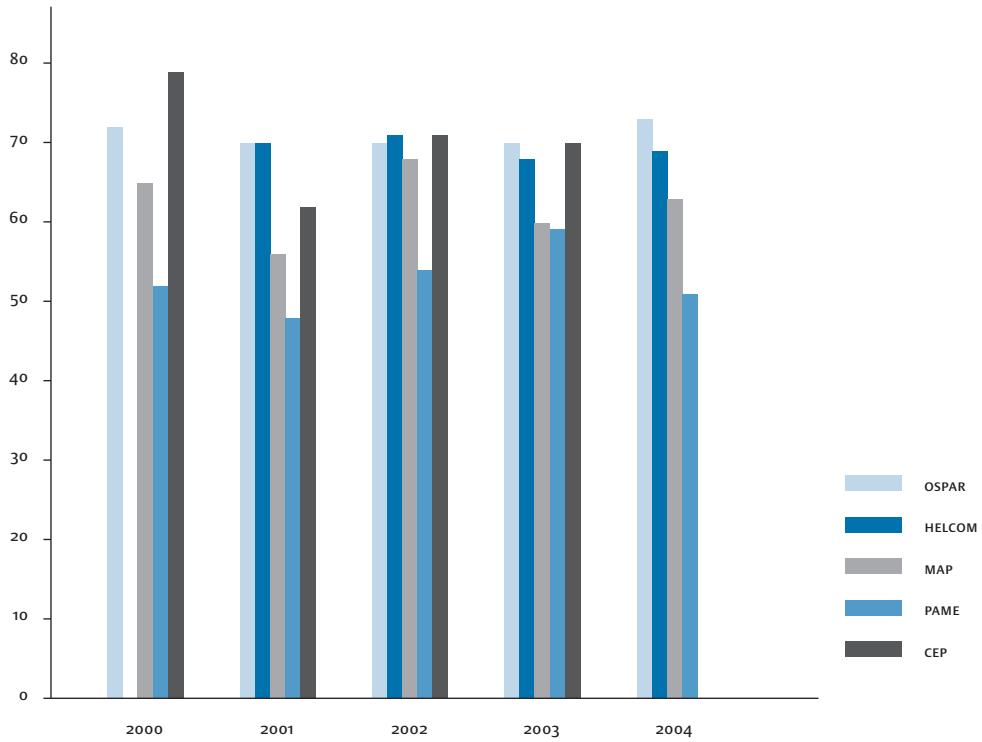
At the 7th Global Meeting of the Regional Seas Conventions and Action Plans, a brief was compiled analyzing five Regional Seas secretariats with respect to their costs. The review showed that staff-related costs (including consultant services) was the highest cost expenditure making up 50 to 80 per cent of the total budget from 2000-2004 as illustrated in Figure 1.2. These costs represent the majority of the secretariats' core costs and reflect the programme of work expenses.

Figure 1.3 compares accommodation and equipment costs as a percentage of the RS secretariats' total budget. These costs average around 20 per cent of the RS secretariats total budget and have remained rather stable from 2000-2004.

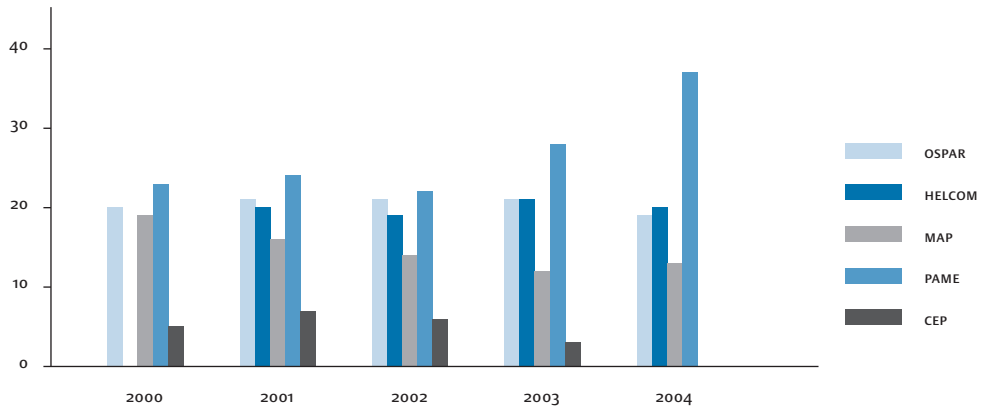
Figure 1.4 compares costs related to meetings and travel as a percentage of the RS secretariats' total budget. These costs vary between years and between regions. Reductions in these costs may be an indication of budget deficiencies (for example PAME) as the costs associated with travel represent the budget item that is typically the easiest to reduce.

...while staff costs make up 50 to 80 per cent of the total secretariat budget

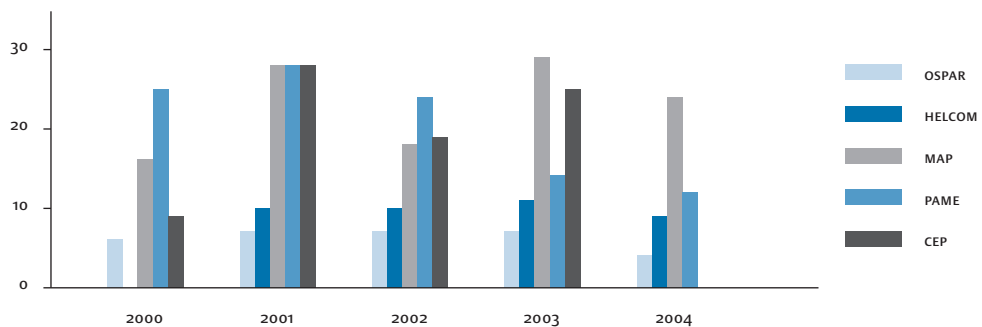
**FIGURE 1.2 Staff-related costs**  
(percentage of total RSP secretariat budget)



**FIGURE 1.3 Costs of accommodation and equipment**  
(percentage of total RSP secretariat budget)



**FIGURE 1.4 Costs related to meetings and travel**  
(percentage of total RSP secretariat budget)



### Financial considerations and options

Traditionally, the financing for the RSP secretariats' costs and their programmes has been a mix of RSP member-country payments, UN contributions, GEF funding and other multilateral and bilateral donor contributions. Yet as the challenges and priorities for the RSPs evolve and expand, it is necessary to develop more sustainable long-term financing by increasing the contribution from member countries.

Potential funding sources can either be in-cash or in-kind (or a combination of both) and include the following:

- regular contributions to the RSP's Trust Fund from participating member countries
- ad hoc contributions made by participating member countries in addition to annual contributions
- contributions from countries supporting the national programme of action but not participating in it (such as non-members)
- support from the UNEP
- support from another United Nations organization on a project-funding basis
- support from regional or global organizations that are not part of the United Nations system (for example The World Bank)
- support from specific international funds (for example GEF)

**Sustainable financing is required to successfully run a secretariat...**

**...while realizing that a secretariat does not generate revenue from its activities**

When establishing a funding package for secretariat costs, it is important to note that the secretariat will not be generating any revenue from its activities, and thus will have to be financed completely by direct payments (member contributions) or grants. On a short-term basis, it may be possible to borrow resources to bridge financing gaps but this cannot be expected. The funding arrangement agreed upon by member countries will need to produce a stable and consistent stream of financing, with little to no room for late or missed payments.

As countries have very different income levels, expecting the low-income countries to contribute equally to the financing of the RSP secretariat is not realistic. However, some contribution should be made by these countries in order to establish a sense of ownership. In the short and medium term, it may be necessary for certain (often the wealthier) member countries to pay a larger share of the secretariat costs but the goal should always be a fair distribution of member payments.

**Several options exist to obtain a base level of funding**

Inconsistencies in the *expected* and the *actual* annual contributions made to the Regional Seas Programmes by the member countries are an illustration the funding uncertainties faced by the secretariats. The following options<sup>1</sup> could assist RSPs and member countries in determining realistic and equitable contribution levels. The 'base figure' refers to the minimum annual level of funding required to meet the basic operational costs of the secretariat and a realistic number of substantive activities.

- *Option 1:* Arbitrary annual amounts as agreed upon by the participating countries that equal the proposed ‘base figure’.
- *Option 2:* Contributions in accordance with the UN scale of assessment as agreed to by the General Assembly of the United Nations.
- *Option 3:* Contributions per country that combine two elements:
  - an equal amount based on equal sharing of a fixed percentage of the ‘base figure’
  - the remaining amount of the ‘base figure’ to be distributed according to the same ratios as applied in the UN assessment scale.

**For example: OSPAR parties contribute to the secretariat according to their economic status but have equal voices regardless of size**

### **BOX 1.2 Financing the OSPAR Secretariat: allocating contributions**

OSPAR relies on contributions from its Contracting Parties to fund its budget. There is an ongoing debate between two principles:

- Contracting Parties should contribute according to their economic status – it would be unfair for a smaller country with a population of 300 000 to pay the same as a larger country with a population of 80 000 000
- Contracting Parties have equal voices in the OSPAR Commission and should therefore contribute equally

All budgetary decisions require a unanimous vote. Therefore, the basic approach agreed upon for the general budget<sup>2</sup> is a balance between the two principles:

- two-fifths (40 per cent) of the budget is divided in equal shares (the 16 Contracting Parties each pay 2.5 per cent of the general budget)
- three-fifths (60 per cent) is divided according to the economy size of the Contracting Parties (derived from the triennial UN assessment on the basis of contributions from member states)

Three refinements have been added to this basic approach:

- since the European Community (EC) does not have an economic base separate from its member states, it pays only the 2.5 per cent share (this approach has now been adopted as standard for EC participation in other international agreements)
- special arrangements were made when extra work to support the North Sea Conferences was taken on. When OSPAR followed up on these commitments made by the member countries in support of the North Sea Conferences, a special ‘North Sea tranche’ of the contributions was established. This totalled 16.66 per cent of the total general budget and was divided equally between the eight North Sea coastal countries, in addition to their share of the remaining 83.33 per cent
- to prevent any one Contracting Party from dominating the budget, a ‘cap’ of 22 per cent of the total general budget is applied to any one contribution. Excess over this cap is redistributed among the un-capped countries. In practice, France, Germany and the United Kingdom usually benefit from this cap

This system, though complex, has been able to achieve, and maintain, unanimous agreement since the early 1990s. Its strength lies in the fact that small member countries know that they will not have to meet a disproportionate share, while large member countries know that small ones cannot argue for increased expenditure without having to accept a reasonable share of the burden.

Source: (OSPAR 2005)

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## **1.3 Financing a Regional Seas programme of work**

### **Programme costs**

Most Regional Seas Programmes have developed or are in the process of developing a Strategic Action Programme (SAP), which outlines the environmental problems facing the region and the actions necessary to address these issues. The RSP secretariat then carries out programme activities, referred to as a programme of work (PW), that support the actions outlined in the SAP. An important distinction can be made between what can be described as ‘secretariat’ costs and ‘programme’ costs, which often include the following activities:



**A secretariat carries out programme activities such as monitoring and training**

- information collection and dissemination
- review of and assistance with strengthening legislation and monitoring
- guideline development
- initial investment programming and planning
- regional analysis
- monitoring of hot spots
- development training
- technology advice
- assisting with the development and implementation of national action programmes
- facilitating regional cooperation

The programme of work involves expenses similar to the core costs of the secretariat – such as staff, housing and operational facilities, meetings, support for the less financially established member countries, expert assistance, missions, travel, and consultancies. Some of these expenses require upfront investment (capital, equipment, and staffing) whereas others can be undertaken once funding becomes available or not at all if financing is not sufficient. Most RSPs rely primarily on contributions from their member countries to fund the secretariat's budget but the basis for how much each member country contributes varies between regions. Additional funding from international organizations, such as the World Bank and the Global Environment Facility (GEF), may also represent a part of the RSP project portfolio as funding directed toward specific projects.

**A Regional Seas Programme secretariat and programme of work are regional public goods**

Most Regional Seas Programmes secretariats have an ongoing working relationship with the regional and bilateral donors working in the regions. The individual Regional Sea secretariat is a regional public good established for the protection of the shared resource, the Regional Sea. Financing the secretariat and the pw is the responsibility of the member countries and the international community at large – no country has the incentive to fund the total cost of pollution control and resource conservation, while sharing the benefits of the shared resource with other members.

**Financing for programme activities comes from many different sources...**

The financing for the pw will most likely come from many different sources and involve blending and matching resources, which at times can be very complex. Similar to funding a secretariat, the financing arrangement for the programme of work should be agreed upon by the RSP member countries and should include more long-term sustainable financing based on the user/beneficiary pays principle (explained in the Section 2.1). The agreement should also specifically outline how, when and by whom the programme of work will be financed. Due to the income differences between RSP member countries, it is highly likely that subsidies from the wealthier members, or external donor funding, will be necessary to cover the full expenses.

Another option for financing the programme of work is to divide the types of activities to be undertaken into different categories. An example of this would be seeking financing for regional assessments and information collection from membership contributions, but funding more national and training-related activities from user countries. For the less

economically developed countries, international donor payments can supplement member contributions. Other sources of financing may also be available through partnerships and co-funding arrangements with other organizations and institutions. Voluntary contributions or sponsorships are another alternative for supplementing regular funding sources. Some possible PW funding options are summarized in Box 1.3.

...varying from membership fees to grants, subsidies, partnerships and sponsoring

### **BOX 1.3 Funding options for a Regional Seas programme of work**

#### **Suggested primary sources of financing**

- membership fees/contributions
- member country grants/subsidies
- international grants

#### **Possible secondary sources of financing**

- bridging capital from a lending institution/country
- the creation of an earmarked regional charge
- the introduction of fees/voluntary payments for environmental service
- partnership arrangements
- voluntary and sponsor funding

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### **Examples from Regional Seas Programmes**

In the Regional Seas Programme OSPAR, member countries directly fund all programme costs. The financing schemes vary: certain secretariat costs are covered regularly by individual member countries, and certain programme costs are covered from a collective budget. These flexible financing arrangements play a major role in financing OSPAR's work. A similar system operates in the Regional Seas Programme PAME, in which PAME programmes are typically financed by a 'lead county' (or countries) that assume responsibility for associated project costs. If the PAME Secretariat is then requested to provide secretariat support to PAME-led projects as part of its day-to-day operations, the additional costs are covered by a proportionate increase in the annual contribution made by the respective lead country (or countries). With this project structure in place, the PAME Secretariat does not have a separate section for 'project costs' in its annual budget.

In the RSP CEP (Caribbean Environmental Programme), funding for the programme of work is distributed across four sub-programmes. Due to insufficient funding, the Officer position in one of the sub-programmes has been vacant since 1992. To accommodate this, the three remaining sub-programmes have carried out most of the Officer activities for the sub-programme in question.

## **1.4 Developing and financing a national programme of action**

### **Introduction**

Implementation of Regional Seas Programme activities at a national level is the sole responsibility of their respective member countries. The Regional Seas Programmes' conventions and action programmes clearly outline a wide range of environmental actions that need to be addressed by these countries. To facilitate this, the RSPs have developed country assessments, which identify and prioritize environmental sectors and activities by the level of urgency in each country (Annex 1 provides a case study from the Red Sea and Gulf of Aden region).

Over 70 countries developed National Programmes of Action (NPAs) to implement RSP activities

To carry out these activities, most countries have developed or will develop a national or sub-regional programme of action (referred to here as an NPA). Globally, more than 70 countries have already developed NPAs focused on the protection of the marine and coastal environment from land-based activities.

The purpose of a national programme of action is to:

- identify, resource, and implement actions to address specific causes of environmental degradation to the marine and coastal environments
- increase awareness and understanding of the value, benefits, and vulnerability of these environments
- provide a flexible mechanism for identifying and prioritizing problems through partnerships and consensus among stakeholders
- strengthen the public sector's ability to effectively respond to the causes and to ensure the sustainability of the actions and projects undertaken
- mobilize resources and partners, including the private sector, for implementation of specific projects
- enhance environmental and financial legal frameworks and regulations

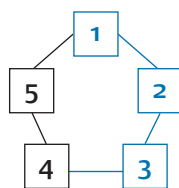
RSP secretariats support countries in the implementation of NPAs in various ways

The Regional Seas Programmes can assist member countries with the development and implementation of these programmes. The amount of support varies but can include strengthening capacity and efficiency, monitoring and assessments, facilitating regional cooperation, or ensuring the relevant regional mechanisms are in place to support national implementation. RSP secretariats can also raise the awareness of the environmental costs of inaction, the value of a vibrant environment, and draw attention to environmental/health cost-related issues.

### Developing a national programme of action

Developing a national programme of action is a coordinated and long-term iterative and cyclic process that should involve all stakeholders from the beginning. To support RSP member countries in developing and implementing a national programme of action, the UNEP/GPA produced the NPA Guide (UNEP/GPA 2006) as a resource. The UNEP/GPA NPA Guide outlines the phases and steps involved in the NPA process and each step is broken down into action points that should be taken before moving on to the next phase of development (Box 1.4 and Figure 1.5).

FIGURE 1.5 The NPA process cycle



An iterative NPA process goes through generations of the five major steps

### BOX 1.4 Programme cycle and specific steps for developing a NPA process

#### Developing realistic NPA action

##### STEP 1 Initial preparations

To begin a cross-sectoral and multi-stakeholder process for the protection of the coastal and marine environment from land-based activities:

- designate the overall lead that will have to carry out initial preparation tasks:
- set up (and chair) a NPA Core Group
- define the overall scope and guiding principles
- consult potential financial partners
- hold initial brainstorming sessions with key actors
- develop and agree on an initial work plan
- secure funding for preparatory activities (mainly Step 1 and 2)
- ensure formal endorsement of the NPA process by the government

##### STEP 2 Identification of problems and of constraints and opportunities for successful solutions

To analyse the current situation:

- assess policy tools, (potential) partners and linkages
- assess data, monitoring and reporting mechanisms
- assess legal and financial frameworks
- For all: identify problems, constraints, opportunities and (capacity building) needs

##### STEP 3 Formulating realistic strategies and action

To develop a tailor-made NPA programme for step-by-step implementation through a wide network of linkages, partners and stakeholders:

- set up an institutional network
- set realistic objectives, goals, targets and time-frames
- define prioritization criteria and set priorities
- produce a programme pipe-line and formulate short and medium term activities
- devise a financing strategy
- formulate communication and participation strategies
- designate implementing agencies and assign responsibilities

#### Towards successful NPA implementation

##### STEP 4 Kick-off national level measures and on the ground activities

To begin implementation involving all stakeholders and to ensure support and a sense of ownership at all levels by creating awareness:

- ensure adoption and acceptance of responsibilities by implementing agencies
- start ongoing awareness and outreach activities

##### STEP 5 Monitoring, evaluation and revision

To establish strong monitoring, feedback and evaluation components:

- ensure continuous monitoring, evaluation and revision
- set-up assessment and reporting programmes to evaluate action
- select indicators against which set goals and targets can be evaluated

Source: UNEP/GPA 2006

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### Financing a national programme of action

From the activities and investments identified in SAPs/NPAs, it is clear that the total cost of compliance is high and exceeds current levels of financing given the political, household, and private sector priority of the conventions and action plans. For some countries, the amount of financing needed to implement the conventions and action plans exceeds the available level of financing – even with substantial donor support. For these reasons, it is crucial to identify which financing sources are most relevant and realistic to the specific project activities, clarify which organizations are responsible for implementing specific

activities, and develop a programme of action based on affordability and long-term sustainable financing.

**The problem is not the identification of issues but increasing available funding**

Often the challenge to national level implementation of the Regional Seas Programmes is not a problem of identifying issues that need to be financed but rather a problem of increasing available funding. In addition, the NPAs often do not prioritize the necessary actions and are not specific enough when describing how they are to be implemented. Given the scarce available resources for implementation, actions need to be prioritized as short, medium or long term.

**National level expenses are similar to those of RSP secretariats: staffing, research, training, implementation, monitoring...**

To implement a national or sub-national programme it is also necessary to cover the expenses of implementation and the monitoring and enforcement of the programme as well as other supporting activities. These expenses, to a large extent, are similar to those of the RSP secretariats and the programme of work, including cost for institutional arrangements, capacity increases, undertaking research and analytical work, monitoring and enforcement activities, technical assistance, project preparation, and design and project implementation activities.

When proposing a programme of action, these different financing needs must be acknowledged and evaluated for their expected cost. Specific funding arrangements should be designed for each type of financing need. It is also necessary to identify actions that create incentives for the users/beneficiaries or polluters to pay for their activities and ensure that the programme is integrated into public expenditure programmes (such as fiscal budgets and public-investment programmes). Developing a medium to long-term strategy on how to establish a framework that will support a gradual move toward sustainable financing mechanisms is also a high priority. In addition, arrangements should be made to ensure that household affordability will not become a problem. Annex 4 lists 11 actions that should be followed during the financing process for a programme of action.

**Long-term financing needs to include short- and medium term priority investment projects**

For the financing goals to be reached, the long-term strategy needs to be supplemented by a rolling two to four-year pipeline of priority investment projects for co-financing from the public budget. In some countries, such a pipeline management mechanism is called a Public Investment Programme (PIP). PIP is a mechanism through which funding from the state budget is allocated to public-sector investment projects in the short to medium term.

### **Challenges in implementing a programme of action**

Most developed countries, and increasingly in transitional and developing countries, have faced serious challenges when developing and implementing national programmes of action, such as:

**Implementation challenges are: inadequate support, capacity, coordination, and financing**

- lack of widespread political and/or community support for long-term actions and changes necessary to protect coastal and marine environments
- inadequate institutional capacity and/or human resources to satisfactorily address the wide range of land-based pressures facing coastal and marine environments

- the lack of coordination between public investment programmes and national development/funding programmes – PAs are often developed by Ministries of Environment without taking into consideration that other ministries will be responsible for implementing the PAs
- lack of financial resources to adequately plan, design, implement, monitor, and evaluate firm actions

To address these challenges and to ensure long-term sustainability at the national level, organizations must:

**Address challenges by: involving stakeholders, assigning responsibilities, and being realistic**

- involve all stakeholders in the preparation and in the development of the PA
- assign clear responsibility for the implementation and the funding of the PA
- base the action plan on realistic assumptions of sustainable financing and on realistic expectations of institutional set-ups
- identify potential challenges to implementation
- describe actionable ways to overcome these challenges in the action programme

The Regional Seas Programmes aim to protect regional seas, a shared natural resource, from threats of pollution and other forms of degradation. As regional seas are a cross-border resource, no country could or has incentive to provide this protection alone. Therefore regional cooperation is vital but it is also a challenge to ensure that all countries participate and that certain countries do not become ‘free riders’ at the expense of others. The report *Financing Regional Seas Conventions: Paying for a regional public good* (UNEP 2000) presents a thorough analysis of this issue and how it can be addressed.

## 1.5 Financing for the protection of the marine environment

### Demand for environmental financing

The need to increase environmental financing usually arises from a policy process initiated to strengthen environmental action for various reasons, possibly because an environmental hot spot has arisen, health concerns have surfaced, or users/polluters have a need for services that protect the environment. The policy process creates a demand that requires funding.

**Demand for financing reflects the willingness of society to pay for the environment**

The demand for environmental financing can be viewed from several angles. The national parliamentarian/policy maker will usually define the demand for financing as the amount of funding needed to implement the legislation and policies in place at national and global levels. The ministries or municipal civil servants responsible for programme implementation will define the demand based on agreed programmes of work such as time-bound national action programmes or business plans. From a financial point of view, the demand for financing reflects the actual willingness of society to pay for the environment.

**Demand for financing also reflects society's ability to enforce regulations and users/polluters willingness to comply**

Based on these definitions, the demand for environmental financing becomes the result of political commitment to the environment through budget transfers, users' willingness to pay for services and the use of environmental resources, and the polluter's willingness (or enforced willingness) to clean up and prevent environmental degradation. Largely the



demand for financing reflects society's ability to enforce regulations and users'/polluters' willingness to comply with these regulations, including voluntary approaches and/or voluntary financing (Box 1.5).

### Box 1.5 Groups that carry out environmental action

Three main groups carry out environmental actions and/or investments:

- the public sector in providing environmental services to users (possibly through public-private partnerships)
- firms/enterprises with pollution abatement actions or actions to clean up inputs to their production
- other stakeholders that may, for varying reasons, wish to secure and maintain the environment (such as environmental groups and organizations)

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Environmental degradation will often have a series of external effects (externalities) that can be difficult or impossible to measure. The demand for environmental financing can be influenced by increasing the awareness of these externalities (such as the full costs) related to environmental degradation or non-action. In the process of obtaining environmental financing studies on the effects of non-action, environmental health costs, and environmental socio-economic relationships can become a valuable tool to justify increased financing for environmental action.

### Effectively financing environmental action

Environmental financing comes from a variety of sources including the public sector, private sector, civil society, and international funding sources.

**Different financing mechanisms fit different purposes, ranging from...**

When implementing environmental activities, it is always a challenge to select the right financing option(s) and to identify enough available financing to cover the entire set of needs. To overcome this, it is essential to: identify relevant sources of financing, design a realistic and viable financing package, and find a way to strengthen sustainable financing. It is also important to understand which financing mechanisms are best for the specific purpose, which conditions need to be in place for the mechanism to be efficient, and how these funding instruments are best utilized.

**...subsidies and loans to taxes and public-private partnerships**

There are several funding mechanisms available (such as subsidies, public transfers, grants, loans, user and polluter pay revenues). In addition, there are economic instruments (such as taxes and charges) that can be used to increase revenues, increase efficiency gains, and remove harmful subsidies, which could free up money for environmental activities. Finally, arrangements such as public-private partnerships (PPPs) and decentralization may present new and interesting financing options that were not previously available.

Each financing mechanism has specific characteristics that can be determining factors when deciding between options, such as:

- the type of financing that is being considered (for example grants, public transfers, subsidies, loans)

- the purpose they may be used for (such as investments, administration, operational costs)
- whether there is the need for co-funding to operationalize the funding;
- maturity dates and interest rates available
- if there is a need for guarantee and, if so, which type of guarantee

When developing financing packages for environmental programme activities, it is necessary to take all of these specificities into consideration in order to find the cheapest and most ideal-financing package for the activity. Another issue to take into consideration is the cash flow based on annualized costs of the activity to ensure that payment can always be made. It is also necessary to secure long-term sustainable financing to ensure support of the project, possibly by using bridging mechanisms until the sustainable mechanisms can be fully realized.

### Challenges in financing increased environmental protection

Limited availability of financing is one of the main obstacles to increasing environmental protection. This is due to the relatively low effective financing available from the public sector, enterprises, and users of environmental services (such as low willingness and/or low ability to pay, and weak enforcement of regulations). The countries in surrounding regional sea often have very different economic structures and are at very different stages of development. This complicates a regional approach since a financial solution that would work for one country might not be appropriate or even possible in another country. Generally, one size does not fit all. Table 1.1 lists various economic characteristics for two countries from four different Regional Seas Programmes<sup>3</sup>.

Different economic structures in countries complicates a regional approach

**TABLE 1.1 Selected economic indicators<sup>4 5</sup>**

	Morocco	Egypt	Jordan	Dom. Rep.	Jamaica	Russia	Georgia	Thailand	Vietnam
GDP (US\$ bn.)	50.1	75.1	11.2	18.7	8	582.4	5.1	163.5	45.2
GNI per capita (US\$)	1520	1310	2140	2080	2900	3410	1040	2540	550
Aid per capita (US\$)*	17	13	233	8	1	9	48	-16	22
GNI per capita (US\$ PPP)*	3940	3940	4290	6310	3790	8950	2610	7450	2490
Gini	39.5	34.4	36.42	47.4	37.9	31	36.9	43.2	37
Upper 10 decile	30.9	29.5	29.84	37.19	30.3	23.8	27.9	33.8	29.9

Based on most recent data available; \* 2003 figures

Source: <http://devdata.worldbank.org/wdi2005/Cover.htm>

**The majority of financing for environmental services still comes from the public sector**

Ideally, revenue used for environmental protection comes from user/polluter fees and charges, from investments made by enterprises for pollution abatement and control (PAC) practices, and from public-sector resources. Unfortunately, in many regions, the situation is not ideal and the majority of the financing for environmental services comes from the public sector as well as enterprises that finance PAC expenditures through enforced legislation or incentives. In a recent Country Environmental Analysis by the Mediterranean Environmental Technical Assistance Program (METAP 2005a) it has been reported that in Tunisia an increasing percentage of the national revenues are allocated to the protection of the environment and natural resources. From 1997-2001, this amount equalled about 1.1 per cent of GDP.

**Domestic environmental financing often is not enough**

As domestic environmental financing usually does not cover the total expenditures needed, outside financing needs to be secured in the form of grants, loans, IFI financing or private sector investments. With the exception of grants, it must be stressed that at some point in time *all* of these options will have to be repaid (most often with interest). The end-financiers (those who repay these futures) will always be domestic users, taxpayers, or companies. The only international source of funding that does not have repayments are grants from foreign taxpayers. Therefore, it is essential that any long-term action programme has a financial plan that is based on realistic expectations of grant transfers and long-term sustainable domestic resources.

**Infrastructure investments are the main environmental expenditures**

**Infrastructure investments (in developing countries)**

For most countries, the main environmental expenditure will be infrastructure investments. As these have to compete with other pressing social priorities, the scarce public funds and donor grants need to be strategically prioritized. As infrastructure investments involve high initial costs, they are usually financed by loans, bond issues, or other sources of financing, which are based on the postponement of repayment into the future. Revenues from public-sector transfers and user fees/charges can then pay for the operations and maintenance costs, annualized capital costs, and debt servicing. However, service providers (providers of public services, such as public and/or private sector utilities, water supply and wastewater) face two difficult obstacles in organizing an infrastructure investment.

**International loans often require guarantees...**

The first obstacle is securing infrastructure investment financing. When domestic financial markets are poorly developed and/or there is macro-economic instability, domestic financing involves high interest rates, if it is available at all. Many service providers have looked to IFIs for loan financing, and these IFIs have provided many important loans. However, IFIs usually require national governments to provide sovereign guarantees for loan repayment. In most developing and transitional economies, governments have limited possibilities for issuing such guarantees.

**...which in turn require domestic or donor funds for debt payments**

Secondly, though user charges are an important long-term source of finance for operation and maintenance expenditure, it can be very difficult for low-income countries to raise the necessary funds to cover the debt payments. For this reason user/polluter fees alone set an important affordability constraint on the infrastructure investments. The long-term financing solution will therefore also require domestic or donor funding.

Each financing mechanism has its own criteria and characteristics. Chapter 2 presents more detailed information on options available for environmental investments, covering specific types of environmental financing (Section 2.1), donors (both domestic and international – Section 2.2), international financial institutions (Section 2.3), commercial banks (Section 2.4) and economic instruments (Sections 2.5), singling out subsidies (Section 2) and public-private partnerships (Section 2.7).

## Financing sources and strategies <sup>6</sup>

# 2

Loans and grants remain the dominant funding source...

Finding financial arrangements that will allow for adequate financing of regional cooperation needs to be addressed based on country affordability while ensuring its ownership to the process.<sup>7</sup> There are several types of financing for environmental programmes. Annex 12 provides a summary table listing financial mechanisms for marine conservation, including sources of revenue. However, as can be seen from Table 1.1 the countries in the Regional Seas often are very different in terms of wealth and financial strength, reason why not all of these financial options will be viable for all countries. Wealthier countries have a wider range of options available for funding environmental investments than low-income countries. For low-income countries, grants and/or IFI loans will, at least in the short to medium term, continue to provide the bulk of funds for environmental programmes.

### 2.1 Types of environmental financing

#### Grants

Grants will typically be advanced to finance clear, well-defined projects that match a specific set of priorities and/or requirements that are laid out by the grant provider. Grants are the only type of financing that does not require repayment. Grants can be made available from state, regional, or local authorities, special-purpose funds, multilateral or bilateral organizations, and other governmental and private sector entities. Grants could be used to support both commercially viable projects if the subsidy is provided for a non-commercial element such as PAC expenditure as well as projects valued primarily for their non-financial benefits.

...but grants are not a source of sustainable, long-term financing

Grant financing helps overcome the lack of domestic funding opportunities or the general unwillingness to pay for pollution abatement or use of services. Grants, although attractive to the recipients, should only be utilized in a smart, well thought out manner. Typically, a grant will be provided with a co-financing requirement of some form and may also require a plan for future domestic financing for maintenance, operations, and rehabilitation. If not used wisely, the downside of grant funding can be a reduced pressure to identify the most cost-efficient solutions, thereby wasting valuable future resources. Grants are not a source of sustainable, long-term financing and therefore should not deter the focus away from the higher priority of securing long-term programme funding. It is important that grants are not accepted because they are free goods but are accepted because they have a purpose for financing the priorities of the recipient.

#### Loans

Loans can take many forms, such as commercial loans, IFI loans, government loans (domestic as well as foreign), soft loans and loans with guarantees. Despite the variety of loans, all have common characteristics that can be used for comparison, such as size, interest rates, grace and maturity periods, and security/collateral requirements. Three specific forms of loans are described here:

All types of loans have common characteristics that can be used for comparison

- *Commercial loans* are loans based on market conditions and they are issued without concessional elements. Terms, conditions, and availability will depend on the credit quality of borrower and/or guarantor. For environmental investments, commercial loans will typically be an option only if there is a sovereign guarantee to back up the loan.

- *Soft loans* are loans provided on favourable terms – the principle usually has to be repaid in full but with a very low interest rate or with no interest at all. Soft loans are usually earmarked for a special purpose as decided by the lender, which typically is a donor (domestic or international) or an IFI.
- *Loans with guarantees* (sovereign and sub-sovereign) are loans provided by multilateral banks, bilateral donors, or other international financial organizations. Since this type of loan is backed with a commitment for repayment, the element of risk is moved from the borrower to the country itself. For low-income countries that follow IMF and World Bank programmes, there are often restrictions on which guarantees the state can give in order to comply with the programme.

### *Bonds*

Bond financing involves issuing an obligation guaranteeing repayment in the future. In order to issue a bond, the issuer needs to convince investors of its ability to meet the payment obligations specified by the terms of the bond. Bond issuing is only an option for well-developed countries as it requires detailed and reliable information including a risk rating from one of the recognized rating institutions such as Moodys, Standard and Poors, and Fitch.

Rating institutions rate the debt of companies, municipalities, and governments. The ratings are ranked with alphabetical designation where AAA is the best rating. The rating is based on extensive financial, legal, and accounting analysis of the entity in question. The ratings provide a tool to which risks can be compared between companies and countries. Many capital market participants require little further information than a rating in order to set a price on a loan given to the rated entity.

### *Polluter pays principle (PPP)*

The Polluter Pays Principle (including the users and beneficiaries pay principle) provides the framework for environmental financing in market economies. According to the principle, polluters use their own resources to finance measures to comply with environmental standards. If the polluter, or ultimately the consumer, is made to pay for these costs, they have a strong incentive to reduce the negative environmental effect and clean-up costs do not fall on society at large. However, monitoring compliance is a difficult and costly task.

### *Economic instruments (EIs)*

Principle 16 of the Rio Declaration states: 'National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution with due regard to public interest and without distorting international trade and investment.'

**Bonds are only an option for well-developed countries**

**Forcing polluters to pay provides a strong incentive to reduce negative impacts**

**Economic instruments can indeed encourage changes in behaviour**

Economic instruments for environmental protection are policy approaches that encourage behavioural changes through their impact on market signals rather than through explicit directives regarding pollution control levels or methods or resource use (UNEP 2002).



Section 2.5 goes into greater detail about economic instruments (EIs), which can generate resources for environmental protection programmes. Annex 5 reviews the potential of market-based instruments.

**Subsidies reform can free up available resources**

### *Subsidies*

According to a World Bank report (Pagiola and others 2002), the most important potential source of additional revenue comes not from the efforts to generate new revenues, but from freeing up already available resources. This can be done by improving the efficiency with which these resources are spent, in particular, by reforming subsidies that are expensive and, often, environmentally harmful. Subsidies and the removal of unwanted subsidies are discussed in more detail in Section 2.6 and Annex 9.

Besides subsidies, other reforms might also have a positive effect on increasing revenue or freeing up of financial resources. Reforms can have significant incentive effects that, in many cases, will have a more important effect on the environment than on the resource generation itself. However, as the aim of this report is identifying financial sources and options, this report does not discuss environmental incentives from reforms and policy revisions.

**The private sector typically applies more efficient management practices**

### *Public and private sector partnerships*

Public and private sector partnerships are often mentioned as a way to increase environmental infrastructure investments. By having the private sector to invest and operate facilities for public services, such as water supply or wastewater collection/treatment, the public utility may be able to benefit from lower costs as a result of the more efficient management practices that typically characterize the private sector. In addition, in most developing and transitional economies there is the perception that it is more acceptable to pay service/user charges to a private sector company than to a public sector company. Section 2.7 and Annex 2 will discuss the different types and possibilities of partnerships for private sector involvement.

## **2.2 Donors**

### **Domestic and international donors**

**For low-income countries donors are the main source of environmental financing**

Donors (domestic or international) are either bilateral or multilateral institutions that provide grants and/or other forms of financing without cost. For low-income countries, donors are the main source of environmental financing together with IFIs. In countries such as the Kyrgyz Republic, Armenia, Georgia, and Uganda, international transfers (such as loans or grants) account for between 60-75 per cent of all environmental funding (OECD EAP 2003).

Donors usually require recipient countries to sign a bilateral agreement, which outlines the sectors that are eligible for support and the general framework and requirements for co-financing and other policy obligations. Countries should not expect to receive donor funding in the medium to long term as donors usually provide grants only for specific sectors and limited to a specified period of time and then phasing out the support. From

the beginning, recipients should prepare for a gradual shift to self-financing arrangements and should focus on securing increased sustainable financing. Grants can be a boost and play a vital, short-term role in country development if used wisely to bridge the gap while continuing to search for more long-term financing.

Donor funds are particularly attractive but they are not without disadvantages. Donor grants are usually targeted for specific activities or sectors. Recipient countries will then have to tailor their funding requests/proposals to fit the donor criteria, which may not have the same priorities as the recipient country. This is especially a problem if the grant requires co-financing since re-working the priority list may pull much-needed funding away from the actual priorities of the recipient country. Other downsides include:

**Donor funds are particularly attractive but they have several downsides**

- the process for obtaining grants may be rather lengthy, especially for grants from multilateral organizations
- there is often a significant time lag between commitment and disbursements
- the Ministry of Foreign Affairs will usually negotiate the focus and priorities of the grant programmes; the Ministry of Environment and other related Ministries are not always involved in the decision-making process
- poorly considered grant projects can undermine local efforts for self-sufficiency and reduce the potential for leveraging user financing

The purposes and mission of the individual donors may vary a lot and some aid will be tied to products from the country of the contributor. Most of the aid going to the least developed countries is now untied and the trend seems to be that more and more aid is untied. Therefore, since each donor programme has their own priorities and funding criteria, this information should be integrated into national financing strategies for the environment.

In Table 2.1 the net official development assistance (ODA)<sup>8</sup> receipts from 2000-2004 to a selected number of countries are listed.

In Figure 2.1 OECD DAC members' net ODA in 2004 are illustrated<sup>9</sup>. The overall largest ODA donor is the United States with total average donations of US\$19.7 billion, followed by Japan, France, UK and Germany all with an annual contribution above US\$7 billion.

### **The Global Environment Facility (GEF)**

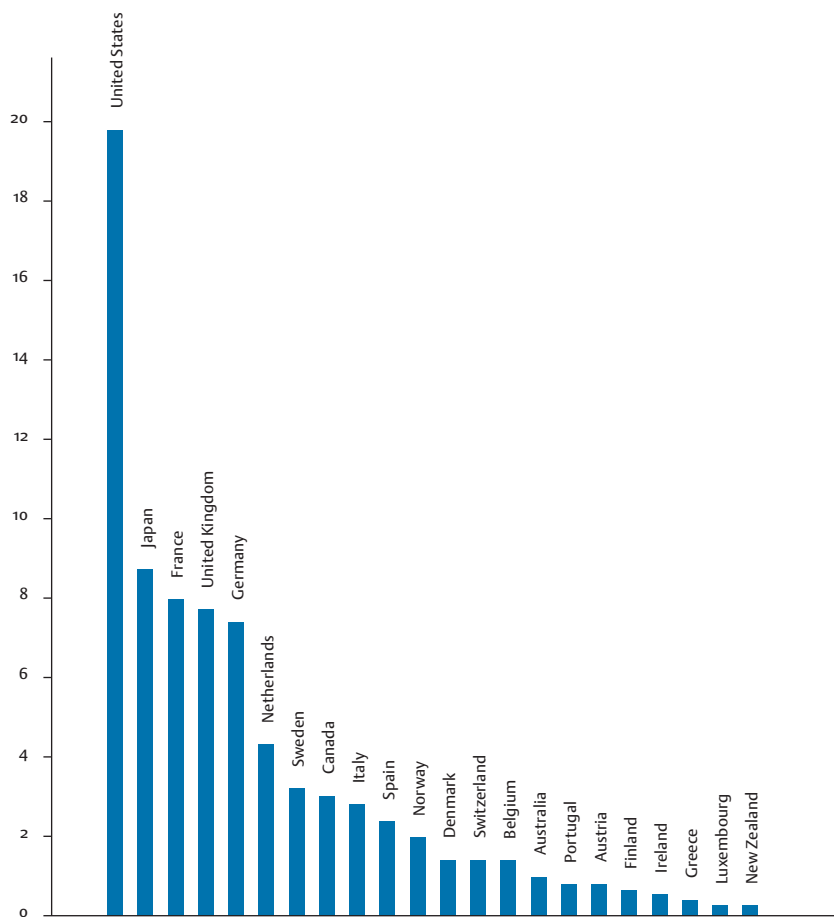
The Global Environment Facility (GEF), established in 1991, is an independent financial organization that helps developing countries fund projects and programmes that protect the global environment. Since 1991, the GEF has provided grants for more than 1300 projects in 140 countries.

**GEF has provided grants for more than 1300 projects in 140 countries...**

**TABLE 2.1 Net ODA receipts 2000-2004** (in million us\$)

	2000	2001	2002	2003	2004
Morocco	419	519	487	538	706
Egypt	1328	1257	1239	988	1458
Jordan	552	433	520	1228	581
Dom. Rep.	62	108	145	69	87
Jamaica	10	54	24	5	75
Russia	NA	NA	1301	1255	1313
Georgia	169	300	313	225	315
Thailand	698	281	295	-967	-2
Vietnam	1682	1450	1277	1765	1830

Source: OECD/DAC database

**FIGURE 2.1 DAC members' net ODA in 2004** In percentage ODA/GNI

Source: OECD/DAC database

...addressing six environmental issues...

### Types of projects

GEF projects address six complex global environmental issues:

- Biodiversity
- Climate change
- International waters
- Land degradation
- The ozone layer
- Persistent organic pollutants (POPs)

...providing us\$ 4.5 billion in grants and generating us\$14.5 billion in co-financing

### GEF funding

Since 1991, the GEF has provided us\$4.5 billion in grants and generated us\$14.5 billion in co-financing from other partners for projects in developing countries and countries with transitional economies.

GEF funds are contributed by donor countries. In 2002, 32 donor countries pledged a total of us\$3 billion to fund operations from 2002 to 2006. The allocation by focal areas is presented in Table 2.2. Table 2.3, lists the grants provided by the GEF to selected countries.

**TABLE 2.2 Total GEF allocation by focal area** (in million us\$)

	1991-2005	2005
Biodiversity	2062.8	227.5
Climate change	1992.4	143.4
International waters	782.1	62.9
Land degradation	98.2	54
Multiple focal areas	465.8	72.9
Ozone depletion	181.9	4.7
Persistent organic pollutants	146.8	46.9

Source: [www.gefonline.org/home.cfm](http://www.gefonline.org/home.cfm)

**TABLE 2.3 GEF grants by country, 1991-2005** (in million us\$)

	1991-2005	2005
Morocco	69.9	0
Egypt	80	0
Jordan	21.5	0
Dom. Rep.	8.3	4.6
Jamaica	4.9	0
Russia	157.6	21.6
Georgia	20.4	0
Thailand	20.2	0
Vietnam	50.8	11.0

Source: [www.gefonline.org/home.cfm](http://www.gefonline.org/home.cfm)

#### *Management of GEF projects*

GEF projects are managed by GEF Implementing Agencies:

- the United Nations Environment Programme
- the United Nations Development Programme
- the World Bank

Seven other international organizations, known as GEF Executing Agencies, contribute to the management and execution of GEF projects. One of these is the African Development Bank.

#### *Focal points (country representatives)*

Each GEF member country has designated government officials responsible for GEF activities. These officials, known as GEF 'focal points', play a key role in ensuring that GEF projects are country-driven and based on national priorities. There are two types of GEF country focal points:

- Political focal points: responsible for GEF governance issues and policies and communications with their constituencies; all member countries have political focal points<sup>10</sup>
- Operational focal points:<sup>11</sup> responsible for in-country programme coordination of GEF projects and other operational activities; only countries eligible for GEF funding are expected to designate operational focal points

#### *Eligibility criteria and project cycle*

Any eligible individual or group may propose a project, while meeting two key criteria: it must reflect national or regional priorities and have the support of the country or countries involved, and it must improve the global environment or advance the prospect of reducing risks to it. GEF project ideas may be proposed directly to UNDP, UNEP, or the World Bank.

**There are simple rules  
for proposing a project...**

### ...and for receiving funding

Country eligibility to receive funding is determined in two ways. Developing countries that have ratified the relevant treaty are eligible to propose biodiversity and climate change projects. Other countries, primarily those with economies in transition, are eligible if the country is a party to the appropriate treaty and is eligible to borrow from the World Bank or receive technical assistance grants from the UNDP.

#### *Projects*

There are three different project types:

- *Full-size projects:* The three implementing agencies of the GEF work with the operational focal point in each recipient country to develop project ideas that are consistent both with the country's national programmes and priorities and with the GEF operational strategy and programmes. Regional or global programmes and projects may be developed in all countries that endorse the proposed activity
- *Medium-sized projects:* Grants of less than US\$1 million are available through expedited procedures that speed processing and implementation. These medium-sized grants increase the flexibility of the GEF in providing resources and encouraging a wider range of interested parties to propose and develop project concepts.
- *Enabling activities:* Grants for enabling activities help countries to prepare national inventories, strategies, and action plans in cooperation with the Convention on Biological Diversity and the UN Framework Convention on Climate Change. This assistance enables countries to assess biodiversity and climate change challenges from a national perspective, determine the most promising opportunities for project development, and subsequently pursue full-scale projects.

#### *Project preparation and development facility*

Funding for project preparation is available in three categories or 'blocks':

- Block A grants (up to US\$25 000) fund the very early stages of project or programme identification, and are approved through the implementing agencies of the GEF
- Block B grants (up to US\$350 000 for single-country projects and up to US\$700 000 for multiple-country projects) fund information gathering necessary to complete project proposals and provide necessary supporting documentation. These grants are approved by the GEF CEO, with attention to the GEF operations committee's recommendations. Block C grants (up to US\$1 million) provide additional financing, where required, for larger projects to complete technical design and feasibility work
- Block C grants are normally made available after a project proposal is approved by the GEF Council

#### *Small grants programme*

The UNDP administers this programme, which offers grants of up to US\$50 000 to eligible projects.

#### *Small and medium enterprise (SME) programme*

A partnership with the International Finance Corporation (IFC), a World Bank affiliate, the SME programme finances projects that demonstrate a positive environmental impact and

have basic financial viability, thus promoting private sector investment opportunities in developing countries.

**KFAED exists since 1961 for Arab and other developing countries**

### **The Kuwait Fund for Arab Economic Development (KFAED)**

The KFAED was established in 1961. The object of the fund is to assist Arab and other developing countries in developing their economies and to provide such countries with loans required for the implementation of their development programmes.

The KFAED may extend its assistance to different types of entities, which include:

- central and provincial governments, public utilities, and other public corporations
- development institutions, whether international, regional or national and, in particular, development finance institutions
- corporate entities that undertake projects which are jointly owned by a number of developing countries as well as mixed or private enterprises that enjoy corporate personality, and are of a developmental nature and not merely oriented towards making of profit (such enterprises must be either under the control of one or more developing country or have the nationality of any such country)

**It requires a state guarantee and co-financing, and does not cover local costs**

In order to provide a loan, the fund requires a state guarantee from the beneficiary country. The Kuwait Fund does not finance local costs as a rule, and its share in the financing of a project must not exceed 50 per cent.

Assistance from the fund may take any of the following forms:

- direct loans or the provision of guarantees
- joint or parallel financing with other international, regional, or national development finance institutions
- making of grants-in-aid to finance technical, economic, and financial studies whether in relation to projects financed by the Fund or otherwise (studies may be of such types as pre-investment surveys, studies for the identification of investment opportunities and projects, feasibility studies, project preparation, sectoral studies, and the like)
- advisory services in relation to technical, financial, economic, and legal aspects of projects or programmes or development policies, or in relation to institution-building in the field of development
- subscription to the capital or contribution to the resources of development finance institutions
- subscription to the capital of eligible developmental enterprises (the fund does not provide financial assistance for budgetary or balance of payment support)

In determining the rates of interest on its loans, the term of each loan and grace period, the fund takes into account the need for a reasonable degree of concessionality in its loans, such concessionality being reflected in the significant magnitude of grants in the fund's loans. The level of grants is determined with respect to the economic conditions of the recipient country and the particular circumstances of each project.

**A special charter describes the conditions for KFAED loans**

As common for multilateral institutions, the fund's loans are, in addition to the financial conditions, subject to other conditions. The charter requires that the loan agreements between the fund and the borrowers provide for the following:

- an undertaking by the prospective recipient country that no other external debt will have priority over the fund's loan by means of a lien created on the assets of the borrower or assets of entities under its control
- an undertaking that all fund's assets and income, which primarily consist of the principal of the loan, the interest and other charges thereon, shall be exempt from all taxes, dues, and other levies imposed under the laws of the recipient country
- an undertaking that the loan, interest, and other charges thereon shall be exempt from any exchange control restrictions

**Since 1961 some 680 loans worth over us\$11.8 billion have been given**

The total number of loans given is 680 with a total value of almost 3.5 billions KD (over us\$11.8 billion). As regards the terms of the total loans extended up to the end of the fiscal year under review, the average loan period reached 22 years, the grace period averaged four years, and the interest rate (including 0.5 per cent service charge) averaged 3.5 per cent annually. Box 2.1 gives an example of a KFAED loan. The average grant element implied in these terms reached 45 per cent of the value of each loan. Table 2.4 presents the sectoral breakdown of the loans for each Regional Seas Programme country in PERSGA.

**TABLE 2.4 Sectoral distribution of KFAED loans** (amounts in million us\$)

	Loans in total		Loans per sector											
			Agriculture		Transportation		Energy		Industry		Water & Sewage		Others	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Djibouti	10	98.1	–	–	5	57.2	2	29.7	2	5.9	–	–	–	–
Egypt	25	1150.3	3	177.3	8	239.1	5	397.2	4	96.1	1	38.0	1	34.1
Jordan	22	391.7	5	81.3	1	10.2	7	136.6	6	110.7	1	23.9	–	–
Saudi Arabia	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Somalia	4	102.5	2	45.5	–	–	2	56.9	–	–	–	–	–	–
Sudan	18	362.7	5	74.7	6	99.0	2	139.8	3	41.5	–	–	–	–
Yemen	29	235.8	14	94.0	8	72.6	2	44.2	1	10.2	2	0.02	–	–

Source: [www.kuwait-fund.org/e/loanstable.asp](http://www.kuwait-fund.org/e/loanstable.asp)

As to the sectoral distribution of the total loans committed, the transport and communication sector ranks highest (35.1 per cent), followed by the energy sector (22.3 per cent), the agriculture sector (16.4 per cent), the industrial sector (13.3 per cent), the water and sewerage sector (11 per cent), and other sectors (1.9 per cent).



The number of technical assistance grants extended by the fund reached 237 with cumulative value of about us\$332 millions. Of these, almost half is given to Arab countries. Table 2.5, gives the number and total amount of grants to PERSGA member countries.

**TABLE 2.5 KFAED grant distribution to member countries of PERSGA** (in million us\$)

	No. of grants	Total amount of grants
Djibouti	2	0.55
Egypt	5	3.72
Jordan	3	5.69
Saudi Arabia	–	–
Somalia	2	1.81
Sudan	3	1.13
Yemen	17	9.75

Source : [www.kuwait-fund.org/e/loanstable.asp](http://www.kuwait-fund.org/e/loanstable.asp)

### BOX 2.1 The Nobaría power plant project in Egypt

Recently the KFAED provided a loan to Egypt for the Nobaría Power Plant Project. The Project included the construction of a combined-cycle power station with a total installed capacity of about 750 megawatt. The total cost of the project is estimated at 1,955 million Egyptian pounds (us\$441 million), of which 1 394 million Egyptian pound (us\$314 million) is in foreign currency. The fund's loan of KD 30 million covers 23.2 per cent of the project cost and 32.5 per cent of its foreign currency component. The loan period is 22 years with a six year grace period. The interest on the loan 3.5 per cent p.a. and the loan must be paid back in 32 semi-annual instalments. The grant element constitutes 46 per cent. <

#### EcoFund is funded by debt-for-nature swaps

### The EcoFund – the Polish debt-for-nature fund (a national donor fund)

The Polish EcoFund was created in 1992 by the Ministry of Finance in Poland. EcoFund is funded by debt-for-nature swaps, which began as part of the Paris Club agreement Poland signed in 1991.

In the Paris Club agreement, half of the debt Poland owed to the members of the Paris Club was written off and the other 50 per cent was rescheduled to be repaid by 2010. The Government of Poland further proposed that 10 per cent of the debt be forgiven if the funds were reallocated to support the most urgent environmental protection activities in Poland. This so-called debt-for-nature (or debt-for-environment) swap was the first of its kind. The Paris Club accepted the Polish proposal, making it acceptable to reallocate a portion of debt (up to 10 per cent) for the purpose of environmental protection (as specified in the bilateral agreements signed by Poland and the individual creditor countries).

Six countries agreed to enter into a debt-for-nature swap with Poland. Four of these countries agreed to swap 10 percent of the total debt owed while two countries swapped two and four percent of debt owed. The EcoFund received us\$350 million (almost 1.15 billion PLN<sup>12</sup>) between 1992 and 2004, which equates to 60 per cent of the total amount (us\$571 million) the EcoFund will receive by 2010 according to the Paris Club agreement. The EcoFund received us\$350 million through dept-swaps with six countries

#### *Allocation of the funds*

Grants from EcoFund's resources may only be provided for investment projects directly related to environmental protection (and only at the project implementation stage). The sole exception is nature-related projects, which may be eligible for EcoFund grants even if they are non-investment projects. The EcoFund's resources have the status of non-returnable foreign aid and, therefore, are subject to the system of preferences arising from the relevant regulations in force.

The EcoFund does not subsidize projects dedicated to scientific research and development, monitoring actions, conferences, or symposia, or educational activities in any form. An exception to this rule is made for educational or instructional tasks carried out as part of innovatory or nature-related projects.

Table 2.6 lists the five sectors that the EcoFund covers. In 2004, us\$41 million was granted, 221 projects were handled, of which 118 were completed. On average, EcoFund grants provided 21 percent of the projects' total costs. Since the start of EcoFund, more than 1100 projects have been awarded grants, totalling more than us\$370 million.

EcoFund's largest allocations went to water protection and climate protection. In 2004, some us\$400 000 (37.4 per cent of total project funding) was spent on water protection. An additional us\$1.53 million (36.3 per cent of total project funding) was spent on climate protection projects. Far less was disbursed for waste management projects (some us\$6 million, 14.4 per cent of total funding) and nature protection projects (us\$4 million, 11.3 per cent of total funding).

**EcoFund's largest allocations went to water and climate protection**

**TABLE 2.6 2004 EcoFund allocations**

	<b>Description</b>	<b>Share of 2004 allocations</b>
Air protection	Reduction of the transboundary transport of sulfur dioxide and nitrogen oxides and elimination of the low sources of such emissions	1%
Baltic Sea Protection	Reduction of the pollutant inflow to the Baltic Sea and protection of drinking water resources	37%
Climate Protection	Reduction of the emissions of gases that cause global climate changes	36%

>

Waste Management	Biological diversity protection	15%
Nature Protection	Waste management and contaminated soil reclamation	11%

Source: EcoFund

Since Poland joined the EU, substantial funds now flow from the EU into Poland. EU funds are primarily targeted to the rationalization of water and sewage management systems. Because of this, the EcoFund will focus all of its support on projects that are ineligible for EU funds.

#### *EcoFund application process*

There are two stages in the EcoFund's application process.

**The EcoFund application process involves a questionnaire followed by a grant application**

*Stage one:* The applicant submits a standard 'project questionnaire' to the EcoFund. The questionnaire provides enough information for the EcoFund Board to make a decision on whether the project is consistent with EcoFund's priorities and should therefore move onto the next stage. During stage one, it is important to specify in the brief project description the estimated project costs, the anticipated environmental benefits of the project, and all the project financing sources expected.

*Stage two:* For projects that meet EcoFund's criteria, a more thorough application process begins, during which the EcoFund Board invites the applicant to submit a 'Grant Application', which provides more specifics on the project such as:

- objectives of the project, outlining why the project is necessary
- technologies applied (or proposed) and/or the project organization methods
- anticipated environmental benefits to be gained in result of the project
- contractors and/or suppliers selected or proposed and the contractor/supplier selection methods employed
- material and financial schedule of project implementation with the financing sources specified
- economic analysis of the project, showing that the financial liquidity of the project will be maintained both at the project implementation and the operation stage (such as before and after the project completion)
- project 'feasibility study' or 'business plan'
- source documentation related to the economic, financial, and tendering issues
- all the permits as required by law for project implementation and operation

**The EcoFund Council makes the final decision on a grant**

The application is analyzed by EcoFund and/or external experts and if the outcome is positive, the application will then be presented to the EcoFund Council. The council makes a final decision on the grant, the grant amount, and the grant terms, which may deviate from what the application specified. Furthermore, the council might formulate additional requirements the applicant has to fulfil in order to receive the grant.

**IFIs are multilateral institutions that mainly provide loans**

## 2.3 International financial institutions (IFIs)

IFIs are multilateral institutions<sup>13</sup> that provide a wide range of financial products but are mainly loan providers. Loans such as these can be provided for almost any type of investment/action but will often require a sovereign guarantee, which can be difficult and time consuming to organize. Furthermore, loans are often denominated in hard currency, which exposes the project to exchange rate fluctuations.

**The World Bank...**

### The World Bank

The World Bank<sup>14</sup> is a multilateral lending agency made up of four closely associated financial institutions:

- the International Development Association (IDA)
- the International Bank for Reconstruction and Development (IBRD)
- the International Finance Corporation (IFC)
- the Multilateral Investment Guarantee Agency (MIGA)

**...financing focuses on agriculture and infrastructure...**

The World Bank offers loans at commercial and soft terms, guarantees (through MIGA), and grants. Projects cover a wide variety of sectors. However, the traditional areas of World Bank financing are agricultural projects and infrastructure projects (including municipal infrastructure – Box 2.2 is an example). Infrastructure projects increasingly support rehabilitation and maintenance of existing installations rather than new construction.

**...and requires on average 40 per cent co-financing**

The World Bank does not finance the full cost of a project; co-financing is required. In most cases, World Bank financing is limited to the international elements of a project that are purchased with foreign currency. On average and across many projects, this share constitutes around 40 per cent of total project costs. The remaining part of the financing is provided by the countries, donors and commercial banks that co-finance the project in cooperation with the World Bank. Please note that the World Bank requires co-financing from governments but not from other development partners (although in many cases this does exist).

### BOX 2.2 Improving the water supply in Yemen

In August 2002, the World Bank approved a US\$ 130 million loan (10-year grace, 40-year maturity) to upgrade urban water supply and sanitation services in densely populated urban communities of Yemen. Through improved operation and reduction of water losses, the project will increase water supplies and provide affordable sewerage facilities, which will enable wastewater to be reused for agriculture. The urban water and wastewater sector in Yemen is confronted with major challenges in the face of increased water shortage in the country. The sector has been unable to cover expenses and cost of new investments. In addition, the National Water and Sanitation Authority and its branches are in need of more effective managerial and technical capabilities.

In response to these challenges, the Government of Yemen launched an Urban Water Sector Strategy in 1997 to decentralize services and achieve financial self-sufficiency by establishing water and wastewater corporations that are state-owned but operate independently on a day-to-day basis. The project supports the government's sector policy, placing emphasis on improving the financial viability, autonomy and the creation of opportunities for increased private sector participation. As services from local corporations improve, it is expected that low-income households will rely less on higher-priced water supplied by private vendors. This will ease the burden on the household budget and relieve women and children, in particular, from the time-consuming task of fetching and carrying water. <

**IDA** offers loans on an interest-free concessional basis with an average maturity of 35-40 years and grace period of ten years. However, this is extended only to countries classified as low-income countries. Low-income countries are those that have a GNI per capita of less than US\$2 500 per year. IDA provides approximately US\$6 to 9 billion a year to 81 of the world's poorest countries. IDA's interest-free credits and grants are vital because these countries have little or no capacity to borrow on market terms.

**IBRD**, which extends loans on market terms, provides fixed-spread loans (FSL) and variable-spread loans (VSL) (see Annex 6). A typical maturity period for IBRD loans is 12-15 years and a grace period extends from 3-5 years.

In general, IBRD does not require any guarantee or security against the loan if borrowed by a government or a government agency. In certain cases, however, it might require a guarantee if the borrower is a government agency with a low creditworthiness rating. If the loan is made to the private sector, then a sovereign guarantee will normally be required and IBRD may even require that additional security as well as a guarantee.

Both IBRD market-term loans and IDA concessional loans are administered by the same World Bank staff, and the projects they finance must meet the same criteria in order to qualify for a loan. The main criteria are:

- technically sound projects
- financially sustainable projects
- environmentally sustainable projects
- acceptable financial and economic return
- contribution to the country's economic growth and development
- follow the World Bank procurement procedures

**IFC**<sup>15</sup> is the private sector arm of the World Bank. Its main purpose is to encourage private enterprise in developing countries. IFC aims to reach businesses in regions and countries that have limited access to capital. It provides finance in markets deemed too risky by commercial investors in the absence of IFC participation. IFC fulfils its mandate primarily through three types of operations in its member countries:

- financing private sector projects
- helping private companies to mobilize capital in the international financial markets
- providing technical assistance and advice to both governments and private businesses

IFC operates on a commercial basis. It invests exclusively in profitable projects and charges market rates for its products and services. IFC lend funds on market terms with debt financing of up to 13-15 years with a flexible grace period of 1-12 years. As a rule, the IFC deals only with enterprises that are privately owned and controlled. Exceptions can be made for state-owned enterprises that are in the process of being privatized. IFC finances only part of the project costs. For new projects a maximum of 25 per cent of the total costs are provided (can be 35 per cent for small projects). For expansion projects, it can provide up to 50 per cent of the total cost. Annex 6 give more details on the wide range of financial products.

**MIGA**<sup>16</sup> helps promote foreign direct investment in developing countries by providing guarantees to investors against non-commercial risks, such as expropriation, currency inconvertibility and transfer restrictions, war and civil disturbance, and breach of contract. MIGA's capacity to serve as an objective intermediary and to influence the resolution of potential disputes enhances investors' confidence that they will be protected against these risks. In addition, MIGA provides technical assistance and advisory services to help countries attract and retain foreign investment.

Types of foreign investments that can be covered include equity, shareholder loans, and shareholder loan guarantees, provided the loans have a minimum maturity of three years. Other forms of investment, such as technical assistance and management contracts, and franchising and licensing agreements, may also be eligible for coverage. Equity investments can be covered up to 90 per cent, and debt up to 95 per cent, with lending periods typically available for up to 15 years, and in some cases, up to 20 years.

Annex 6 among others provides more information on World Bank vehicles and strategies used to define and direct loan programmes, such as the Country Assistance Strategies (CAS) and Poverty Reduction Strategy Paper (PRSP).

### **The African Development Bank (AfDB)**

The African Development Bank (AfDB<sup>17</sup>) is a regional multilateral development bank promoting the economic development and social progress of its regional member countries in Africa. The bank began operations in 1966 and has 53 member countries in Africa as well as 24 member countries in the Americas, Europe, and Asia.

Besides the AfDB, the Bank Group consists of two other institutions managed by the AfDB but financially independent.

#### **The African Development Bank provides 'soft' financing...**

The **ADF** (African Development Fund), established in 1974, provides 'soft' financing and is primarily funded by the 24 non-African member countries. Its cumulative resources total US\$18.7 billion.

The **NTF** (Nigerian Trust Fund) is a special fund created in 1976 by the agreement between the Bank and the Government of Nigeria to assist in the development efforts of low-income regional member countries whose economic and social conditions and prospects require financing on non-conventional terms. Total NTF resources amount to US\$558 million.

The bank's main responsibilities are:

- offering loans and equity investments for the economic and social advancement of regional member countries;
- providing technical assistance for the preparation and execution of development projects and programmes;
- promoting investment of public and private capital for development purposes;
- responding to requests for assistance in coordinating development policies and plans for regional member countries.

ADB is also required to give special attention to national and multinational projects and programmes that promote regional integration.

**...for all major sectors**

The bank provides financing for all the major sectors, with particular emphasis on agriculture, public utilities, transport, industry, and the social sectors of health and education. Projects also cover poverty reduction, environmental management, gender mainstreaming, and population activities. Most financing is designed to support specific projects. However, the bank also provides programme-, sector-, and policy-based loans to enhance national economic management.

**The Asian Development Bank mainly deals with...**

**The Asian Development Bank (ADB)<sup>18</sup>**

The ADB is a multilateral development financial institution. Its mission is to combat poverty and improve the welfare of the people in Asia and the Pacific. The ADB is owned by 64 members of which 46 stem from the region and 18 from other parts of the world. The ADB has a preferred creditor status and is rated AAA by Moody's rating agency.

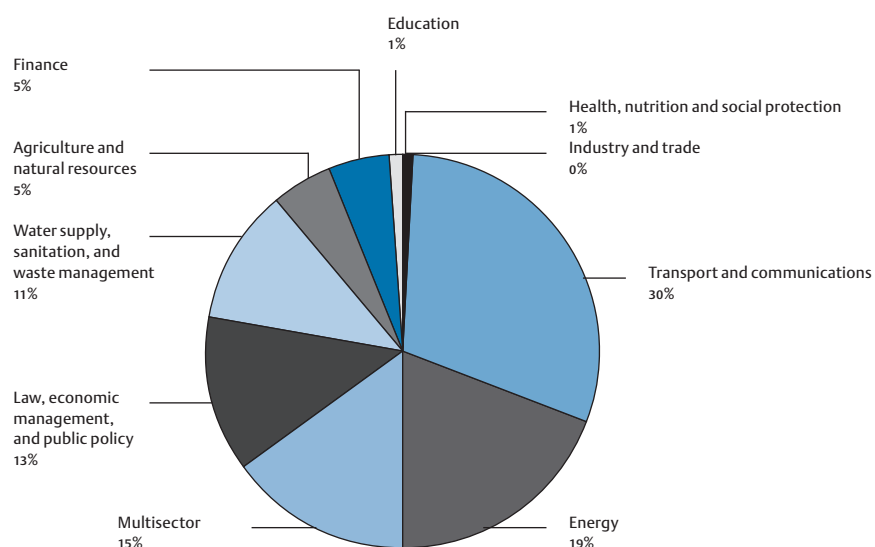
ADB's main instruments for providing help to its developing member countries are:

- policy dialogue
- loans
- technical assistance
- grants
- guarantees
- equity investments.

As a multilateral development financial institution, the ADB mostly engages in public sector lending for development purposes in its developing member countries. Members are the banks shareholders.

**...public sector lending for development purposes**

The ADB's principal tools are loans (see for example Figure 2.2 and Table 2.7) and technical assistance, which are provided to governments for specific, high-priority development projects and programmes. ADB funding both supports and promotes investment for development based on a country's priorities. The figure below shows the sectoral distributions of the loans given in 2004<sup>19</sup>.

**FIGURE 2.2 Sectoral distribution of ADB loans, 2004**

Source: ADB 2005

**TABLE 2.7 Disbursed ADB loans outstanding by country** (percentage of total disbursed ADB loans)

	1999	2000	2001	2002	2003	2004
Indonesia	24.4	24.7	24.3	26.7	31.7	34
Philippines	9.5	9	8.6	8.7	10.9	11.5
India	16.7	14.9	14.1	14.8	13.6	10.5
Pakistan	8	7.9	7.5	8	10.3	7.7
China	16	18.1	20.6	21	18.2	20.2
Thailand	8.6	7.1	7.2	2.7	2.5	2.3
Malaysia	1.9	1.8	1.5	1.5	1.6	1.6
Korea	14.4	14.1	13.6	13.4	7.5	7.8
Others	0.5	2.4	2.7	3.1	3.8	4.5
<b>Total (us\$ million)</b>	<b>28 344</b>	<b>28 231</b>	<b>28 739</b>	<b>29 234</b>	<b>25 398</b>	<b>24 197</b>

Source: ADB 2005

In 2005, the ADB approved loans worth us\$5.8 billion for 64 projects, most of which went to the public sector. China was the largest borrower, followed by Indonesia, Pakistan, Vietnam, and Bangladesh. Multi-tranche financing facilities worth us\$1.52 billion, grants worth us\$1.5 billion, equity investments for us\$217.1 million, and guarantees for us\$68.4 million were provided. Technical assistance, which is used to prepare projects and support advisory activities, amounted to us\$198.8 million.



*Technical assistance*

Technical assistance is a vital element of the ADB's development strategy. Through its technical assistance operations, the ADB assists its developing member countries in a number of fields. In 2005 a total of 299 technical assistance projects were approved totalling US\$199 million, including 271 new projects and 28 supplementary projects.

The ADB has several technical assistance instruments, which it finances with grants and loans, which can be useful for financing Regional Seas National Action Plans:

- project preparatory technical assistance for the preparation of feasibility studies and detailed engineering for bankable projects
- project implementation technical assistance covering consulting services for project implementation and initial operation, including the training of project personnel
- advisory technical assistance supporting institutional strengthening, sector and policy studies, and non-project-related human resource development
- regional technical assistance addressing issues of interest to the region or a sub-region or a group of individual developing member countries

*Private sector operations*

Through its Private Sector Operations Department, the ADB provides direct assistance to the private sector in undertaking financially viable projects with significant development impact.

The ADB directly supports private enterprises, private equity funds, and financial institutions. Its traditional modes of financing are equity investments and hard currency loans. For projects with revenue in local currency, the ADB offers loans in local currency in order to mitigate the exchange rate risk in the projects. ADB's private sector focus is primarily on two sectors: finance and capital markets, and infrastructure.

In the infrastructure sector, the focus is on telecommunications, power and energy, water supply and sanitation, ports, airports, and toll roads. Projects may involve various forms of risk sharing and ownership arrangements including build-own-operate and build-operate-transfer (BOT) structures.

The total support for a project is limited by ADB policy to 25 per cent of the total cost of the project or US\$75 million. The bank cannot be the largest single investor in an enterprise.

*The Asian Development Fund (ADF)*

The ADF is authorized by its charter to establish and administer special funds. Established in 1973, the Asian Development Fund (ADF) is the oldest and largest of the ADF existing special funds whose resources consist mainly of contributions mobilized under periodic replenishments from ADB's members. At 31 December 2001, total contributed ADB resources amounted to US\$18.18 billion.

**The ADB focuses on low-income member countries with limited debt-repayment capacity**

The ADB is designed to provide loans on concessional terms to those developing member countries with a low per capita gross national product and limited debt-repayment capacity. At the end of 2003, loans from the ADB accounted for around 27 per cent of cumulative ADB lending. ADB is a multilateral source of concessional assistance dedicated exclusively to the needs of the region.

As the loans are given on concessional terms the price is very low. For project loans (other than quick-disbursing program loans) the terms are: 32-year maturity including an 8-year grace period, 1 per cent interest charge during the grace period and 1.5 per cent during the amortization period, and equal amortization. For quick-disbursing program loans the terms are: 24-year maturity including an 8-year grace period, 1 per cent interest charge during the grace period and 1.5 per cent during the amortization period, and equal amortization.

**The Islamic Development Bank...**

### **The Islamic Development Bank**

The Islamic Development Bank<sup>20</sup> is an international financial institution established in pursuance of the Declaration of Intent issued by the Conference of Finance Ministers of Muslim Countries held in Jeddah in December 1973. The Bank was formally opened on 20 October 1975. The Bank's mission is to foster the economic development and social progress of member countries and Muslim communities individually, as well as jointly in accordance with the principles of Shari'ah (Islamic Law).

**...finances productive projects and enterprises, and economic and social development...**

The Bank participates in equity capital and grants loans for productive projects and enterprises in addition to providing financial assistance to member countries for economic and social development. The Bank is also required to establish and operate special funds for specific purposes, including a fund for assistance to Muslim communities in non-member countries.

**...through methods that comply with Shari'ah**

The Bank is authorized to accept deposits and to mobilize financial resources through methods that comply with Shari'ah. It is also charged with the responsibility of assisting in the promotion of foreign trade, especially in capital goods, among member countries; providing technical assistance to member countries; and extending training facilities for personnel engaged in development activities in Muslim countries to increase conformity with the Shari'ah.

IDB offers a wide range of financing and development schemes<sup>21</sup> such as loans, leasing, instalment sale, Istisna'a, equity participation, profit sharing, structured finance, and lines of financing. Furthermore, IDB provides technical assistance mainly for pre-investment studies as well as detailed design and capacity building activities. The financing extended by the IDB is in the form of grant, up to a maximum of ID 300,000, or an interest-free loan over a maximum period of 16 years, including up to 4 years of grace. The following section describes the loan process in more detail.

### *Loans*

IDB loans provide long-term financing for the implementation of development projects, mainly in agriculture (such as land development, irrigation networks, small-holders development and rural water supply) and infrastructure (road transport or social facilities such as schools and hospitals).

Currently, loans are limited to a maximum of ID<sup>22</sup> 7 million per project. Loans are given interest-free and bear a service fee to cover related administrative expenses incurred by IDB while formulating and processing the project. Repayment is made in equal semi-annual instalments and extends over a period varying between 15 to 25 years, with a grace period of 3 to 7 years, depending on the beneficiary member country and the type of project. Loan financing with very soft terms is also provided under a special account for the 'least-developed member countries'.

IDB financing usually covers (fully or partially) the foreign cost of specific components. In certain cases, particularly for least-developed countries, it may also cover part of the local cost. The beneficiary is expected to contribute to the project financing. Co-financing with other institutions is also possible under certain conditions (usually parallel financing or, if the procedures are similar to those of IDB, joint financing). While loans are mainly given to least developed member countries, these may also be extended to other member countries, particularly in combination with other modes of financing (leasing, instalment sale, or Istisna'a) whenever possible.

Loans are normally extended to governments or public institutions having a government guarantee. IDB provides financing for those projects or programmes that are technically sound and economically viable and of high priority to the borrowing country.

### **The KfW Bankengruppe (KfW Development Bank)<sup>23</sup>**

KfW Development Bank is one of five separate divisions of the KfW-Bankengruppe. KfW was founded in 1948, and is today the promotional bank of the Federal Republic of Germany. KfW is owned by the Federal Republic of Germany (80 per cent) and by the federal states (20 per cent). The total balance sheet is of €341 billion as of December 31, 2005, which makes KfW one of the ten largest banks in Germany. Because KfW provides services and projects on behalf of the German government, KfW enjoys an explicit and direct guarantee from the Federal Republic of Germany while it has the same rating as Germany.

**The KfW Development Bank carries out...**

**...the financial cooperation with developing countries on behalf of the German government**

KfW Development Bank carries out financial cooperation (FC) with developing countries on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). It finances eligible investments in the expansion of the social and economic infrastructure and for strengthening the financial sector and supports national economic reform programmes (Box 2.3 is an example).

The projects promoted via FC funds are selected jointly by the German federal government and the partner country according to development policy criteria. The local partners are responsible for the preparation, implementation, and operation of the projects. KfW Development Bank gives them professional advice in planning and implementing and also in monitoring the projects. At the same time, it supervises the proper use of the funds.

The projects and programmes are embedded in the development strategies of the partners in the developing countries. They are closely coordinated with projects implemented under German Technical Cooperation and other bilateral and multilateral donors. KfW Development Bank is currently implementing 1 400 projects in more than 100 countries.

**For example, some €3.58 billion have been provided to Egypt since the early 1960-s**

### **Box 2.3 KfW financial cooperation with Egypt**

The Financial Cooperation (FC) between Egypt and KfW Development Bank has a long-standing tradition. The first projects were financed in 1962. Around €3.58 billion have been provided since the early 1960s. The project funds are provided in the form of preferential loans or grants, supplemented by €1.34 billion in market funds guaranteed by the German federal government. This priority area encompasses the use of water both for water supplies and sewage disposal and for agricultural purposes. Safe drinking water and environmentally sound sewage disposal are crucial for good health.

One example of where KfW Development Bank has helped to finance environmental projects is the Tanta oil and soap factory in Banha in the Nile Delta. The daily need for water was not so long ago 5.3 million litres daily for the production of edible oil, soap and animal food. The company operates in a section of land where the Nile is the sole source of water. It is a source that has to provide for an increasing population.

After an investment in the production facility the daily need for water has fallen to 240,000 litres per day – only 4.5 percent of what was previously needed for production. The sewage problem has also been mitigated. Previously 4.4 million litres of polluted water were discharged into the sewerage system every day. Today, a small volume of sewage is treated. To achieve this, two grants from KfW were required, one for €510 000 and one for €230 000.

Since then, German support has helped 130 Egyptian businesses to invest in environmental protection. KfW Development Bank has already provided €85 million in BMZ funds for environmental credit lines in Egypt. The second loan programme is currently being implemented: €16.9 million for loans and €12.4 million for grants. The recipients include companies from the chemical and pharmaceutical industries, producers of foodstuffs and plastics, petrochemical companies and paper mills. The funds are disbursed through a partner bank. Another positive effect for the environment is that the Egyptian commercial banks can gather knowledge about environmental investments – on a sustainable basis. <

Infrastructure projects eligible for support under development-policy terms (for example in the areas of energy supply, transport, telecommunications, or water supply) can be funded through mixed financing. For this financial product, KfW assumes part of the country risk. In turn, KfW is protected by Hermes or another first-class official export credit agency. Consequently, mixed financing projects also have to meet the requirements of the respective export credit agency involved. Borrowers may be states or project-executing agencies in the developing countries that benefit from a state guarantee. Table 2.8 lists the total commitments given in 2004, which are administered by KfW.

**TABLE 2.8 Total 2004 commitments in selected countries, administered by KfW** (in million €)

	<b>BMZ budget funds</b>	<b>Other donor funds</b>	<b>KfW funds</b>	<b>DEG</b>	<b>Total</b>
Morocco	69.48	–	192.38	62.14	423.2
Egypt	8.69	0.60	–	1.28	10.57
Jordan	10.06	–	–	–	10.06
Dom. Rep.	7.55	–	–	5.79	13.34
Jamaica	–	–	–	–	–
Russia	0	–	28.7	57.29	85.99
Georgia	7.86	–	–	3.5	11.36
Thailand	–	–	–	3.6	3.6
Vietnam	22.88	–	–	–	22.88

Source: [www.kfw.de/EN/Home/Presse/PressConfe39/FZ\\_Jahresbericht\\_2004\\_englisch.pdf](http://www.kfw.de/EN/Home/Presse/PressConfe39/FZ_Jahresbericht_2004_englisch.pdf)

### *Loans*

The German government has created instruments for mobilizing additional KfW funds for developmentally sound programmes within the framework of official cooperation with developing countries. In these instruments, FC funds made available from the German government are combined with funds raised by KfW. These FC development loans are available in the form of ‘integrated composite finance’, ‘mixed finance’, or ‘interest reduction’.

Composite loans are available for financing projects that are eligible for promotion according to development policy criteria in the fields of infrastructure (telecommunications, energy supply, transport, water supply, and waste management), industry and environmental technology. The loan is only available to developing countries in OECD categories 2 to 6.

Borrowers may be states or project-executing agencies benefiting from a state guarantee.

The terms of the composite loans are adapted to the project periods. The interest rate for such a composite loan is either variable or fixed for the entire loan term (upon signing of the loan agreement or at disbursement). The composite loan interest rate is always below the market interest level. By adapting this instrument to the economic situation of the partner countries and the commercial viability of the projects, KfW is able to provide financing solutions tailored to individual needs.

Composite loans may either be tied or untied to German supplies. Untied composite loans must contain a grant element of at least 25 per cent to qualify as ODA. Tied composite loans are available only for projects that are commercially non-viable owing to the OECD Consensus rules. In other words, they can be granted only for projects with cash flows insufficient under commercial financing conditions. The grant element required in this case is at least 35 per cent.

Annex 11 describes the process of working with KfW Development Bank. In principle the process is the same as for other IFIs, though some differences can always be expected.

#### *DEG*

Within KfW Development Bank, DEG improves private sector structures in developing and transitional countries, thereby making room for private business initiatives. These initiatives form the basis for sustainable economic growth and a lasting improvement in people's living conditions.

As specialist for long-term project and corporate finance, DEG advises private enterprises, structures and finances their investments in developing and transitional countries and in this way mobilizes long-term investment capital, technical expertise, and management and marketing experience.

DEG invests in profitable, environmentally and socially sustainable projects in all economic sectors opening up to private entrepreneurial activity. Another main focus is the development of the financial and capital markets.

## 2.4 Commercial banks

In economically advanced countries, policies supporting economic reform and macro-economic stabilization have encouraged the development of domestic capital markets that can supply financing to both enterprises and municipalities. In developing and transitional countries, capital markets and institutions have often remained weak and commercial loans are often available only if loans are guaranteed by the state or by an export credit agency (ECA). In addition, an ECA will often require a sovereign guarantee as well. In those countries, local commercial banks will only play a limited role in the funding for environmental investments.

For the least-developed countries, a sovereign guarantee might not be enough to secure commercial financing. In this case, a commercial loan is not an option and these countries will have to rely on IFI lending and donor funds.

Generally speaking, the role of commercial banks in financing environmental investments is limited. For example, in the PERSEA region only Saudi Arabia, Jordan, and to some extent Egypt, are likely candidates for commercial bank environmental financing. International rating institutes as well as the OECD country risk classification<sup>24</sup> system have rated many developing countries as high-risk countries thus limiting their ability to secure financing, especially commercial.

**In developing and transition countries commercial loans usually require state or export credit agency guarantees...**

**...which is not an option for the least-developed countries**

**Environmental investments (with low returns) are not attractive for commercial banks**

Most service providers in developing and transitional countries are municipalities, which are typically not creditworthy. Furthermore, since environmental investments often are very large, have long-term repayment periods, and have very low returns they are not attractive for the commercial banks. In some cases, commercial banks will work together with the IFIs and donors to provide funds for municipal projects but usually the banks only provide short-term working capital.

When banks are determining loan qualification, the following aspects are considered:

- financial statements and budgets
- borrower stability
- stable income
- financial viability of the project
- environmental impact of the project
- whether the borrower can finance at least 15 per cent of the investment up front, often 30 per cent is required
- whether the borrower can undertake the currency risk

*Credit guarantees*

**Credit guarantees lower the credit risk and thus improve loan conditions**

When the service provider is not creditworthy, a credit guarantee is necessary in order for the service provider to obtain a commercial loan. Credit guarantees provide a promise or commitment to a creditor that the debt or loan will be repaid even if the borrower is unable to make these payments. Credit guarantees, either partial or full guarantees, are issued by sovereign entities (national governments or states), sub-sovereign entities (regions), commercial financial institutions, multilateral and/or bilateral financial organizations, or private entities. Thus, credit guarantees lower the credit risk by acting as repayment insurance. This in turn increases the amount of money available to the borrower(s) and improves the terms and conditions of the loan.

*Export credit agencies (ECAs)<sup>25</sup>*

**ECA guarantees only cover international elements, not the local costs**

For many types of investments in developing and transitional countries, ECAs play a central role in financing individual projects. Their job is to issue a guarantee to the lending bank or exporter for the repayment of capital investments. ECAs do not guarantee local costs, only the international elements of a project can be guaranteed. However, for larger infrastructure investments, it is common to create a package that includes IFI loans, commercial bank loans, and ECA guarantees. In many emerging markets, ECA guarantees are often a prerequisite for commercial loans.

Historically, states have used ECA cover to give subsidies to their own exporters. By charging a very low premium that did not reflect the risk involved, the exporters were able to increase their market shares or to penetrate new markets by offering a very low price<sup>26</sup>. This is considered a state subsidy and is in breach of the OECD and WTO rules.

The 'OECD consensus agreement' fosters a level playing field for official support

In order to prevent states to subsidize their exporters, the main ECAs (those that were members of the OECD) signed an agreement known as the OECD consensus agreement. The objective is to foster a level playing field for official support by encouraging competition between exporters based on quality and price of goods and services exported rather than on the most favourably supported financial terms and conditions.

The OECD consensus agreement, also known as the Knaepen Package, aims to ensure that participants charge premium rates in addition to interest charges that cover the risk of non-repayment of export credits (such as credit risk). The premium shall also cover the cost associated with running an export credit scheme, which are the long-term operating costs and losses associated with the provision of export credits. Another stated purpose of the Knaepen Package is premium rate convergence<sup>27</sup>, which although not easily measured or defined, is a general outcome that can be expected when the two above-mentioned objectives are met.

One of the key elements of the Knaepen Package is the system used to assess a country's credit risk. It classifies countries into eight different risk categories (0-7)<sup>28</sup> with 0 representing the lowest risk. Each category includes a minimum benchmark that the OECD countries are supposed to surpass. The member countries in the European Union are obliged by law to apply to the OECD rules.

Micro-finance provides funds to small enterprises, including the 'informal' sector...

...and is much in demand

#### *Microfinance*

Microfinance provides funds to small enterprises – including the 'informal' sector – village banks, farmer groups, and households, which do not have easy access to conventional lending sources (such as commercial banks). Valuable experiences and international cooperation already exist. Currently, the demand for micro-financing is much higher than the resources available. Microfinance can contribute to the implementation of GPA-related activities, particularly in the sectors related to agriculture, aquaculture, tourism, small industries, and small-scale sanitation. High transaction cost, shortage of funds, and the lack of involvement of the traditional banking sector are some of the major impediments to be addressed. NGOs play a significant role in the development and implementation of micro-financing schemes. Government, foundations, and international financing institutions are currently the major founders. Commercial banks have followed the developments, but have not entered this market segment to a major extent (UNEP/GPA 2001).

## 2.5 Economic instruments<sup>29</sup>

### **What are economic instruments?**

The best way to explain the features of Economic Instruments is by quoting Panayotou (1998) who summarized the flexible properties of economic instruments as follows: 'Apart from their market correction qualities and their efficiency or cost minimization objectives, economic instruments are ideally suited for reconciling environmental concerns with development needs, and integrating environmental and economic policies by virtue of their a) flexibility in accommodating heterogeneity, and b) adjustability to changing circumstances. The key to the promise of economic instruments is their ability to harness



the power of the market and the self-interest of the individual, and to turn these presumed adversaries of sustainable development into powerful allies. This is done not by mandated or prescribed actions, but by changing the economic incentives facing producers and consumers; by taking full advantage of their self-interest and superior information at their disposal without requiring the disclosure of such information and without creating large and costly bureaucracies. Economic instruments in effect transfer from bureaucrats to the market the responsibility of identifying and exploiting new and additional low-cost sources of pollution control’.

**Economic instruments can be seen as complementary to command and control measures...**

In the 1970s and 1980s, the common approach for dealing with pollution and environment protection was by using ‘command and control’ (CAC)<sup>30</sup> regulations. CAC regulations are concrete regulations and norms that are defined by law. The motivation for compliance when CAC regulation is applied is the desire to avoid penalty, whether financial or by exposure for non-compliance. Economic instruments are often described as complementary to the CAC approach or as substitutes of these. However, this view has to be taken with caution.

**...but in reality they often operate in tandem...**

In reality, command and control regulations and economic instruments often operate in tandem. In fact, for economic instruments to be valuable and enforceable, they have to co-exist with a complex body of traditional regulations – like CAC regulations. For example, governments may set limits on allowable pollution levels for a region or country. Market-oriented approaches such as tradable permits (an economic instrument) are then used to allocate the allowable emissions in an efficient manner (UNEP 2002). Hence, if the CAC approach does not work due to a lack of political will or institutional obstacles, the economic instrument will not work either.

**... and work best in a ‘policy mix’ of both**

Given the complexities of environmental problems and the impact of environmental policies on social and economic activities, specific environmental problems are usually addressed by employing a ‘policy mix’ consisting of various command and control instruments, economic instruments, and persuasive instruments. It is important to stress, therefore, that using economic instruments alone usually is not the ideal and only solution. In fact, the effectiveness and efficiency of economic instruments always depends on the accompanying overall policy mix.

### **Why use economic instruments?**

Economic instruments have a number of benefits compared to other measures. They can allow internalization of environmental costs, in line with the polluter pays principle, and give polluters flexibility in the way they respond. Economic instruments can include taxes, charges, tradable permit schemes, subsidies or tax credits, and/or deposit/refund schemes (HM Treasury 2002).

**Economic instruments can change the behaviour of both users and producers**

The main advantage of using economic instruments is that they have the potential to change the behaviour of the users. When environmental costs are fully internalized into the price of a product or an activity/service, consumers are encouraged to substitute away from

these products with higher relative prices to alternative products that are relatively cheaper priced and more environmentally friendly. The same goes for producers – if a tax or charge is put on emissions, then they are encouraged to change their production methods into less polluting methods because of the tax incentive. The implemented changes might even lead to technological developments and new production processes to the benefit of the environment.

Economic instruments are not always the most appropriate option, especially when quantities of emissions are important or in a situation where it is essential that emissions do not exceed specified limits on any individual site. In these cases, it will probably be necessary to address the problem through regulation. Regulation or voluntary agreements may also be more appropriate where there are a limited number of polluters, so that the costs of setting up a scheme based on an economic instrument may outweigh the benefits.<sup>31</sup>

### Types of economic instruments

#### Examples of economic instruments are:

The list of economic instruments is long and the literature describing them is abundant. As the objective of this report is to describe the revenue potential and not the environmental effects of using EIs, the focus will be on revenue generating economic instruments:

#### Emission charges/fees/taxes

##### *Emission charges/fees/taxes*

Direct payments based on measurements or estimates of the quantity and quality of a pollutant. Emission charges typically cover a wide range of pollutants, often in combination with non-compliance fees (see below). Such instruments are also referred to as ‘pollution charges’.

#### User charges/fees/taxes

##### *User charges/fees/taxes*

Payments for the cost of collective services are primarily used as a financing device by local authorities, for example for the collection and treatment of solid waste and sewage water. In the case of natural resources management, user fees are payment for the use of a natural resource (such as minerals, parks, or sporting, fishing and/or hunting facilities).

#### Product charges

##### *Product charges*

Charges applied to products that create pollution when they are manufactured, consumed, or disposed of (such as fertilizers, pesticides, packaging and batteries). Product charges are intended to modify the relative price of the products and/or to finance collection and treatment systems.

#### Non-compliance fees

##### *Non-compliance fees*

Payments imposed on polluters who do not comply with environmental or natural resource management requirements and regulations. They can be proportional to selected variables, such as damage due to non-compliance or profits linked with non-compliance. Non-compliance fees are also commonly referred to as ‘fines’ or ‘penalties’.

The following economic instruments are not revenue generating but are cost-covering instruments:

#### Deposit-refund systems

##### *Deposit-refund systems*

Payments made when purchasing a potentially polluting product (for example batteries or glass bottles). The payment (deposit) is refunded when the product is returned to the dealer or a specialized treatment facility for destruction or recycling. It is intended to encourage individuals and firms to dispose of such items in an environmentally acceptable manner. Administrative costs are an important consideration when determining whether to create deposit-refund systems. Such systems appear best suited for products whose disposal is difficult to monitor and potentially harmful to the environment. When the used item has an economic value, the private sector may initiate a programme. Deposit-refund systems have typically been used for beverage containers, pesticide containers, lead-acid batteries, and tires. They can also be applied to appliances, electronic equipment, and automobiles.

#### Performance bonds

##### *Performance bonds*

Performance bonds are payments to authorities that take place prior to an activity that is potentially environmentally harmful. To guarantee compliance with environmental or natural resource requirements, polluters or users must pay a deposit in form of a 'bond'. The bond is refunded when compliance is achieved, and forfeited if it is not achieved. In that sense, a performance bond acts like a deposit-refund system. If the performance bond is linked together with the renewal of for example permits and licenses, the environmental effect can be even stronger. Due to the difficulties in monitoring environmental damage and legal restrictions while setting up the contracts, performance bonds are used less frequently than other economic instruments and have been applied mainly where there is a clear potential for environmental damage, such as mining or oil production.

#### Liability payments

##### *Liability payments*

Payments made under civil law to compensate for the damage caused by a polluting activity. Such payments can be made to the 'victims' (from chronic or accidental pollution) or the government. They can operate in the context of specific liability rules and compensation schemes, or compensation funds financed by contributions of potential polluters (such as funds for oil spills).

#### For economic instruments one size does not fit all

##### **Problems with economic instruments**

When choosing among instruments, the selection needs to consider local and global priorities. Given the number of possible instruments and the number of possible activities involved with each instrument, the government must choose where to start and how best to prioritize the different polluting sources. There is substantial variation in the needs, opportunities, and constraints facing each developing country. One size does not fit all. Even within countries, there is a substantial variation in the capacity to implement economic instruments across different regions or sectors.

**The balance between regulatory controls and economic instruments depends on the local situation**

Some desired changes are easier to implement through economic instruments while others are easier to implement through command and control regulations. It is not an either or situation. For each country, the balance between regulatory controls and economic instruments will depend on local conditions and preferences. In high-income countries with well-staffed and well-equipped regulatory agencies, as well as strong judicial response systems, specific regulatory standards may be readily implemented on an equitable basis. Thus, economic instruments used in these countries may be designed to encourage super-performance. However, in many developing countries the inspection and enforcement resources are limited and political influences may lead to inequitable compliance requirements. In such cases, economic instruments may be designed for the achievement of more modest standards of performance rather than super-performance.

Finding and implementing an economic instrument is not an easy task as the use of EIs has a number of preconditions that need to be fulfilled in order for the EI to be successful. Some of these preconditions are listed below.

**A free-market economy is required....**

*Functioning markets and related institutions*

The presence of a free-market economy with property rights, private enterprise, competition, price liberalization, equitable judicial systems, and limited price distortions (subsidies) is crucial<sup>32</sup>.

**...and the institutional capacity to enforce rights and obligations**

*Institutional capacity*

To enforce the rights and obligations that follow the implementation of an economic instrument, it is necessary to have a well-functioning and competent legal system. As with the command and control approach, economic instruments are not effective unless supported by consequences or punishments handed down to organizations that deviate from them. Having successful economic instruments and CAC regulations require that the political institutions punish violators. For example, if the legal system is not capable of enforcing property rights, then using permits to curb emissions or granting access rights to indigenous people is not feasible. To implement economic instruments, countries need to have a minimum level of human and technological capacity. Disputes with the industry over payments are common and can be costly.

Many economic instruments build on existing institutional infrastructures, such as tax systems and electricity and water payments. For example, in Denmark, the implementation of economic instruments has been rather extensive since there is complete tax base where all households and companies are registered. This allows, for example, the government to institute user charges in the form of green taxes<sup>33</sup>. Without a complete tax base, registers and meters at household level it would be very difficult to implement user charges at all levels. If this is the case, charges can be levied on the upstream suppliers of the polluting substance. They will accordingly internalize the charge in the price and thereby pass on the cost to the end user through an increase in the price of the product or service.

All direct and hidden environmental costs should ideally be included in the price

#### *Setting the right price*

In high-income regions or countries, the principle is that the 'instrument should be designed to internalize external costs'. Therefore, all direct and indirect environmental costs that would otherwise be paid by the community in the environmentally harmed area should instead be built into the pricing for the product or service causing the harm.

As this is not always possible, a step-by-step approach is best followed

For developing and transitional countries, a good initial option is to implement a phased approach. One approach could be initially to move towards recovering (through user charges) only the operational and maintenance costs. At a later stage full cost recovery of services received including investment costs should be recovered. This may be an appropriate way to address willingness and ability to pay. The case in many developing countries is that user charges only cover administration costs of command and control systems. Therefore the users and polluters pay only for a small part of the actual cost associated with the services provided or damage from pollution (Andersen and others 2003).

To determine both the internal and external costs needed to cover the project, it requires an objective and complex scientific and economic analysis, so that pricing is made as fair as possible. In developing countries, the burden of such analysis may be too expensive and sophisticated for existing institutions to undertake. The analysis also requires technical skills that might not be in place.

A range of actors are involved in tax policy-making; not easy to reach consensus

#### *Political willingness*

Policy-makers have other objectives than analysts. There is not one unitary governmental actor that collects information, performs analysis and imposes the proper level of taxes or charges. Instead, there are various actors involved in policy making, including interest groups, bureaucratic actors as well as the formal decision makers. As these groups of actors have different perceptions of the costs and benefits related to instrument choice, it is generally difficult to reach consensus on what constitutes the optimal solution (EU 1998).

#### *Competition*

One of the arguments often used for not implementing economic instruments is that the domestic industry will lose competitiveness to industries in countries where such economic instruments not in place, possibly leading to the relocation of the industries and the loss of much-needed jobs. For this reason, some of the most polluting and energy-intensive industries in Europe are given tax exemptions and rebates in return for a negotiated agreement to make a partial environmental improvement. Experiences in Denmark show that basically all green taxes levied on the industry are tax neutral (DEPA 1999, OECD 2001). Consideration for effects on competition within industry sectors should also be taken into consideration.

One way to deal with the loss of competitiveness issue is to jointly implement the same economic instruments in all the countries in the region. Such a harmonized approach might take some time and effort to be implemented but the rewards can be significant. Harmonization could help to avoid loss of competitiveness

Subsidies are often used to pursue social or political goals, but...

...they often have negative effects on government budgets and overall economy...

...and on environment and social equity

A carefully designed subsidy can also achieve positive outcomes though

## 2.6 Focussing on subsidies

### Subsidies for social or political purposes

Subsidies are often used to pursue social or political goals. They can also be used to ensure the availability of food, and/or make basic commodities more readily available to the poor.

Although there are both positive and negative effects of subsidies, subsidizing selected economic sectors has a number of costs – including a direct impact on government budgets, adverse environmental impacts, and lower overall economic activity. Typically consumers are not charged at full cost recovery for the cost of providing the goods and services such as electricity, water sanitation, and water irrigation. In developing and transitional countries, consumers usually pay very little for these services, which are subsidized, and, in most cases, not even operational costs and maintenance expenses are fully covered. One of the main problems with this situation is that it usually leaves the institutions overseeing the sector chronically short of funds (Pagiola and others 2002). Another downside of subsidizing these sectors is that most likely the goods being supplied are then used wastefully because the low prices do not provide users with an incentive to conserve.

A common argument for using subsidies is that they benefit the poor by allowing them access to the product/service as a result of the low costs. However, this is often not the case in developing countries since most often the subsidized products/services are not available to the poor due to the weak infrastructure of the country. Subsidies for electricity and water supply are good examples of this. Often the poor are not connected to the grid for these services and therefore it is the wealthy that actually benefit from these subsidies. The subsidy provided for transportation fuels (diesel or gasoline) is another example of a subsidy that benefits the wealthier car owners, a group that rarely includes the very poor. As a result, according to a World Bank report, the non-poor sectors of society use 90 per cent of subsidized products/services (Pagiola and others 2002).

### Subsidies for environmental purposes

Subsidies are not always negative; in fact, some are necessary to ensure consistency in country policies. In principle, a subsidy can be used to achieve positive outcomes, like a decrease in pollution from a tax or trading scheme. However, careful considerations need to be made before subsidies are introduced. Experience shows that once a subsidy is in place it is very difficult to remove it. It is therefore wise to place a time limit on subsidies in order to make it easier to terminate the programmes, if needed.

Using subsidies is only a second-best solution since they set aside valuable economic resources – outside the general process of financial and economic policy – thereby reducing the economic resources available for other necessary expenditures. However, they may nevertheless play an important role in enhancing the acceptability of the taxes and fees/charges in question, and in turn provide important funding for environmental expenditures.

Subsidies can take many forms, such as grants, soft loans, or tax allowances. Subsidies may be financed through the general budget or through earmarked revenues. The purpose of subsidies is to motivate individuals or firms/enterprises to act more environmental responsible. Examples of tax incentives used in the UK are:

- reduced rates of VAT for certain energy-saving products
- enhanced capital allowances for investment in energy-saving technologies which were introduced with the climate change levy
- reduced duty rates for road fuel gases and for bio-diesel
- a 150 per cent tax credit for costs incurred in the remediation of contaminated land.

**Agriculture and energy are the most subsidized sectors**

The two sectors that are most often subsidized, according to the OECD, are agriculture and energy. Out of 36 subsidy schemes in effect by late 1998 in Denmark,<sup>34</sup> 14 were for energy and four for agriculture. Of the funds used for subsidies, 68 per cent were used for energy and 8 per cent for agriculture.

**Subsidies for environmental protection work, but could also backfire**

Subsidies for environmental protection can be seen as the flip side of emission taxes. Instead of using taxes to encourage firms to reduce emissions, firms will decide voluntarily to reduce emissions if they are granted a subsidy (in essence, an incentive) for doing so. Under a subsidy system, polluters have the incentive to control all units of pollution, whose marginal control fits within the limits of the subsidy. However, using environmental subsidies in this way may actually backfire. Potentially, firms that would not normally engage in the environmentally harmful activity might begin to use it to reap the benefits of the subsidy. Therefore, subsidies might have the opposite effect than intended and pollution could actually increase instead of decrease.

### **How to remove unwanted or harmful subsidies**

An important advantage of removing environmentally harmful subsidies is that the action does not require the design and implementation of new instruments. Furthermore, removing or reducing environmentally harmful subsidies would provide savings and/or additional resources for the state budget. There are two ways to remove subsidies:

Removing subsidies does not require new instruments and gives state-budget savings...

- slash the entire subsidy in one move. This one-off approach raises the price of the good in line with economic costs at once. The big-bang approach capitalizes on the political will backing the reform. However, this can have social costs since consumers do not have time to adapt to the new situation. The risk is provoking social unrest that may be able to stop the reform (as has happened, for example, in Indonesia and Nigeria)
- a gradual change over a number of years. The gradualist approach is risky since reforms could be reversed as political will erodes with time and as affected constituencies get organized to oppose the reform



...but when phasing out subsidies a safety net needs to be established

Removing subsidies is never easy as a number of groups may have vested interests. There is no doubt that removing subsidies will have effect on all users in society. Therefore, phasing out subsidies requires the establishment of a safety net, in order insulate the poor from the effects of the price increase. This could be done by targeting the subsidy to those who really needs it instead of applying the subsidy to all users.

## 2.7 Focussing on public-private partnerships

### PPPs – a financing strategy

PPPs may open the door to additional financing options for implementation

Public-private partnerships (PPPs) are not a direct financing source or instrument but more of a financing strategy. However, in many instances, especially in developing and transitional countries, PPPs may open the door to additional financing options for the implementation. The rationale behind public-private partnerships is to transfer part of the responsibility for infrastructure management to private partners while still achieving the goals or targets set up by the public sector. There are several advantages of PPPs since the private sector can:

- increase cost efficiency through more streamlined management practices, typical of the private sector, as well as by focusing on lower operating costs and better tracking of resources
- increase collection rates or user fees/charges since users are more willing to pay increased prices for services provided by private companies, therefore increasing revenue
- bring in better operational and technical skills, which can have a positive effect on the project
- provide additional capital for the project giving the project a greater potential for success

Both partners must benefit and both must share risks

In order for a PPP to be successful, both partners must benefit from the project and both partners must also share the risk involved. When entering into a PPP, it should be clearly stated that there will still be a need for users and the public sector (if subsidized) to pay for the services desired. This need for public-sector transfers will still be high unless user charges can be increased. Though PPPs seem simple in theory, many examples can be given where PPPs have failed and the projects have been terminated (PriceWaterhouseCoopers 2001).

Partnerships can take many different forms, including: build-operate-transfer schemes (BOT); contracting private sector firms to commercialize existing services or to manage renovation or expansion; privatizing part of or all of a municipal service; or providing private concessions to operate a service while maintaining municipal ownership of assets. Table 2.9 summarizes the allocation of key responsibilities for the main types of PPPs. Annex 2 give descriptions for the six PPP options listed in the table.



**TABLE 2.9 Allocation of key responsibilities for main types of PPPs**

Option	Capital investment	Commercial risk	Operation & maintenance	Asset ownership	Typical duration
Service contract	Public	Public	Shared	Public	1-2 years
Management contract	Public	Public	Private	Public	3-5 years
Lease	Public	Shared	Private	Public	8-15 years
Concession	Private	Private	Private	Public	20-30 years
BOT/BOO	Private	Private	Private	Shared	20-30 years
Divestiture	Private	Private	Private	Private or Shared	Indefinite (may be limited by license)

Source: Adapted from World Bank 1997, in UNEP/GPA 2004

### Factors to consider before entering into a partnership

From the beginning, a partnership has to be a genuine collaboration between the public and private partner and the conditions agreed upon have to be acceptable for both parties. The overall framework must be realistic and both parties must share the risk involved in the project. The contract should provide a strong foundation for both parties to develop confidence in the partnership and in each other.

#### Factors for PPP success are:

##### Commitment

The foundation of a successful PPP must include the following elements:

- A clear outline of the commitments, including political commitments, and contractual obligations assigned to each partner builds trust and confidence in a PPP. This includes a commitment from the national authorities as well as from the local government. Political and institutional stability at national and local levels and compliance with long-term commitments are the basis of a long-term partnership and are often a precondition for private sector involvement in environmental projects. Even if the local government changes, commitments made by the previously elected officials should be honoured. If the countries not are considered politically stable, the main challenge is setting up appropriate guarantees for the private companies.
- Transparent investment procedures, which have a direct impact on risk allocation and on the feasibility of the partnership, are required. In addition, ownership rights must be clearly stated, including a clear definition of the assets contributed by each party and appropriate concession fees, if any.
- The project needs to be viable/bankable as an IFI project – meaning commitments and arrangements of subsidies and support must have the same obligations as IFI projects. Entering into a partnership does not necessarily mean that fewer subsidies will be needed.

##### Transparency

##### Viability

### Public sector management capacity

- Solid technical expertise on the public side is crucial for tasks such as designing the contract, negotiating with private companies, or setting the partnership's scope and objectives.

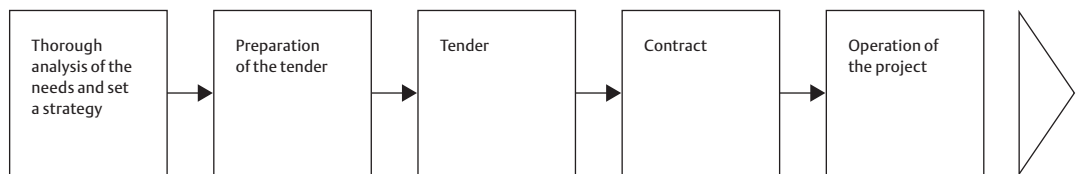
### Consideration of future demands

Prior to the final investment, it is necessary to complete a thorough analysis that takes into account the future demand that may arise from a changing demographic as well as the local context, which affects the partnership. The project's investments must be adapted to the population's needs and resources in order to obtain a tariff that is acceptable for the local population. This means both the population's ability to pay and willingness to pay must be considered.

### Tariff flexibility through local funding

Furthermore, it is essential to acknowledge the need for tariff flexibility related to exchange, interest, and inflation rates that may fluctuate over time. This is especially the case in many emerging markets, where there is no market for local financing and the financing for investments often is given in hard currency. In this situation, if the currency suddenly falls, the loan amount and the instalments will increase as measured in the local currency. This will create a mismatch between the income from tariffs and the debt obligations. Therefore, if possible, use local funding to respond to this type of financial issue.

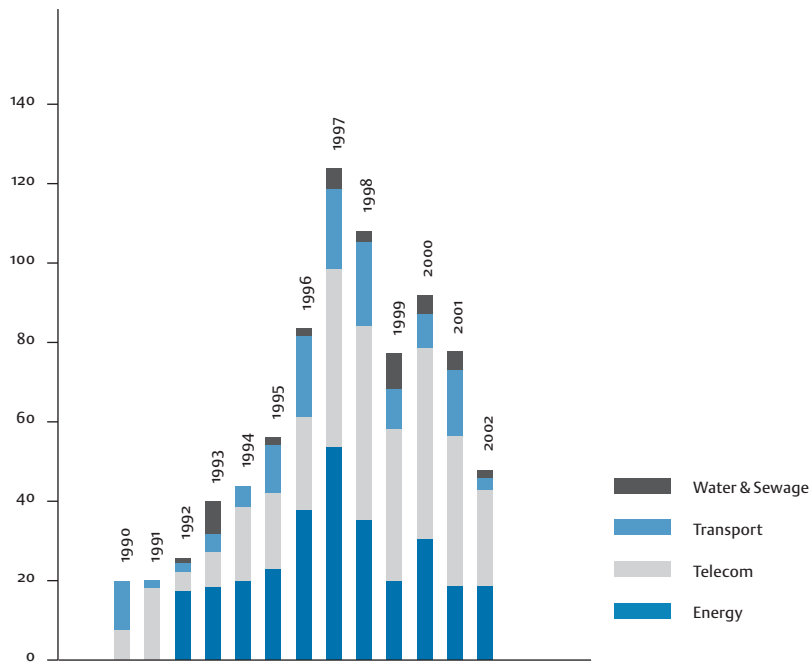
**FIGURE 2.3** The process in a PPP project



Source: Regeringen 2004

### International trends for private partnerships

For most of the 1990s, the private sector played a significant role in financing infrastructure investments in emerging markets. The financing reached a peak in 1997 when investments totalled US\$127.5 billion. The economic crisis in Asia together with a number of failed projects in emerging markets led to a sharp decline in these private investments. By 2002 the level had dropped to about one third of the level reached in 1997 (World Bank 2005). Figure 2.4 outlines the flow of these investments while Box 2.4 lists reasons for this decline.

**FIGURE 2.4 Private sector infrastructure investments in emerging markets**

Source: PPI Database, World Bank 2005

Since 1997 private sector investments are declining

### BOX 2.4 Private sector participation in environmental investment is declining

The World Bank lists the following reasons for the lack of private sector participation in environmental investments:

- capital intensity, with high, up-front investments combined with long payback periods and low sector returns
- risk of political pressure on tariffs
- weak or inconsistent regulation, lack of transparency, and perceived risk of regulatory capture
- sub-sovereign risk – local government entities standing counterparty to bulk water sale agreements while having a poor collection record, sub-optimal financial condition, and weak credit
- water unaccounted for, water loss, inadequate distribution networks in a state of disrepair, and the lack of investment funding to remedy the situation, thus threatening long-term project viability
- foreign exchange risk, with a mismatch between local currency revenues and foreign currency financing
- forms of credit backstop (for example, sovereign counter guarantees for financial obligations of sub-national entities being scaled back in the face of decentralization, ratings agency reviews, and downgrades)
- lack of local government access to bank and capital markets due to the absence of central government authorization and competition for scarce financial resources
- aversion of private insurers and re-insurers to providing bond insurance and political risk insurance to sub-national entities in developing countries due to lack of transparency, poor financial condition of reference entity, and absence of credit rating

Source: OECD 2006

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Chapter 3 describes the more strategic aspects and challenges of planning financing for programmes of action, discussing in detail the options of matching and blending different resources to create viable financing packages: strategic planning for programmes of action (Section 3.1); and how to approach and work with IFIs and donors and how to select and implement financing sources and mechanisms (Section 3.2).

# Strategic planning

## 3

### 3.1 Strategic planning for programmes of action

#### Introduction

In the process of implementing action programmes, there will always be challenges that must be resolved. Identifying and analysing these potential challenges, and developing ways to overcome them, requires strategic planning, a crucial element for the success of any programme of action.

The most visible challenges will often arise in the implementation phase because PA's are rarely specifically prioritized, financed, time-bound, and are often based on unrealistic expectations of financing availability. Another common challenge is utilizing the full range of financing instruments – such as an increase in tariffs, charges, or legal barriers – to allow for financing options such as bonds, increased borrowing, and lower interest rates. It is important to build into the planning process a way to identify and address the perceived challenges.

#### Four categories of challenges are:

#### Lack of commitment

#### Weak institutional capacity

#### Lack of integration

#### Lack of financial resources

As previously mentioned in this report, most developed countries, and increasingly in transitional and developing countries have encountered the following challenges when developing or implementing programmes of action:

- The lack of widespread political and/or community support for the long-term actions and changes needed to protect coastal and marine environments
- Inadequate institutional capacity and/or human resources to satisfactorily address the wide range of land-based pressures facing coastal and marine environments
- The lack of integration into public investment programmes and national development and funding programmes – PAs are often developed by Ministries of Environment without a specific recognition of the other ministries that will be implementing the PAs
- The lack of financial resources to adequately plan, design, implement, monitor, and evaluate concrete actions to protect the marine environment from land-based activities.

To address these challenges and to ensure long-term sustainability strategic planning is crucial. Initial planning must involve all stakeholders in the preparation and in the development of the PA, assign clear responsibilities for the implementation and the funding of the PA, and base the concrete action plan on realistic assumptions of sustainable financing. The programme of action should also be adapted to realistic expectations of institutional setups, identify constraints and barriers to implementation, and integrate the elimination of these challenges into the action programme.

#### *Addressing the challenges*

In the 1990s, many transitional countries were faced with the challenge of implementing unrealistic programmes of action in the environmental sector. Several donors, international organizations<sup>35</sup>, and transitional countries joined forces to address these challenges. Over the last ten years or so, methods and tools to deal with these issues have been developed providing an integrated package to help prioritize actions based on available and potentially available resources.

#### Much experience meanwhile exists in addressing these challenges

**A more realistic 'affordability' approach is helping countries to prioritize**

These activities have contributed in changing ways of thinking – specifically, they have helped governments realize that they need to take financial constraints and institutional/capacity-related barriers into consideration at a much earlier stage. This 'affordability' approach has strengthened the countries' ability to prioritize their own resources as well as strengthening effective leveraging of additional external sources.

Below are some models, methods, and processes that can assist Regional Seas Programmes member countries in strengthening the capacity to implement PAs, strengthen public institutions and municipalities. They might also help with in prioritizing and undertaking long-term financially sustainable environmental action plans and environmental capital improvements. The concrete steps needed to implement these methods are included in Annexes 3-5.

**The strategic planning concept**

### **Strategic planning concept**

Strategic planning includes activities such as:

- legislative approximation
- identification of obstacles to implementation at legal, institutional, capacity, and financial levels
- financing strategies, including gap assessments and scenario development (supported by willingness to pay and affordability studies)
- the potential of domestic resource mobilization (identification of sustainable financing levels)
- the potential of strengthening efficiency in public-sector financing for the environment
- detailed action planning based on realistic implementation scenarios

**Strategic planning is a disciplined effort to produce fundamental decisions and actions**

Strategic planning in the context of PA's is used to help organize and plan the necessary activities at national, sub-national, or municipal levels. The purpose of strategic planning is to ensure that all actors have the same knowledge and have been a part of the decision-making process when to implement the programmes of action. Strategic planning is a disciplined effort to produce fundamental decisions and actions that shape and guide programme implementation and ultimately achieve the programme objectives.

The process involves setting goals (such as defining a desired future development path) and developing an approach to achieve these goals. The process goes through a series of activities and studies, which at the end will allow the policy makers to develop realistic action programmes based on affordability and the obstacles to implementation. Such planning will ensure that realistic action plans are developed and then can be implemented systematically. In addition, they reduce the risk of over-implementation or focussing on the wrong investments or activities.

### **Legislative review**

The objective of a legislative review is to evaluate the necessary legal requirements to implement the PA effectively and timely. The legislative review does not only cover environmental and environmentally related legislation, but also legislation that allows

for framework conditions of these activities (such as financial arrangements, monitoring/enforcement and institutional arrangements). This also includes 'ownership' legislation, which has an indirect effect on the implementation of the programme of action.

#### Legislative review is done in five steps

The steps involved (described in detail in Annex 3) in the legislative review process are:

- Step 1: Determine which legislation should be reviewed
- Step 2: Identify which legislative requirements the programme of action will have
- Step 3: Determine how the programme of action will be implemented and enforced
- Step 4: Decide on the process of legislative transposition
- Step 5: Develop the action plan for the transposition of legislation

In connection with the EU accession process, the European Commission developed a handbook on the implementation of EC environmental legislation (EC 1997). This handbook provides a short process description of activities needed to review and adapt legislation. The handbook also discusses the types of experts that need to be involved with the review in a step-by-step approach. Although the handbook is EU specific, the method and process of evaluation are the same for other legislative processes.

Since the development and implementation processes for the PA may change, it may be necessary to adapt and possibly expand the legislation that has been reviewed.

#### Challenges to implementation

#### Challenges and obstacles will arise throughout an entire programme cycle...

In the process of implementing action programmes, there will always be challenges and even obstacles to implementation that must be addressed. It is important to build into the planning process a way to identify the perceived challenges and design activities to address these.

#### ...and need to be anticipated as much as possible

The most visible obstacles are often seen in the implementation phase because PA's are rarely specifically prioritized, financed, time-bound, and are often based on unrealistic expectations of financing availability. Capacity constraints during the project preparation and approval phase are often a challenge. Another common challenge is utilizing the full range of financing instruments – such as an increase in tariffs, charges, or legal barriers – to allow for financing options such as bonds, increased borrowing and lower interest rates.

#### Environmental financing strategy

The environmental financing strategy (EFS) was developed as a response to the unrealistic environmental strategies and plans that were developed in the early to mid-1990s. These environmental action programmes did not take into consideration affordability, realistic financing sources, and did not involve ministries of planning, finance, and development adequately – the groups that would eventually have to fund and implement the activities of the programme.

**Environmental financing strategy can be used to...**

**...identify or develop new sources of financing...**

**...mobilize financing...**

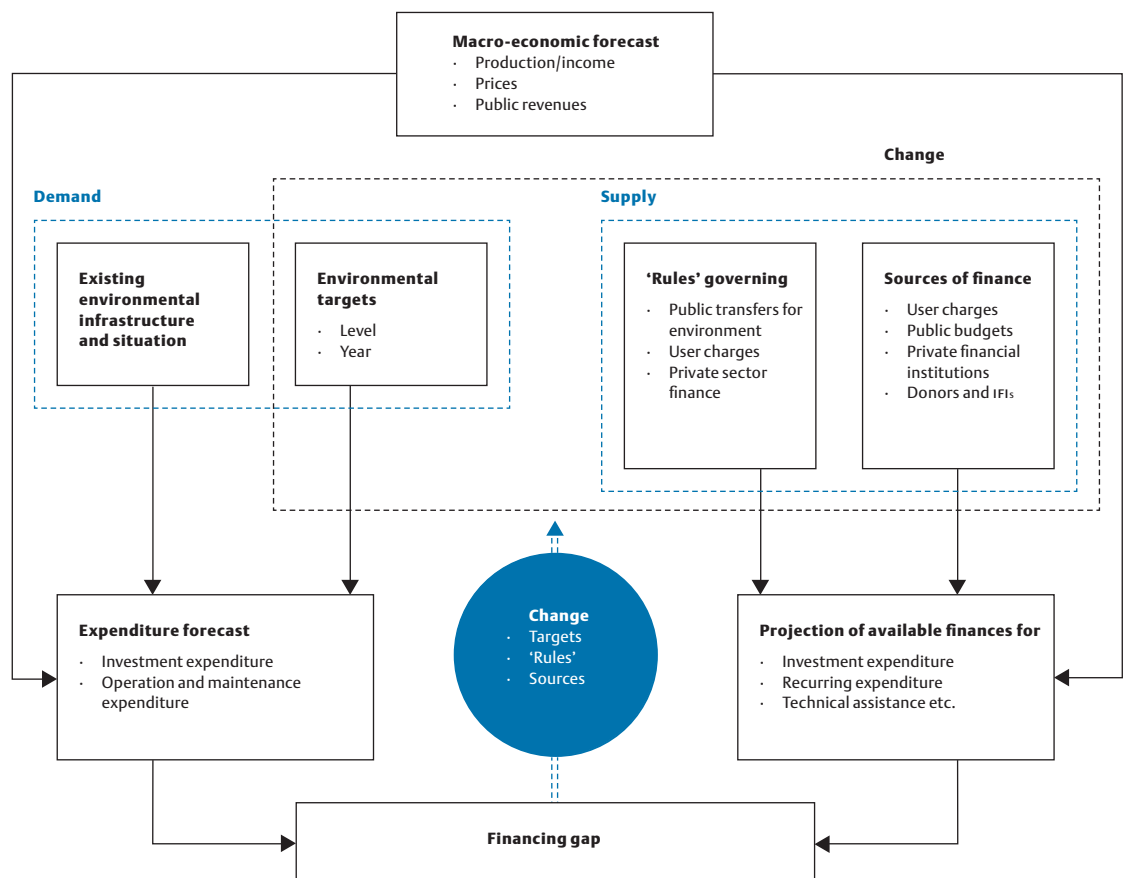
**...identify obstacles to implementation...**

**...develop action plans**

The EFS serves as a planning tool for assessing the demand and the supply of funds and evaluating financing gaps for specific sectors, project owners, or types of projects (Figure 3.1). Using the environmental financing strategy can provide information that can be used by environmental authorities in the country or region in several ways:

- assuming that financing gaps exist, the EFS can stimulate a dialogue focused on the reassessment of environmental targets, the identification or development of new sources of financing, and institutions to provide or facilitate financing
- at the project or sector level, this information can help environmental officials mobilize financing from donors or IFIs by providing a clearer picture of where funding is needed
- the EFS, in coordination with the legislative review, can help identify the obstacles to programme implementation; the study of the potential of domestic resource mobilization (see Section 3.2 and Annex 5) can be used to identify policy and resource implications for public sector institutions trying to mobilize environmental financing from the private sector
- the EFS can be used to develop detailed short and medium-term action plans and the longer-term programme of action

**FIGURE 3.1 Environmental financing strategy process**



Relevant authorities can subsequently use the financing strategy to identify specific projects or project types requiring government support. Annex 4 lists 11 actions to be undertaken when formulating a financing strategy process. For further information and details on financing strategies for the environment, several publications can be recommended, such as:

- The OECD publication titled *Financing Strategies for Water and Environmental Infrastructure* (OECD 2003)
- The DEPA publication titled *Lithuania Environmental Financing Strategy* (DEPA 2001)
- DANCEE/COWI's *The Feasible Model* (DANCEE/COWI 2000)

### 3.2 Selection and implementation of financing sources and mechanisms

#### Finding the appropriate financing sources<sup>36</sup>

Approaching donors and IFIs is similar as they more or less look for the same information and use the same approach when deciding whether or not to invest in or give grants to a project. The main difference is that donors do not have a long-term interest in the future cash flows or viability of projects since they most often provide grants, which are non-repayable funds. IFIs, on the other hand, place a high priority on the expected future cash flow of the project, as this cash flow will provide the resources for repayment of the loan.

The difference between donors and IFIs lies in the interest in future cash flows

#### Project prioritizing

Before donors or IFIs are approached, it is crucial that each country and/or region has prioritized the funding areas that most important. Donor grants are usually targeted for specific activities or sectors. Recipient countries will then have to tailor their funding requests/proposals to fit donor criteria, which may not have the same priorities as the recipient country. As grants and IFI loans often require co-financing, the project may pull much-needed funding away from the actual priorities of the recipient country. Furthermore, as human capital and human resources are always scarce, they should not be 'wasted' on low-priority projects.

It is important to ensure that co-financing does not pull funding away from actual priorities

#### Knowledge of IFIs and donors

Though donors and IFIs have many similarities, they are not identical. It is important that project investors are aware of the specifics of the IFIs, the donors, and the commercial banks that they approach. Most information needed to evaluate the funding source can be found on the institution's website. The information should then be analysed before the first meeting between the IFI/donor and the project proponent.

Make sure you know the donor or IFI before you approach them

What the project investor needs to know:

- eligibility rules
- region and sector priorities
- terms of lending
- types of financial instruments offered
- ways and methods of communication and information exchange
- project submission procedures and timing requirements
- procurement rules



*Information sharing*

When contact has been made, it is important for the project investor to keep in mind that IFIs and donors are managing taxpayers' money and they have a responsibility to the public they represent. Therefore, they are obliged to follow a set of specific rules and regulations and to utilize entrusted funds in the most efficient way. That is why the IFIs and donors are so eager to know all the details of the project and continue asking questions even beyond the point where the project manager thinks he has answered them all at least once.

**All information, how trivial it might seem, should be revealed**

IFIs and donors need to know all project details and it is better to give more information – and the sooner the better – than little information. To avoid creating an atmosphere of mistrust, all information, how trivial it might seem, should be revealed. Also all project risks should be disclosed immediately as donors and IFIs know and expect project risk. If the project investor can give a list of risks and perhaps ways to mitigate the risks, it will increase the chance of establishing a constructive dialogue. Information goes both ways. If project investors have a question for the IFI/donor on the process or method of work, the investor should not be afraid to ask the question. Often insecurity arises from differences in working culture. The best way to overcome this is through communication.

*Financial issues and budgets*

Donors typically pay less attention than IFIs to the financial viability of the project because grants are non-repayable funds, which are allocated for achieving specific outputs. Donors are typically more interested in knowing that there are no alternatives to their grants. This is different for commercial banks and IFIs since the key issue for IFIs is loan repayment. The project proponents should be prepared for this through diligence.

**Usually more than one investor will need to be found...**

*Co-financing:* Typically IFIs and donors do not provide financing for the entire investment and will often require other investors to be involved. This is important. If, for example, an IFI finances only a maximum of 35 per cent of the project cost, it implies that a minimum of 65 per cent will have to come from other sources. Such other sources include, among others, the utility's own funds, municipal budgets and loans and/or grants from other IFIs, donors, and/or commercial banks.

**...before submitting initial financing requests**

Identification of potential additional sources of financing is rather time consuming. Therefore the project proponent has to think about this issue as soon as possible – before a project concept is submitted to an IFI that may play a major role in project financing.

*Provision of guarantees:* IFIs usually require a state guarantee. Guarantees involve a political process in which the project proponent needs to be initiated as soon as possible. It can be a very time-consuming process as the Ministry of Finance might need to have the entire state budget in place beforehand. For some developing countries that are running a programme through the IMF, it can be even more difficult as they might have restrictions in the programme on obtaining new debt or issue guarantees. Guarantors will request the same basic information as requested by the IFIs.

An IFI will look into the ability and willingness to repay loans

*Ability to repay the loan:* In contrast to donors, IFIs expect to have the loan repaid. Therefore, they want to know if a project is capable of generating sufficient cash flow in order to repay the loan fully and on time. IFIs prefer the support of a financially sound administration, which is prepared to act as a guarantor. They will look into the ability and willingness to pay. In addition to budgets and annual accounts, the IFI will be interested in current tariff policy. Questions to take into consideration are:

- Who is responsible for setting tariffs?
- What is the number of tariffs?
- What are the tariff levels?
- What are the collection rates among different types of consumers?

Identify risks at an early stage and propose ways to mitigate them

#### *Risk management*

Any project can have risks. The challenge is to identify all possible risks and find appropriate ways to mitigate these in the early stages of a project. The issues that need to be addressed as part of risk management include:

- *Project costs:* Have all possible cost elements been taken into consideration. Do the project costs include taxes, charges, and duties levied on goods and services required for project implementation? Such questions have to be asked and answered.
- *Local approvals:* In most cases there is a need to obtain approvals from local authorities for, for instance, construction works. This should be fully taken into account. What approvals will be needed? Is it time consuming to get these? Is there a risk that the utility will not get the necessary approvals?
- *Duration:* Is the project timeline realistic given the necessary project steps and phases? What is the risk that a certain phase will take much longer to complete than anticipated?

Four-phases to help policy makers choose and implement the right economic instrument

#### **Finding the appropriate economic instrument**

Since countries and regions vary, the starting point depends on the previous actions taken by the individual countries. There is no best way to find and implement economic instruments. Any solution and policy recommendation will have to take into account the degree to which the pre-conditions are fulfilled, as described previously. In Annex 9, a comprehensive list of criteria is provided to help evaluate the potential effectiveness of environmental taxes and charges (Speck and Özdemiroğlu 2004). The UNEP has developed a four-phase approach to help policy makers choose an appropriate economic instrument and implement it accordingly<sup>37</sup>.

Through Phase 1 the problem is identified...

#### *Phase 1 – Problem identification*

To design the best solution, one needs to be familiar with the current situation as well as the history. In phase one the existing information is gathered in a structured way. Creating this structure is a critical step, as it drives the process of assessing the solutions that may work from those that may not, as well as identifying key data gaps.

**...what is the goal...**

Involving local stakeholders in the information gathering process and in the problem identification phase can become a powerful tool for raising public awareness and participation. The problem identification phase needs, at a minimum, to answer following:

**...what are the baseline conditions...**

- *What is the goal – assessing the problem?* Goal definition should include a primary goal and any secondary goals that may be relevant. In order get to the goal the policy makers need to know: What is the damaged resource? What is the anticipated severity of damage? What does the policy makers hope to accomplish? What is the characteristic of the pollutant?
- *What are the baseline conditions?* The appropriate policy response hinges on a clear and realistic understanding of the baseline conditions. The level of competence and corruption for any area/institution that will be used to develop, communicate, monitor, or enforce the policy in question needs to be realistically assessed.
- *Institutional baselines:* If the institutional capabilities needed to communicate and enforce the EIs in a fair and unbiased manner are missing, the performance of the EIs will suffer.
- *Mandate and level of power:* Many environmental protection packages come from the environment ministries, which generally have far less political power than finance or trade ministries. Policy makers need to assess their relative power accurately and plan how to address their weaknesses.
- *Factional analysis:* Who are the stakeholders and what are their interests. Policy changes involve far more than government bodies. Assessing the major players with an interest in the status quo, and in the projected change, is important. This baseline assessment should also evaluate which groups are most powerful, and what their primary goal is likely to be. In many cases, their primary goal will be linked to the protection of their jobs and/or access to valuable resources. Environmental quality may be a distant second. Allocation of rights in the baseline is also quite important: groups with existing rights (whether actual or implied) will often have more power/interest in fighting changes to existing policies.

**...what is the long-term viability of a package...**

- *What is the long-term viability of the package?* Countries may receive external funding to conduct policy research or to implement EI-based approaches. However, this money does not last forever. A long-term plan for implementing and overseeing the policy should be considered from the beginning.

**...what obstacles can be anticipated**

- *Identifying potential obstacles:* Obstacles may occur that will hamper implementation and management of the programme. Identifying and addressing potential obstacles early in the process is important, so that solutions can be found and incorporated into the programme. Obstacles can be a lack of institutional capacity, lack of funding, or lack of political will.

**In Phase 2 an initial proposal is defined for instruments with best chances of success***Phase 2 – Planning*<sup>38</sup>

Phase 2 takes the general information provided in Phase 1 and uses it to develop initial policy proposals. The purpose of assembling information in Phase 1 is to help policy makers develop a shortlist of policy options. This short list includes options that have the most reasonable chance of success given the existing baseline conditions and resources at risk.

- *Environmental effectiveness*: Does the instrument lead to the desired environmental improvements, such as reduction in waste generation, increased waste recycling, reduced emissions from transport and disposal?
- *Economic efficiency*: Does the instrument create incentives for investment and innovation toward the reduction of pollution control costs?
- *Administrative cost efficiency*: Does the instrument require affordable and available levels of skill and effort to implement and monitor?
- *Revenue usefulness*: Can the revenues generated be applied to address the environmental objectives of the instrument and create measurable improvement?
- *Ease of implementation and replicability*: Are the relative costs and benefits fairly easy to assess and the legal requirements for introducing the new instrument reasonable?
- *Acceptance*: Does the general public and the affected industries accept the instrument as a viable means of cost-effectively achieving environmental improvement without adversely affecting competitiveness, employment, income distribution, and trade?
- *Distributional effects*: Is there distributional disparity or inequity in the application or impact of the instrument, particularly regarding effects on lower-income households, small businesses, and disadvantaged parties?
- *Short-term results*: Does the instrument have the potential to result in sufficient short-term improvement and motivate political administrators to undertake commitment to the costs associated with the instrument within their political term?
- *Economic development enhancement*: Does the instrument provide an environment that maintains trade competitiveness and encourages industrial development and employment generation?

### *Phase 3 – Engaging stakeholders and refining policies*

**In Phase 3 stakeholders are involved to increase the likelihood of success...**

In this phase, stakeholders are involved for feedback on these initial options, and important information is collected on how to refine them to increase their likelihood of success or to gauge any major resistance. The process of organizing stakeholder involvement varies with the country in question and its cultural traditions and political climate.

**...acknowledging the very different interests...**

- *Who are the stakeholders?* Though there are many stakeholder groups (such as citizens, businesses, resource users), there are almost always three main stakeholder interests: those responsible for the problem; those affected by the problem; and those affected by one of the proposed solutions.

**...realizing that there are vested interest in keeping things as they are...**

- *Not all stakeholders will be pleased:* Within each of these groups there may be stakeholders who are well organized and economically powerful and some of these might have vested interest in keeping things as they are. If the firms are controlled by people with ties to the government, the potential for them to bias the policy direction will be even larger. The challenge with the more powerful groups is ensuring they are not able to derail the policy entirely by influencing the structure of the rules or instruments or by perpetual delaying tactics.

**...and focussing on transparent negotiation from the very beginning**

- *Transparency and early signals:* It is important to involve stakeholders at an early stage. Early, continuous, targeted, and transparent communication between all parties is required to establish firm partnerships. Because the environmental authorities

often have less power than many of the affected industries or their political partners, built-in transparency also protects them from pressure tactics from companies or other ministries.

#### *Phase 4 – Policy implementation and evaluation*

**In Phase 4 the instruments are then chosen and implemented**

The final phase means moving from data gathering and negotiations with the stakeholders to choosing and implementing the instrument. Given the baseline conditions and the feedback from the stakeholders, the option with the highest efficacy, lowest side-effects, and greatest feasibility given existing power and institutional dynamics is the best choice of instrument.

**...considering transitional measures...**

- Flanking measures to mitigate severe effects: Where the implementation is anticipated to cause undue hardships on segments of the population, transitional measures need to be built into the initial policy package. Possibilities include phasing in limits more slowly to avoid sudden changes in prices or access rights; exemptions for groups who face high costs but are small contributors to the problem; or transitional subsidies to highly affected groups.

Besides distributional effects, consideration for the capital stock should also be taken into account. As the introduction of, for example, a new environmental tax increases the production cost for the industry, the cost of capital might become unacceptably high given the current capital stock of the economy, which was put into place in the absence of such taxes. It may therefore be necessary to introduce taxes at a rate below the economically efficient level and then increase them over time as the capital stock is replaced in the expectation of increased tax levels in the future<sup>39</sup>.

**...explaining the choices made...**

- Marketing and public announcements: It is important to explain what policy package is being implemented, why it was chosen, and what steps are taken to ensure that this decision makes sense and incorporates the feedback from the stakeholders.

**...and monitoring and evaluating performance**

- Monitoring and enforcement: To ensure optimal performance, plans should be subject to regular monitoring and evaluation, so that timely improvements can be introduced when necessary. Evaluation should account for experience and for improved knowledge, building, for example, on improved scientific understanding.

Keep the programme simple. The more complicated a programme is to monitor and enforce, the less likely it is to succeed, especially in the developing world. Thus, it is very important that goals and objectives, as described in Phase 1, are unambiguously formulated and measurable (quantifiable), so that results can be verified.

#### **Domestic resource mobilization**

**Market-based instruments are the most sustainable source of financing for the environment...**

In the long run, market-based instruments (MBIs) together with national public sector transfers are the only sustainable source of financing for the environment as donors will not continue to finance environmentally related sectors in developing and transitional countries. Therefore, analysing the potential benefits of MBIs in the medium to long term

will enable countries to develop policy packages to strengthen the sustainability of their environmental financing.

...as they change behaviour and generate economic incentives

In recent years, market-based instruments experienced increased attention as an important tool in environmental policy in both developed and developing countries. Their advantages – as compared to command-and-control measures – encompass the provision of economic incentives aiming to change behaviour as well as the generation of revenue that can be used for financing environmental investments.

The process of identifying and evaluating the potential long-term sustainable domestic financing mechanisms from environmental and environmentally related economic instruments has been tested in several countries. This is carried out through a review, which focuses on:

- the specific relevance of the economic instrument in solving the environmental problem
- the institutional framework
- capacity constraints
- the best method of implementing/strengthening the instrument
- analysing the short-term and longer-term revenue potential of the specific instrument

The review also analyse which factors may complicate the effectiveness and efficiency of the instrument as well as propose the most efficient method of arranging and introducing the economic instrument revenue flows.

In addition MBI's can strengthen institutional capacity

The focus of the review is to assess the role market-based instruments can play in reversing the current trend of environmental deterioration and protecting the environment. The revenue-generating effect of MBIs<sup>40</sup> holds a particular relevance because it could create additional financial resources to be used by governments in developing countries for concrete actions to protect the environment. The use of market-based instruments can, as an additional effect, improve and strengthen the institutional capacity and provide supplementary information for environmental-policy management. Public sector transfers for the long-term implementation of the PA are decided during the development phase of the environmental financing strategy.

### **Strengthening efficiency in managing public environmental expenditure**

Domestic financing needs to be supported by optimal management of resources...

Domestic financing is the most important financing source for the protection of the environment. Hence, the development of supportive regulatory and management systems, which utilize these financing sources and mechanisms most efficiently, is essential to maximize the benefits of these resources.

Inefficient management of resources is often due to the lack of well-defined programmes and unambiguously defined roles. At a project level, issues such as unclear eligibility criteria, procedures, priorities, and targets could be reason enough to include all possible environmental measures.

### ...through transparent processes

It is essential that clear and transparent processes are established to support efficiency in management and disbursements (accountability, transparency, and cost-effectiveness in the institutions managing public money). For further information and inspiration, the OECD has developed clear guidelines on *Good Practices in Public Environmental Expenditure Management* (OECD 1995). The OECD has also developed a handbook that provides domestic institutions managing public environmental expenditure with practical guidance and tools for identification, appraisal, and financing of environmental investment projects.

#### BOX 3.1 Internationally recognized principles of good public expenditure management

Accountability<sup>41</sup> means the capacity to hold public officials liable for their actions and performance. Accountability implies addressing three questions: accountability by whom, accountability for what, and accountability to whom. Accountability is achieved through a clear division of responsibilities and subsequent consequences for both good performance and failures to fulfil prescribed responsibilities.

Transparency entails low-cost access to relevant information. Public sector institutions should use acknowledged international standards of accounting and disclosure of fiscal and financial information to report to controlling bodies and to the public. Transparency implies both good internal control (within the government) and external audits by specialized institutions, including legal, financial, and performance audits.

Cost-effectiveness is a technical concept and implies achieving objectives at a minimum cost. It requires managerial autonomy from political ad-hoc pressures over appraisal and selection of specific projects. It also requires competent individuals recruited on a merit-based and performance-based promotion system.

Source: OECD/EAP 2003

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### 3.3 In summary

Having developed a financing strategy and undertaken a review of potential additional financing source, countries should have a priority list of realistic actions based on long-term sustainable financing. These priorities should be agreed upon during the programme development phase with all major stakeholders and should include the identification of the financing mechanisms required to finance each individual programme activity.

### The last step of a strategic financial planning concerns the compilation of a priority list

Thus, the results identified through the strategic planning process can be translated into a priority list of concrete short-term actions, enabling the possibility of designing individual project components for each initiative to be undertaken. The priority action list also needs to incorporate the following medium- and long-term actions:

- the preparation of investments and detailed design studies
- identification of expected short-term financiers for negotiation
- policy steps to be taken to create long-term sustainable financing mechanisms to secure these actions (economic instruments, capacity/institution and legislative measures)
- the necessary activities required for the legislative review process
- identification of and initiatives to progress the removal of obstacles
- actions to strengthen the efficiency of public expenditure management

All these activities identified for programme of action implementation need to be prioritized in order to ensure efficiency in implementation. Prioritization should ensure that delays – due to the lack of capacity/resources and/or legal or financial obstacles – are minimized.

*Moving forward*

The detailed information in this report covers a wide range of topics involved with environmental financing, including: financiers, financing options, tools, and schemes, different financing methods including blending and matching, factual data discussing past financing projects, the importance of long-term sustainable financing, and the concept of strategic planning. The framework described in this report should further enable the Regional Seas Programmes to strengthen and prioritize long-term sustainable financing for programmes geared toward the protection and conservation of marine and coastal environments.



## Annex 1 Environmental challenges and environmental action priorities for the Red Sea and Gulf of Aden

This Annex summarizes the activities to date carried out by PERSGA and its partners in identifying the environmental problems to be tackled in the region. The Annex builds on Mr. Ljubomir Jeftic's review of several PERSGA related programmes.

A Strategic Action Programme (SAP) was launched at the end of 1998 (a GEF project) and was implemented from 1999 to 2003. The SAP was designed around a series of complementary, preventive, and curative actions as identified in the SAP preparatory phase that collectively address the trans-boundary nature and sustainable development of marine resources for the PERSGA Region as a whole. These 'development objectives' or components functioned as the guiding framework for a wide range of inter-related activities that were to be realized through this project:

- Institutional strengthening to facilitate regional cooperation
- Reduction of navigation risks and maritime pollution
- Sustainable use and management of living marine resources
- Habitat and biodiversity conservation
- Development of a Regional Network of Marine Protected Areas
- Support for integrated coastal zone management
- Enhancement of public awareness and participation
- Monitoring and evaluation of programme impacts

Although the SAP, as formulated in the preparatory phase, identified the threats to coastal and marine environments and resources in the PERSGA Region – such as widespread habitat destruction, non-sustainable use of living marine resources, navigation risks, petroleum transport and petroleum production, impacts of urban and industrial development, rapid expansion of coastal tourism, other concerns, and emerging issues – the priority actions that should be taken on a national and regional level, the GEF full project did not include activities directly relevant to land-based sources and activities.

### 1 SAP Country Reports

In 1995 and 1996, a series of national workshops was held to finalize the Country Reports and to develop priority actions required by each country to address the environmental threats identified. As a result, those reports served as the first diagnostic tool for the SAP in analysing issues of regional, national, and local significance, and in recommending actions to protect the region's environment and natural resources. A total of 147 priority actions were identified (between 17 and 25 per country). The titles of all 147 activities were analysed and all activities that are directly linked with the land-based sources and activities were selected and are listed below. Activities dealing with coastal zone management and port reception facilities were not selected because they are either complex (coastal zone management) and include other types of activities that are dominant or are more concerned with maritime transport (port reception facilities), although in both cases there is a land-based component in them. In 2000, the Country Reports were updated and the priorities for land-based sources of pollution, as identified by countries in 2000, are presented below.

### Priorities for land-based sources of pollution as identified by countries (1995/1996)

#### Djibouti

- Upgrading of wastewater collection and treatment in coastal areas, especially Djibouti town \*\*\*
- Upgrading of solid waste management and disposal in coastal areas, especially in the vicinity of Djibouti town \*\*\*

#### Egypt

- Development of an evaluation of point source pollution from urban and industrial sites \*\*
- Development of a National Plan for Solid Waste Management in coastal cities on the Red Sea \*\*\*
- Shoreline profiling programme and identification of hot spots \*\*

#### Jordan

- Recruitment and training of staff for implementation of industrial pollution prevention regulations \*\*\*
- Waste oil contamination monitoring and demonstration project in recovery of waste oil from land-based sources \*\*
- Development and implementation of a plan for municipal wastewater conservation and reuse \*\*\*
- Development and implementation of a solid waste collection, recycling, and disposal plan \*\* >

**Saudi Arabia**

- Improved management of air pollution, brine disposal, and thermal discharges from desalination plants at urban areas and industrial ports \*\*
- Improved control of emissions from cement plants in coastal areas, especially Ras Baridi \*
- Effective control of dredging and filling for urban and industrial development, port construction, and maintenance dredging of navigation channels \*\*\*
- Upgrading of wastewater collection and treatment in coastal areas, especially Jeddah \*\*\*

**Somalia**

- Introduction of control measures against illegal dumping of hazardous waste by foreign vessels \*\*\*
- Development of wastewater collection and treatment facilities in Berbera and Bosaso, in the medium term \*

**Sudan**

- Upgrading of wastewater collection and treatment in coastal areas, especially Port Sudan \*\*
- Upgrading of solid waste management and disposal in coastal areas, especially Port Sudan \*\*

**Yemen**

- Upgrading of wastewater collection and treatment in coastal areas, including Aden, Hodaydah, and Mukalla \*\*
- Upgrading of solid waste management and disposal in coastal areas, including Aden, Hodaydah, and Mukalla \*\*
- Design and implementation of programme to evaluate potential impacts from agricultural chemicals on the Tihama coastal zone \*

Of the 20 activities identified, six deal with wastewater treatment and disposal, and five with solid waste management.

\*\*\* extremely important; \*\* very important; \* important

**Priorities for land-based sources of pollution as identified by countries (2000)**

As with priorities identified in 1995/1996, sewage was most frequently selected (6), followed by industrial activities (3), coastal development (3), organic pollutants (3) and litter (3).

**Djibouti**

- Sewage
- Heated brine and cooling water
- Litter

**Egypt**

- Tourism and Coastal development
- Sewage and Nutrients
- Agricultural runoff
- Industrial Activities

**Jordan**

- Industrial Activities (Phosphates)
- Development of Coastal area
- Sewage
- Cooling water discharges
- Litter

**Saudi Arabia**

- Sewage Discharge
- Industrial activities
- Development of Coastal area
- Cooling water discharges

**Somalia**

- Organic Pollutants
- Alteration/destruction of habitats
- Heavy Metals
- Litter

**Sudan**

- Oil bunkering facility
- Tourism activities and coastal development
- Sewage
- Organic pollutants (Insecticides)

**Yemen**

- Sewage
- Coastal development
- Bunkering facilities and oil refinery
- Agricultural Runoff

## **2 SAP Annual Reports**

Four Annual Progress Reports on the Implementation of the PERSGA SAP were published (1999, 2000, 2001, and 2002). All Reports reviewed the progress in the implementation of eight activities of the SAP. Results of most of the activities will constitute an important pool of background information for the development and implementation of activities for the protection of the coastal and marine environment from land-based activities.

## **3 Draft Protocol on Protection of the Marine Environment from Land-Based Sources of Pollution in the Red Sea and Gulf of Aden**

PERSGA has developed, in 1999, the Draft Protocol on Protection of the Marine Environment from Land-Based Sources of Pollution in the Red Sea and Gulf of Aden. This Protocol was revised both technically and legally in 2003 with the view of its adoption in 2005. The Protocol covers among others:

- pollution resulting from the discharge of sewage and the different wastewater from the coastal facilities or the effluents from any land-based sources or activities (Article 1);
- treatment and management of wastewater (Article 6);
- control of solid waste (Article 7);
- control of sedimentation and dredging (Article 8);
- local and regional regulations for waste disposal (Article 10);
- transboundary pollution (Article 17); and
- priorities to be taken into consideration in the process of formulating regional work plans, programmes, and procedures to eliminate pollution from land-based sources (Annex I).

It is clear that the Draft Protocol is placing the main emphasis on wastewater and solid waste.

## Annex 2 Possibilities of public-private partnerships (PPPs)

Annex 2 further explains the concepts and terms presented in Table 2.11: Allocation of key responsibilities for the main types of PPPs. The following list has been adopted from the UNEP 2004 publication titled '*The Use of Economic Instruments in Environmental Policy: Opportunities and Challenges*'.

**Service contracts:** Specific components are contracted out to the private sector while the government retains responsibility for operation and maintenance.

- Characteristics: Payments can be a fixed fee, but are usually related to achievement of performance targets. This creates an incentive for increasing productivity.
- Constraints: None

**Management contracts:** Responsibility for entire operation and maintenance is transferred to contractor.

- Characteristics: Payments can be a fixed fee, but are usually related to achievement of performance targets. This creates an incentive for increasing productivity.
- Constraints: Setting, monitoring, and evaluating targets is difficult. Achievement of targets may be related to capital investments, which are not the responsibility of the private contractor.

**Lease contracts:** Private operator is responsible for operating, maintaining, and managing a system, including revenue collection for rented assets.

- Characteristics: Government remains sole owner of assets and is responsible for expansion and upgrading, investments, debt service, tariff setting, and cost recovery policies.
- Constraints: Particularly beneficial if no substantial capital investments are required, and for this reason, it is not popular in wastewater management sector.

**Concessions:** Concessionaire has full responsibility for delivery of services: operation, maintenance, system expansion, collection of revenues, and fundraising for investments. Government is responsible for establishing and enforcing performance targets.

- Characteristics: Concessionaire has strong incentives to make efficient investment decisions and to develop innovative technological solutions, since efficiency gains will directly increase its profits. Full utility concessions are attractive where large investments are needed to expand the coverage of service or to improve quality.
- Constraints: A critical factor is the quality of regulation, as it concerns a long-term monopolistic position of concessionaire.

**Build-Own-Transfer contracts:** Private sector finances, builds, and operates new facility applying governmental performance standards. Government retains ownership of facility. In construction period, private sector provides investment capital. In return, government guarantees purchase of a specified output.

- Characteristics: Operation period should be long enough for contractor to recover its construction costs and to realize a profit. Agreements mitigate commercial risks for the private sector, because government is its only customer. Thus, BOT contracts are financed with a relatively high debt component.
- Constraints: Not for existing infrastructure: they do not tackle deficiencies nor do they turn financially weak utilities into strong ones. Length and complexity: most BOTs have to be renegotiated once underway. Size and time frames often require sophisticated and complicated financing packages

**Divestiture:** Full divestiture pertains to a situation where utility has been fully privatized. Ownership of utility rests with private operator. Private operator is responsible for operation and maintenance, investments and tariff collection. Regulation (to safeguard public interest) is in hands of Government, so completely separated from ownership and operation.

- Characteristics: Improved incentives for efficient investment decisions and development of innovative technologies. Low transaction costs compared to costs of tendering and contract negotiations associated with models discussed above.
- Constraints: Possible conflict of interest: public sector responsible for regulation and company shareholder responsible for maximizing returns. Could lead to political interference and counteract private sector management advantages. No competition (as no tendering) can raise transparency and corruption concerns.

## Annex 3 Legislative review and transposition: step-by-step

Below is a step-by-step approach to the transposition of legislation. The approach is non-specific with regard to what type of legislation is to be considered. The step-by-step approach builds on the EC 1997 report titled *'Guide to the Approximation of European Union Environmental Legislation'*.

### STEP 1: Determine which legislation should be reviewed

- 1 What type: laws, regulations, decisions?
- 2 What are the aims and objectives of the PA?
- 3 What relevant authorities are needed?
- 4 What information must be collected and provided to the decision makers?
- 5 What planning is required?
- 6 What scientific or technical knowledge is required?
- 7 What consultation procedures are required?

### STEP 2: Identify which legislative requirements the programme of action will need

- 1 Which requirements (in the national legislation) allow choices to be made?
- 2 Which requirements do not allow for choice?
- 3 National Laws or administrative measures?
- 4 New or amended legislation?
- 5 Content of national legal measures?  
(to be identified during financing strategy work – see Annex 4):
- 6 What are the costs and benefits to the economy and to the environment?
- 7 Which sectors will bear the burden?
- 8 How should the transition to the new requirements be organized: deadlines, transition periods, implementation programmes, investments, and reports?

### STEP 3: Determine how the programme of action will be implemented and enforced

- 1 Central, regional, or local level implementation?
- 2 What powers will officials need to have?
- 3 What coordination and consultation among regulatory bodies is needed?
- 4 What is the need for information, guidelines, training?
- 5 Costs and benefits of different implementation choices?
- 6 What financing is needed for administration? For investment?
- 7 How will costs be recovered and financing be obtained?
- 8 What monitoring is needed?
- 9 Who will carry out the monitoring? Do they need training, staff, equipment?
- 10 What penalties should apply? How will they be applied (administrative, judicial)?

### STEP 4: Decide on the process of legislative transposition

- 1 Who should be consulted? Government departments, local and regional authorities, industry representatives, NGOs, neighbourhood groups?
- 2 What form of consultation is needed?
- 3 At what stage in the process?
- 4 Other possible roles of organizations outside the national government?

### STEP 5: Develop the action program for the transposition of legislation

- 1 Legislative schedule
- 2 Preparation and implementation of administrative rules, decrees, and the like
- 3 Budgetary schedule
- 4 Institutions, staff, and resources
- 5 Training, information materials, meetings with concerned government offices, industry, public and other stakeholders, and other communication activities
- 6 Monitoring
- 7 Information assembly and reporting
- 8 Enforcement

## Annex 4 Financing strategy process: 11 action points

Actions to be taken when formulating a financing strategy process are:

- 1 Review the current list of short-, medium-, and long-term activities identified in the PA. The review should include an update if activities are currently being implemented and check if information in PA is aligned (including costs and responsibility).
- 2 Identify existing sources of financing and financing programmes, which may currently be used to implement part of the activity areas identified in the PA. This would include reviewing relevant official budgets, which provide resources for the environment and related areas, public investment programmes, sub-national governmental budgets, private sector financing, user financing, and international financing.
- 3 Update financial costs of the activities identified as short-, medium-, and long-term activities of the PA. The purpose of the costing exercise is not to develop precise costing data but to get figures of the magnitude of each of the activities.
- 4 Based on the information collected under activity c) develop a baseline for the activities identified in the PA for implementation – including legislative, institutional, capacity, and financing overviews. A financing strategy that reflects the baseline in the current situation should be prepared.
- 5 For each identified activity, review the needed legislative framework, the institutional setup, the capacity to undertake the activity, and needed sources of financing for the activity. See Annex 3 and 4 on legislative review and transposition and removal of barriers to implementation.
- 6 Identify potential new sources of funding for the PA (in coordination with the review of MBIs and the stakeholder meeting) – exploring possible realistic future public spending programmes, user and polluter pay systems, international funding available, and other stakeholders – together with inputs from the study on domestic resource mobilization.
- 7 Develop a gap assessment (if any) between the baseline and the full PA implementation with annualized costs – the consultant will be asked to make realistic assumptions for timing of implementation for further discussion with the relevant ministries.
- 8 Stakeholder meeting to discuss findings and to identify key actors in the iterative process to minimize the possible gap for the implementation of the PA.
- 9 Undertake iterative processes with main stakeholders to identify options to minimize the possible gaps including discussions of increasing resources or limiting the demand for financing.
- 10 Develop an affordability analysis at household and national levels.
- 11 Prepare financing strategy (annualized) for the PA based on affordability issues, identification of additional financing, and possibly including a revised activity plan for the PA established in the iterative process

## Annex 5 Review of the potential of market-based instruments

The study assessing the potential of market-based instruments (MBIs) (as well as the potential use of new economic instruments) should build on international best practices gained in developed as well as developing countries. The project should further investigate the institutional and regulatory frameworks for the use of such instruments and a functioning framework must be implemented as a prerequisite for effective use of market-based instruments. It is necessary to take into consideration issues such as the hypothecation of revenues of market-based instruments as well as the appropriateness of the current levels and structure of consumer/user charges for environmental services.

The *following tasks* should be undertaken when analysing the potential (in cooperation with international consultants and/or national experts/consultants):

- 1 review existing environmentally related taxes and charges<sup>42</sup>, and if necessary, propose an appropriate restructuring of current taxes and charges based on the current political and economical situation, taking into consideration international best practices (developed world as well as developing world)
- 2 investigate the appropriate sphere of government to levy specific environmentally related taxes (national, provincial, or local);
- 3 investigate the institutional set-up: such as monitoring of emissions and collecting tax revenues
- 4 investigate the appropriateness of the current levels and structure of consumer/user charges on water, wastewater, and waste and suggest a methodology to restructure such tariffs (if necessary) and how to adjust them on a regular basis
- 5 ascertain what a reasonable environmental tax/GDP ratio should be for the country (to the extent that this is an appropriate measurement) in the short term and medium term. Discuss pros and cons for increased use of environmentally related taxes/charges and additional potential market-based instruments for environmental policy in developing countries
- 6 provide overview of international best practices with regards to environmentally related taxes and user charges for water supply, for wastewater services, and for waste
- 7 identify which environmentally related taxes and user charges would be relevant for PA related activities
- 8 investigate new environmentally related economic instruments, including taxes, for example on water supply and water pollution (such as water abstraction taxes, wastewater taxes, or effluent taxes); waste management and recycling, such as landfills and plastic bags; agricultural sector: such as insecticides, pesticides; other (including tourism, energy, transport and air emissions)
- 9 investigate the appropriate use of tax/charge revenues from new environmentally related taxes (and other market-based instruments, such as permit trading or deposit-refund schemes). Assess the feasibility of replacing some of the current payroll taxes with environmentally related taxes – such as ecological tax reform
- 10 investigate the feasibility, appropriateness and (fiscal) policy implications of the possibility of tax revenue hypothecation and the potential for possible – the earmarking of environment taxes for environmental investment

## Annex 6 The World Bank: vehicles to direct loan decisions, and financial products

The main vehicle for defining the Bank's group assistance strategy for loans through IBRD and IDA are the *Country Assistance Strategies (CAS)*. These are developed for each client/country and include a detailed assessment of creditworthiness, overall development priorities, as well as an assessment of project performance in the past. With this analysis as a base, an overall strategy for financial and technical assistance for a particular country is developed.

Another vehicle for directing mainly IDA lending is a *Poverty Reduction Strategy Paper (PRSP)*. This is prepared annually by the countries themselves with assistance from the World Bank and the International Monetary Fund (IMF). A PRSP includes specific poverty reduction plans and actions which governments propose to undertake within the next three-year period, including specific programs within economic development, structural, institutional, and social policies. Upon receiving a PRSP, a joint assessment by the World Bank and the IMF is conducted to determine whether the PRSP actions are sound enough to be supported by concessional lending. Results of PRSP assessment have an effect on the IDA's loan package as well as on loans from the Poverty Reduction Growth Facility of IMF.

### **IFC offers a wide range of financial products:**

- Loans: 7-12 year maturity periods with a negotiable grace period, market interest rates plus risk premium. Co-financing is required.
- Equity financing: as the IFC will subscribe as a long-term investor usually retaining its investment interest for 8-15 years. Subscribes to between 5 per cent and 15 per cent of a project's equity and is never the largest shareholder in a project and will normally not hold more than a 35 per cent stake. However, it does not take an active management role in the company.
- Syndicated loans: the IFC will assist in mobilizing funding from different sources, including the domestic commercial banking sector.
- Risk management products: the IFC will provide currency and interest rate risks management products or a package combining several of those products. Such products are common in developing countries, where private companies use them to reduce risks associated with currency and interest rate fluctuations (such as swaps, futures and options). In developing countries, due to higher levels of risks and lower levels of country creditworthiness, use of such products is limited. The IFC attempts to close this gap and allow private companies into developing countries to take advantage its product offers.

### **IBRD fixed-spread loans and variable-spread loans**

The IBRD, which extends loans on market terms, provides fixed-spread loans (FSL) and variable-spread loans (VSL). For both loan types, the interest consists of variable-base-rate and spread. Variable base rate is equal to the 6-month LIBOR rate, which is revisable. For FSL, the spread is fixed for the loan period and reflects a project/currency risk premium. For VSL, the spread is tied to the LIBOR rate plus Bank's standard lending spread.



## Annex 7 10 Keys for action on municipal wastewater

### 1 Secure political commitment and domestic financial resources

A political climate has to be created in which high priority is assigned to all the aspects of sustainable municipal wastewater management, including the allocation of sufficient domestic resources.

### 2 Create an enabling environment at national and local levels

Public authorities remain responsible for water and wastewater services. The 'subsidiarity principle', this is the delegation of responsibilities to the appropriate level of governance, applies to the entire water sector. National authorities should create the policy, legal, regulatory, institutional and financial frameworks to support the delivery of services at the municipal level in a transparent, participatory and decentralized manner.

### 3 Do not restrict water supply and sanitation to taps and toilets

A holistic approach to water supply and sanitation should be adopted. This incorporates not only the provision of household services, but also various other components of water resource management, including protection of the resource that provides the water, wastewater collection, treatment, reuse and reallocation to the natural environment. Addressing the environmental dimensions mitigates direct and indirect impacts on human and ecosystem health.

### 4 Develop integrated urban water supply and sanitation management systems also addressing environmental impacts

Municipal wastewater management is part of a wider set of urban water services. The wastewater component is usually positioned at the end of a water resource management chain. Integration of relevant institutional, technical, sectoral, and costing issues of all major components of the chain is required. Consideration should be given to the joint development, management, and/or delivery of drinking water supply and sanitation services.

### 5 Adopt a long-term perspective, taking action step-by-step, starting now

The high costs of wastewater systems necessitate a long-term, step-by-step approach, minimizing current and future environmental and human health damage as much as possible within existing budgetary limits. Non-action imposes great costs on current and future generations and misses out on the potential of re-using valuable resources. A step-by-step approach allows for the implementation of feasible, tailor-made and cost-effective measures that will help to reach long-term management objectives.

### 6 Use well-defined time-lines, and time-bound targets and indicators

Properly quantified thresholds, time-bound targets and indicators are indispensable instruments for priority setting, resource allocation, progress reporting and evaluation.

### 7 Select appropriate technology for efficient and cost-effective use of water resources and consider ecological sanitation alternatives

Sound water management relies on the preservation and efficient utilization of water resources. Pollution prevention at the source, efficient use and re-use of water, and application of appropriate low-cost treatment technologies will result in a reduction in wastewater quantity and in investment savings related to construction, operation and maintenance of sewerage systems and treatment facilities. Depending on the local physical and socio-economic situation, different technologies will be appropriate. Eco-technology is a valid alternative to traditional engineering and technical solutions.

### 8 Apply demand-driven approaches

In selecting appropriate technology and management options attention must be given to users' preferences and their ability and willingness to pay. Comprehensive analyses of present and future societal demands are required, and strong support and acceptance from local communities should be secured. With such analyses realistic choices can be made from a wide range of technological, financial and management options. Different systems can be selected for different zones in urban areas.

### 9 Involve all stakeholders from the beginning and ensure transparency in management and decision-making processes

Efforts and actions on domestic sewage issues must involve pro-active participation and contributions of both governmental and non-governmental stakeholders. Actors stem from household and neighbourhood levels to regional, national and even international levels, and possibly the private sector. Early, continuous, targeted and transparent communication between all parties is required to establish firm partnerships. The private sector can act as a partner in building and improving infrastructure, in operating and maintaining of facilities, or in providing administrative services.

**10 Ensure financial stability and sustainability****10.1 Link the municipal wastewater sector to other economic sectors**

Sound and appropriate wastewater management may require substantial construction and operational investments in wastewater infrastructure and treatment facilities. Relative to the water supply sector, cost recovery in the wastewater sector is traditionally a long process. Developments in other (socio-) economic sectors, for instance water supply or tourism, may create opportunities to address sanitation at the same time. Linking wastewater management with other sectors can ensure faster cost-recovery, risk-reduction, financial stability and sustainable implementation.

**10.2 Introduce innovative financial mechanisms, including private sector involvement and public-public partnerships**

Traditionally, sanitation services have been provided by public authorities. Costs for investments, operation and maintenance, however, often outstrip their capacities, as do present and future requirements for serving the un-served. Therefore, innovative, more flexible and effective financial management mechanisms have to be considered, such as micro-financing, revolving funds, risk-sharing alternatives, municipal bonds. Public-private partnerships, and also public-public partnerships, are important tools to assist local governments in initial financing and operating the infrastructure for wastewater management.

**10.3 Consider social equity and solidarity to reach cost-recovery**

The employment of principles like 'the water user pays' and 'the polluter pays' is required to achieve stable and sustainable wastewater management with efficient cost-recovery systems. These principles should be applied in a socially acceptable way, considering solidarity and equitable sharing of costs by all citizens and facilities. Various user groups should be made aware of – and be able to identify with – concepts such as 'water-' and 'catchment solidarity'. All users will benefit from environmental improvement.

Source: UNEP/GPA 2004

## Annex 8 The PERSGA environmental fund<sup>43</sup>

The Member States of PERSGA are firmly wedded to the idea of establishing an Environmental Fund (EF) to support ongoing activities. The establishment of such a fund is felt to be timely and appropriate given that:

- The strategy document agrees on the basic vision and scope of environmental investments to be covered by the fund.
- The time period being considered in this strategy document is long, at 10 years, and the threats to the environment that are being addressed are also long-term and require a sustained response over a number of years.
- Existing national agencies cannot effectively manage the amount of funds and type of activities needed in the region. There is therefore a need for PERSGA to fulfil this role.
- There is a community of organizations in the Member States able to implement the range of activities needed to achieve the overall vision.
- There is strong support within the Member States for the fund's establishment.
- Such a fund would promote continuity, flexibility and co-financing collaborations between the public and private sectors.
- As evidenced by Member State commitments, such a fund would strategically direct and leverage financial resources to projects and practices that are of environmental significance to the region.
- There is perceived to be a level of capacity development and governance in PERSGA, and in the region, capable of establishing and managing such a fund.

A number of funding mechanisms are possible to support the activities envisioned through an Environmental Fund (EF). These are<sup>44</sup>:

- endowment;
- revolving fund;
- sinking fund; and/or
- a combination of two or more of these structures.

An *endowment* is a fund whose capital (also called its 'principal') is invested in order to generate a steady annual stream of income. Only the investment income is spent, while the principal is either maintained or increased. Only under unusual, specifically defined circumstances can the capital (corpus) of an endowment be invaded (such as spent), and typically the endowment must be replenished (such as restored to its previous size) within a short number of years afterwards. An EF's board typically reinvests a portion of the investment income in order to hedge against inflation and may also decide to reinvest a significant percentage of the investment income in order to increase the size of the endowment so as to be able to generate higher investment returns in later years, or because the money is not currently needed. Many EF experts believe that it is not cost-effective to establish an endowment fund whose capital (principal) is less than us\$5 million, because otherwise the annual investment income will be largely absorbed by administrative and transaction costs. In the case of PERSGA activities, if an endowment fund was to be used on its own, given yearly budgeted expenditure of between us\$3-5 million and probable investment returns of around 5 per cent on an endowment fund, the fund would need to be around us\$75 million. It is considered very unlikely that this level of funds could be raised.

A *sinking fund* is designed to disburse its entire capital plus its income over a designated period of time. This type of funding can be well adapted to the funding of projects with development or income-generating potential that are expected to become self-sufficient after an initial seed money or start-up phase, and it may then be possible to pay interest from such projects into an endowment fund. In addition, sinking funds offer donors the opportunity to earmark funding for specific projects or activities. Debt-for-nature swaps have been a major source of sinking funds denominated in local currencies (see Annex 10).

A *revolving fund* is periodically (for example annually) replenished through fees, taxes or levies collected or through donor contributions or swapped interest payments (such as on forgiven debt)<sup>45</sup>. In the case of PERSGA, while a large number of potential users' fees, taxes and other charges could potentially be used to generate revenue, it is not considered likely that realistic levels of user fees would enable the countries in the region to significantly replenish the revolving fund. In addition, while a large range of potential sources exist as already demonstrated, it is usually harder in practice, in some cases due to country-specific financial regulations, to prevent central exchequers from obtaining such funds which means that specifically earmarking them for conservation purposes can be problematic given other competing demands. It may therefore be more sensible for monies generated from user fees and conservation taxes to be used to help fund the national commitments of the Member States to the proposed budget. Furthermore, given the type of packages outlined in this strategy document, few

of the activities to be supported by PERSCA are likely to be of sufficient income generating potential to allow loan repayments necessary to replenish a revolving fund. However, the levels of user fees generated could turn out to be greater than expected, and the objective of user payments is one that should be supported, so the option should not be ruled out. This is especially so given that a revolving fund would help to ensure greater sustainability of activities than relying solely on a sinking fund. Indeed, many experts and fund managers now agree that the most effective EFs often include a combination of two or three funding mechanisms. New EFs are often under pressure to demonstrate concrete results and success quite rapidly, in order to secure contributions to the EF from other donors.

It is therefore *recommended that an EF be established with a revolving fund portion and a sinking fund portion*. With reference to the proposed budget, it is proposed that approximately 65 per cent of the funds for each year are spent from the sink funds, with the balance of 35 per cent from the revolving funds. The exact balance will depend greatly on the requirements of the possible external donor agencies, and the different packages that they chose to buy into, because some packages will be more suitable for different types of funds. It might be advisable in the start-up phase to spend a larger percentage of the total funds represented by sinking funds and finance some priority projects that can generate immediate impacts and benefit key stakeholders. Then as the 10-year period considered by the strategy evolves and greater levels of user payments become the norm, to spend greater amounts from the revolving portion of the fund.

## Annex 9 Criteria to evaluate the potential effectiveness of environmental taxes and charges

### Tax/charge design

- What are the current levels and past profiles of the economic instrument to be revised or related economic instruments if a new one is to be designed?
- What is the optimum (and/or feasible) point of application for the tax/charge (such as households, retailers, and wholesalers)?
- Is there an externality evaluation (in monetary or other units) supporting the design of the tax? If not, decide if one should be commissioned (if externality taxing in the Pigouvian style is to be followed), design and commission such a study if a decision is taken to commission one.

### Organizational arrangements

- Which institution should have the responsibility to design the tax/charge (Ministry of Environment, Finance, or other)?
- Who should be responsible for the implementation/administration (tax collection)?
- Who should decide whether there would be any exemptions from tax/charge?
- What are the planned changes to exemptions over time (for example exemptions to expire after a given number of years)?
- What was the collection efficiency for the existing economic instruments (to be revised or related to the one to be designed)?

### Purpose of tax/charge

- Should/could the tax/charge have a significant incentive effect for environmental protection and management?
- Should/could the tax/charge raise revenue for particular environmental activities (for example through earmarking)?
- Should/could the tax/charge raise revenue for the general national budget?

### Portfolio of policy instruments – Complementarity and substitutability of taxes with other instruments

- Is the tax/charge to be implemented on its own, or as a part of a whole package of economic or other policy instruments? If the latter, the whole package needs to be described and analysed to understand the full scale of the effects of the main tax/charge studied.
- Is the tax/charge a substitute for an existing instrument?
- Which alternative instruments (for example voluntary agreements) been included in the analysis of the impacts of the proposed tax/charge?

### Potential effect and effectiveness of the tax

- Is the tax/charge designed to have an incentive effect?
- Are there any cases of 'win-win' effects (environment and economic efficiency) which can be achieved, for example, by reducing other taxes as a result of generating revenue through the proposed environmental tax/charge?
- Are there likely to be other effects of the tax/charge such as technology or technical innovation (dynamic efficiency)?
- Is there any evidence that the tax/charge may create perverse incentives (such as evasion, relocation of industrial activities from one region to another)?

### Effect on producers

- What are the key sectors affected?
- What are the price effects at the different stages of the production or service chain?
- What is the level of tax as a percentage of the cost of production?
- To what extent are the price increases passed on through the value chain? Answering this and the rest of the questions here requires information about the price elasticity of demand and supply.

### Effect on consumers

- Which consumers are affected?
- What is the level of tax/charge as a percentage of the sale price?
- Have any concerns been raised by consumers of the effect of the tax, and if so, what are they and which are important? In order to answer this question, a reasonably well developed design of the proposed instrument has to be opened to stakeholder consultation. The same applies for the responses from producers.

**Equity and distributional effects**

- Are there significant differences of tax/charge burden across different sectors of the economy?
- Are there significant differences of tax/charge burden across different household (income) groups?
- Is there quantitative evidence for significant regional (geographical) effects?
- What are these differences, and are there any specifically disadvantaged groups?
- Is there quantitative evidence for significant distributional effects?
- Are there measures in place to compensate for distributional effects, and what are these?
- If only qualitative data are available, are the distributional effects deemed to be significant by the stakeholder consultation?

**Trade and competition issues**

- Have concerns been raised regarding adverse effects on competition (such as in water market if provided privately or in products and services that cause water pollution), and what are these?
- What evidence is there of adverse effects on competition?
- Who are the likely winners and losers? (this links to the effects of producers and consumers)

**Revenue**

- What is the projected tax/charge revenue (on an annual basis)?
- What is the level of revenue as a percentage of GDP, and as a percentage of the turnover affected sectors?
- Who is to determine the use of revenues? Are the revenues earmarked or not?
- What is the mechanism for using the revenues (such as earmarking, say, with an Environment Fund or through the general budgets)?
- What would the revenues be used for (to finance environmental or other investments, to support sectors, to replace other taxes)?
- Is the use of the revenues likely to lead to any likely positive environmental effects (linked to earmarking)?

**Employment**

- Have any concerns been raised on the employment impacts of the environmental tax/charge during the technical analysis and/or stakeholder consultation?
- Is there any evidence for this concern (if mainly voiced during stakeholder consultation)?
- Is there any indication/estimation of positive effects of taxes/charges on employment?
- Are there any cases likely to lead to win-win effects (environment benefit and employment gains)?

**Administrative and compliance cost**

- Who is managing the tax at the level of government?
- Is there an administrative burden and what constitutes this burden? Develop a cost estimate for this burden.
- If only qualitative evidence is available, would it be fair to say that the administrative burden is (a) large (b) medium (c) small (d) insignificant, where the brackets of costs for (a) to (d) will have to be decided during the design process.

Source: Speck and Özdemiroğlu 2004

## Annex 10 Debt-for-nature swaps

Debt-for-nature (or debt-for-environment) swaps allow highly indebted countries to increase their spending on environmental protection by reducing or converting a country's external debt in exchange for their commitment to spend an agreed portion of the reduced debt on domestic environmental improvements. Debt-for-nature swaps first appeared in 1984 and the first agreement was signed in 1987 for Bolivia<sup>46</sup>. The debt-for-nature swap accomplishes the twin goals of reducing the country's external debt and increasing the amount of resources available for environmental conservation.

Debt swaps can either be entered into bilaterally, be facilitated by a third party (typically an environmental NGO or broker), or become part of an overall debt rescheduling.

Debt swaps are not a solution for all indebted countries and many challenges must be addressed before a debt-for-nature swap is a viable solution, such as:

- debt is sufficiently large to encourage it to seek debt-relief
- debtor country makes the political decision to actively seek debt-relief and use a portion of the relief for environmental protection
- willingness on the part of creditors to convert the debt to environmental investments in the debtor country
- the mechanism designed to administer the debt-for-environment swap satisfies the interests of both creditor and debtor country
- sufficient local capacity exists to effectively supervise and operate the funds

Though a debt-for-nature swap can be very tempting for debtor countries to apply for, they have to be aware that the solution can end up being very costly for the debtor country as it might change their credit rating, thereby increasing the cost of obtaining new debt in the future. This is because entering into a debt swap can be interpreted as a sign of fragility, unstable public budgets, and, in general, poor economic balances perhaps worse than previously anticipated by rating institutions. It also might influence the creditors' willingness to roll over short-term debt and thereby causing a real debt crisis for the debtor country. If the economic situation is in such a poor condition that a default on debt is unavoidable, or the country already is in a default situation, these concerns are not relevant.

The main challenge facing environmental authorities interested in implementing debt-for-environment swaps is to design a 'win-win' package that will be more attractive to creditors than available alternatives. The correlation between bilateral indebtedness and the creditor's environmental interest in the debtor country may be very weak.

Besides the positive environmental effects for creditor countries, a rationale for creditors to enter a debt-for-nature swap can include having access to a big export market for environmental equipment or access to knowledge available from exporters in the creditor country. In the case of the Polish EcoFund, it is written into the principles of the EcoFund that equipment to institute the swap has to be bought in one of the contributing creditor countries in order for environmental projects to receive a grant from the EcoFund.

An additional reason for creditor countries to enter into a debt swap agreement could be to improve their own environment. If a debtor country is having problems repaying its foreign debt obligations, it often also has problems financing environmental investments. As pollution is often a cross-border problem, the creditor countries can benefit environmentally from the environmental investments made in neighbouring countries. In this case, the benefit of one euro invested in a neighbour country could be several times higher than the benefit of one euro invested at home. From this perspective, a debt swap could be a sound investment policy for the creditor country.

A debt-for-nature swap requires environmental agencies to prepare expenditure programs aimed at solving specific environmental problems, which are often an international priority as well as a national one (global or trans-boundary environmental problems). Another challenge is to convince creditors that their money will not be wasted or corrupted and that the debtor country will have the institutional capacity to manage foreign expenditure in a transparent, effective, and efficient manner, in accordance with best international standards. This is why, for example, the Polish EcoFund has a rigorous project-cycle management with a close focus on achieving high benefit/cost ratios. Also, donors will often require that the funds be considered 'additional' to existing budgetary resources allocated to environmental protection by the recipient state and not a substitute for them (OECD 1998).

The debt swap mentioned in the main report between Poland and a number of Paris Club member countries, which established the EcoFund, was the first of its kind in which the swap was used to create a fund or institution to handle the funds. Another example of a debt-for-nature swap came in 2002 when Russia fostered an agreement with Finland to swap up to US\$50 million in debt – 10 per cent of Russia's Soviet-era debt – for specific investment projects implemented by Finish firms that would reduce pollution in the Gulf of Finland and the Baltic Sea (OECD 2006). The Kyrgyz Republic and Georgia have also included a swap clause in their framework agreements with the Paris Club.

#### **Georgian debt-for-nature swap<sup>47</sup>**

In 2002-2003, the Ministry of Environment of the Republic of Georgia and the OECD Secretariat of the EAP Task Force produced a pre-feasibility study on establishing a debt-for-environment (and development) swap in Georgia. The study concluded that a debt-for-environment swap between Georgia and creditors in the Paris Club is feasible and could generate benefits for Georgia and the international community, including the creditor countries. The debt-for-nature swap is estimated to generate between €31 and 56 million over the period 2005-2020. Though the estimate seems small, by 2011 it would nearly double the level of environmental investment compared to 2001.

A review of Georgia's environmental priorities and creditors' preferences suggests that the most promising projects could be those that aim to:

- reduce emissions of greenhouse gases that affect global climate
- reduce pollution of international waters
- protect biological diversity
- facilitate access to safe sanitation services for the poor, with a focus on small communities

Therefore, carefully selecting the most cost-effective projects and analyzing the requirements for co-financing from other sources will be critical when prioritizing projects, in order to make a real difference in any of the priority areas listed above.

The feasibility study recommended key institutional characteristics for managing a debt-for-environment swap, including:

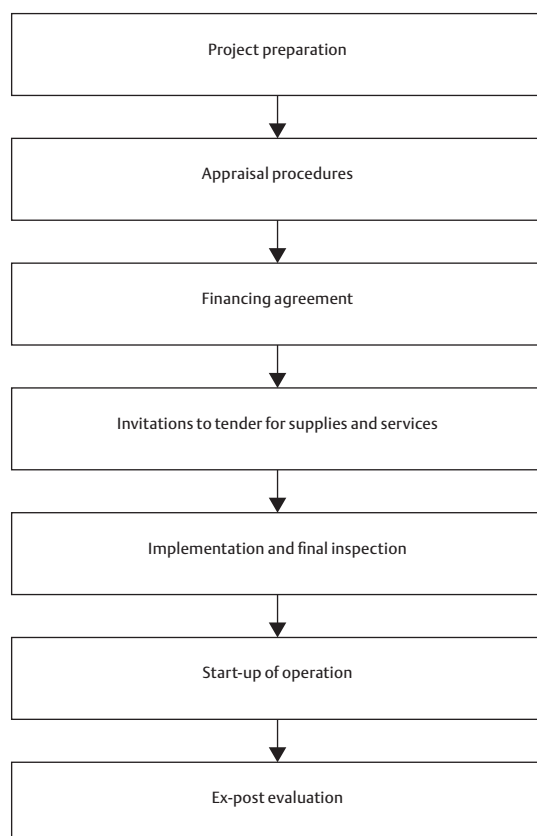
- The core of the institutional framework should be a locally established financial facility, which would select projects competitively under the supervision of relevant stakeholders.
- In order to avoid any inflationary impacts and to manage the absorptive capacity of the project pipeline, the swap would involve the Georgian government transferring the entire flow of future debt repayments over an agreed period (swap-as-you-repay scheme), rather than a one-time transfer of the present value of debt.
- The local financial facility should be established as a modular structure with a 'core' revolving fund, which would receive periodic injections of resources equivalent to the amount of forgiven debt in that period. The facility should however be able to open parallel accounts and financing 'windows' – some with endowments, some sinking, and others revolving, depending on the preferences of investors and the nature of the financing demand.
- A prudent strategy would be to finance projects with grants only. As institutional capacity and financial markets develop, other financial products can be considered. Co-financing should always be required to achieve financial leverage.
- Accountability to all stakeholders, but freedom from ad hoc political interference, will be necessary to win international credibility and hence attract resources. Accountability, transparency, and efficiency must be cornerstones for governance and everyday operations. The Governing Board of the financial facility should be open to creditors involved in the swap. Professional executive management should have a high degree of operational independence in project-cycle management, subject to strict accountability for performance. International good practices in public expenditure management should be applied.
- The project cycle should have clearly defined stages, responsibilities, procedures, and project selection criteria. Cost effectiveness should be a key quantitative basis for the appraisal and selection of projects. Subjective, discretionary elements in project selection should be minimized and subject to procedures.
- Competition in procurement under the swap scheme should be maximized to boost efficiency.



## Annex 11 Working with the KfW Development Bank

This Annex gives more detail on the procedures of financial cooperation with the KfW Development Bank. The procedures are in principle the same for other IFIs though some differences can be expected.

All projects and programmes realized between the partner country and KfW Development Bank under financial cooperation go through the same cycle of preparation and implementation. At all stages of the cycle, the projects are subject to a comprehensive quality assurance system.



### Appraisal

A consultant has gathered information on site, which is presented in the feasibility study. The consultant submits the study to the project-executing agency and KfW Development Bank.

Once the feasibility study is available, KfW starts the actual project appraisal at the project site.

The appraisal focuses on the following items, among others:

- the legal, institutional and macro-economic framework
- the economic and management capacities of the project-executing agency
- the economic feasibility of the project concept
- the risks and the objectives with regard to development policy
- the general interests of the target group
- environmental constraints
- the technical adequacy of the project

For example, in the specific case of a drinking water supply project, the data provided on the coverage of future water needs are also examined, as well as investment and operating costs. It is clarified who will bear the related costs. All parties involved agree on an implementation schedule, which specifies who has to do what, how and when. After all, once the public standpipes planned have been completed they are to supply the population and have to be maintained.

KfW presents the results of the in-depth appraisal report, which is submitted to the German government for its financing decision. The appraisal report also makes a proposal about the volume, the terms and conditions of the funds to be provided by the German government.

**Financing agreement**

If the German federal government takes a positive decision on the appraised project, KfW Development Bank has the green light to start negotiations with the government of the partner country and the project-executing agency on the financing and project agreement.

The financing and project agreement not only states the details of the financing – or in the case of a loan the redemption and interest details – but also specifies details concerning project implementation and future operation. The financing and project agreement comprises measures to be taken by the public authorities in the partner country, such as:

- the provision of sufficient budget funds to finance the country's own contribution to the project
- the adjustment of tariffs and fees in order to cover future operating costs

With the signing of the financing agreement, the green light is given to the project implementation phase.

**Implementation of the project and final inspection**

The project-executing agency is responsible for the implementation of the project; KfW is in charge of monitoring and ex-post evaluation.

Various protagonists are involved in the project: the project-executing agency, consultants, suppliers, building companies, the local population, KfW, and possibly other organizations.

All activities, from the turning of the 'first sod' to the final inspection after completion, have been agreed with the executing agency, are specified in the agreements and will now be implemented:

- project activities
- training measures for the project staff
- tendering and award of contract for supplies and services
- supervision of construction and of the adherence to the contracts
- progress reviews of project activities
- final inspection

The phase of financing by KfW Development Bank ends with the final inspection. Immediately after the technical completion of the project, KfW examines whether the facilities established are functioning and the start of operation is possible.

The final inspection may reveal that follow-up measures are necessary, for instance, personnel support in the form of training measures, to ensure the development success of the project. After the final inspection, the project facilities will officially start operating. Three to four years later, an ex-post evaluation will determine whether the development objectives originally envisioned have been achieved.

## Annex 12 Financing mechanism for marine conservation

Financing mechanism	Source of revenue
<b>Government revenue allocations</b>	
Direct allocations from government budgets	Government budget revenues
Government bonds and taxes earmarked for conservation	Investors, tax payers
Lottery revenues	Gamblers
Premium-priced motor vehicle license plates	Vehicle owners
Wildlife stamps	Postal customers, hunters, fishermen
Debt relief	Donors, government, NGOs
<b>Grants and donations</b>	
Bilateral and multilateral donors	Donor agencies
Foundations	Individuals, corporations
Non-governmental organisations (NGOs)	NGO members and supporters
Private sector	Investors
Conservation trust funds	Multi-source
<b>Tourism revenues</b>	
Protected area entry fees	Visitors to parks
Diving and yachting fees	Divers, boaters
Tourism-related operations of protected area agencies	Tourism operators, tourists
Airport passenger fees and cruise ship fees, taxes and fines	Tourists, cruise lines
Hotel taxes	Hotel clients
Voluntary contributions by tourists and tourism operators	Tourism operators, tourists
<b>Real estate and development rights</b>	
Purchases or donations of land and/or underwater property	Property owners, donors
Conservation easements	Property owners, donors
Real estate tax surcharges for conservation	Property owners, donors
Tradable development rights and wetland banking	Property developers
Conservation concessions	Conservation investors
<b>Fishing industry revenues</b>	
Tradable fishing quotas	Commercial fishermen
Fish catch and services levies	Commercial fishermen
Eco-labelling and product certification	Seafood producers, wholesalers, retailers and end-use purchasers of ornamental tropical fish and corals
Fishing access payments	Governments, associations of and/or individual fishermen
Recreational fishing license fees and excise taxes	Recreational fishermen
Fines for illegal fishing	Fishermen
<b>Energy and mining revenues</b>	
Oil spill fines and funds	Energy companies, donors
Royalties and fees from offshore mining and oil and gas	Energy and mining companies
Right-of-way fees for oil and gas pipelines and telecommunications infrastructure	Private companies
Hydroelectric power revenues	Power producers
Voluntary contributions by energy companies	Energy companies
<b>For-profit investments linked to marine conservation</b>	
Private sector investments promoting biodiversity conservation	Private investors
Biodiversity prospecting	Pharmaceutical companies

Source: Spergel and Moye 2004

# Endnotes

- 1 Based on the report titled *Financing of the East Asian Seas Action Plan*.
- 2 Budget amount after deducting the special contribution from the United Kingdom towards the costs of office accommodation.
- 3 Egypt belongs both to the Mediterranean Regional Sea and to Red Sea and Gulf of Aden (PERSGA)
- 4 Data for the Gini index and upper 10 deciles data are from World Development Indicators 2005: <http://devdata.worldbank.org/wdi2005/Cover.htm>. As the years in the report vary widely, interpretation of the results should be taken with caution. They are only to be seen as a rough measure of the income distribution in the countries. The Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative percentages of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and the hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. A Gini index of zero represents perfect equality and 100, perfect inequality. The Upper 10th deciles measure the share of total income or consumption of the richest 10 per cent of the population.
- 5 PPP refers to Purchasing Power Parity. PPP statistics adjust for cost of living differences by replacing normal exchange rates with rates designed to equalize the prices of a standard 'basket' of goods and services.
- 6 Most of this section is inspired from: PPC Project Financing Workshop; A stand-alone guide: How to Promote Municipal Infrastructure Projects in the EECCA and SEE countries, September 2004. For further information on the elements discussed in this section, we highly recommend reading this report.
- 7 For a more detailed overview of financing regional public goods see UNEP 2000.
- 8 See more on [www.oecd.org/dac](http://www.oecd.org/dac).
- 9 Source: OECD Statistical Annex of the 2005 Development Co-operation Report. Besides DAC members many other countries like Saudi Arabia, Kuwait, India and China are also known to have large aid programmes. However, as data from these countries are not collected and reported systematically they can not be meaningfully comparable to the above data and therefore have not been included in the figure. Fifteen non-DAC donors has reported a total of us\$3.7 billion net ODA in 2004, of which us\$1 billion was from other OECD members and us\$2 billion from Arab countries.
- 10 See this website for the list of political focal points.  
[www.gefweb.org/participants/Focal\\_Points/Political/political.html#d](http://www.gefweb.org/participants/Focal_Points/Political/political.html#d)
- 11 See this website for the list of operational focal points.  
[www.gefweb.org/participants/Focal\\_Points/Operational/operational.html](http://www.gefweb.org/participants/Focal_Points/Operational/operational.html)
- 12 The 31 December 2005 exchange rate: 100 PLN = 30.56 US\$
- 13 IFI's are mainly financed by its member countries. The member countries contribute a specific amount of resources, which together with possible bond issues allow for subsequent disbursement.
- 14 See [www.worldbank.org](http://www.worldbank.org) for more information on The World Bank and its associated financial institutions, strategies and programmes.
- 15 See [www.ifc.org](http://www.ifc.org) for more information.
- 16 See [www.miga.org](http://www.miga.org) for more information.
- 17 See [www.afdb.org](http://www.afdb.org) for more information
- 18 For a thorough description of the policies in Asian Development Bank and its affiliates see ADB's Operations Manual: [www.adb.org/Documents/Manuals/Operations/default.asp?p=aadb](http://www.adb.org/Documents/Manuals/Operations/default.asp?p=aadb)
- 19 See the annual report 2004 for further information.
- 20 All PERSGA member countries are also members of the Islamic Development Bank.
- 21 For a full list of the services provided by IDB please refer to [www.isdb.org](http://www.isdb.org).
- 22 One Islamic Dinar (ID) is equivalent to one Special Drawing Right (SDR) of the IMF.
- 23 For more information see at [www.kfw.de](http://www.kfw.de)
- 24 At present Egypt is classified in risk group 4, Jordan in 6, Saudi Arabia in 2, Somalia and Sudan in 7 and Yemen in 6. Djibouti is not classified.
- 25 Only export credits with a maturity above one year is handled in this section. These are typically capital goods which are sold on long credits.
- 26 The price for a capital good sold on an export credit is the sum of the cost of the good and the cost of financing the credit. The financing costs are usually interest for the loan and a premium for the political and commercial risk. It is the premium for the political and commercial risk that ECAs charge and it is this premium that previously did not reflect the risk involved.

- 27 Premium rate convergence is that all ECAs charge the same minimum premiums  
(for the political risk). Thereby there will be a floor below which the premium cannot fall.
- 28 The country classification can be seen at: [www.oecd.org/dataoecd/47/29/3782900.pdf](http://www.oecd.org/dataoecd/47/29/3782900.pdf).
- 29 This report focuses on the fiscal elements of environmental and environmentally-related  
economic instruments. Issues on the potential environmental effects of these instruments  
through changing the behaviour of polluters and users for the benefit of the environment  
are not addressed.
- 30 Typical elements covered by the command and control approach are: waste storage container  
design standards; air, water and noise emissions criteria; pollution control design standards,  
and the like.
- 31 In HM Treasury (2002) there are some good examples of where regulation has been the best the  
best instrument. These are the EU National Emissions Ceiling Directive, the Montreal Protocol  
(ozone-depleting chemicals), and The Building Regulations requirements in the UK. An example  
of poor regulation is the EU Directives on bathing waters.
- 32 Eastern Europe countries in transition have found these preconditions to be particularly  
important (IADB 2003).
- 33 For a list of the economic instruments implemented in Denmark see DEPA 1999.
- 34 See DEPA, 1999 (chapter 9) for a description of the subsidies used in Denmark.
- 35 Mainly OECD EAP Task Force, Regional Environmental Centre in Hungary, Project Preparation  
Committee, the World Bank Group, and the European Bank of Reconstruction and Development.
- 36 This section largely builds on the guidelines and experiences from the Project Preparation  
Committee (PPC). The PPC is a network of stakeholders involved in preparing and financing  
environmental investments. The network includes over 20 multilateral and bilateral donors, IFIs,  
regional governments, NGOs and the private sector. Their focus is on Eastern Europe, the Caucasus  
and Central Asia and South Eastern Europe. Its Secretariat is located at the European Bank for  
Reconstruction and Development (EBRD).
- 37 Only the headlines and main ideas are presented here. See UNEP (2004) for a thoroughly  
description of the different options and examples of where they have been used. See also  
UNEP/GPA (2004) which also has four phases. In that report, ten key points have been formulated  
for local and national action on municipal wastewater. These 10 keys are listed in Annex 7.  
The 10 keys for action cover policy issues, management approaches, technology selection,  
and financing mechanisms
- 38 The policy recommendations are also based on IADB (2003).
- 39 HM Treasury, 2002. In this report, examples are given on how economic instruments have been  
implemented in the United Kingdom and which considerations they have made.
- 40 For further information on MBI studies, please refer to Eunomia (2003).
- 41 For further information on the whole issue of accountability, please refer to Allen and Tomassi  
(2001), Sciavo-Campo and Tomassi (1999), World Bank (1998).
- 42 The main focus is directed to study taxes and charges. However, we should not exclusively focus  
on these market-based instruments but also consider other MBIs.
- 43 Taken from Development of a Strategy and Business Plan for PERSGA (2004-2014) SSA C/2004/0016  
44 <http://conservationfinance.org/>
- 45 The Belize Protected Areas Conservation Trust for example is a revolving fund whose capital  
comes partially from a US\$3.75 fee on visitors entering the country, and partially from an  
earmarked 20 per cent from fees for PA entrance, recreational licenses and permits, and cruise  
ships. Five percent of the collected revenues are managed as a permanent endowment for  
emergency purposes.
- 46 In Pagiola and others (2002) a list of Debt-for-nature swaps entered between 1990 and 1997  
is listed.
- 47 The Georgian debt-for-nature swap is taken from OECD 2006 Annex 6. More information can be  
found at: Georgian Ministry of Environment and OECD EAP Task Force (2003).

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