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Use of Economic Instruments to Promote Environmental Conservation in the United Republic of Tanzania

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Abbreviations and Acronyms Used in this Report

BAT	best available technology
CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
CNG	compressed natural gas
CO ₂	carbon dioxide
curr.	currency
CV	curriculum vitae
CZK	Czech Crown (currency)
EBRD	European Bank for Reconstruction and Development
EDF	European Development Fund
EF	Environmental Fund
EPA	Environment Protection Agency
EPEEF	Environmental Protection and Energy Efficiency Fund of Croatia
EU	European Union
EUR	Euro (currency)
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GPP	green public procurement
HRK	Croatian Kuna (currency)
IFI	international financing institution
IPA	Instrument for Pre-Accession Assistance (EU support scheme)
IT	information technology
LCC	life-cycle cost
MEUR	millions of EUR
MEEW	Ministry of Environment, Energy and Water
MUSD	millions of USD
NGO	non-governmental organization
NO ₂	nitrogen dioxide
ntl.	national
O&M	operation and maintenance
OECD	Organization for Economic Cooperation and Development
p.e.	population equivalent
PAF	Project Application Form
PCF	project completion form
PCM	project cycle management
PEEM	public environmental expenditure management
PIF	Project Information Form
PLN	Polish Zloty (currency)
PMU	project management unit
PPP	Polluter Pays Principle
PR	public relations
PRAG	Practical Guide to Contract Procedures for EC External Actions
RES	Renewable energy sources
SEF	State Environmental Fund of the Czech Republic
SMEs	small and medium sized enterprises
SO ₂	sulfur dioxide
UNDP	United Nations Development Program
USA	United States of America
USD	United States Dollar (currency)

Executive Summary

The current report has been supported with funding from the UNDP/UNEP Poverty and Environment Initiative and mandated by UNDP and the Ministry of Finance and Economic Affairs of the United Republic of Tanzania under the UN Joint Program on Environment JP11 and focuses on the use of economic instruments to promote environmental conservation in Tanzania.

The report includes information on the current use of economic and financial instruments for environmental policy in Tanzania to promote sustainable utilization of environment and natural resources for growth and poverty reduction, and identifies areas where further progress could be achieved in line with good international experience. This is done for a number of sectors, including waste management, water, energy, transport, wildlife and biodiversity protection, agriculture, forestry, fisheries, mining and manufacturing.

The report highlights the following current use of economic and financial instruments for environmental policy in Tanzania:

- Existing excise taxes on petroleum products, as well as transport related excise taxes already contribute significantly to overall tax revenue in Tanzania.
- A plastic bag tax has obviously had a positive impact in terms of reducing bag use and thus waste from such bags. However, detailed information on the effectiveness of the tax is not yet available.
- User charges for water and energy use are widely introduced and especially in the case of new infrastructure investments, relevant authorities aspire to design them in a cost covering manner. However, a systematic view (e.g., so called water sector financing strategy) on rationalizing and sustaining sector finance in the longer term is lacking.
- User fees for wildlife resources and entrance fees for national parks have been widely introduced and generate significant revenue. In addition, the Tanzania Wildlife Protection Fund has been operating for many years.
- The Government has started to require mining companies to systematically set aside funds that can be used in case of environmental damage and rehabilitation, as well as safety and occupational health

Based on above mentioned experience and sector analysis, the report concludes that there would be numerous areas in which Tanzania could achieve progress in promoting and further implementing environmental fiscal reform. The proposed Tanzania EFR action plan includes the following proposals:

- Elaborate legislation for and introduce product taxes
- Elaborate legislation for and inform political process leading to the introduction of a CO₂ tax
- Establish an Environmental Fund
- Introduce green public procurement
- Enable and implement work aimed at greening budgeting processes including MTEF planning and execution

- Promote and work towards cost covering user charges (e.g., elaborate water sector financing strategy)
- Work towards greening commercial finance
- Work towards progress with EFR in the EAC region and internationally
- Realize CDM projects
- Consider introduction of pollution charges/taxes
- Establish EFR Commission and ensure regular meetings of this Commission

1. Background to this Report

The current report has been supported with funding from the UNDP/UNEP Poverty and Environment Initiative and mandated by UNDP and the Ministry of Finance and Economic Affairs of the United Republic of Tanzania under the UN Joint Program on Environment JP11 and focuses on the use of economic instruments to promote environmental conservation in Tanzania.

In line with the consultant's Terms of Reference, "the study aims at providing recommendations on how Tanzania could benefit from the potential for harnessing the use of use economic instruments to achieve a more sustainable management of natural resources and environmental conservation while contributing to achieving priorities of MKUKUTA II specifically the pro-poor growth, specifically addressing priorities identified in MKUKUTA II. The overall objective of the consultancy is to critically assess the extent to which the existing economic instruments have contributed to the achievements of environmental management objectives for which they were introduced as well as examine the causes of the failure. Furthermore, the study will establish the opportunities for the use of economic instruments in supporting poverty reduction and improved community wellbeing. The study will propose actions to improve the use of selected economic instruments in meeting national development objectives including sustainable use of environment and natural resources for growth and poverty reduction."

The report is structured as follows:

- Chapter 2 provides for an overview of definitions and concepts as regards economic instruments used for environmental policy
- Chapters 3 and 4 provide for an overview of the relevant fiscal and environmental policy context in Tanzania
- Chapters 5-12 contains information on the use of economic instruments in a number of sectors, including: the waste management sector, the water sector, the energy sector, the transport sector, the wildlife/biodiversity protection sector, the agriculture sector, the forestry sector, the fisheries, sector, the mining sector and the manufacturing sector. For each of these sector/chapters, there is a section on typology of economic instruments typically used in this sector including respective international experience. This is followed by a discussion of economic instruments currently used in Tanzania and recommendations on further increasing the effectiveness of such instruments. Each chapter is concluded with a brief discussion on options to extend the use of economic instruments in the given sector.
- Chapter 13 summarizes and concludes all previous chapters by providing an Action Plan for enhancing the use of economic instruments to promote environmental conservation in Tanzania.

Various annexes provide further information to specific issues raised in the main report.

2. Definitions and concepts

In the consultant's opinion, the most robust, widely used and tested definitions and classification of economic and financial instruments in environmental policy is that developed by the Organization for Economic Cooperation and Development headquartered in Paris. The 1998 OECD publication entitled "Economic Instruments for Pollution Control and Natural Resources Management in OECD Countries", offered that the term "economic instrument" includes the following types of instruments:

- Emission taxes: direct payments based on the measurement or estimation of the quantity and quality of a pollutant.
- User charges: payments for the cost of collective services. They are primarily used as a financing device by local authorities e.g. for the collection and treatment of solid waste and sewage water. In the case of natural resource management, user fees are payments for the use of a natural resource (e.g. park, fishing, or hunting facility).
- Product taxes: applied to products that create pollution either through their manufacture, consumption, or disposal (e.g. fertilizers, pesticides, or batteries). Product taxes are intended to modify the relative prices of the products and/or to finance collection and treatment systems.
- Taxes for natural resource management are unrequited payments for the use of natural resources.
- Marketable (tradable, transferable) permits, rights, or quotas (also referred to as "emissions trading") are based on the principle that any increase in emission or in the use of natural resources must be offset by a decrease of an equivalent, or sometimes greater, quantity. Two broad types of tradable permit systems are in operation: those based on emission reduction credits (ERCs), and those based on ex ante allocations ("cap-and-trade").
 - The former approach takes a "business as usual" scenario as the starting point, and compares this baseline with actual performance. If an emitter/user performs better than the anticipated baseline, a "credit" is earned. This credit can then either be used by the emitter/user himself, either at the current location or elsewhere, or sold to some other emitter whose emissions are higher than the accepted baseline (and presumably at a lower price than what it would cost the latter to abate on his own).
 - The "cap-and-trade" approach sets an overall emission/use limit (i.e. the "cap") and requires all emitters to acquire a share in this total before they can emit. Emitters may be allocated their shares free-of-charge by a relevant environmental authority, or the shares may be auctioned. Regardless of how the initial allocation of shares is determined, their owners can then either utilize them as emission permits in current production, save them for future use (if "banking" is allowed), or trade them with other emitters.
- Deposit-refund systems: payments made when purchasing a product (e.g. packaging). The payment (deposit) is fully or partially reimbursed when the product is returned to the dealer or a specialized treatment facility.
- Non-compliance fees: 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, profits linked to reduced (non-) compliance costs, etc.
- Performance bonds: used to guarantee compliance with environmental or natural resources requirements, polluters or users may be required to pay a deposit in the form of a "bond". The bond is refunded when compliance is achieved.
- Liability payments: payments made under civil law to compensate for the damage caused by a polluting activity. Such payments can be made to "victims" (e.g. in cases of chronic or accidental pollution) or to the government. They can operate in the context of specific liability rules and compensation schemes, or compensation funds financed by contributions from potential polluters (e.g. funds for oil spills).

- [Environmental/green] subsidies: all forms of explicit financial assistance to polluters, users of natural resources [and other entities], e.g. grants, soft loans, tax breaks, accelerated depreciation, etc. for environmental protection [related investments and projects].

Note that in practice, the term “financial instrument” is often used for the last category mentioned in the above list, e.g., environmental/green subsidies.

The 1998 OECD publication entitled “Economic Instruments for Pollution Control and Natural Resources Management in OECD Countries” also explains in detail the differences in the terms “taxes”, “charges/fees” and “levies” as follows:

The OECD classification defines taxes as “compulsory, unrequited payments to general government. Taxes are unrequited in the sense that benefits provided by government to taxpayers are not normally in proportion to their payments.” The term “general government” is defined as “supra-national authorities, the central administration and the agencies whose operations are under its effective control, state and local governments and their administrations, social security schemes and autonomous governmental entities, excluding public enterprises”. Note that a tax (unrequited) can be earmarked if it is decided that a certain percentage of the revenue will be affected to a specific purpose (e.g. when part of a gasoline tax is earmarked for road building).

The OECD classification also uses the terms “fees” and “charges” (as opposed to “taxes”) and “levies”. In practice, the terms charges and fees are often used interchangeably. Therefore, charges and fees will be defined as compulsory requited payments to either general government or to bodies outside general government, such as for instance an environmental fund or a water management board. The general term “levy” could be construed as covering all types of compulsory payments. Note that, according to the OECD classification there are “borderline-cases” where a levy could be considered as “unrequited”, i.e. as a “tax” (if the payment is made to “general government” as opposed to a charge or fee):

- where the levy greatly exceeds the cost of providing the service;
- where the payer of the levy is not the receiver of the benefit (e.g. a fee collected from slaughterhouses to finance a service which is provided to farmers);
- where government is not providing a specific service in return for the levy which it receives even though a license may be issued to the payer (e.g. where the government grants a hunting, fishing or shooting license which is not accompanied by the right to use a specific area of government land);
- where the benefits are only received by those paying the levy but the benefits received by each individual are not necessarily in proportion to his payments (e.g. a milk marketing levy paid by dairy farmers and used to promote the consumption of milk).

The [OECD eco-tax database](#) explains further as follows:

This database defines environmentally related taxes as any compulsory, unrequited payment to general government levied on tax-bases deemed to be of particular environmental relevance. Taxes are unrequited in the sense that benefits provided by government to taxpayers are not normally in proportion to their payments.

Requited compulsory payments to the government, such as fees and charges that are levied more or less in proportion to services provided (e.g. the amount of wastes collected and treated). The term levy can be used to cover both taxes and, fees and charges.

Above mentioned classification and definition of economic instruments will be used throughout this present report.

In recent years a number of studies were carried out on the use of economic and financial instruments for environmental policy covering a range of countries and using above mentioned

classification and definitions. These studies¹ basically covered all European countries, non-European OECD countries (Australia, Canada, Chile, Israel, Japan, Mexico, New Zealand, South Korea, Turkey, USA), as well as countries that followed from the dissolution of the former Soviet Union: EECCA countries, whereas the acronym EECCA stands for Eastern Europe, Caucasus and Central Asia.

It is from these surveys and databases that we can draw reliable and methodologically correct information that allows for the comparison of the use of economic instruments in environmental policy between countries.

Unfortunately no similar regional studies have been completed so far for African, South American and Asian countries. A number of studies on the use of economic instruments on the level of one single, specific country have, however, been prepared. For East Africa, for example, such studies have been recently prepared for Uganda² and Rwanda³.

TEXTBOX 1: Experience with EFR in Uganda

Uganda makes use of a range of environmental taxes and charges but the overall concept of an environmental fiscal reform (EFR) as promoted by international organizations, such as the OECD and the World Bank, is not well-known. The underlying principle of EFR is seen as an important part of the development policy tool kit as it allows – when designed properly – to achieve multiple benefits simultaneously namely in the fiscal/economical field, environmental sphere as well as with regard to poverty eradication. When analysing the situation with environmental taxes in Uganda applying the broadly accepted definition of an environmental tax, then it can be concluded that taxes levied on energy products are significant in terms of revenues generated and that the tax rates are rather on the higher end when compared internationally.

The discussion of the two main aspects of an EFR, i.e. the environmental and fiscal dimension, show that there are some challenges Uganda is facing – namely addressing environmental challenges and the mobilization of domestic budgetary revenues. One of the issues at stake is how to generate additional revenues through domestic resources and three different options can be thought of: 1) increasing the efficiency in tax collection; 2) increasing the tax rates of existing taxes; 3) broadening the tax base – including the introduction of new taxes including environmental taxes.

International experience shows that EFR instruments can be appropriate tools for addressing environmental problems and for the generation of fiscal resources. However, their design has to be based on the relevant country-specific conditions. Reports studying the options of the more widespread application of EFR in Uganda and the implications of an EFR qualitatively as well as quantitatively in detail have not been identified. Such studies are very important as they show policy-makers the benefits of a properly designed EFR package. Transfer of experiences with EFR, in particular from developed countries to developing countries, are only of limited use as the environmental problems and challenges as well as socio-economic considerations are very different. For instance, Uganda has huge challenges to cope with regarding the loss of biodiversity, land degradation and to construct additional electricity generation capacity as a source of power and thus reduce the pressure on the environment, in particular under the consideration that more than 90 percent of total energy consumption is fuel wood.

Source: EC Framework Contract Commission 2007 Lot 4, Contract nr. 2008/160146/2: OPTIONS FOR PROMOTING ENVIRONMENTAL FISCAL REFORM IN EC DEVELOPMENT COOPERATION. Final draft version, May 2010.

¹ Reference is made here to ([OECD, 1998](#)), which covered OECD countries, ([Klarer, 1999](#)) which covered Central and Eastern European countries and ([OECD, 2003](#)) which covered EECCA countries. Up to date information on the use of economic instruments in all mentioned countries, except for EECCA countries, is available in the joint [OECD-EEA internet database](#) on instruments used for environmental policy and natural resources management.

² In addition to the EC study mentioned in the text, see “UNDP and UNPEI (2009): Economic Instruments for Promoting Sustainable Natural Resource Use, Environmental Sustainability and Responses to Climate Change” for another report focusing on Uganda

³ The Rwanda report is currently in preparation and a finalized version will be available soon from [unpei.org](#).

It should be mentioned that economic and financial instruments are nowadays often discussed in the context of a larger “environmental fiscal reform” or in the context of “green economy”. Below follows a brief introduction to environmental fiscal reform.

According to the European Environment Agency [EEA 2005], Environmental Tax Reform (ETR) can be defined as a reform of the national tax system where there is a shift of the burden of taxation from conventional taxes, for example on labor, to environmentally damaging activities, such as resource use or pollution. The burden of taxes should fall more on 'bads' than 'goods' so that appropriate signals are given to consumers and producers and the tax burdens across the economy are better distributed from a sustainable development perspective. The economic rationale is that welfare gains are generated by reducing taxes on labor or capital and increasing taxes on externalities and hence helping to avoid 'welfare-reducing' activities. A typical case is an increase in the tax on energy, and a simultaneous reduction in labor taxes or social security contributions.

Environmental fiscal reform (EFR) is a broader approach, which focuses not just on shifting taxes and tax burdens, but also on reforming economically motivated subsidies, some of which are harmful to the environment and may have outlived their rationale. EFR is a more recent development than ETR and offers more opportunities for progress.

EFR supports the implementation of the following key environmental policy principles, which are now firmly established in many countries:

- Polluter Pays Principle
- User Pays Principle
- Sustainable Development Principle
- Prevention and Precautionary Principles
- Modern integrated pollution prevention and control instruments
- Promotion of environmental technologies, environmental industry and technological innovation

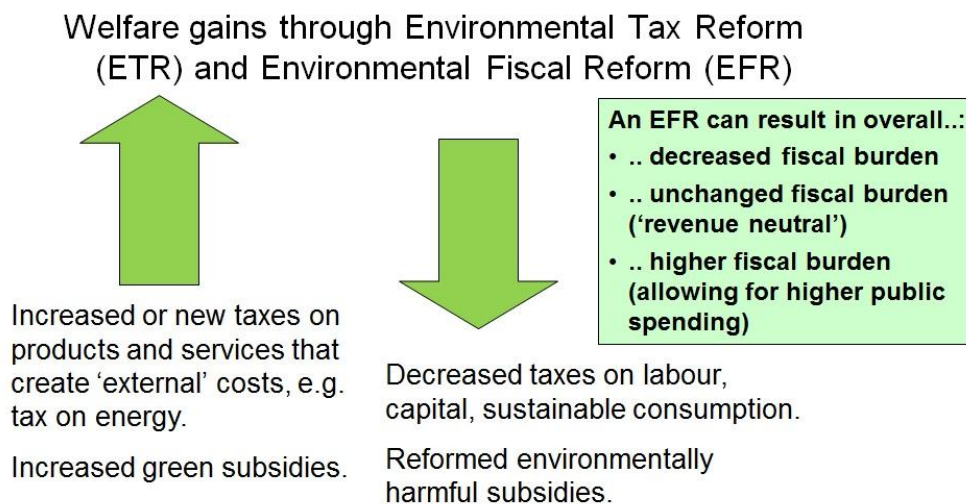
The theoretical rationale and justification for EFR draws on the concepts of scarcity, externalities and resource efficiency:

- Most environmental assets are public goods which have an obvious value but are not exchanged on markets (e.g., clean air, clean water, fishery resources, ecosystems, etc.), and therefore no price emerges to signal relative scarcity. EFR can assign such price reflecting scarcity.
- Economic activities generate pollution and waste that leads to costs to others – ‘externalities’ (e.g., increased health costs due to air pollution related respiratory diseases). EFR can help ‘internalize’ such ‘external’ costs.
- By providing appropriate price and subsidy signals, EFR can also encourage a more efficient allocation and use of natural resources.

EFR can be one important way to “green” the economy, a concept which is now very high on the political agenda as evidenced by the following initiatives and processes:

- OECD’s Green Growth Strategy: www.oecd.org/greengrowth
- UNEP’s Green Economy Initiative: <http://www.unep.org/greeneconomy/>
- The European Union’s Environmental Technology Action Plan (ETAP) and Sustainable Consumption and Production (SCP) Action Plan, see <http://ec.europa.eu/environment/etap/> and http://ec.europa.eu/environment/eussd/escp_en.htm
- “Green Economy” will be the leading theme at the Rio+20 Summit to be held in 2012 in Rio de Janeiro, see Earth Summit 2012 website: <http://www.earthsummit2012.org/>
- UNESCAP’s policy focus on green growth in the Asia and Pacific region (www.greengrowth.org/)
- Millennium Development Goals
- Many countries have embarked on green growth strategies and green impulse programs as a response to the 2008/9 financial crisis

In summary, EFR is about taxing ‘bads’ not ‘goods’, introducing green investment schemes and reforming environmentally harmful subsidies as the following graph illustrates



Selected possible results and benefits of EFR (if designed properly) include:



In terms of policy instruments for EFR, the following can be mentioned (note that the first four groups of instruments correspond to “economic instruments” as defined above at the beginning of this chapter):

- Environmental taxes or charges, levied for example on emissions (e.g., CO₂, SO₂), water effluent, water abstraction, energy (e.g., fuels, sulfur in fuels), transport (annual circulation, car registration/import/emission, motor size), landfill and/or incineration, resources (raw materials, minerals), environmentally harmful products (packaging material, tires, pesticides, batteries, etc.)
- Other fiscal instruments such as import duty differentiation, VAT rate differentiation, accelerated depreciation, etc.
- Emissions trading which can help ensure that a given overall emission target is met via allocation and trading of emission allowances
- Green subsidies, such as investment grants, soft loans, interest subsidies and equity finance for investment supporting the implementation of environmental policy, or, for catalyzing the uptake or mainstreaming of environmental technologies, etc.
- Reform of environmentally harmful subsidies, e.g. subsidies that were introduced for other purposes than environmental policy but effectively counter-act environmental policy or support unsound environmental practices
- Green public procurement which can catalyze the mainstreaming of environmentally sound technologies and foster the environmental industry by including sustainability criteria in purchasing decisions
- Measures aimed at “greening” the yearly or longer term public budgeting processes, e.g., by including sustainability criteria in budget or MTEF formulation
- In addition, measures aimed at greening commercial finance (e.g., financial products and services offered by commercial banks, insurance and leasing companies) may be included in EFR solutions

3. Fiscal policy context

Several environment related taxes are already in force in Tanzania, including:

- Excise duty on plastic bags
- VAT on petroleum
- Motor vehicle taxes
- Excise duty on petroleum
- Fuel levy

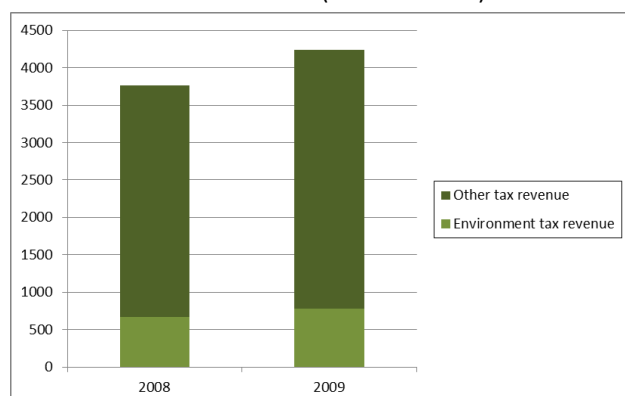
Three out of the five above listed taxes provide significant revenues: motor vehicle taxes, excise on petroleum and fuel levy.

The revenue from these three taxes is important, however: In 2009 it accounted for 18.5% of total tax revenue in Tanzania (782 billion TZS revenue from environment related taxes in 4237 billion TZS total net tax revenue).

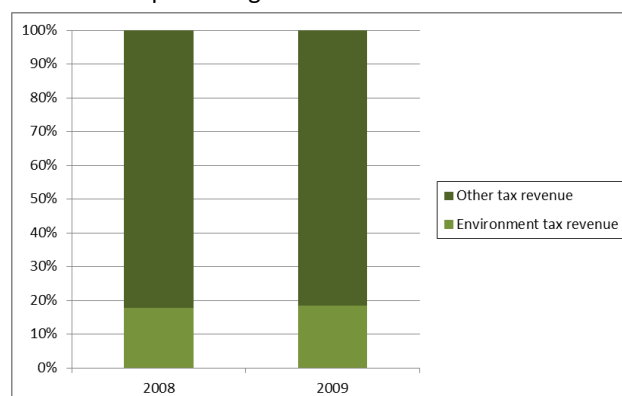
Details are available in the table and figures included below.

Share of environment related taxes in total tax revenue in Tanzania in 2008 and 2009

Revenues in absolute values (billions of TZS)



Revenues as percentage of total



Source: MoFEA website (accessed 25 March 2011)

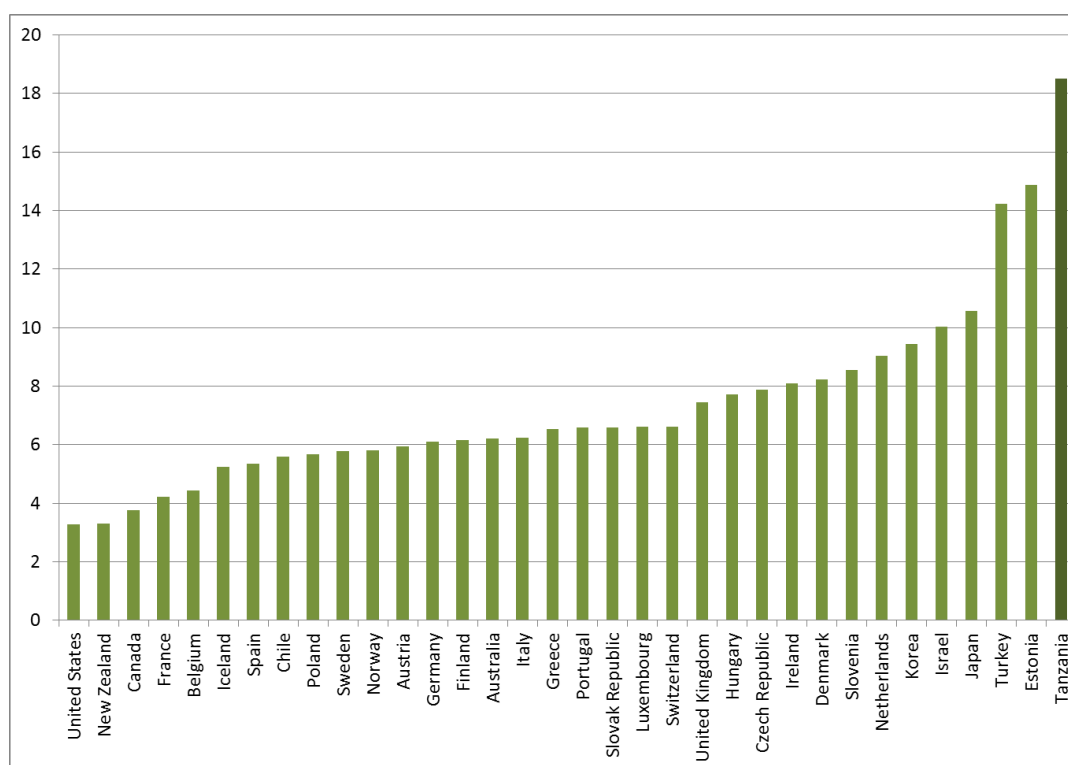
Share of environment related taxes in total tax revenue in Tanzania in 2008 and 2009

In billions of TZS	2008	2009
Environmental taxes	668	782
Other taxes	3101	3455
Total net tax revenue	3768	4237

Source: MoFEA website (accessed 25 March 2011)

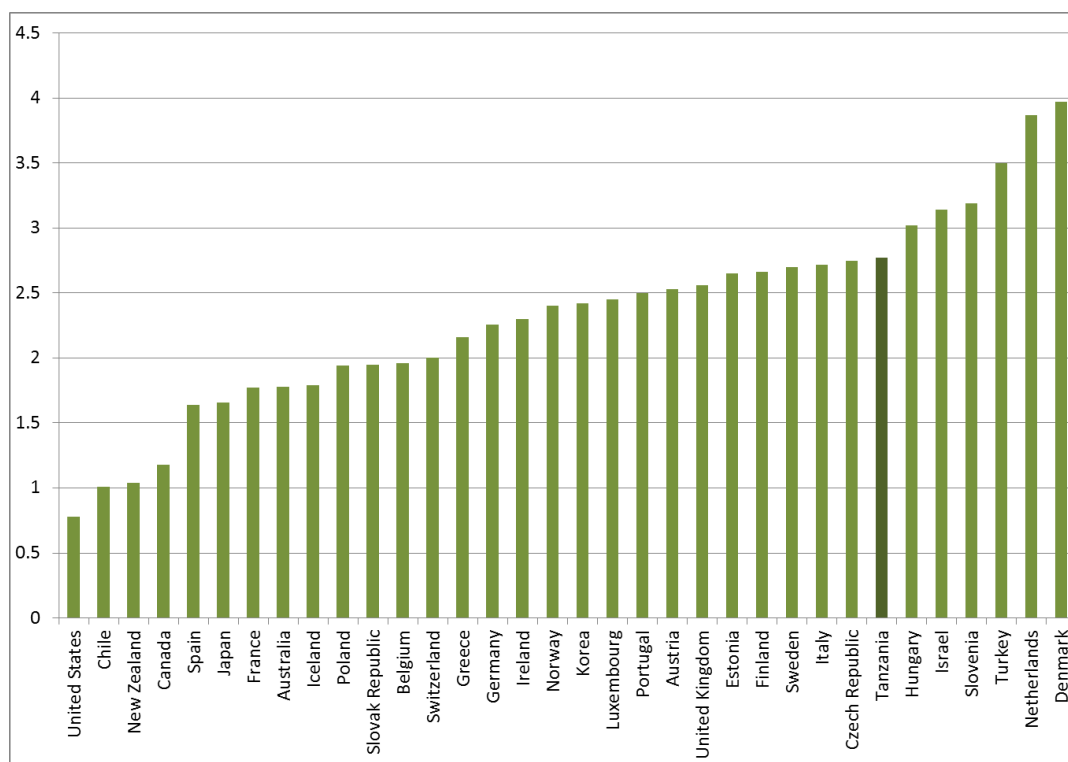
The share of environment related taxes in total tax revenue is high in Tanzania if compared to experience in OECD countries. In 2009, in fact, no OECD member scored a higher percentage.

Revenues from environment related taxes in per cent of total tax revenue, 2009



Sources: Tanzania data are author's calculation, based on tax revenue data reported on the TRA and MoFEA websites. Data for all other countries as published on the [OECD eco-tax database](#) (all websites accessed 25 March 2011).

Revenues from environment related taxes in per cent of GDP, 2009

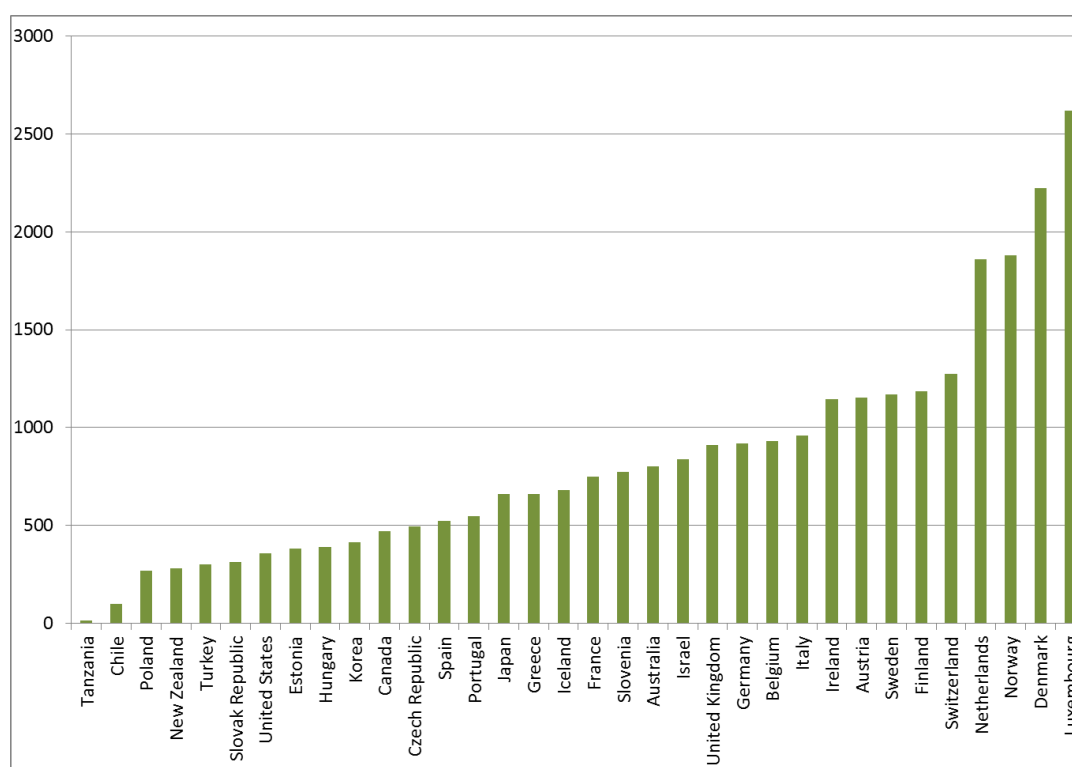


Sources: Tanzania data are author's calculation, based on tax revenue data reported on the TRA and MoFEA websites and 2009 GDP data as published on the IMF website. Data for all other countries as published on the [OECD eco-tax database](#) (all websites accessed 25 March 2011). See annex 3 for underlying data presented in this figure.

The share of environment related taxes in GDP was 2.8% in Tanzania in 2009, a value that is quite high if compared to experience in OECD countries.

However, on a per capita basis, the revenue from environment related taxes is low if compared to corresponding data from OECD countries (see figure below): In 2009, revenue from environment related taxes per inhabitant in Tanzania was 14 USD.

Revenues from environment related taxes per capita, in nominal USD, 2009



Sources: Tanzania data are author's calculation, based on tax revenue data reported on the TRA and MoFEA websites, 2009 population data published on the World Bank website and 2009 average annual TZS/USD exchange rate as published on oanda.com. Data for all other countries as published on [OECD eco-tax database](#) (all websites accessed 25 March 2011). See annex 3 for underlying data presented in this figure.

Revenues from environment related taxes in Tanzania in Q3/2006 – Q3/2010 (in bln TZS)										
	Q3 2006	Q4 2006	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Excise duty local on plastic bags	0.011	0.013	0.006	0.021	0.005	0.015	0.023	0.002	0.001	0.019
VAT local on petroleum	0.612	0.278	0.437	0.288	0.721	0.642	0.586	0.276	0.623	0.191
Motor vehicle taxes	4.139	3.624	3.964	5.289	10.39	12.11	14.27	15.57	15.32	12.26
Excise duty petroleum	53.22	77.84	80.87	79.27	124.3	114.9	83.82	93.41	114.4	102.1
Fuel levy	20.93	25.49	24.07	24.36	48.08	53.16	45.46	53.75	58.54	58.71
			Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Q2 2010	Q3 2010	
Motor vehicle taxes			14.7	19.7	17.6	16.3	16.0	18.4	22.0	
Excise duty petroleum			104.5	122.8	112.1	121.1	130.8	129.2	120.5	
Fuel levy			61.0	68.1	56.9	67.4	63.9	68.2	58.2	
Source: TRA (Q3/06 – Q4/08) and MoFEA (Q1/09 – Q3/10) websites (accessed 25 March 2011)										

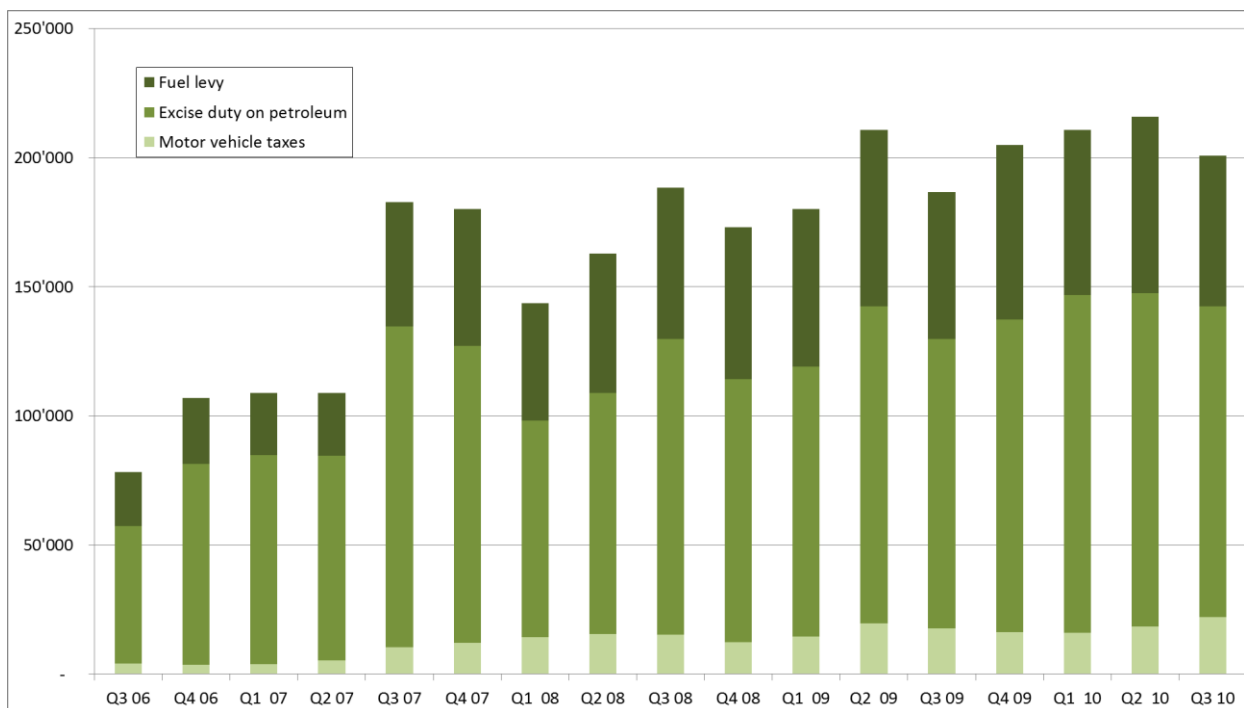
Revenues from environment related taxes in Tanzania in Q3/2006 – Q3/2010 (in mln USD)

	Q3 2006	Q4 2006	Q1 2007	Q2 2007	Q3 2007	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008
Excise duty local on plastic bags	0.009	0.011	0.004	0.017	0.004	0.013	0.020	0.001	0.001	0.016
VAT local on petroleum	0.5	0.2	0.4	0.2	0.6	0.6	0.5	0.2	0.5	0.2
Motor vehicle taxes	3.3	2.9	3.2	4.3	8.3	10.7	12.4	13.2	13.4	9.9
Excise duty petroleum	42.4	62.9	65.4	64.5	99.8	101.1	72.9	79.2	100.2	82.3
Fuel levy	16.7	20.6	19.5	19.8	38.6	46.8	39.5	45.6	51.3	47.3
	Q1 2009		Q2 2009	Q3 2009	Q4 2009	Q1 2010	Q2 2010	Q3 2010		
Motor vehicle taxes	11.3		15.1	13.5	12.5	12.0	13.2	14.8		
Excise duty petroleum	80.3		94.2	86.3	92.5	98.3	92.7	80.9		
Fuel levy	46.9		52.2	43.8	51.5	48.0	48.9	39.1		

Source: Actual tax revenue data are from TRA (Q3/06 – Q4/08) and MoFEA (Q1/09 – Q3/10) websites, accessed 25 March 2011. Quarterly average TZS/USD exchange rates are from the oanda.com website, accessed 25 March 2011.

Looking at detailed data on revenues from environment related taxes in Tanzania (see tables above and graphs below), it is obvious that revenues from the plastic bag excise and VAT on petroleum are small. At the same time, it is obvious, that revenue from the petroleum excise and the fuel levy provide the Government with a significant and stable income. The revenue from motor vehicle taxes was about 52 million USD (68 bln TZS). The revenue from petroleum excise and fuel levy was 548 million USD (714 bln TZS) in 2009.

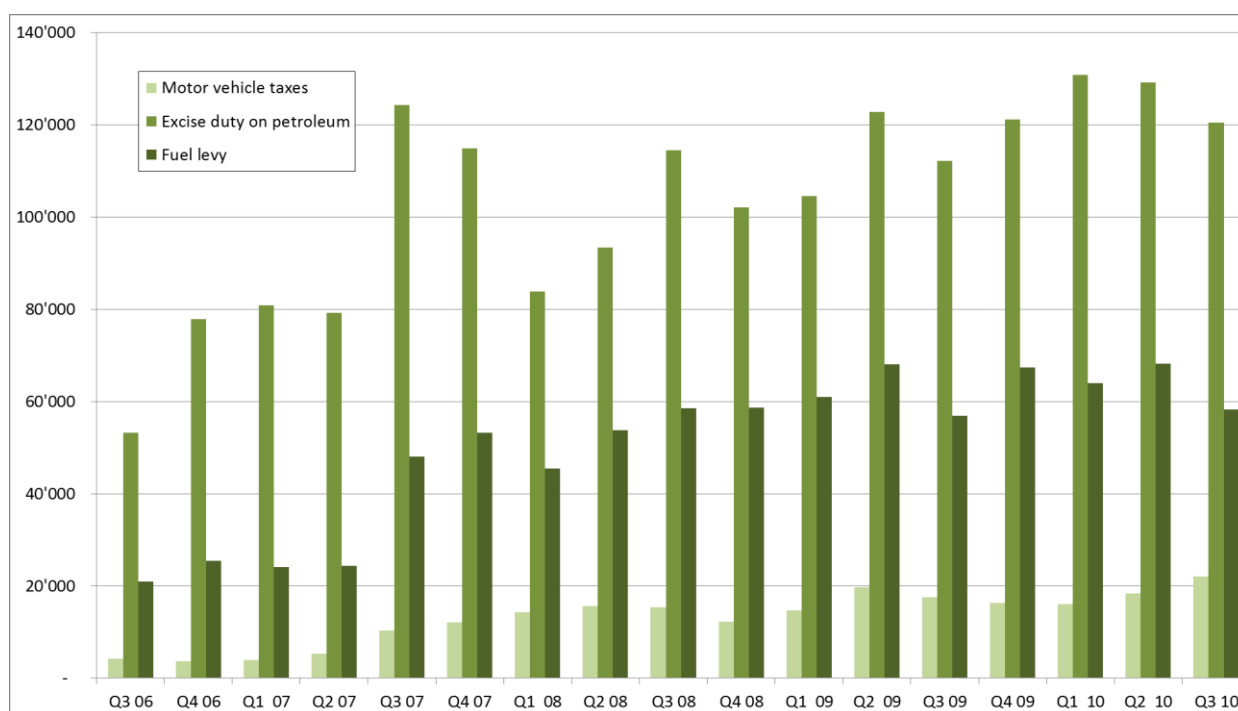
Revenues from environment related taxes in Tanzania Q3/06 – Q3/10 (cumulative, in mln TZS)



Note: Based on monthly or quarterly revenue data as reported on the TRA and MoFEA websites. Due to the small size of revenues from plastic bag excise and VAT on petroleum, these tax revenues are not included in above graph (they would not be visible)

Source: TRA and MoFEA websites (accessed 25 March 2011)

Revenues from environment related taxes in Tanzania Q3/06 – Q3/10 (in mln TZS)



Note: Based on monthly or quarterly revenue data as reported on the TRA and MoFEA websites. Due to the small size of revenues from plastic bag excise and VAT on petroleum, these tax revenues are not included in above graph (they would not be visible)

Source: TRA and MoFEA websites (accessed 25 March 2011)

None of the revenue from above mentioned environment related taxes in Tanzania is earmarked for environment related expenditure. Out of the five environment-related taxes, the only instrument that includes earmarking is the fuel levy, where 100% of the revenue goes to the Road Fund and is used for maintenance and emergency repair of classified roads and related administrative costs in Mainland Tanzania.

It is no surprise that energy and transport related taxes are not earmarked; in fact most countries use such taxes without earmarking for environment-related investment, i.e. as merely fiscal instruments to provide for budget revenue. However, an increasing number of countries is earmarking part of energy related taxation for environment related investment in order to provide additional incentives to decrease the environmental impacts of energy use and to fuel growth of new economic sectors focusing on energy efficiency, technology modernization and renewable energy. In addition, a large number of countries are using specific environmental taxes related to product waste and/or emissions, where revenues are typically earmarked for green subsidy programs. Related recommendations (introduction of a CO₂ tax, product taxes) will follow later in this report, see section 13 in particular.

As for already adopted taxes in Tanzania, each tax is discussed further in the chapter of the corresponding sector:

- The plastic bag excise is discussed further in chapter 5 on waste management
- The fuel levy and petroleum excise/VAT are discussed in chapter 7 on energy
- Motor vehicle taxes are discussed further in chapter 8 on transport

So far in this chapter, the discussion focused on the revenue side of the government budget. It is similarly important and interesting to look at what performance the environmental sector had in terms of the expenditure side, i.e. government spending.

The following table provides for a summary of key indicators of government budget for the years 2007 to 2010. The table shows, among others, that Tanzania continues to depend quite heavily on foreign funds to finance in particular development expenditure and investment. Another observation is that the share of development investment in total government expenditure appears to be relatively small.

Government budget			
	2007/8	2008/9	2009/10
	Actual in billions Tsh		
A) Total revenue	3634.6	4293.1	4661.5
Tax revenue	3359.3	4043.7	4427.8
B) Total expenditure	5209.0	6811.8	8173.7
Recurrent expenditure	3398.0	4681.5	5562.4
Development expenditure	1811.0	2130.4	2611.3
From local funds	567.4	906.0	
From foreign funds	1243.6	1224.3	
Deficit (A-B)	-1574.4	-2518.8	
Financing of deficit			
External sources	2302.8	2201.5	
Internal sources	-728.4	317.3	
Ratio to GDP	In %		
Tax revenue	14.7	15.3	14.5
Development expenditure	7.9	8.0	8.5
Sources: MoFEA NKUKUTA Annual Implementation Report 2009/2010 and MoFEA 2009 Tanzania Economic Survey			

The following table shows data on central government spending in 2007-2009 for selected, environmentally sensitive sectors. The environment sector itself is not listed because, as a matter of fact, this sector is not even reported in this data series. A main reason for this could be that environment sector spending, in fact, has been very low in recent years in Tanzania: according to the National Bureau of Statistics (as reported in the 2009 MoFEA report "Budget Background and Medium-term Framework 2009/10 – 2010/11"), *"The government has allocated around 0.17 percent of the total budget in 2009/10 to environment sector, down from 0.27percent of the total budget in 2008/09. The decline in allocation for environment sector is the result of decline in development budget, both local and foreign component in the 2009/10 budget."*

The same report states that *"The Vice President's Office (VPO) has the responsibility of ensuring that environmental concerns are adequately taken into account in sector programs among other responsibilities. About 97 percent of all funds allocated to the VPO for implementing recurrent activities were all released and spent in 2008/09 [...]. Release and spending of development funds continued to struggle in 2008/09, with only 43 percent of funds being released and spent compared to 15 percent in 2007/08."*

Central government expenditure in selected sectors, fiscal years 2007/2008 and 2008/2009				
	Actual budget execution 2007/8, bln TZS		Planned budget execution 2008/9, bln TZS	
Sector	Recurrent	Development	Recurrent	Development
Agriculture, Forestry, Fishing, Hunting	95.1	56.3	126.2	183.9
Education	408.7	144.0	420.1	136.7
Health	200.3	173.6	209.9	301.3
Water supply and sanitation	10.1	213.1	15.1	212.6
Fuel and energy affairs	31.4	310.4	33.0	313.3
Mining, manufacturing, construction	168.8	432.0		
Transportation, communication	45.5	34.6	203.5	592.1

Sources: National Bureau of Statistics as reported in MoFEA 2009 Tanzania Economic Survey

The impression remains, therefore, that in the environment sector, government funds are mainly spent on recurring costs, including salaries of staff. Apparently the environmental administration has encountered some problems in developing and implementing investments projects, as the low percentage of budget execution as regards development expenditure seems to suggest.

The establishment and operation of an Environmental Fund, as has been foreseen in the Environment Protection Act (see discussion in the following chapter), appears to be a most urgent task, both in order to significantly increase environmental investment and in order to develop investment project preparation and implementation capacities.

Comparing Tanzania's environmental expenditure data with similar data of other countries is not a trivial issue. In fact, it would be necessary to apply a standardized methodology to allow for proper comparison (which to the author's knowledge has been attempted in OECD countries and a number of Eastern European countries only). In order to make estimations on future financing needs, it will also be necessary to establish a benchmark against which financing needs will be projected. Such a benchmark typically is investment volumes required or triggered by adopted environmental legislation. In other words, one will try to translate the text of environmental legislation into volume of investment necessary to implement the standards and requirements defined in the law. Such an exercise - which is a difficult and complicated task - has recently been completed for selected Central European countries.

When it became clear that most Central European countries would eventually join the European Union, a discussion started on how the adoption of EU legislation could be financed in these countries. It soon became clear that the environmental sector would belong to one of the most costly sectors to achieve compliance with EU legislation. In 1997 the first comprehensive compliance cost assessment for approximation of EU environmental legislation in Central and Eastern European countries was completed. This assessment was later refined. The table below shows data that were found.

When these data were published, intense political discussions started including highest levels on how estimated costs could be covered. This discussion eventually led to the allocation of significant additional funds for the environmental sector in all concerned countries, including increased allocations from the European Union, increased national budget allocations and in several cases, higher capitalization of national environmental funds (especially in countries where environmental funds were operating in satisfactory manners).

Cost estimations for compliance with EU environmental legislation in Central and Eastern European countries							
	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovakia	Slovenia
1997 estimate, million EUR	15000	13400	13700	35200	22000	5400	1840
Updated estimates, million EUR	8610	6600 - 9400	4118 – 10000	22100 – 42800	22000	4809	2430
GDP (1997, in millions of current USD)	10365	57135	45724	157154	35286	27022	20272

Source: EC Communication “the challenge of environmental financing in the candidate countries” COM(2001) 304 final, see <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0304:FIN:EN:PDF>. Source for GDP data: World Bank. Note: Updated cost estimations have been completed in 1999 and 2000. The compliance cost estimations include the following sectoral legislation: drinking water supplies, sewage and wastewater treatment; waste management including landfill, incineration, hazardous waste and sewage sludge; and quality, fuel quality and VOC legislation; and industry pollution control legislation.

What can be learned by decision-makers in Tanzania from this? First, it appears that even if regulatory density in the environment sector is by far less dense as in the European Union, still it is very likely and obvious that currently the environments sector is massively under-funded in Tanzania. A very rough, initial estimation based on international experience (however, totally lacking any analytical backup) would be that environmental expenditure could easily amount to one or several percent of GDP⁴ (one percent of GDP alone equals roughly 300 billion TZS – environmental expenditure in this size would effectively mean a twentyfold increase in environmental expenditure as compared to current spending levels).

The consultant therefore believes that it could be useful to have costing studies of Tanzanian environmental legislation and policy. For example, a costing study could cover what it would take to achieve specific environmental sustainability targets and prioritize those that have a significant impact on growth and poverty reduction. For instance, the costs for achieving environmental sustainability targets in MKUKUTA II could be estimated and related financing strategies developed for mobilizing the required resources through the government budget and from development partners. Alternatively, costs required for fully implementing specific legislation could be estimated and compared with existing and potential future financing.

If such studies were available, it would be more clear which amounts of finance would actually be needed in Tanzania to implement current policy and law. The consultant assumes that current environment expenditure is far below what would be necessary to implement the law. Proofing such a financing gap with concrete and correct data and information that was prepared in a methodologically correct way would provide for a very strong political argumentation to increase environmental finance, including through an Environmental Fund capitalized by revenues from earmarked environmental taxes.

The second lesson may be that high environmental expenditures have not hampered economic growth in central Europe. Quite in contrary! It is generally accepted that environmental infrastructure investments (water, energy, waste) as well as investments into environmental technologies have very much enabled and supported economic growth. This is because good infrastructure is an indispensable prerequisite for growth, and, because environmental technologies typically lead to modernization and innovation, which support growth eventually. In

⁴ In almost all countries where comprehensive annual environmental expenditure statistics were elaborated, levels of at least one percent of GDP were found. In addition, if one applies, for example, a 20-year implementation period to implement EU environmental legislation in the seven Central European countries mentioned in the table, expenditure percentages higher than 3% of GDP per annum will result.

fact, in Europe the environmental industry was one of the fastest growing industrial sectors in recent years.

The consultant believes that any studies and analyses into above-mentioned areas, especially those related to positive growth linkages connected with improved infrastructure, modernization and innovation would be extremely useful to justify higher environmental expenditure in Tanzania.

Once necessary and desirable environment expenditure levels have been defined for Tanzania, the question will follow how increases in expenditure can be financed. The consultant believes that this should happen in principle in line with the Polluter Pays Principle and secondly, build on the existing structures. Taking into account existing environmental financing markets in Tanzania, which are probably barely developed at this point, it is quite obvious that it would be highly desirable to introduce new and additional environmental taxes in Tanzania, whereas revenues of such taxes would be collected by an Environmental Fund and used to support priority environmental investments in line with enacted environmental legislation and policy.

Based on the limited research completed by the consultant as part of preparing the present report, it appears that the following sectors could be quite suitable for new taxes and related spending programs executed by an Environmental Fund:

- waste management
- energy efficiency and renewable energy sources, especially in rural areas and for decentralized solutions
- other environmental technologies, incl. related modernization and innovation
- biodiversity and nature protection

The Tanzanian Government might want to consider cooperating with bilateral and multilateral development partners, in elaborating compliance cost estimations studies and related financing studies in some of the above-mentioned areas. Such cooperation could also be sought and realized in the area of designing and introducing new environmental taxes as well as designing and establishing an Environmental Fund.

4. Environmental policy context

Tanzania's environmental management is determined by the following frameworks:

- The 1997 National Environmental Policy (NEP)
- The 2004 Environmental Management Act (EMA)
- The National Strategy for Growth and Reduction of Poverty (MKUKUTA I and II)
- Multilateral Environmental Agreements to which Tanzania is party

Consequently, activities aimed at promoting and realizing environmental fiscal reform should seek to contribute with the above-mentioned policy. The following discussion looks at EFR related provisions in both the NEP and EMA, as well as environmental policy provisions in MKUKUTA II.

The 1997 National Environmental Policy (NEP)

The 1997 NEP identifies six major environmental problems for urgent attention. These are land degradation; lack of accessible good quality water for both urban and rural inhabitants; environmental pollution; loss of wildlife habitats and biodiversity; deterioration of aquatic systems; and deforestation. NEP recognises other sectoral policies and their respective Acts regarding environmental management such as agriculture, livestock, water and sanitation, health, transport, energy, mining, human settlement, industry, tourism, wildlife, forestry and fisheries.

The NEP also includes a special section on economic instruments. This section mentions in particular:

“The marketplace does not yet provide decision-makers, producers and consumers with appropriate signals about the value of the environment because most environmental resources and services are either undervalued or considered as common property. A balanced use of regulations and suitable market based approaches for environmental protection can form a sound basis for sending out “green signals”. The most important advantage of economic instruments is their ability to achieve a specified level of environmental protection and lower cost, particularly where they are designed to match the cost of achieving a predetermined and tangible environmental goal. Economic instruments are also able to take into account the reality that the cost of controlling a particular environmental problem may not be the same for all causes.

Resource prices are themselves economic instruments that can play a critical role in encouraging efficient and environmentally responsible management of natural resources, and influence users to act in ways consistent with sound economic and environmental values. User charges are applicable for the use of collective goods and services, and are practiced in the country. Ideally, the charge should match the cost of supplying the service consumed, so that consumers have an incentive not to overuse the service or abuse it.

While economic instruments are not necessarily the most effective means of choice for every environmental problem, their application can be linked to specific environmental problems, so that they are made relevant in their design an application to the problem. Already, deposit refund schemes are practiced in Tanzania primarily to encourage the return of beverage containers, and shall be used for other products which can be recycled or recovered, and which create environmental problems if not disposed of in an acceptable manner, such as acid batteries and oils, or plastics with long life cycles.

As far as possible the preventive approach to environmental problems shall be given top priority. Liability for environmental pollution shall not be passed on. The polluter pays principle shall be adopted and implemented deterrently. In principle it shall be the responsibility of those who pollute to repair and bear the costs of pollution caused and rehabilitation, where appropriate.”

It is noteworthy that above policy formulation strongly underlines the implementation of that polluter pays principle. The NEP basically promotes the introduction of various economic instruments - where and when value added it is guaranteed - but is not very concrete about which instruments should be established by whom and when. More concrete guidance is offered by the 2004 Environmental Management Act in this respect.

The 2004 Environmental Management Act (EMA)

The 2004 Environmental Management Act provides for the legal and institutional framework for sustainable management of the environment and natural resources in Tanzania. The Act confers the task of overall coordination of environmental management in the country to the Ministry responsible for Environment and the role of environmental management in specific sectors such as agriculture, fisheries, forestry, wildlife, mining and water is conferred to relevant sector ministries and Local Government Authorities. As regards EFR the 2004 EMA includes the following provisions:

Articles 5 and 7 firmly establishes the precautionary principle and the polluter pays principle.

Article 80 includes following provisions related to economic instruments:

(1) For purposes of minimizing environmental damage, the Director of Environment shall periodically prepare proposals on packages of economic instruments and financial incentives and forward the same to the Minister.

(2) The Minister may, in consultation with the Minister responsible for finance, make regulations and rules on economic instruments thereby prescribing

- (a) how best to oblige individuals or firms when making decisions about production, consumption and investment, to consider the environmental consequences;
- (b) measures to be adopted to internalize environmental costs without relying on the pricing mechanism;
- (c) price-based measures, user charges and subsidies to internalize environmental costs and benefits;
- (d) subsidies, tax deductions and rebates to be paid to advance environmental protection.
- (e) special grants for particular programs and projects, including environmental projects.
- (f) encourage return of bottles, plastics and metals for recycling and proper disposal; and
- (g) any other measure the Minister may impose on economic instrument.

(3) The Minister may, on the approval of the Minister responsible for finance, further prescribe the following incentives and financial measures for the protection of the environment

- (a) effluent charges, based on the content and quantity of discharges into the air, water, or sewerage system;
- (b) user charge fee for using such natural resource and for others being provided with a service such as garbage collection;
- (c) product charges, such as charges on plastic or bottle packaging that are used to discourage disposal of or encourage recycling; and
- (d) sales and excise taxes that give environmentally friendly products a price advantage over polluting products.

(4) "Economic Instrument" as used in this act means an instrument for environmental and natural resources management designed to influence behavior of economic agents in order to ensure sustainable use and protection of biophysical resources, and includes fiscal instruments, charge systems, property rights, market creation, performance bonds and deposit refund systems, liability systems, provision of information and financial instruments.

Article 80 clearly establishes a strong and comprehensive legal basis for the introduction of various economic instruments in support of environmental policy in Tanzania.

Articles 213 – 216 includes detailed provisions for the establishment of a National Environmental Trust Fund. The following sources of these funds are stipulated in article 213:

- (a) such sums of money as may be appropriated by Parliament.
- (b) such sums of money as may be payable to the Fund by way of donation, gifts, grants, or bequests by the Government, other agencies, individual persons or another government or international organizations;
- (c) all other sums or property which may in any manner become payable to or vested in the Fund in respect of any matter incidental to its powers and duties;
- (d) any income generated by any project financed by the Fund, due allowance being made for any necessary expenses which may be met by any such project; and
- (e) a levy of the amount to be determined by the Minister in the regulations from every prescribed fee payable under this Act.

Article 214 outlines the objectives of the Fund as follows:

- (a) to facilitate research intended to further the requirement of environmental management;
- (b) to foster capacity building;
- (c) to confer environmental awards;
- (d) to issue environmental publications;
- (e) to provide scholarships.
- (f) to promote and assist, through grants, community-based environmental management programs; and
- (g) to pay for the cost of the meetings of the National Environmental Advisory Committee and of the Board of Trustees.

Article 215 and the Fourth Schedule to this EMA establish the Board of Trustees as management body of the fund consisting of the following members:

- (a) a Chairman who shall be a person of proven quality and integrity who has achieved high office or distinction in Tanzania on public administration who shall be appointed by President;
- (b) a senior representative of the Ministry responsible for finance;
- (c) a senior representative of the Ministry responsible for environment;
- (d) a member from institutions concerned with training in environmental management;
- (e) a registered accountant;
- (f) a legally qualified person from the Office of the Attorney General;
- (g) a member from Non-Governmental Organizations concerned with environmental management;
- (h) a representative of the Ministry responsible for local government authorities; and
- (i) a representative of environmental management research institutions.

Although the legal basis for the establishment of an Environmental Fund in Tanzania has been created in 2004, up to now such a Fund has not been established yet. As was discussed already in section 3, the environment sector continues to be massively underfunded in Tanzania and the establishment of an Environmental Fund should be seen as extremely useful and desirable in this context. As the legal basis exists already, key challenges on the road to establish an Environmental Fund in Tanzania appear to be:

- Design and introduction of earmarked taxes that could capitalize the Fund with recurring revenues, such as product taxes, a CO2 tax, pollution charges/taxes, etc. (see recommendations in chapter 13).
- Addressing possible concerns with regard to public finance principles, such as the question of allowing extra-budgetary funds, with revenue from earmarked taxes (good international practice in public environment expenditure management as reported in annexes 1 and 2 will provide for the necessary justification and explanations in this regard)

- Designing operational procedures and governance structures for a Tanzanian environmental fund that are essentially in line with good international practice in public environment expenditure management as reported in Annex 1 of this report. The draft elements of terms of reference for expert support to establish an environmental fund as outlined in annex 4 of this report should be very useful to address this issue.
- Positioning and new Tanzanian Environmental Fund vis-à-vis already existing financing mechanisms dealing with environment related investment, such as the Tanzania Wildlife Protection Fund, other proposed sectoral extra-budgetary funds, commercial financing institutions and other potential partners.

Articles 227 and 228 of the EMA further detail requirements on environmental performance bond and compensation as follows:

227. (1) The Minister shall prescribe in the regulations, activities or processes which threaten the environment of which environmental performance bond may be required.
- (2) An environmental performance bond shall be deposited with the Director of Environment as security for good environmental practice until its refund to the depositor.
- (3) The environmental performance bond shall be returned to the operator of activity or process upon the satisfaction of the conditions set by the Minister.
- (4) The Director of Environment shall give the operator of an activity or process an opportunity to be heard before confiscating the environmental performance bond.
- (5) An environmental performance bond shall be confiscated in whole or in part when the Director of Environment finds and operator's practices violate the provisions of this Act, including the conditions of any certificate, license or permit issued under this Act.
- (6) Where any environmental performance bond is confiscated under sub-section (5), shall be used to rehabilitate a degraded environment.
- 228.-(1) For the avoidance of doubt, the Minister shall make regulations prescribing the right to compensation for those who suffer damages while protecting the environment.
- (2) Any person who violates environmental protection standards causing any damage shall compensate for the damages and costs of remedying the consequences.

It appears that the environmental performance bonds have recently been requested from operators starting new mining activities in Tanzania (see chapter 11 for more details).

Note that part XVI of the 2004 EPA contains detailed regulations for a variety of non-compliance fines which can be imposed by environmental inspectors employed by the National Environmental Management Council.

Environmental and Sustainability provisions in MKUKUTA II

The National Strategy for Growth and Reduction of Poverty II (often referred to as: MKUKUTA II) contains numerous provisions relating to environmental and sustainability policies. Some key provisions relating to the discussion following in chapters 5ff. of this present report include:

4.1 Cluster I: Growth for Reduction of Income Poverty

Goal 2: Reducing Income Poverty through Promoting Inclusive, Sustainable, and Employment-Enhancing Growth and Development

Operational targets include:

- ix. Generation of electricity, utilization of capacity and coverage increased
 - Use of non-hydro renewable for power generation increased from 4 percent 2010 to 6 percent in 2015
- x. Access to clean and affordable substitute for wood fuel for cooking increased (from 10 percent in 2010 to 20 percent in 2015)

GDP growth: GDP is targeted to increase in real terms, from 6 percent in 2009 to 8 -10 percent per annum by 2015.

Among the strategies to achieving this operational target are:

- vi. Integrating, harmonizing and coordinating environmentally sustainable policies and strategies for growth in key growth sectors, including climate change adaptation and mitigation.

Agriculture and fisheries:

- x. Mitigating and adapting to climate change by supporting research programs to improve and develop new technologies, quality seeds, pest control, and agronomic practices e.g. tillage, soils and water conservation techniques and irrigation measures and livestock management practices, information collection and dissemination for early warning;

Mining:

- v. Enforcing security and adherence to the laws, regulations and environmental considerations, including compliance to labor standards, occupation, health, and safety at workplaces;
- ix. Ensuring sustainable extraction, maintaining health and safety standards, and equitable distribution of proceeds to local stakeholders;

Energy:

- iii. Expanding renewable energies (solar, wind, mini-hydro and biogas) for offgrid areas where distribution costs are prohibitive, especially rural areas;
- viii. Promoting use of energy-efficient appliances and equipment, use of natural gas for industrial heating and domestic cooking;
- ix. Promoting energy saving technology, at household, firm, institutions, and community levels;
- x. Promoting energy efficient and conservation as well as integrated environmental management;
- xi. Promoting projects which qualify for carbon credit through clean development mechanism (CDM) window;

Water Supply:

- iv. Demarcating and conserving water sources in all basins in order to protect them from environmental depletion and pollution;
- v. Establishing water use and effluent discharge permit register for proper recording of water extraction and enforcement of water quality standards;
- vi. Integrating management of water resources;

Goal 4: Ensuring Food and Nutrition Security, Environmental Sustainability and Climate Change Adaptation and Mitigation

Operational targets include:

- iv. Crop and livestock varieties suited to adverse conditions brought about by climate change introduced and adopted;
- v. Climate change projection and early warning and natural disaster response, coordination framework strengthened.

Cluster strategies include:

- viii. Enhancing sustainable forest management for improved governance, livelihoods, forest conditions, resilience of forest ecosystems and trees outside forests and more efficient use of wood resources;
- x. Creating awareness on climate change and adaptation strategies;
- xiii. Supporting research in introducing and promoting adoption of crops, livestock, and fish varieties and breeds suited to adverse conditions brought about by climate change;
- xiv. Applying new technologies in pest and disease management (IPM, breeding, biotechnology);
- xv. Increasing farmers, livestock farmers, fishers and aqua farmers awareness on the full impacts of climate change on agriculture;
- xvi. Designing sustainable crop production and farming systems reflective of climate change scenarios such as breeding pest resistant crop and livestock;
- xvii. Increasing carbon sequestration on farms through reduced tillage high carbon crops and agro forestry;

- xviii. Improving soil and water conservation measures including irrigation development;
- xix. Providing specific adaptation and mitigation options according to regional conditions;
- xxi. Facilitating development of market-based financing mechanisms for climate change mitigation and adaptation and leveraging private sector resources;
- xxii. Supporting accelerated development and deployment of new technologies that ensure adaptation and mitigation actions;

Goal 5: Leveraging Returns on National Resources (both within and outside) for Enhancing Growth and Benefits to the Country at Large and Communities in Particular, Especially in Rural Areas

Operational targets include:

- i. Sustainable utilization of natural resources ensured with benefits to local communities;

Cluster strategies include:

- x. Enhancing community based natural resource management arrangements;
- xi. Improving legislation on ownership/access to environmental and natural resources.

4.2 Cluster II: Improvement of Quality of Life and Social Well-being

Goal 4: Increasing Access to Affordable Clean and Safe Water; Sanitation and Hygiene

Addressing Water Supply

Operational targets include:

- i. Proportion of households in rural settlements provided with improved sources of water increased from 58.7 percent in 2009 to 65 percent by 2015;
- ii. Proportion of households in small towns provided with improved sources of water increased from 53 percent in 2009 to 57 percent by 2015;
- iii. Proportion of households in urban authorities provided with improved sources of water increased from 84 percent in 2010 to 95 percent by 2015;
- iv. Proportion of households in Dar es Salaam provided with improved sources of water increased from 68 percent in 2010 to 75 percent by 2015.

Addressing Sanitation and Hygiene

Operational targets include:

- ii. Proportion of population with access to improved sanitation facilities increased;
- iii. Proportion of schools with improved sanitation facilities increased;
- iv. Proportion of households connected to the public sewage system increased from 18 per cent in 2010 to 22 percent in 2015;
- v. Solid waste collected in urban centers increased from 47 per cent in 2008 to 85 percent in 2015;

Cluster strategies include:

- ii. Strengthening solid waste management in urban areas;
- iv. Developing and implementing clear Sanitation and Hygiene policy and plan for participatory sanitation and hygiene promotion and marketing, building on current efforts to establish effectiveness of interventions, including clarification of the roles and responsibilities, budget requirements and strategies for ensuring that schools and health facilities have adequate WASH;

Goal 5: Developing Decent Human Settlements while Sustaining Environmental Quality.

The operational targets are:

- i. Planned and serviced urban settlements with functioning town planning procedures, including improved solid and liquid waste management, use of sustainable transport and cleaner energy ensured;
- ii. Implications of rapid urban population growth on settlements addressed.

Source: UNITED REPUBLIC OF TANZANIA, NATIONAL STRATEGY FOR GROWTH AND REDUCTION OF POVERTY II (MKUKUTA II), MINISTRY OF FINANCE AND ECONOMIC AFFAIRS, July 2010

5. Use of Economic Instruments in the Waste Management Sector

5.1. Typology and International Practice

There are many different kinds of economic and financial instruments that are applied in waste management, including:

- Product taxes
- Waste collection, disposal and incineration charges/taxes
- Hazardous waste charges/taxes
- Charges of taxes related to resource and raw material use
- Subsidies related to waste management (grounds, soft loans, interest rate subsidy, equity finance for establishment of new recycling/waste management companies, etc.)
- etc.

For illustration, the following table provides for an overview of the use of waste related charges and taxes in selected European countries.

Overview of the use of waste related charges/taxes in 2004 in selected European countries															
	Austria	Denmark	Finland	Germany	Netherlands	Norway	Sweden	UK	Switzerland	Czech Republic	Hungary	Latvia	Lithuania	Poland	Slovenia
Waste tax/charge	X	X	X		X	X	X	X	X	X		X		X	
Tax on tires		X	X		X						X	X	X		
Tax on packaging	X	X	X			X	X			X	X	X	X	X	
Tax on bags		X													
Tax on pesticides		X	X			X	X								
Tax on CFCs	X	X								X	X	X			
Tax on batteries	X	X					X		X		X	X	X		
Tax on light bulbs		X										X	X		
Tax on lubrication oil			X			X				X	X	X			X
Tax on fertilizers		X			X		X								
Tax on paper, board		X										X	X		
Tax on raw materials		X					X	X			X	X	X		
Source: European Environment Agency Technical Report number 8/2005 on Market-based Instruments for Environment Policy in Europe.															

5.2. Economic instruments Currently Used in Tanzania

5.2.1. Existing EIs and how their effectiveness could be further increased

As mentioned in chapter 3, an excise tax on plastic bag imports has been introduced in Tanzania, but has recently produced very little revenue. During the meetings with various Tanzanian

government representatives, the consultant was unable to identify the reasons for such insignificant revenues. As apparently no evaluation of the causes and effectiveness of the plastic bag tax has been produced so far, this leaves room for speculation: one reason for the low revenue could be that the tax has had significant effects in decreasing plastic bag imports. Another reason could be that the implementation of the tax has been inefficient. Another possible explanation could be that plastic bag producers found ways of circumventing the payment of the tax. If any work will follow in the near future in Tanzania on waste management related product taxes or other waste related taxes, the consultant suggests evaluating the plastic bag tax, as some useful lessons learnt for any new tax instrument in the waste sector may result.

As reported on the publication entitled “Taxes and Duties in Tanzania in 2010 at a Glance” available for download on the website of the Tanzania Revenue Authority (TRA), the following tax rates currently apply: “ad-valorem rate of 120% imposed on shopping plastic bags”.

The Citizen’s Budget report “A simplified version of the national Budget 2010/11”, published by the policy forum (www.policyforum.or.tz) further reports that since 2010, there is a VAT exemption on the supply of packaging materials for fruit juices and milk products. This measure is opposite to efforts found in many countries elsewhere where packaging materials are, in fact, taxed (rather than tax exempt)!

Reportedly, there are also deposit refund schemes in place for certain packaging materials, but again, the consultant could not identify reliable information on the functioning, causes and effectiveness of these schemes during meetings with various government representatives.

5.3. Enhancing the Use of Economic Instruments in the Waste Management Sector

Keeping in mind rich international experience with environmental taxes in the waste sector, the consultant concludes from the discussion above that there is a vast potential in Tanzania to extend the use of economic and financial instruments in the waste management sector, in particular:

- Product taxes on various products could be introduced, ideally with revenues earmarked for environmental subsidies and investment support offered by the proposed Tanzanian Environmental Fund. The political acceptability of such product taxes is usually very high (everybody immediately understand that the consumption of these products eventually will result in waste that needs to be managed) and such product taxes have a potential to generate significant revenue streams (see annex 2.5 for an example of large revenues generated by various product taxes in Croatia, whereas revenues are earmarked for the Croatian Environment and Energy Efficiency Fund). In addition, the existing plastic bag tax could be integrated in a more comprehensive product tax on packaging materials. Existing deposit refund schemes could also be linked or even integrated into a comprehensive product tax on packaging materials.
- Charges on waste collection and disposal could help covering costs of new waste management infrastructures and services that will eventually have to be developed for tackling ever growing waste streams, especially in larger settlements. The adoption of basic legislation and policy should be seen as a first useful step that should be followed up by developing more detailed waste management plans, concepts and financing strategies, including for safe disposal, reuse, recycling, waste-to-energy, etc.

- Hazardous waste charges/taxes may be considered in Tanzania too in the future, but one should stress the establishment and proper operation of a command and control system first, as a government generally speaking should provide first of all incentives to eliminate hazardous waste before offering incentives to minimize or economize on such waste.
- Finally it is quite clear that even in the absence of detailed financing strategies and studies, Tanzania will most likely require significant financial incentives to realize much needed investments in waste management. Such subsidy and support programs could be offered through the proposed Environmental Fund.

6. Use of Economic Instruments in the Water Sector

6.1. Typology

A basic typology of economic and financial instruments in the water sector includes:

- Water supply user charges
- User charges imposed on sewage collection
- Wastewater treatment charges
- Water pollution/effluent charges/taxes
- Subsidies (grants, soft loans, interest subsidy, etc.) aimed at catalyzing and enabling investment into water infrastructure and water purification technologies

6.2. Economic instruments Currently Used in Tanzania

As reported already in section 3, the water sector is already a priority sector for government spending. However, it appears obvious from available policy documents that current spending continues to be significantly below what would be needed to offer a more comprehensive, safe and reliable supply and treatment of water.

In 2005, a new, comprehensive water sector strategy was adopted that refers to many economic and financial aspects, including:

- Section 2.2.1 focuses on service coverage
- Section 2.3.2. focuses on environmental policy links and includes as one policy goal to introduce a water effluent charge/tax in Tanzania
- Section 3.2.1.2 calls for a Water Resources Management Council to be financed from user and pollution charges/taxes
- Section 3.7 and 3.8 provides for the strategy in the environment and pollution control sectors
- Section 4 focuses on water sector finance
- Section 6 is dedicated to water tariffs, among others

The 2009 Tanzania Economic Survey published by the Ministry of Finance and Economic Affairs provides for the following data on water supply and related revenue collection in urban areas:

Water supply and revenue collection in urban areas, 2009			
Authority	Total water production (cubic meters)	Estimated water demand (cubic meters)	Revenue collection (mln TZS)
Arusha	13,197,478	18,001,080	3,984,733
Babati	1,063,277	1,464,000	273,181
Dodoma	9,620,136	10,759,000	3,596,945
Mbeya	11,051,297	11,656,050	2,925,543
Morogoro	8,663,000	10,386,000	3,553,517
Moshi	8,815,529	8,820,000	2,777,756
Mtwara	1,905,807	3,816,000	951,483
Mwanza	20,581,248	829,440	5,921,170
Tabora	4,291,665	8,415,000	1,089,551
Tanga	9,564,823	9,784,675	3,731,586
Bukoba	2,250,451	2,737,500	712,297
Iringa	3,986,958	5,110,000	1,802,107
Kigoma	2,551,254	9,416,000	451,652
Musoma	3,850,894	8,640,000	1,024,353
Shinyanga	3,735,376	7,140,997	1,288,835
Singida	1,729,854	2,574,000	455,045
Sumbawanga	1,840,800	2,928,000	336,483
Songea	2,225,611	3,095,940	730,780
Lindi	402,125	1,800,000	198,673
GRAND TOTAL	111,327,583	127,373,682	35,805,690
Source: Ministry of Water and Irrigation as reported in MoFEA (2009): Tanzania Economic Survey			

6.3. Enhancing the Use of Economic Instruments

Based on the information provided above and details contained in the 2005 Water Sector Strategy, the consultant believes that strategic goals in the water sector are quite well established. What appears to be absent, though, and what would appear to be very useful is a water sector financing strategy, a tool recently developed and tested in several countries by OECD and the World Bank.

The graph below shows in schematic form what a water sector financing strategy attempts to achieve:

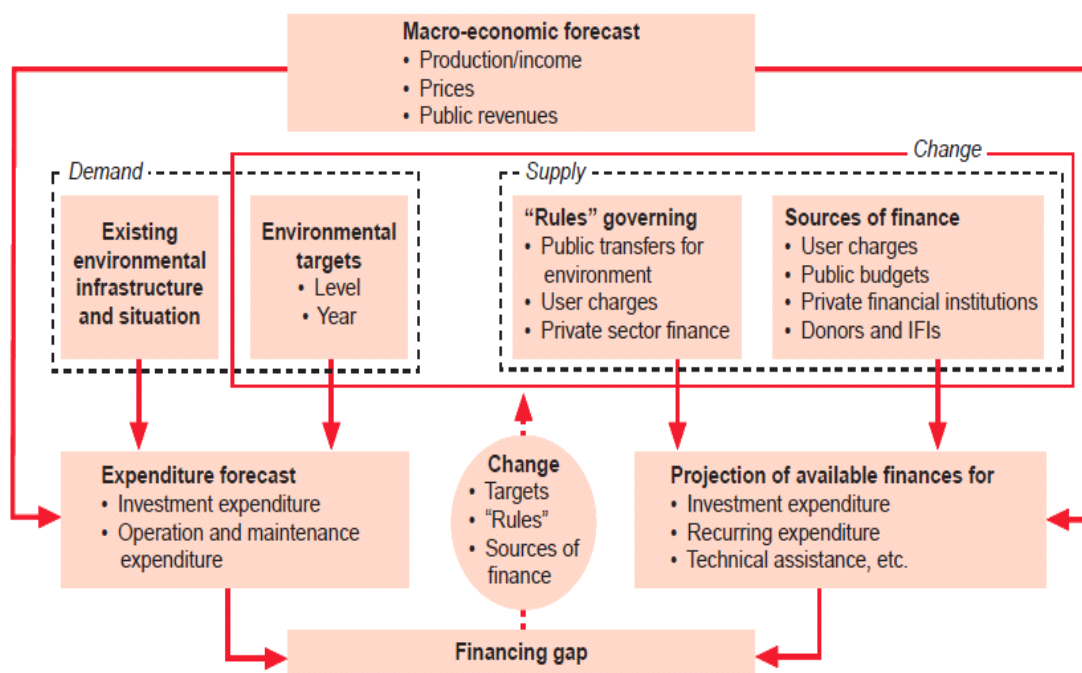
First, the demand for water infrastructure investment is estimated based on requirements established in adopted water legislation and policy, whereas different benchmarks and scenarios will be developed (for example, investment necessary to satisfy requirements of national drinking water policy, investment necessary to satisfy national sewage collection and water treatment policy and law, investment necessary to satisfy water related Millennium Development Goals, etc.). Such investment forecast is plotted over medium and long terms, taking into account various macro-economic factors and assumptions.

Demand for water finance is then compared to, in a second step, existing and forecasted supply of finance. Such supply of finance normally consists of government budget allocations for water sector investment, revenue from water user charges set aside for water infrastructure investment, financial support offered by bilateral and multilateral donors, as well as private sector finance

offered under public-private partnerships. Again, different scenarios will be elaborated to reflect potential changes in any of these sources of supply of investment finance: for example, one scenario could include significantly increased user charges, another scenario might include significantly increased government allocations, etc.

Demand and supply of finance plotted against each other will demonstrate the financing gap over medium and long term for water sector infrastructure investment. The water sector financing strategy will then elaborate different scenarios and recommendations to minimize or close to gap. This could include specific changes to adopted law and policy (effectively resulting in lowered investment demand), increased supply of finance from various sources, demand-side measures, rationalized what the management (including operation and maintenance of expenditure), rationalized investment strategies and priorities, etc.

Overall, a properly prepared water sector financing strategy will help to significantly rationalize economic and financial policies in the water sector. A number of background documents on water sector financing strategies, as well as examples of such strategies implemented in various countries are available, for example, on a [dedicated OECD website](#), or the [EU Water Initiative Finance working group](#) website.



7. Use of Economic Instruments in the Energy Sector

7.1. Economic Instruments Currently Used in Tanzania

As already discussed in detail in section 3 of this report, Tanzania uses excise taxes on petroleum products and generates significant tax revenue with this instrument. This tax contributes, of course, to environmental and climate change policy.

According to information posted on the website of the Ministry of Finance and Economic Affairs, excise duty is a special duty designed to raise extra revenue, provide disincentives for consumption of some environmentally or socially detrimental goods, and impose extra taxes on a selection of luxury goods. The tax is levied on the ex-factory price or the import price and so is included in the price of the product on the market. The specific rates are adjusted upwards to account for inflation each budget. Subject to the Finance act of 2005 all specific exercise duty rates will be annually adjusted in accordance with the project inflation rate. Rates of excise (2009/10) for selected taxed petroleum products are as follows (source: PriceWaterhouseCoopers: Doing Business: Know your Taxes, East Africa, 2009/10):

- Gasoline premium (MSP) (Petrol) - TZS 339 per litre
- Gasoline regular (MSP) - TZS 339 per litre
- Gas oils (Diesel) - TZS 314 per litre
- Jet fuel - Nil
- Illuminating kerosene - TZS 52 per litre
- Other medium oil and preparation – TZS 9.32 per litre
- Industrial diesel oil - TZS 392 per litre
- Heavy Furnace Oil - TZS 97 per litre
- Lubrication oil – TZS 500 per m3
- Lubrication greases – TZS 0.75 per kg
- Liquefied petroleum gas (LPG) - Nil

In addition, a fuel levy amounting to TZS 200 per litre of petrol or diesel (2010 level) has been introduced. The revenue from the fuel levy is earmarked to the Tanzanian Road Fund, which allocates the money to TANROADS and to Local Governments for the sole purpose of road rehabilitation and maintenance.

According to the 2009 Tanzania Economic Survey published by MoFEA:

- The average price of electricity was TZS 114.8 per KWh in 2009 compared to TZS 85.5 per KWh in 2008.
- The average price of petrol in the world market was USD 60.0 per barrel in 2009 compared to USD 96.9 in 2008. The average price of petroleum in the world market was USD 541.3 per ton, 458.2 (diesel) and 496.1 for kerosene. The average pump price in filling station was

TZS 1,550 per liter (petrol), 1,500 diesel and 1,300 for kerosene in 2009 compared to TZS 1,610.3 per litre (petrol), 1,707.2 (diesel) and 1,178.9 of kerosene in 2008.

According to the NKUKUTA Annual Implementation Report 2009/2010:

- Improving generation capacity, transmission and distribution is key to the expansion of power supply in the country. This requires substantial funding by the government and support from the development partners. Activities like gas development for power generation, oil exploration, establishment of strategic fuel reserves and the development of new and renewable energy sources all require both financial investments and technical support from development partners and private sector at large to enable the government to meet its economic growths targets as expressed in the MKUKUTA, Vision 2025 and MDG's. It should be understood that both financial investments and technical support in the energy sector are vital due to the fact that the sector is one of the key engines for economic growth and development in the country. Therefore, it is recommended that efforts need to be undertaken to improve mobilization of funds and increased allocations and disbursements of funds to energy projects.
- Access of the rural population to modern energy services: The Parliament enacted the Rural Energy Act in 2005 for the purpose of establishing the Rural Energy Board and the Fund and Agency to be responsible for promoting improved access to modern energy services in the rural areas. This is to be achieved through a Fund which is administered by the Board to provide for grants and subsidies to developers of rural energy projects. Rural Energy Agency which was established under this act became operational in 2007. REA has increased the speed of rural electrification.

7.3. Enhancing the Use of Economic Instruments

Based on the above discussion and the provisions of the 2003 energy policy, the consultant believes that existing excise taxes and fuel levy could be complemented by a CO₂ tax, whereas revenues could be earmarked to the proposed Environmental Fund.

As petroleum products are already taxed quite heavily, a CO₂ tax could also be designed such that its revenues replace part of the revenue of existing excise taxes on petroleum products (revenue and cost neutral design of the CO₂ tax), a measure which could increase political acceptability of a CO₂ tax.

As regards subsidies in the energy sector, one obvious area for investment of the proposed Environmental Fund would be decentralized, rural, renewable energy production. However it would be necessary to align support policies properly with the Fund established recently under the Rural Energy Agency.

Another spending area for the proposed Environmental Fund would be energy efficiency and conservation investments.

It should be stressed that both, proposed energy efficiency/conservation and renewable energy spending programs would undoubtedly have positive effects for employment generation and continued economic growth, i.e. provide for win-win-win solutions. Decentralized rural renewable energy solutions especially would also provide for important benefits in poverty alleviation.

8. Use of Economic Instruments in the Transport Sector

8.1. Typology and International Practice

A basic typology of economic and financial instruments in the transport sector includes:

- Taxes on transport fuels (taxes on gasoline / tax differentiation leaded/unleaded gasoline)
- Vehicle taxes (tax related to registration/ road use/ motor size/ emissions)
- Aviation taxes: (aviation fuel, airport charges, passenger arrival/departure)
- Subsidies (grants, interest subsidy, soft loans, etc.), for example related to investments in greener or more sustainable modes of transport

Economic and financial instruments are widely applied in most countries.

8.2. Economic instruments Currently Used in Tanzania

As reported on the publication entitled “Taxes and Duties in Tanzania in 2010 at a Glance” available for download on the website of the Tanzania Revenue Authority (TRA), the following transport related taxes currently apply:

Excise Duty

Imported non-utility vehicles of ten years of age or more , counted from the date of manufacture, are chargeable excise duty at the rate of 20%

Vehicles of cylinder capacity exceeding 1000 cc but not exceeding 2000 cc are taxed at 5%

Vehicles of cylinder capacity exceeding 2000 cc are taxed at 10%

Fuel levy

TZS 200 per litre of petrol or diesel

Airport Service Charges

International Travel: USD 30

Local travel (resident): TZS 5000

Port Charges

Resident traveler: TZS 500

Non-resident traveler: USD 5

Motor Vehicle Registration

Motor vehicle registration fees: TZS 120'000

Motor cycle registration fees: TZS 35'000

Costs for number plates (M/vehicle): TZS 38'000

Costs for a number plate (M/cycle): TZS 19'000

Annual fees:

Engine capacity up to 500 cc: TZS 30'000 per annum

501-1500 cc: TZS 50'000 per annum

1,500- 2,500 cc: TZS 100'000 per annum

Above 2,500: TZS 150'000 per annum

Tractors used for agricultural purposes: no annual fees

Motor Vehicle transfer tax: Motor vehicle transfer fees = TZS 50'000
Motor cycle transfer fee = TZS 15'000
Fee for a new registration card: TZS 10'000

Motor Vehicle Driving License: License fees: TZS 10'000, renewable every 3 years
Driving test fee: TZS 3'000
Provisional license fees: TZS 5'000, renewable every 3 months

Note that the revenue from the fuel levy is earmarked and allocated to the Tanzanian Road Fund, which allocates the money to TANROADS and to Local Governments for the sole purpose of road rehabilitation and maintenance. For more details on the Road Fund see the Road Funds dedicated website: <http://www.roadsfundtz.org/web/index.asp>

According to information posted on the website of the Ministry of Finance and Economic Affairs, excise duty is a special duty designed to raise extra revenue, provide disincentives for consumption of some environmentally or socially detrimental goods, and impose extra taxes on a selection of luxury goods. The tax is levied on the ex-factory price or the import price and so is included in the price of the product on the market. The specific rates are adjusted upwards to account for inflation each budget. Subject to the Finance act of 2005 all specific exercise duty rates will be annually adjusted in accordance with the project inflation rate. Rates of excise (2009/10) for selected taxed petroleum products are as follows (source: PriceWaterhouseCoopers: Doing Business: Know your Taxes, East Africa, 2009/10):

- Gasoline premium (MSP) (Petrol) - TZS 339 per litre
- Gasoline regular (MSP) - TZS 339 per litre
- Gas oils (Diesel) - TZS 314 per litre
- Jet fuel - Nil
- Illuminating kerosene - TZS 52 per litre
- Other medium oil and preparation – TZS 9.32 per litre
- Industrial diesel oil - TZS 392 per litre
- Heavy Furnace Oil - TZS 97 per litre
- Lubrication oil – TZS 500 per m3
- Lubrication greases – TZS 0.75 per kg
- Liquefied petroleum gas (LPG) - Nil

The 2003 National Energy Policy states that:

...more than 40% of all imported petroleum is consumed by the transport sector.

There are insufficient standardization and quality control of petroleum products and inadequate enforcement and uncoordinated safety measures. There is a need for efficient use of transportation means and improvement of underdeveloped transport infrastructure, including the use of alternative systems.

Regulatory measures for improvements and licensing, storage facilities and safety standards and pricing needs to be addressed. Furthermore, it is necessary to improve mass transport systems to reduce fuel consumption, traffic congestion and pollution. The exploration for possibilities of fuel switch to other energy forms such as electricity, ethanol and compressed natural gas should be encouraged.

Policy goals include:

1. Promote energy efficiency and conservation in the transport sector.
2. Encourage use of more efficient transportation modes.
3. Promote fuel switch from petroleum to all the alternative environmentally friendly fuels.

8.3. Enhancing the Use of Economic Instruments

Transport related taxes already provide significant revenues to the treasury, as reported in the preceding section and section 3.

One option to further enhance the existing scheme would be to introduce the new CO₂ tax, with revenues earmarked to the proposed Environmental Fund. Alternatively, a CO₂ tax could also be designed such that it replaces part of the existing excise tax on petroleum products in a cost-neutral manner, thus increasing political feasibility of such tax.

Some of the policy goals of the 2003 National Energy Policy related to transport, as detailed in section 8.2, could be addressed by investments supported by the proposed Environmental Fund, in particular investments related to increased energy efficiency and conservation in the transport sector, investments into more efficient transportation modes, and investments leading to fuel switch to more environmentally friendly fuels.

9. Use of Economic Instruments in the Wildlife and Biodiversity Protection Sector

9.1. Typology and International Practice

There are many different types of economic and financial instruments related to wildlife and biodiversity protection, including for example (selection):

- Access fees to protected areas
- User charges related to wildlife and biodiversity resources
- Management charges related to protected areas
- taxes or charges levied on certain wildlife and biodiversity resources (aimed at minimizing such resource use, or raising revenue for the treasury or biodiversity-related subsidy programs)
- Subsidies aimed at wildlife and biodiversity protection (grants, soft loans and other types of financial assistance)
- Reform packages for subsidy schemes that are harmful from the point of view of wildlife and biodiversity protection

The interested reader will find additional information on websites such as (the following represent just a selection recommended by the consultant and should by no means be considered as complete list): <http://www.biodiversityeconomics.org/> or <http://www.cbd.int/incentives/case-studies.shtml> and <http://www.cbd.int/financial/>.

9.2. Economic instruments Currently Used in Tanzania

Law enforcement on wildlife and wildlife products, including ivory, is primarily established under a special “Anti-poaching Unit”. This “Anti-poaching Unit” is paramilitary and is largely funded by special fund, the “Tanzania Wildlife Protection Fund”, TWPF⁵.

The TWPF was established by Parliament Act No. 21/1978. Apparently, more than 90% of the revenue of the Fund is generated from proceeds that accrue from sport hunting and sale of trophies. Main spending areas of the TWPF include:

- Anti-poaching and law enforcement.
- Development Projects relating to wildlife protection
- Applied research on biodiversity conservation and environmental protection
- Conservation education programs conducted by Malihai Clubs of Tanzania
- Training of wildlife manpower
- Support to wildlife training institutions such as Pasiansi wildlife training institute and College of African Wildlife Management – Mweka.

⁵ Contact info of the TWPF: Tanzania Wildlife Protection Fund, Ivory Room, Nyerere road, P.O. Box 1994, Dar es Salaam, Tel: +255 22 2866377. [Click to access TWPF website](#) (very limited information on the TWPF is available on this site, though)

The 2009 Wildlife Conservation Act stipulates in Articles 91-94 that the TWPF shall continue to exist. The legislation states that the objectives of the TWPF shall include to facilitate and support wildlife conservation, inside and outside protected areas particularly in:

- Anti-poaching operations and law enforcement;
- operations of the Wildlife Protection Unit
- the conservation of wildlife;
- the development of communities living in rural areas adjacent to wildlife protected areas;
- conservation education, training and awareness creation in wildlife matters;
- capacity building in wildlife management;
- the wildlife management research; and
- any other activity related to conservation of Wildlife.

The 2009 Wildlife Conservation Act stipulates further the following sources of the Fund:

- such sums of money as may be appropriated by the Parliament;
- 25% of the proceeds of the sale of every animal, trophy, weapon, vehicle, vessel, aircraft, tent or other article which is forfeited pursuant to section 110 of the Act and sold or disposed of in any manner for money including proceeds accrued from non-consumptive use of wildlife outside national parks and the Ngorongoro Conservation Area;
- any sum or property which may in any manner become payable into the Fund; and
- any sum payable or donation, bequest, gift or grant made or given to the Fund by other agencies, institutions, persons or other government or international organizations.

The management of the TWPF is carried out by a Board of Trustees, including membership of:

- the Chairman who shall be appointed by the President, and who is a person of a proven quality, integrity and experience in public service in either wildlife matters, economics, laws, management or related disciplines;
- the Conservator of the Ngorongoro Conservation Area;
- the Director General of the Tanzania National Parks;
- the Director General of the Tanzania Wildlife Research Institute;
- a senior State Attorney appointed by the Attorney General on his behalf;
- a senior accountant representing the Ministry of Finance;
- two members with quality, integrity, knowledge and experience in wildlife conservation appointed by the Minister;
- the Director who shall be the Chief Executive Officer and the Secretary to the Board.

There is no detailed further information available online on the revenues, more detailed spending strategies and operational procedures of the TWPF (TWPF does not seem to have an own website) and the consultant unfortunately could not meet with the TWPF.

However, it is quite clear that potential interfaces and cooperation with the TWPF should be further investigated and established while preparing for creating an Environmental Fund (see recommendation 3 in chapter 13 of this report).

Revenues from wildlife resources

The 2009 Tanzania Economic Survey published by MoFEA (p 156ff) reports on the following revenue figures related to wildlife resources (total 2009 revenues reported in the table below would amount to approximately 18 million USD):

Trends in Earnings from Wildlife Resources 2006 -2009 in mln TZS				
	2006	2007	2008	2009
Export permits	8.3	10.5	10.2	5.7
Catching permits for live	236	74.5	408.5	87.6
Permit for Owning	2.2	2.9	24	1.5
Hunting Tourism	14,364.50	6,743.60	17,834.10	22,112.60
Photographic Tourism	531.7	648.5	18.8	1,350.60
Other fees	16.1	84.7	11.4	7.4
Trophy Business Licences	123	3.2	2	10.4
Source: Ministry of Natural Resources and Tourism as reported in MoFEA (2009): Tanzania Economic Survey				

Revenues from tourist visits to national parks

Number of tourists visiting national parks and related revenues are reported in the following table. In 2009, a total of 647,193 tourists visited National Parks, whereby 533,655 tourists were foreigners and 113,538 were locals. Earnings from tourists visited the National Parks was TZS 67.3 billion. In addition, a total of 438,179 tourists visited Ngorongoro Conservation Authority, of which 234,767 were foreigners and 203,412 were locals. Earnings from tourists visited Ngorongoro was shs. 34.7 billion.

Tourists visited National Parks and Earnings for 2009				
National Park	Foreigners	Locals	Total	Revenue (Tshs)
ARUSHA	40,268	9,235	49,503	2,339,387,301
GOMBE	1,202	432	1,634	204,503,850
KATAVI	1882	292	2,174	202,229,175
KILIMANJARO	41,879	1,183	43,062	30,109,748,440
KITULO	366	187	553	36,145,700
ZIWA MANYARA	118,565	16,361	134,926	4,758,228,813
MAHALE	810	58	868	342,847,429
MIKUMI	25,282	10,616	35898	792,552,744
MKOMAZI	647	263	910	70,588,250
RUAHA	14,125	3,118	17,242	1,153,754,858
RUBONDO	472	153	625	65,701,650
SAADANI	2,755	1,335	4,090	105,268,080
SAANANE	1,936	51	1985	8,875,800
SERENGETI	202,537	58841	261,378	22,956,673,451
TARANGIRE	77,739	10,018	87,757	4,019,454,771
UDZUNGWA	3163	1395	4,558	121,871,763
Ngorongoro	234,767	203,412	438,179	34,741,592,721
Sources: TANAPA and Ngorongoro Conservation Authority as reported in MoFEA (2009): Tanzania Economic Survey				

9.3. Enhancing the Use of Economic Instruments

In the consultant's view a number of conclusions could be drawn from the discussion in the preceding section:

- User/access charges are well established in National Parks and Ngorongoro Conservation Authority. The same can be said on revenues from using wildlife resources. As regards use of revenues, in both cases possible interfaces and cooperation arrangements with the proposed new Environmental Fund should be closely investigated and discussed (see recommendation 3 in chapter 13 of this report). For example, the proposed Environmental Fund could play a role in biodiversity and nature conservation in areas outside National Parks and Ngorongoro Conservation area.
- It might be useful to develop a survey that establishes both demand for biodiversity/wildlife finance (primarily based on requirements set out in respective legislation and policy) and current supply of such finance. The resulting gap should then be analyzed and measures to close the gap could be identified (increase of user charges, introduction of new economic instruments, revision of policy targets to make the achievement of these targets financially viable, etc.). Eventually, such a survey could help to further rationalize and focus biodiversity-, nature- and wildlife-policy related financing in Tanzania.
- The management (and related financing) of protection and conservation activities in areas with significant marine biodiversity should be investigated, especially also in the context of the possibility of establishing marine protected areas.

10. Use of Economic Instruments in the Agriculture, Forestry, Fisheries Sectors

10.1. Typology

The following types of economic and financial instruments are used in the agriculture, forestry and fisheries sector (selection):

- Charges and taxes on water effluent, air emissions, waste production/disposal
- Product taxes on pesticides, fertilizers, packaging materials, etc.
- Green subsidies (grants, interest subsidies, soft loans, etc.) for investments into environmentally sustainable technologies, e.g., decentralized small scale renewable energy production, waste reuse, recycling, waste to energy etc.
- Reform of agricultural/fishery/forestry subsidies ensuring that such subsidies are fully supportive of environmental policy goals (reform of environmentally harmful subsidies)

10.2. Economic instruments Currently Used in Tanzania

The agriculture, forestry and fishing sectors belong to the priority sectors for central government spending as the table below demonstrates.

Central government expenditure in selected sectors, fiscal years 2007/2008 and 2008/2009				
	Actual budget execution 2007/8, bln TZS		Planned budget execution 2008/9, bln TZS	
Sector	Recurrent	Development	Recurrent	Development
Agriculture, Forestry, Fishing, Hunting	95.1	56.3	126.2	183.9
Education	408.7	144.0	420.1	136.7
Health	200.3	173.6	209.9	301.3
Water supply and sanitation	10.1	213.1	15.1	212.6
Fuel and energy affairs	31.4	310.4	33.0	313.3
Mining, manufacturing, construction	168.8	432.0		
Transportation, communication	45.5	34.6	203.5	592.1
Sources: National Bureau of Statistics as reported in MoFEA 2009 Tanzania Economic Survey				

This is because the economy of Tanzania is dependent on agriculture, a sector that employs over 75% of the workforce. The agriculture sector is also the major source of food supply and raw materials for the industrial sector. Subsistence farming is the most common activity and women are the main stakeholders in most agricultural sector activities.

In many countries reform of environmentally harmful agricultural subsidies of greening agricultural subsidies is high on the agenda. It appears, however, that in Tanzania the primary problem is not so much the reform of environmentally harmful agricultural, fishery and forestry subsidies, but increasing investment into the agricultural, fishery and forestry sectors. One area in which increased investment would be desirable, for example, would be green investments or modern, environmentally sustainable technologies.

According to the 2003 National Energy Policy, of the total energy demand in agriculture, 75% is met from human energy, 15% by animal power and only 10% by diesel, electricity and solar power. Drying and processing of agricultural products is by traditional applications of solar energy and firewood. Many agricultural activities contribute towards deforestation, through extensive farming and slash and burn practices. The current agricultural policy calls for increased output and efficiency in agricultural production, timely delivery and efficient use of energy inputs into agriculture and increased use of tractors. The policy also includes the promotion of environmentally friendly technologies, for instance in the areas production, processing and irrigation. Furthermore, methods and approaches on how to maximize the use of alternative sources of energy such as coal, micro-hydro, solar, wind, biomass, and other renewable energies, need to be developed and commercialized.

The proposed new Tanzanian Environmental Fund could assist with targeted subsidize support to several of the mentioned areas needing investment, especially as regards environmentally sustainable technologies and energy efficiency in agriculture, forestry and fisheries.

Articles 77-83 of the 2002 Forest Act stipulate the establishment of forestry charges and royalties, as well as the establishment of the Tanzania Forest Fund. It appears however that this Fund has so far not been established.

According to the 2002 Forest Act, the proposed Forest Fund could have the following revenues:

- a levy of two per cent of every prescribed fee payable under the Forestry Act;
- a levy of three per cent of any royalty payable under the Forestry Act;
- grants, donations, bequests or such sums contributed by any private individuals, corporate bodies, foundations, or international organizations or funds within or outside the country;
- any sums realized by the sale of any forest produce confiscated under any of the provisions of this Act;
- any income generated by any project financed by the Fund, due allowance being made for any necessary expenses which must be met by any such project.
- any such funds acquired from various sources,

The objectives and purposes of the Fund would be to:

- promote awareness of the importance of the protection, development and sustainable use of forest resources through public education and training;
- promote and assist in the development of community forestry directed towards the conservation and protection of the forest resources of the country through the making of grants and providing advice and assistance to groups of persons wishing to form themselves into a group;
- promote and fund research into forestry;
- assist in enabling Tanzania to benefit from international initiatives and international funds directed towards the conservation and protection of biological diversity and the promotion of sustainable development of forest resources;
- assist groups of persons and individuals to participate in any public debates and discussions on forestry and in particular to participate in processes connected with the making of an environmental impact assessment;

- assist groups of persons and individuals to ensure compliance with the Forestry Act;
- Promote such other activities of a like nature to those set out in this section as will advance the purposes of the Forestry Act.

As for the fisheries sector, articles 28-30 of the 2003 Fisheries Act stipulate that the Minister responsible for fisheries has the right to prescribe and implement fees on fishing vessels registration, various licenses, services, permits and export royalties, whereas export royalties can be levied on particular fish and fishery products. The same Act also stipulated the establishment of a Fisheries Development Fund. (Apparently this Fund has not been established so far).

The Fisheries Development Fund would have the following revenues:

- any such sum as may be appropriated by the Parliament;
- any sum or property which may in any manner become payable into the Fund;
- any income generated by any project financed by the Fund, due allowance being made for any necessary expenses which must be met by any such project;
- grants, donations, bequests or such sum contributed by any private individuals, corporate bodies, foundations and international organizations, within or outside the country;
- any such funds legally acquired from various sources.

The objectives and purposes of the Fund would be to:

- promote awareness of the importance of protection development and sustainable use of fisheries resources through public education and training;
- promote and assist in the development of community management units by giving grants and assisting groups of persons wishing to form fisheries conservation and protection groups;
- promote and develop research in fisheries;
- enable Mainland Tanzania to benefit from international initiatives and international funds directed towards conservation and protection of biological diversity and promotion of sustainable development of fishery resources;
- assist group of persons and individuals to participate in any public debates and discussions on fisheries such as the making of environmental impact assessment;
- assist groups of persons and individuals to ensure compliance with the Fisheries Act;
- support fisheries protection activities;
- promote fishery products in the external market, compliance with international standards and improvement of quality for local market;
- enable Mainland Tanzania to pay her membership fee and various contributions to relevant international fisheries organizations;
- promote aquaculture activities and restocking of natural water bodies;
- facilitate fisheries data collection; and

10.3. Enhancing the Use of Economic Instruments

In view of potentially establishing the new proposed Tanzanian Environmental Fund, it might be wise to consider options to integrate the operations of the proposed Forest Fund and the proposed Environment Fund into one Fund. One Fund with overall stronger revenue base would likely allocate resources more efficiently. Even the proposed Fisheries Development Fund could be integrated; if this was done, the focus in fisheries support would probably be on biodiversity conservation and sustainable fisheries while promoting at the same time better quality output, higher efficiency and higher profitability.

In any case, the proposed new Tanzanian Environmental Fund could assist with targeted subsidized support to several of the priority areas needing investment according to adopted agriculture/forestry/fishery policy, especially as regards environmentally sustainable technologies, biodiversity conservation and energy efficiency and conservation, always aiming at positive effects of such investments concerning both poverty alleviation and economic growth.

11. Use of Economic Instruments in the Mining Sector

11.1. Typology and International Practice

The following types of economic and financial instruments are used in the mining sector (selection):

- Taxes, charges or royalties on resource extraction
- Charges and taxes on water effluent, air emissions, waste production/disposal
- Green subsidies (grants, interest subsidies, soft loans, etc.) for investments into environmentally sustainable technologies, e.g., renewable energy production, waste reuse, recycling, etc.
- Reform of environmentally harmful subsidies

11.2. Economic instruments Currently Used in Tanzania

According to the 2009 Mineral Policy of Tanzania, strengthening management of safety, occupational health and environment in mining activities is a priority in the mining sector. The Mineral Policy mentions that in order to ensure sustainable mining activities, there is a need for the government to strengthen monitoring and regulation of the mining industry to reduce or eliminate the adverse effects on health and safety, environmental and social issues. It is also important for the government to make efforts to increase environmental awareness and promote environmentally friendly practices in the mining industry, particularly among small scale miners.

The policy statement includes that:

- The government will strengthen the institutional capacity in monitoring and enforcement of laws and regulations on safety and occupational health, environmental protection and management in mining areas.
- The government will require mining companies to set aside funds for environmental rehabilitation and mine closure obligations.
- The government will continue to harmonize laws and regulations governing safety, occupational health and environmental issues in the mineral sector.
- The government will continue to collaborate with stakeholders to ensure that small, medium and large scale miners preserve the environment.
- The government will continue to provide education on health and safety; HIV/AIDS and environmental management to small, medium and large scale miners and the surrounding community communities. And
- The government will administer and monitor exploration, mining, handling, transportation, storage, usage and export of radioactive minerals, explosives and toxic materials.

The 2010 Mining Act established that every authorized miner shall pay to the Government of the United Republic a royalty on the gross value of minerals produced under his license at the following rates:

- 5% in the case of uranium;
- 5% in the case of gemstone and diamond;
- 4% in the case of metallic minerals such as copper, gold, silver and platinum;
- 1% in the case of gem;
- 3% in the case of other minerals, including building materials, salt, all minerals within the industrial minerals group.

The Mining Act also prescribes that mining licenses are provided under the condition that the mining activity does not violate the Environment Management Act and is carried out in line with a special environmental management plan to be approved by the ministry responsible for mining.

As detailed in chapter 4, Articles 227 and 228 of the Environment Management Act detail requirements on environmental performance bond and compensation that apply also the mining activities as follows:

227. (1) The Minister shall prescribe in the regulations, activities or processes which threaten the environment of which environmental performance bond may be required.

(2) An environmental performance bond shall be deposited with the Director of Environment as security for good environmental practice until its refund to the depositor.

(3) The environmental performance bond shall be returned to the operator of activity or process upon the satisfaction of the conditions set by the Minister.

(4) The Director of Environment shall give the operator of an activity or process an opportunity to be heard before confiscating the environmental performance bond.

(5) An environmental performance bond shall be confiscated in whole or in part when the Director of Environment finds and operator's practices violate the provisions of this Act, including the conditions of any certificate, license or permit issued under this Act.

(6) Where any environmental performance bond is confiscated under sub-section (5), shall be used to rehabilitate a degraded environment.

228.-(1) For the avoidance of doubt, the Minister shall make regulations prescribing the right to compensation for those who suffer damages while protecting the environment.

(2) Any person who violates environmental protection standards causing any damage shall compensate for the damages and costs of remedying the consequences.

11.3. Enhancing the Use of Economic Instruments

So far, no charges and taxes on water effluent, air emissions and/or waste production/disposal have been introduced in Tanzania. Such charges and taxes could provide useful incentives also for the mining sector to gradually shift towards more sustainable production practices. However, the consultant believes, that prior to the introduction of such charges or taxes, the government should introduce and properly enforce an appropriate, and control system for pollution, based on integrated pollution prevention and control as foreseen in the Environmental Management Act.

In addition, the proposed Environmental Fund could provide for targeted support to qualified mining companies for environmentally sustainable technology investments, as well as renewables and energy efficiency investments.

12. Use of Economic Instruments in the Manufacturing Sector

12.1. Typology and International Practice

The following types of economic and financial instruments are used in the industrial production and manufacturing sector (selection):

- Charges and taxes on water effluent, air emissions, (hazardous) waste production/disposal
- Product taxes on tyres, packaging materials, CFCs, batteries and accumulators, light bulbs, PVC, lubrication oil, paper, board, etc.
- Taxes and charges levied on transportation
- Green subsidies (grants, interest subsidies, soft loans, etc.) for investments into environmentally sustainable technologies, e.g., decentralized renewable energy, energy efficiency and conservation, waste reuse, recycling, waste to energy etc.
- Reform of environmentally harmful subsidies

12.2. Economic instruments Currently Used in Tanzania

The following table demonstrates the performance of the most important industrial subsectors in Tanzania in 2009. The table shows that food processing and production of beverages are currently the most important industrial sectors in Tanzania.

Overview of industry sector performance in Tanzania in 2009		
	Estimated total number of employees in 2009	Earnings in mln TZS in 2009
Food processing	45287	825715
Beverages	4233	493051
Tobacco and cigarettes	7131	204567
Textile manufacturing	10480	129690
Skins and skins products	23	194
Shoes	1199	11669
Timber and timber products	2723	23445
Manufacturing of paper products, printing	4585	141811
Manufacturing of chemicals	5053	143741
Rubber products	536	7944
Manufacturing of plastic products	2351	67965
Manufacturing of non-metallic products	1772	296044
Other industries	7554	203272
Source: National Bureau of Statistics, as reported in MoFEA 2009 Tanzania Economic Survey		

Apart from excise taxes on petroleum products, taxes on transportation and user charges on water and electricity use, as described earlier in this report, no specific economic or financial instruments supporting environmental policy and addressing the industrial sector appear to be in force at this point in Tanzania.

12.3. Enhancing the Use of Economic Instruments

So far, no charges and taxes on water effluent, air emissions and/or waste production/disposal have been introduced in Tanzania. Such charges and taxes could provide useful incentives also for the industry sector to gradually shift towards more sustainable production practices. However, the consultant believes, that prior to the introduction of such charges or taxes, the government should introduce and properly enforce an appropriate, and control system for pollution, based on integrated pollution prevention and control as foreseen in the Environmental Management Act.

In addition, the proposed Environmental Fund could provide for targeted support to qualified industrial companies for environmentally sustainable technology investments, as well as renewables and energy efficiency investments. In addition, Fund support could also be extended for resource efficient and cleaner production programs extended to specific industrial sectors and companies, including in particular investment components of such programs.

13. Proposed Tanzania EFR Action Plan

Proposal 1: Elaborate legislation for and introduce product taxes

- Identify products that could become subject to product taxes (international experience suggests following products: packaging materials, vehicle tires & wracks, light bulbs, certain fertilizers & pesticides, CFCs, batteries & accumulators, etc.)
- Elaborate implementation concepts and legislation for new product taxes
- Inform political process leading to enactment of product taxes

In completing above work, keep the following in mind:

- Ensure earmarking of product tax revenues to the proposed Environmental Fund (see proposal 3 below)
- Integrate existing deposit refund systems and plastic bag tax into new product tax system

Implementation effects

Impact on economic growth: Likely positive, as new professional waste recycling and re-use industries will emerge and new, more sustainable products will enter the market.

Impact on poverty reduction: Likely positive as the poor tend to suffer disproportionately from insufficient waste management. The emergence of new green industries and consumption patterns will also likely have positive effects on employment.

Expected results: Less waste produced, less wasteful packaging used, high percentages of waste reused or recycled, new waste infrastructure constructed, sustainable finance of waste management sector enabled.

Responsible institution for implementing this measure: Inter-ministerial EFR Commission for coordination (see proposal 11 below), implementation lead with Vice Presidents Office and Ministry of Finance

Proposal 2: Elaborate legislation for and inform political process leading to the introduction of a CO2 tax

- Elaborate implementation concept and legislation for the new CO2 tax
- Inform the political process leading to enactment of the CO2 tax

In completing above work, keep the following in mind:

- Ensure earmarking of CO2 tax revenues to the proposed Environmental Fund (see proposal 3 below)
- Elaborate projections (different scenarios) on economic and environmental impacts of assumed variants of a CO2 tax
- It might be appropriate to consider/introduce a tax shift from income/profit taxes to the new CO2 tax

Implementation effects

Impact on economic growth: Depends on actual design of this tax – the design should be ideally such that overall growth impacts are positive (due to positive growth impacts from subsidies of earmarked tax) or at least neutral.

Impact on poverty reduction: Neutral – the poor are typically not large consumers of products for which the CO2 tax would have to be paid. Compensatory measures or tax waivers for poor households can be included in tax design to alleviate possible negative effects.

Expected results: Incentives to consume less products with high CO2 intensity/content; shifting fuel use towards fuel with low carbon content; shift towards greener, more efficient and lower carbon economy; positive environmental and growth impacts from subsidies financed by the earmarked revenue of the CO2 tax.

Responsible institution for implementing this measure: Inter-ministerial EFR Commission for coordination (see proposal 11), implementation lead with Vice Presidents Office, Ministry of Finance, Ministry of Energy and Minerals.

Proposal 3: Establish an Environmental Fund

- Based on good international practice, elaborate enabling documents for a National (if applicable also: Regional) Environmental Fund(s), including: Fund Statutes; Fund governance (bodies, responsibilities, decision making procedures, staff profiles); capitalization and revenue management; short and long-term spending strategies; project cycle management procedures; outreach and reporting policy.
- Inform political process leading to establishment of Fund
- Main spending areas could include: 1) eco-technology in energy/ industry/ transport/ agriculture sectors; 2) waste management; 3) biodiversity & nature/ wildlife protection; 4) research and education. Max. 10-15% of expenditures for overhead and administration. Min. 80-90% of remaining amount of revenues for investment projects.

It will likely be most useful to base preparations leading to the establishment of an Environmental Fund on good international practice in public environmental expenditure management (as discussed in annex 1 and 2). Annex 4 contains draft elements of terms of reference for expert support in establishing an Environmental Fund in Tanzania.

Implementation effects

Impact on economic growth: Positive due to implementation of new technologies bringing about innovation gains, competitiveness gains, productivity gains, resource efficiency gains and pollution reduction. Long-term positive effects from better conservation of natural resources and biodiversity. Additional growth stimulus from investments into municipal environmental infrastructure.

Impact on poverty reduction: Positive as pollution will be reduced, waste management enabled, and infrastructure improved, all factors the poor population suffers disproportionately from.

Expected results: Modernization of the economy through implementation of new technologies and improvements in municipal infrastructure. Greening the economy. Better and more cost-efficient implementation of enacted environmental policy and law.

Responsible institution for implementing this measure: Inter-ministerial EFR Commission for coordination (see proposal 11 below), implementation lead with Vice Presidents Office and Ministry of Finance.

Proposal 4: Introduce green public procurement

- Commission the preparation of a study on benefits from and limitations of Green Public Procurement (GPP⁶) in other countries, as well as the lessons that could be learned from such experience for Tanzania. The study should also detail gains that Tanzania could realize by introducing GPP and analyze already existing experience with GPP in Tanzania, if at all.
- Elaborate proposals to enhance the 2004 Public Procurement Act with provisions on GPP. Lobby establishing a legal basis for GPP.
- Implement GPP training courses for the Public Procurement Regulatory Authority of Tanzania, as well as procurement officers of national ministries and bigger cities
- Periodically carry out studies on actual GPP implementation in the country in order to measure progress and identify areas requiring further strengthening and training.

Implementation effects

Impact on economic growth: Positive as new, more sustainable industries and products will emerge and grow, and as more cost efficient procurement decisions will be made due to inclusion of full life cycle costs in procurement.

Impact on poverty reduction: Neutral-positive, as eventually new employment will be created due to increased demand for more sustainable products and services called for by green procurement.

Expected results: Decreased use of natural resources and energy, less (hazardous) waste, less pollution, new green industries and products, increased awareness of environmental issues, innovation and competitiveness gains, new export possibilities.

Responsible institution for implementing this measure: Inter-ministerial EFR Commission for coordination (see proposal 11 below), implementation lead with Vice Presidents Office and Ministry of Finance.

Proposal 5: Enable and implement work aimed at greening budgeting processes including MTEF planning and execution

- Elaborate and develop procedures and methodologies that enable Ministries to effectively include sustainability criteria to budgeting processes including MTEF planning; provide related on-the job training
- Elaborate studies aimed at estimating costs of non-action (e.g., value of future costs if budgets & spending on climate change mitigation and/or climate change adaptation are postponed now)
- Identify environmentally harmful subsidy practices and elaborate related reform proposals

See [OECD's Public Environmental Expenditure Management website](#) and [OECD's Green Growth website](#) for current OECD work in this area.

Implementation effects

Impact on economic growth: Neutral – positive as greener budgets should provide for a more efficient allocation of means in the medium and longer term.

Impact on poverty reduction: Positive provided that sustainability criteria include poverty reduction criteria.

Expected results: Systematically greening all public finance processes in a standardized, permanent and comprehensive way leading to sustainability gains across all sectors.

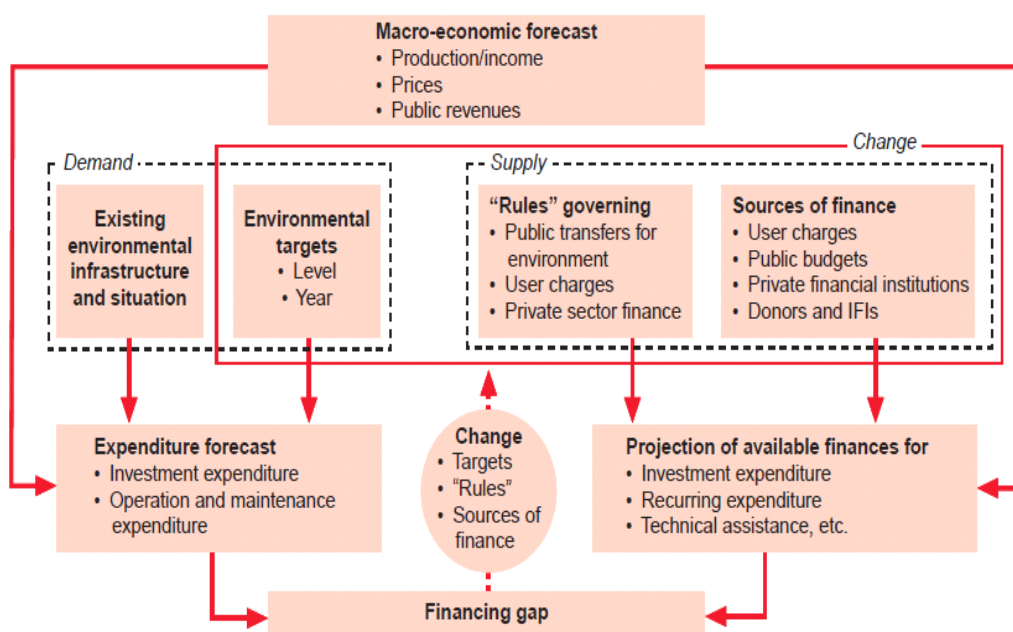
Responsible institution for implementing this measure: Inter-ministerial EFR Commission for coordination (see proposal 11 below), implementation lead with Ministry of Finance, participation of all ministries and public agencies.

⁶ See annex 2.10 for an introduction to GPP

Proposal 6: Promote and work towards cost covering user charges

- In water supply, sewerage, waste collection and energy supply, strive for gradually achieving cost covering user charges.
- This will normally go hand in hand with implementing infrastructure investments
- As finance supply for such investments is limited, it may be desirable to elaborate and implement sector financing strategies, e.g. Water Sector Financing Strategies using methodologies and experience tested by OECD and EUWI in many Eastern European (and increasingly: African) countries.

An overview of the Water Financing Strategy method is provided in the graph below:



For more details on water sector financing strategies including selected case studies see: <http://www.oecdbookshop.org/oecd/display.asp?lang=EN&sf1=identifiers&st1=142003081e1> and: http://www.oecd.org/document/27/0,3343,en_2649_34335_33698459_1_1_1_1,00.html

Implementation effects

Impact on economic growth: Positive as investment into infrastructure will be more efficient and effective.

Impact on poverty reduction: Positive as more cost efficient infrastructure finance should have positive effects on infrastructure quality and supply, leading to positive poverty impacts as poor people tend to suffer disproportionately from insufficient infrastructure.

Expected results: More focused financial planning; effective argumentation available for lobbying for increased finance from public, private and international sources; better implementation of enacted policy and law.

Responsible institution for implementing this measure: Inter-ministerial EFR Commission for coordination (see proposal 11 below), implementation lead with Ministry of Water and Works.

Proposal 7: Work towards greening commercial finance

- Elaborate a study on international experience in greening commercial finance and their applicability for Tanzania
- Organize a conference bringing together main stakeholders, including Tanzanian banks, insurance and leasing companies, to establish a road map leading to greener commercial finance in Tanzania
- Together with banks, insurance and leasing companies, elaborate concrete proposals and concepts for green products such as green bank accounts, green mortgages, green loans, green investment funds, etc.

Implementation effects

Impact on economic growth: Positive as new financial mechanisms and products would emerge; innovation gains would be realized and new markets and industries enabled.

Impact on poverty reduction: Neutral as poor people usually do not benefit from banking and insurance services.

Expected results: The commercial sector gets involved in a emerging environmental financing market, i.e. the market is not dependent exclusively on state intervention; environmental gains through implementation of new products and services.

Responsible institution for implementing this measure: Inter-ministerial EFR Commission for coordination (see proposal 11 below), implementation lead with Vice Presidents Office and Ministry of Finance.

Proposal 8: Work towards progress with EFR in the EAC region and internationally

- As part of the East African Community's work aimed at creating a common market and currency union, lobby for establishing a EAC working group on EFR that would work towards progress with EFR in EAC member states
- Promote Tanzania's work on EFR internationally, including at major events (e.g., 2012 Earth Summit and other relevant major conferences), and continue to track and analyze growing international experience with EFR

Implementation effects

Impact on economic growth: Positive as a regional market for new green industries, products and services would gradually emerge. See also economic effects of individual EFR measures as described for proposals 1-7 above.

Impact on poverty reduction: See description of poverty impacts in proposals 1-7 above.

Expected results: Innovation, growth, competitiveness and environmental gains on a regional level.

Responsible institution for implementing this measure: Inter-ministerial EFR Commission for coordination (see proposal 11 below), implementation lead with Vice Presidents Office and Ministry of Finance.

Recommendation 9: Realize CDM projects

- Continue and intensify work towards realizing projects involving CO2 emission trading under CDM
- Note that the proposed Environmental Fund (see recommendation 3) should be seen as a useful institution to speed up and further professionalize the development and implementation of CDM projects.

Implementation effects

Impact on economic growth: Positive as CDM investments would spur investment and technology change associated with innovation and efficiency gains.

Impact on poverty reduction: Neutral-positive. Depends on the type of CDM project.

Expected results: Realization of investment and financial flows from abroad, contribution to climate change mitigation, environmental and economic efficiency gains.

Responsible institution for implementing this measure: Institutions mandated to realize CDM in Tanzania.

Proposal 10: Consider introduction of pollution charges/taxes

In terms of introducing pollution charges/taxes (charge/taxes related to the emission/effluent of selected air and water pollutants), focus first on building and implementing a robust command and control scheme based on Integrated Pollution and Prevention Control principles. Only once such a scheme is operational and functional, it is advised to introduce pollution charges/taxes to complement and further strengthen the command and control approach.

Implementation effects

Impact on economic growth: Neutral – largely depends on design of taxes. While tax payments will constitute a cost factor for companies (resulting negative growth effects, one could argue), new investments into reducing pollution, thus contributing to reduced external costs, typically bringing about efficiency and innovation/modernization gains, should help to offset negative growth effects. If revenues are earmarked for environmental investment, additional positive growth effects may be expected from such investments.

Impact on poverty reduction: Positive as the poor tend to suffer disproportionately from industrial pollution.

Expected results: Reduced industrial pollution, implementation of environmental management and technologies.

Responsible institution for implementing this measure: Inter-ministerial EFR Commission for coordination (see proposal 11 below), implementation lead with Vice Presidents Office and subordinated environmental management agencies.

Proposal 11: Establish Inter-ministerial EFR Commission and ensure regular meetings of this Commission

Tasks of the commission could include (the commission could be led by the Vice President's Office and Ministry of Finance, including representatives from all main stakeholders in EFR):

- Implement and continuously further develop the EFR action plan (which could initially consist of proposals recommendations 1-10, as detailed above)
- Legislative work: systematically screen ongoing lawmaking processes so that new law and policy is compatible with EFR and includes related provisions;
- Statistics: Ensure that relevant statistical data on existing EFR instruments are collected, published and analyzed regularly.
- Information management and distribution: Prepare and distribute relevant informational products to EFR stakeholders with an aim to continuously enhance knowledge and know how on EFR in Tanzania
- Promote and implement EFR related training (for example, GIZ has recently developed an EFR training course, the provision of which could be a starting for EFR related training and awareness raising activities in Tanzania)

Annex 1: Good International Practice in Public Env'tl. Expenditure Management

Current international good practice in public environmental expenditure management is available as OECD Council Recommendation on “Good Practices for Public Environmental Expenditure Management” of 8 June 2006, OECD document code: C(2006)84. The following excerpt provides for the most important contents of the OECD GPPEEM recommendation:

THE COUNCIL, (...)

CONSIDERING that public environmental expenditures constitute a significant share of public budgets in many OECD Member countries;

CONSIDERING that public environmental expenditure programmes should be designed to achieve specific environmental objectives, follow sound principles of public expenditure management, and use financial and human resources as efficiently as possible;

CONSIDERING that the Polluter-Pays Principle provides the policy framework for financing pollution prevention and control expenditures;

CONSIDERING that the Polluter-Pays Principle, as applied in OECD countries, provides for exceptional public financial support for the purpose of pollution prevention and control, provided that it is well-targeted, limited in size and duration, and does not introduce significant distortions in international trade and investment;

CONSIDERING that resource pricing should be the basis for pricing water and other natural resources, and that it should be applied progressively to cover operational, maintenance, capital and environmental costs;

RECOGNISING that the design of public environmental expenditure programmes must take account of the specific objectives to be achieved and that such programmes will be shaped by national administrative traditions, the level of economic and institutional development, as well the maturity of markets and the public finance system;

RECOGNISING that public environmental expenditure programmes may be implemented by Member countries nationally, and as part of bilateral and multilateral development co-operation programmes;

On the proposal of the Environment Policy Committee:

I. RECOMMENDS that Member countries take effective measures to ensure that public environmental expenditure programmes are environmentally effective, economically efficient and managed in accordance with sound principles of public expenditure management.

II. RECOMMENDS that, in establishing and managing public environmental expenditure programmes, Member countries should take the following steps:

- Define priority environmental objectives using evaluation methods, such as risk assessment, cost benefit analysis and cost effectiveness analysis, as well as participatory political processes;
- Demonstrate that public expenditures are necessary to achieve these objectives;

- Define the sources of funds, the size of the budget, and the terms and conditions of the expenditure programme;
- Authorise an appropriate institution to manage the expenditure programme;
- Continue, modify or terminate the expenditure programme in light of periodic reviews of the programme's performance to assess whether its objectives have been achieved and its continuation is necessary.

III. FURTHER RECOMMENDS that, when establishing, reviewing or reforming public environmental expenditure programmes, Member countries make use of the checklists set out in the Annex hereto, which is an integral part of this Recommendation.

IV. INSTRUCTS the Environment Policy Committee and other relevant bodies of the Organisation to further support Member countries' efforts to implement efficient and effective public environmental expenditure programmes, in particular through country environmental performance reviews.

Annex: Checklists for Establishing, Reviewing and Reforming Public Environmental Expenditure Programmes

Checklist 1: Performance in Terms of Environmental Effectiveness	
Principle	Good Practices
1. Additionality and consistency with other environmental policy instruments	<ul style="list-style-type: none"> • The need for any proposed public environmental expenditure programme should be justified with reference to the Polluter- or User-Pays Principles. Public funds cannot and should not substitute for weak environmental policies; they should not be spent on achieving environmental objectives that could have been achieved with administrative or economic instruments or by eliminating environmentally harmful subsidies. • Public funds should not be used for environmental projects that would have been implemented anyway e.g. projects that have high, risk-adjusted financial rates of return and could have been financed privately. • Public environmental expenditures should reinforce other environmental policy instruments and be consistent with their stated objectives. • Public expenditure programmes typically should be used to finance investments in fixed assets or precisely defined non-investment projects, and not the operational costs of environmental administration. • External auditors should periodically review the environmental value-added of public expenditures; there should be provisions to phase out public funds after they have fulfilled their purpose.
2. Well-defined programming framework	<ul style="list-style-type: none"> • Public funds should be spent in the framework of a publicly-available expenditure programme approved by appropriate authorities. • The expenditure programme ideally should specify measurable, agreed, realistic, time-bound objectives. It should identify eligible beneficiaries, financing needs, eligible project types and rules to guide decision-making so that objectives could be met at least cost. • Expenditure programmes should be established as part of a wider environmental programme or policy. • Economic, social, poverty reduction or other non-environmental objectives may be integrated into the public environmental expenditure programme, but, unless explicitly included in the expenditure programme objectives, they should not undermine the achievement of the programme's environmental objectives. • The wider economic effects of public environmental expenditure programmes (e.g. in terms of public deficit, growth, employment) should be assessed, where appropriate, prior to their establishment and further evaluated during implementation.

3. Clear identification of environmental outcomes	<ul style="list-style-type: none"> ● Standard application forms should be used to the extent practicable to solicit quantitative and qualitative information on projects' environmental outcomes. Once obtained, the accuracy and reliability of this information should be verified. ● Indicators of environmental outcomes should be as unambiguous as possible and used as essential criteria in project appraisal and selection. Where appropriate, environmental outcomes should be valued in monetary terms for the purpose of explicit benefit-cost testing of projects. ● Environmental outcomes should be monitored throughout the project cycle and after implementation; project level environmental data should be stored in a publicly available database that allows ex-post verification and analysis. ● If the project fails to achieve its intended outcomes, as stated in the application form or financing contract, project beneficiaries should be liable to sanctions specified in the contract and enforced in proportion to the violation. ● Information on the environmental results achieved by the programme should be periodically reported to those responsible for programme oversight and to the public, reviewed by external auditors and used to assess the programme's performance.
4. Maximise environmental effect from available funds	<ul style="list-style-type: none"> ● Quantitative information on full, life-time project costs (investment, operational and maintenance) should be requested from applicants in a standard application form and be verified; project level cost data should be tracked and stored in a database format in a way that allows ex-post verification and analysis. ● Project selection criteria should aim to achieve the greatest environmental outcome with the programme's resources. A clear cost-effectiveness indicator (unit lifetime cost of achieving environmental effects) and the rate of financial leverage should form the core of the quantitative basis for appraisal, scoring, ranking and selecting projects. Where justified by project size or other relevant considerations, project selection should be supported by transparent benefit-cost analysis. ● Quantitative information on cost-effectiveness should be periodically reported to those responsible for programme oversight and to the public, be subject to periodic external, independent reviews and be used to assess the programme's performance.
5. Leverage additional finance	<ul style="list-style-type: none"> ● To maximise their environmental impact, public funds should aim to cover less than 100% of project costs; options for co-financing by the retained earnings of the beneficiary or other sources should be assessed. ● The rate of financial leverage should be used to assess the programme's performance. ● Public environmental expenditure programmes should not distort competition in financial markets, nor obstruct the development of private financial institutions. Financial products used in environmental expenditure programmes should not compete with those offered by private financial institutions. ● Full financial plans of environmental projects should be required; commitments for financing from other sources should be verified. No disbursement should be made until full financing for the project is adequately secured.

Checklist 2: Performance in Terms of Budgetary Good Practice

Principle	Good Practices
1. Fiscal integrity of revenues	<ul style="list-style-type: none"> • All financial resources available to public environmental expenditure programmes should be clearly specified in the enabling legislation or regulation. • If the financial resources managed within the programme come directly or indirectly from compulsory transfer payments (taxes, charges, fees), they should be treated as public funds in the meaning of the rules and regulations applicable to public finance, public procurement and/or state aid, as appropriate. As such, these resources should be subject to the usual fiscal discipline and requirements for transparency. • Revenues should be recorded in treasury accounts before they are allocated to the environmental expenditure programme.
2. Avoid constraints to efficiency	<ul style="list-style-type: none"> • Earmarking of revenues should be avoided as it usually results in inefficient use of public resources. However, if it is demonstrated that the advantages of earmarking outweigh the risks, an expenditure programme may be established using earmarked revenues, but it should be limited to a specified period of time. At the end of this time, earmarking should only be continued if it can be demonstrated that it is providing value-added in relation to its stated objectives. • Earmarking within earmarked schemes (e.g. sub-funds for specific sectors or groups of polluters within earmarked environmental expenditure programmes) also should be avoided since it further infringes on efficiency. If earmarking is nevertheless applied, safeguards that prevent inefficient resource allocation and perverse incentives should be implemented, such as competition between projects submitted by different firms within a sector, external controls and/or checks of project appraisal.
3. High standards of fiscal discipline	<ul style="list-style-type: none"> • The risk of environmental expenditure programmes resulting in unplanned fiscal deficits should be avoided. Debt, and in particular, contingent and implicit liabilities (such as loan guarantees) should not be incurred without an explicit, prior approval from fiscal authorities. Medium-term financial forecasts, including contingent and implicit liabilities of all implementing agencies, should be regularly prepared and disclosed in financial statements. • For all public environmental expenditure programmes, an estimate of the financial resources available and the corresponding expenditures should be provided in the state (or sub-national) budget, at least as an annex. Statements on debt and contingent liabilities, especially of any extra-budgetary environmental institutions controlled by the government should be submitted along with the budget of the Ministry of Environment to the Ministry of Finance. • Mandatory internal and external independent financial audits should be regularly carried out. • Ex-post reporting, according to a transparent expenditure classification system, should be regularly conducted and publicly disclosed.
4. Accountability and transparency	<ul style="list-style-type: none"> • Appropriate provisions should be made for holding managers of public environmental expenditure programmes accountable for their decisions. • Appropriate safeguards should be put in place to protect public funds against corruption and fraud, e.g. through dynamic systems of management control, including internal and external audits. Any potential conflicts of interest should be identified and eliminated. • Ex-post reports on performance of managers and results achieved (in terms of specified performance criteria) should be periodically conducted and disclosed to the public.
5. Collection of revenues and public procurement separated from expenditure management	<ul style="list-style-type: none"> • The primary task of agencies implementing public environmental expenditure programmes should be programme and project cycle management and project financing. Collecting revenue or making direct procurement of equipment and construction services should be performed by the government agencies usually assigned these responsibilities. • Revenue from fiscal or quasi-fiscal instruments should be collected by the appropriate fiscal authorities under the control of treasury services. • National or international public procurement rules should apply for all purchases that are co-financed by public funds, even if purchasing is outsourced to a private entity.

Checklist 3: Performance in Terms of Management Efficiency

Principle	Good Practices
1. Sound governance	<ul style="list-style-type: none"> ● Public environmental expenditure programmes should be governed by clear, explicit rules. ● The terms and conditions of financing, decision-making and administrative procedures, internal policies and principles of project appraisal and selection should be available to the public. They should be coherent and consistent, not change frequently or without explanation, and be periodically reviewed in order to identify areas for improvement. ● A clear distinction should be made between policy-making and executive management functions. ● An appropriate arrangement should be made for the policy-making function, such as the establishment of a supervisory board. Policy-making in this context includes programming, priority-setting, establishing rules, performance evaluation, supervision and control. Political oversight should be confined to programming and supervision. This is where the political process has a legitimate and important role to play. ● The supervisory board of a public environmental expenditure programme should include representation from the key stakeholders with appropriate checks and balances between different interest groups. Consideration should be given to involving non-environmental authorities, parliament and non-governmental organisations, as appropriate.
2. Professional executive management	<ul style="list-style-type: none"> ● Responsibilities for the day-to-day management and implementation of environmental expenditure programmes should be clearly separated from policy-making, clearly defined in statutory and operational documents, and shielded from ad hoc political pressures in support of specific projects. ● An implementing agency should have a clear, legal mandate. It should be a professional, executive management body with an appropriate degree of operational autonomy, subject to strict accountability for performance. Its responsibilities should focus on project cycle management, and in particular, on impartial project appraisal and selection. ● Executive managers should be held accountable for their performance. The supervisory board of the public environmental expenditure programme should apply explicit performance criteria and indicators when assessing the performance of executive managers. ● Implementing agencies of large specialised environmental expenditure programmes should have staff assigned exclusively to their management and selected by executive managers. ● The skills of the staff should adequately match the technical requirements of a given expenditure programme. The recruitment and remuneration of managers and of staff should be based strictly on merit. Remuneration should be adequate to attract and maintain suitably-qualified people and to reward integrity and commitment.

3. Sound project cycle management	<ul style="list-style-type: none"> • The project cycle should be subject to intelligible, transparent and written procedures which are consistent and publicly available, in particular to all potential beneficiaries; a project cycle manual should be available and staff required to use it. • Project identification should be proactive (for example by advertising the programme to potential beneficiaries), follow from the objectives of the public environmental expenditure programme, and be based on a realistic analysis of market trends and demand for financing. • Applications for financing should be accepted only in standard forms tailored to different project types and supported by clear, user-friendly instructions. Application forms should be easily available to all potential applicants, preferably in an electronic version. • Project appraisal and selection criteria and procedures should be objective, transparent and clear. Discretionary elements of project appraisal and selection should be subject to explicit, written procedures, and the results of such decisions kept in publicly-available files. • Appraisal systems and procedures should be tailored to the size and complexity of different project types. For large investment projects, a two-stage appraisal process should be used (first stage - screening against eligibility criteria; second stage – appraisal and ranking of eligible projects). • The appraisal system should be relatively simple, based on impersonal rules, and allow for meaningful comparison of comparable projects against one another, or against a benchmark. The appraisal system should also allow for an ex-post verification of the selection process, including tracking personal responsibilities for important judgements and decisions. Appraisal reports should be clear and publicly available.
4. Fair and unbiased relations with external stakeholders	<ul style="list-style-type: none"> • Relations with external stakeholders (beneficiaries, intermediaries, consultants) should be handled in a transparent, unbiased, and arms-length manner. Communication policy should ensure that all applicants have equal access to information on funding opportunities and equal opportunity to have their projects impartially reviewed on a merit basis. • Any outsourcing of tasks should be undertaken through a fair, transparent, competitive process.
5. Effective management of financial products and related risks	<ul style="list-style-type: none"> • Only financial products specified in the terms and conditions of the public environmental expenditure programme should be used by the implementing agency. • The complexity of operations, and the choice of financial products, should be proportional to the institutional capacity to manage the associated risks. • Grants are the most administratively simple and transparent financial product. When used, they should be designed and disbursed so as: to maximise incentives for timely and cost-effective implementation of individual projects and of the implementing agency's entire portfolio; to maximise the leverage of other resources; and to minimise chances of misuse of public money by applicants. • Other financial products could be considered in proportion to institutional capacity and in order of increasing risk and these include: interest subsidies, loans through intermediaries, direct loans, leasing, equity investments and loan guarantees. Before a new financial product is adopted, its feasibility should be checked through an assessment of risks, market needs and supported by a financial plan.

Annex 2: Good International Practice - Environmental Fund Case Studies

Annex 2 illustrates good international practice in operating environmental Funds at the example of selected Environmental Funds and areas of operational management.

Annex 2.1.: The Croatian Environmental Protection and Energy Efficiency Fund

The Environmental Protection and Energy Efficiency Fund was established pursuant to the provisions of Article 60 of Croatia's Environmental Protection Act and the Law on the Fund for Environmental Protection and Energy Efficiency effective as of January 2004. According to the latter Law, the EPEEF is established to provide additional funds to finance projects, programs and similar activities in the field of conservation, sustainable use, protection and improvement of the environment, as well as for the participation in the financing of national energy programs, bearing in mind the achievement of energy efficiency and renewable energy. The EPEEF was established as an extra-budgetary Fund, as a legal person with public authority, established by law. The Fund has its own address and offices, physically separated from the Ministry of Environment.

The EPEEF's 2009 spending areas are listed below. In 2009, total spent resources amounted to HRK 1'167'840'991 which is equal to 229.84 MUSD or 160.35 MEUR at year end exchange rates.

Spending area 1: Environment protection (total spent resources in 2009 this area: 282'284'271.97 HRK – equal to 55.56 MUSD or 38.76 MEUR at year end exchange rates):

- Rehabilitation of municipal waste
- Restoration of wild landfills
- Stimulation of avoiding and reducing waste
- Waste management - construction of waste management centers
- Recovery and exploitation of valuable properties of waste
- Repair of hazardous waste - the location of highly contaminated environment
- The protection, preservation and improvement of air quality, soil, water and seas, and climate change mitigation and protection of the ozone layer
- Encouraging cleaner production, and reduction or elimination of waste and emissions in production process
- Protection and conservation of biological and landscape diversity
- Promote sustainable rural development
- Encouraging educational, research and development studies, programs, projects and related activities, including demonstration activities in environmental protection
- Other projects and environmental protection programs

Spending area 2: Special categories of waste (total spent resources in 2009 in this area: 782'880'652.44 HRK – equal to 154.08 MUSD or 107.49 MEUR at year end exchange rates):

- Packaging Waste
- Management of waste tires
- Waste management vehicles
- Management of waste batteries and accumulators
- Management of waste oils
- Management of waste electrical and electronic waste

Spending area 3: Energy efficiency (total spent resources in 2009 in this area: 102'676'066.73 HRK – equal to 20.21 MUSD or 14.10 MEUR at year end exchange rates):

- The implementation of national energy programs including energy audits and demonstration activities
- Encouraging the use of renewable energy sources (sun, wind, biomass, geothermal water, etc.)
- Encouraging sustainable construction
- Encouraging cleaner transport
- Encouraging educational, research and development studies, etc. activities in the field of energy efficiency
- Other projects and programs for energy efficiency

The Fund's total administrative expenditures amounted to HRK 35'626'204 in 2009 which is equal to 7.01 MUSD or 4.89 MEUR at year end exchange rates.

During 2009, apart from being involved in implementing programs and projects initiated in 2008, the EPEEF signed 974 new contracts related to projects (455 in the area environment and 519 in the area of energy efficiency).

Detailed information on the EPEEF can be found on its dedicated website: <http://www.fzoeu.hr/>. Further information on Croatia's public environmental management system can be found on the website of the Ministry of Environmental Protection, Physical Planning and Construction, see <http://www.mzopu.hr>.

Annex 2.2.: The Czech State Environmental Fund

The State Environmental Fund of the Czech Republic (SEF) provides financial support in the form of grants, soft loans and interest subsidies. The fund obtains financial resources from the European Union (namely the Cohesion Fund and the European Regional Development Fund), from the state budget as well as from taxes collected from polluters, including waste water discharge taxes, taxes for reclassifying agricultural land, air pollution taxes and taxes under the Waste Act. Total revenues of the Fund in 2008 were 2387.3 CZK (equivalent to ca. 90 million EUR or 127 million USD at year end exchange rates).

The fund's main activities include providing advisory services, receiving and evaluating funding applications, preparing groundwork materials for approving support, developing policies for providing support, disbursing financial resources to beneficiaries and continually auditing their use, conducting the final evaluation of the use of provided resources and of accomplished environmental effects and occasionally imposing and enforcing sanctions in cases of non-compliance with the contractual conditions for granting support.

Throughout 2010, the State Environmental Fund of the Czech Republic has been administering two major subsidy programs - the Operational Program Environment and the Green Savings program. The SEF also supports projects in the areas of air protection, protection of the natural environment, natural resource protection and use, as well as environmental education, consultancy and awareness raising that cannot be financed by European funds.

The new program of Czech-Swiss cooperation, offering half a billion Czech crowns worth of investments to improve the environment, to be carried out in selected Czech regions, has also started fully in 2010.

In 2008, according to the SEF's published Annual Report, the following environmental expenditure was realized (see section 4.2 for data on SEF revenues in 2008):

SEF environmental expenditures in 2008 (mln CZK, or %, as indicated)				
	Grants	Loans	Total	Share in %
Water sector, mln CZK	1145.8	88.8	1234.6	70.2
Nature sector, mln CZK	179.0	0.0	179.0	10.2
Air sector, mln CZK	226.1	0.5	226.6	12.9
Freons , mln CZK	3.7	0.0	3.7	0.2
Waste sector, mln CZK	104.8	9.4	114.2	6.5
Total, mln CZK	1659.4	98.7	1758.1	100.0
Total, mln USD*	88.3	5.2	93.5	100.0
Total, mln EUR*	62.5	3.7	66.2	100.0
Source: SEF 2008 Annual Report. Note: *using year-end exchange rates from oanda.com as follows: 18.80 CZK/USD, 26.54 CZK/EUR				

Detailed information on the SEF can be found on its dedicated website: <http://www.sfzp.cz/>. The website of the Ministry of the Environment of the Czech Republic also contains useful information on the Czech systems of environmental economics and finance, see: www.mzp.cz.

Annex 2.3.: The Polish EcoFund

The history of the Fundacja Ekofundusz (EcoFund Foundation) dates back to 1991, when selected Paris Club members (a group of countries that constituted creditors of official debt of Poland) decided to reduce the Polish debt by 50% provided that the remaining part is paid off by 2010. The Government of Poland then proposed that further 10% of the debt was to be allocated for supporting the most urgent environmental protection undertakings in Poland.

This was worldwide the first initiative of allocating a part of a Government-secured debt for environmental protection purposes (usually referred to as "eco-conversion of debts" or "debt-for-environment swap"). Consent for such a proposal given by all the 16 creditor countries would mean a possibility to use over 3 billion US dollars for the protection of natural environment in Poland. This would make a substantial financial support for the efforts made in Poland to improve the natural environment, which was dramatically degraded due to multiannual negligence of the authorities in the former political and economic system.

The Paris Club accepted the Polish proposal, making it generally possible to adopt the mechanism of allocating a part of the debts (up to 10%) for the purposes specified in bilateral agreements signed by Poland with individual creditor countries. As soon as June 1991, the US Government took a decision to assign 10% of the Polish debt (about 370 million US dollars) for the debt-for-environment-swap scheme. This made a basis for setting up a special organization that would administer the money available from that source. In April 1992, the Minister of Finance, acting on behalf of the State Treasury, established EcoFund and gave that organization the status of an independent non-profit foundation. The year 1993 was the first full year of operation of the EcoFund Foundation.

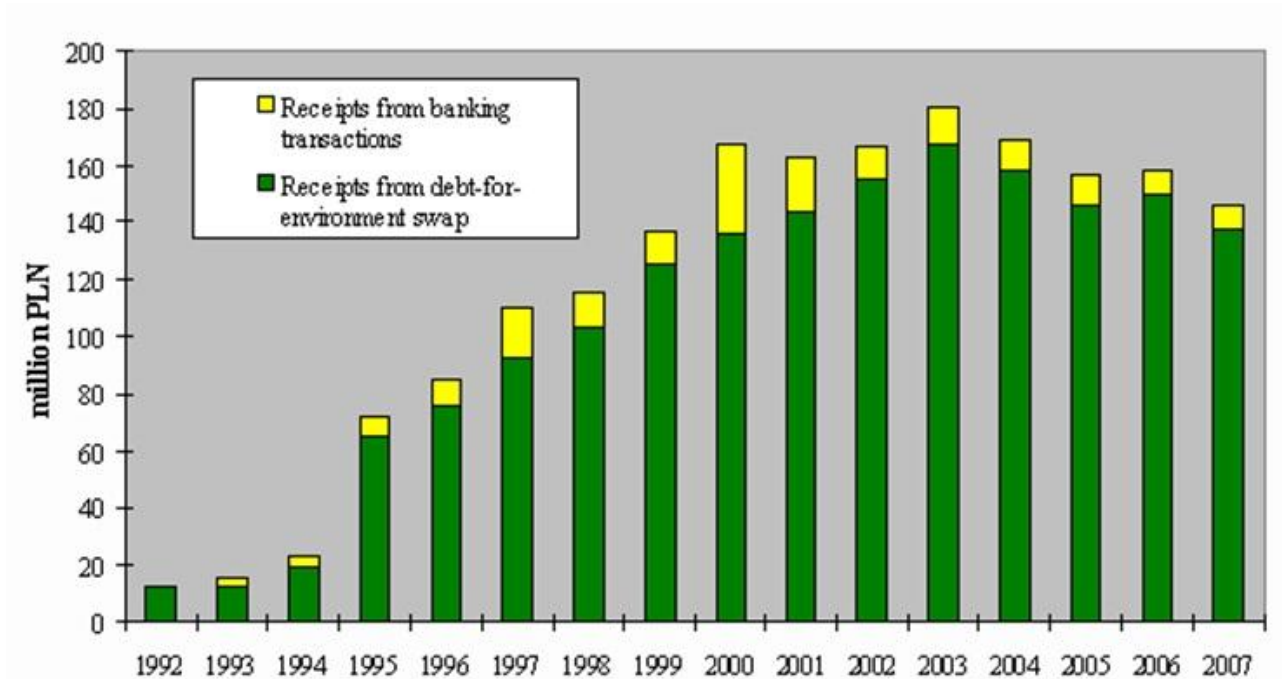
In 1993, France and Switzerland decided to assign a part of the Polish debts for the debt-for-environment-swap scheme. The relevant agreement with France was signed on June 2, 1993 and stipulated the conversion of 1% of the debt, i.e. about 280 million French Francs. The agreement with Switzerland was signed on December 17, 1993 for an amount of 78 million of Swiss francs, which made 10% of the Polish debt to that country. In 1997, a decision to take part in that scheme was taken by the Government of Sweden (4% of the debt, i.e. about 13 million US dollars) and in the next year Italy joined the group of the donor countries (by converting 2% of the debt, i.e. about 32 million US dollars). Afterwards, a decision to allocate 10% of the debt, i.e. about 27 million US dollars, for subsidizing environmental protection projects in Poland was taken by the Government of Norway in 2000.

Thus, Poland received a total amount of 571 million US Dollars for environmental protection projects in result of signing relevant agreements on the debt-for-environment swap with the six countries mentioned above. That money, paid in annual tranches from 1992 to 2010, has been administered by the EcoFund Foundation. Apart from the receipts from the debt-for-environment-swap scheme, EcoFund also receives money from banking operations and from donations. EcoFund revenues in recent years are shown in the graph below.

In 1992 - 2007, EcoFund awarded grants totaling about 1700 million PLN for over 1500 projects in the following five priority environmental protection sectors:

- reduction of the transboundary transport of sulfur dioxide and nitrogen oxides and elimination of the low sources of such emissions,
- reduction of the pollutant inflow to the Baltic Sea and protection of drinking water resources,

- reduction of the emissions of gases that cause global climate changes,
- biological diversity protection,
- waste management and polluted land reclamation.



More information on the EcoFund can be found on its dedicated website: www.ekofundusz.org.pl.

In fact, the EcoFund is one of many Environmental Funds in Poland, including Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej (the National Fund for Environmental Protection and Water Management – see www.nfosigw.gov.pl) and 16 Regional Funds for Environmental Protection and Water Management (see <http://www.eco-finance.org/polandregionalfunds.html>). The National Fund for Environmental Protection and Water Management alone had revenues of some 900 million USD in 2007, whereas the revenues of the 16 regional Funds amounted to more than 600 million USD in the same year. The major part of revenue of these Funds comes from various emission taxes, as well as proceeds from lending (including interest payments and loan repayments). Apart from all this subsidized environmental finance from domestic sources, there is also increasingly commercial finance (often in the form of commercial credit softened with subsidies from environmental funds – see for example Bank Ochrony Środowiska S.A. (BOS), <http://www.bosbank.pl/>), as well as assistance from the European Union aimed at speeding up compliance in Poland with EU environmental legislation.

After successfully completing its mission according to relevant governing regulations, the EcoFund closed in 2010.

Annex 2.4.: Governance

Croatian Environmental Protection and Energy Efficiency Fund

The bodies of the Fund are the Fund Management Board and the Fund Director.

The Management Board currently has six members plus one is Chairman of the Board. All Board members are appointed and relieved by the Government of the Republic of Croatia. Board members are appointed for a term of four years. Currently the Board includes representatives of the following institutions:

- two representatives from the ministry responsible for environmental protection (one of these two representatives currently acts as Chairman of the Board)
- one representative from the ministry in charge of energy
- one representative from the ministry in charge of finance
- one representative from the Croatian Parliament
- one representative from the Croatian Chamber of Commerce
- one representative from among experts in the field of environmental protection

The scope of activities, the authority and responsibilities, as well as the method of work of the Management Board are defined by the Fund Statute. Board responsibilities include:

- Adoption of the annual and the four-year program of work of the Fund (consent of the Government of Croatia necessary),
- Adoption of the financial plan of the Fund (consent of the Government of Croatia necessary),
- Adoption of the Fund Statute (consent of the Government of Croatia necessary),
- Adoption of certain bylaws of the Fund, e.g., on the internal organization of the Fund, and, on rights and obligations of Fund staff
- Decision on the acquisition, encumbrances and alienation of real estate and other property,
- Conclusion of legal contracts whose individual value does not exceed the amount of 5 million HRK
- Decision on the allocation of unused financial resources of the Fund,
- Decision on the leasing of buildings and premises of the Fund or changing the purpose of buildings or premises.
- Decision on the appointment and relief of Deputy Directors and heads of internal organizational units of the Fund,
- Decision on the report on the Fund's operations submitted by the Fund Director
- Decision on projects, programs and other undertakings being planned in the fields of environmental protection and of energy efficiency,

- Decision on the setting of priorities in spending programs
- Decision on the allocation of the Fund's resources for financing programs, projects and similar undertakings through loans, subsidies, aid and grants, and participation in co-financing programs and projects organized by international institutions and bodies or other legal persons,
- Decision on the cooperation with banks and other financial institutions and legal persons in order to realize the activities of the Fund,
- Decision on inviting project applications according to spending priorities,
- Decision on the selection of recipients of financial resources extended by the Fund following the announced invitation,
- Decision on the conditions for the allocation of the Fund's financial resources, in accordance with the bylaws of the Fund,
- With the consent of the Government of the Republic of Croatia, the Board also decides on: the acquisition, encumbrances and alienation of real estate and other property whose individual value exceeds the amount of 5 million HRK, and, taking out loans from financial institutions and other legal persons in amounts exceeding the value of 5 million HRK.

Board decisions are valid if more than half of all Board members are present at a Board session. The Board decides by a majority of votes of all members. The Fund Director and Deputy Director participate in the Board work, however, without voting rights.

The Fund Director is responsible for the operations of the Fund. The Fund Director has a Deputy. Both Fund Director and Deputy Director are appointed and relieved by the Government of Croatia upon proposal of the Management Board. The terms of office of the Director are four years and the same person may be appointed again. The scope of activity, the authority and responsibilities of the Director are defined by the EPEEF Statute. They include:

- Represent the Fund.
- Be responsible for lawfulness of the work and operations of the Fund.
- Propose the program of work and the financial plan of the Fund,
- Implement the decisions of the Management Board.
- Be responsible for the realization of the program of work and the financial plan of the Fund.
- Propose bylaws to be adopted by the Management Board and pass certain bylaws defined by the Fund Statute.
- Sign administrative acts related to the exercise of public authority of the Fund, unless this authority was delegated to other employees of the Fund by virtue of the Fund Statute.
- Organize and implement the procedure for collection taxes which represent earmarked revenue of the Fund.
- Conclude agreements with the recipients of the Fund's resources.

- Ensure that the Fund resources disbursed to recipients are used for the agreed specified purpose.
- Ensure that bylaws are implemented and issue instructions pertinent to this end.
- Propose the appointment and relief of Assistant Directors and heads of internal organizational units of the Fund.
- Decide on hiring and terminating work contracts of other Fund employees.
- Submit reports on the realization of the work and financial program to Board.
- Submit proposals and opinions on individual issues relating to the work and operations of the Fund.
- Perform other tasks defined by the Fund Law, Fund Statute and Fund bylaws

As of end 2009, the EPEEF had 124 employees, working in the following departments:

- Office of the Director,
- Department for Administrative and Legal Affairs (including exerts responsible for collection of environmental taxes which make up the major revenue sources of the Fund)
- Service of preparation, implementation and development of programs, projects and other activities in the field of environmental protection,
- Service of preparation, implementation and development of programs, projects and other activities in the field of energy efficiency, renewable energy, promotion of rational management of energy
- Service of preparation, implementation and development of programs, projects and other activities in the field of management of particular categories of waste
- Finance and Planning
- Preparation and implementation of projects co-financed from foreign aid instruments and EU funds
- Internal Auditing
- Secretariat of the Fund

Polish EcoFund

The Minister of the State Treasury, as the Founder of the EcoFund, did not control matters related to environmental protection, but only those of the organizational or procedural nature. According to the Statute and the Council Regulations, the Founder was authorized to transfer funds, authorize the financial plans adopted by the Council, appoint and dismiss Council Members, except for the President of the Council which was appointed by the Minister of the Environment, authorize amendments to the Statute adopted by the Council and, approve the resolution on the Fund liquidation after the Minister of Environment approval. The Founder also had the right to carry out inspections at the Fund and order the Board to send him documentation on the Fund's activities.

In accordance with the Foundation Act, the Minister of the Environment was the competent authority in respect of environmental foundations. The Minister of the Environment exercised substantive supervision over the Fund, controlled the execution of its objectives and appointed the President of the Council. In addition, the Minister of the Environment defined the objectives to which the EcoFund resources would be allocated after the Fund was liquidated. Together with the Founder, the Minister of the Environment approved the liquidator appointed by the Council.

The EcoFund Council was composed of the representatives of the governments of those countries that approved the Polish debt-for-environment swap, the representatives of the Founder, ministries and non-governmental organizations. The Council could consist of 7 - 15 members. The Council President was nominated by the Minister of the Environment as the competent minister within the meaning of the Foundation Act, while the remaining members of the Council were appointed by the Founder. The Council Members were appointed for a 3- year term of office. Each donor country had the right to delegate its representative to the Council (whom the Founder appointed as a member of the Fund's Council). In the year 1992 the Council had 7 members (including one representative of the USA), in 2004 - 14 members, while in the year 2008 - 10 members. In the period of the Foundation's operation, the Council Members were the representatives of Norway, USA, Switzerland, Italy, France, Sweden and Poland. The Council held its meetings organized at least once in six months.

The role of the Council was to:

- Supervise the EcoFund's operation,
- Define major directions for its activities,
- Authorize amendments to the Statute (they needed the Founder's approval)
- Appoint a certified auditor to perform annual audits,
- Approve change in the Fund's objectives,
- Take decisions on the Fund profit appropriation or the Fund liquidation,

In addition, the Council authorized all subsidies awarded by the Fund, approved annual financial plans, appointed the Board Members, assessed the activities of the Board in a given year, accepted reports and determined remuneration of the Board President. The decisions of the Council in the matters falling within its competence were taken in the form of resolutions, while the others were registered in the minutes of the meetings. For a Council resolution to be valid, 2/3 of the votes of Council Members were required with the presence of at least half the Council Members. The Council decisions were taken by an open ballot, except for the decisions in personnel- related matters.

At the beginning of the EcoFund operations, i.e. in the year 1992, the EcoFund Board consisted of the President and the Deputy President. In accordance with Resolution No. 14/93, the Council increased the number of Board Members from 2 to 2 -5 persons appointed by the Council for a 3- year term of office. In 2004-2008, the Board of the EcoFund was composed of the President and 3 Deputy Presidents.

In accordance with the "Information on the objectives and tasks and the manner of cooperation with the EcoFund" issued in January 1993, at the beginning of the EcoFund operations, the responsibilities of the Board were to:

- compile information and make initial project assessment and pre-selection based on the criteria of impact on the realization of statutory objectives and tasks of the EcoFund and the amount of the budget in hand
- obtain an opinion of the Advisory Team (external companies rendering services concerning, among others, technical evaluations for the EcoFund) about the proposal prepared,
- submit to the Council a list of proposed projects together with the Advisory Team's opinion,
- execute the financial conclusions authorized by the Council, in accordance with the EcoFund Regulations and the procedure relating to project execution,
- prepare the EcoFund budget for the authorization by the Council,
- determine remunerations of the Fund employees.

In 1998, the Board was granted the right to take decisions on awarding subsidies to the winners of competitions organized by the EcoFund, after the competition regulations had been approved by the Council, and to other projects in which the EcoFund subsidy did not exceed the amount of 100,000 EUR, and in the field of biodiversity to the projects with a value not exceeding 50,000 EUR. Based on the resolution dated 16 May 2001, the Council extended the competence of the Board to include decisions on subsidy awards to other projects with a value not exceeding 1,000,000 EUR and in the nature sector up to 200,000, at the same time, authorizing the Board to take decisions on awarding subsidies for the implementation of projects which were part of thematic programs approved by the Foundation Council. In 2004, Resolution no. 10/2004 of 27 May 2004 changed the powers of the Board conferring to it the competence to take decisions on awarding subsidies to the winners of competitions organized by the EcoFund (after the competition regulations had been approved by the Council) and to individually submitted projects, where the value of the EcoFund subsidy in PLN did not exceed the equivalent of 500,000 EUR and in the nature sector up to the equivalent of 100,000 EUR, calculated according to the mean exchange rate of the National Bank of Poland of the date when the Board took the decision to award the subsidy. From this moment on, the strategic role of the Council was to: take decisions (to approve or reject) concerning the terms and conditions of the EcoFund competitions, on long-term comprehensive EcoFund programs and to award subsidies to large projects of strategic importance to a region or the country.

The Board meetings were organized weekly or more often to resolve current issues. The Board was responsible for managing the EcoFund external/public relations and its daily activities. Other responsibilities of the Board were to:

- manage the EcoFund Office,
- define the organizational structure of the EcoFund,
- prepare annual activity plans and reports, assessments and analyses of the Board activities,
- ensure the proper and timely completion of agreements on providing financial assistance and approve amendments to subsidy agreements,
- take decisions on penalties for beneficiaries who did not meet the conditions for the EcoFund's financial aid and accept documents to be submitted to the Council for consideration,

- approve the methods and forms of promotion of the EcoFund in mass media and advertising materials
- determine the EcoFund's human resources policy,
- carry out periodic assessments of the EcoFund Office personnel,
- approve internal organizational documents and instructions, agreement templates and other documents concerning procedures for the selection and execution of projects subsidized by the EcoFund.

The President of the Board represented the employer for all the Board Members and employees. The employer of the President of the Board was the Council represented by its President or another person appointed by the Council based on the rules defined in the Council Regulations. The President of the Board supervised the execution of Council resolutions, convened and chaired meetings of the Board, cooperated with financial institutions financing projects in the field of environmental protection and government administration and self- government bodies, coordinated all contacts of the EcoFund abroad, determined the responsibilities of the Board Members and remunerations of the Board Members and other employees.

Another responsibility of the Board Members was to visit the sites of the commenced or contemplated projects, especially where they regarded projects as problematic. The Board Members participated in training meetings and conferences organized for potential investors applying for the financial aid from the EcoFund (e.g. International Fair „POLEKO" in Poznan) or promoted the EcoFund at home and abroad.

The Board Members participated in conferences and meetings, including those abroad, and took part in fairs and study visits, seeking new technologies to be applied in Poland. The renown the EcoFund had won led to its cooperation with the World Bank, IFC and OECD. The Foundation was also consulted as proposals for EU Directives were prepared. The EcoFund Board helped in establishing a similar institution in Bulgaria. The Foundation played the role of a contact point for the Global Environmental Facility.

The EcoFund Office (departments, teams and independent officers of the Foundation) provided technical and financial services to the Fund and the Council and carried out all tasks relating directly to the realization of the objectives of the Fund as set out in the Statute. At the end of 2004, the EcoFund Office had 35 employees (excluding the Board Members). By the year 2008, this number slightly decreased to 33 persons. In its 2008 structure, the EcoFund Office was composed of the following units:

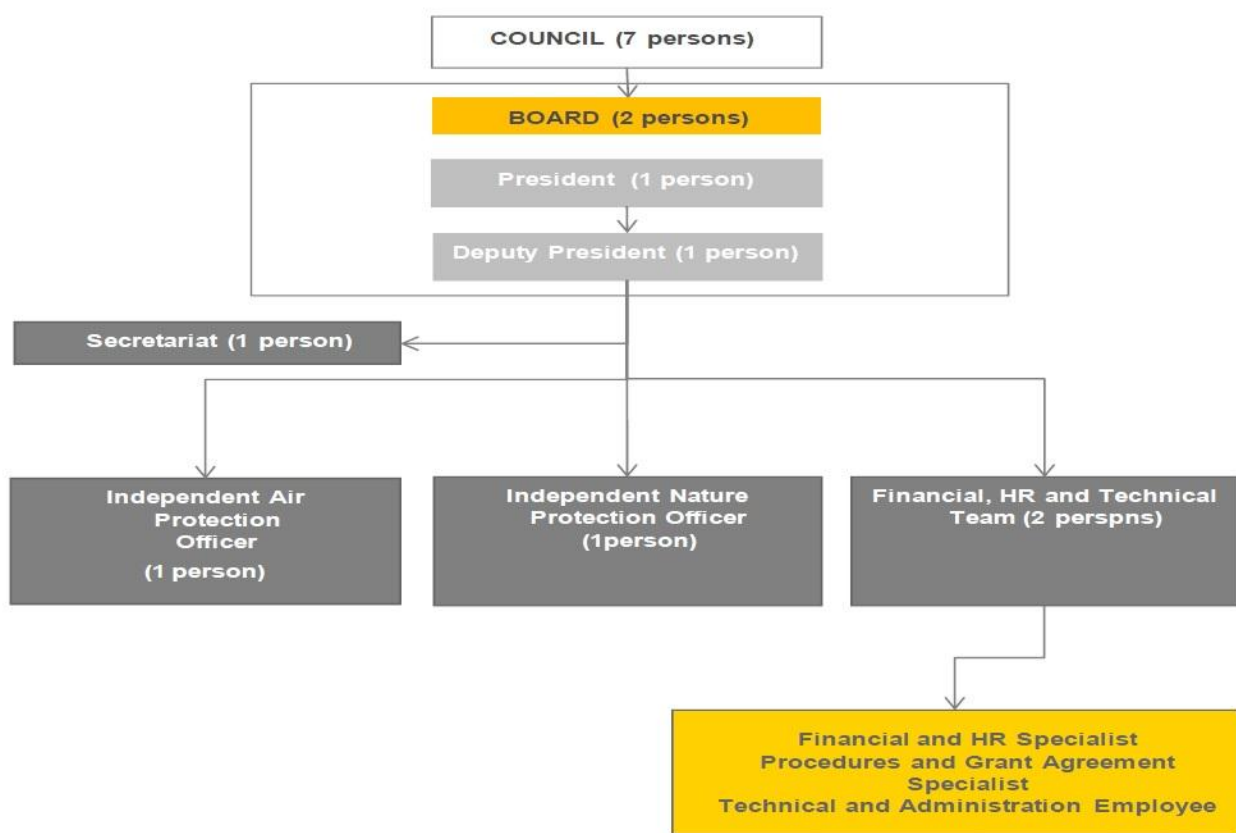
- Two Technical Departments (The Air and Earth Surface Protection Department and the Water and Nature Protection Department),
- Financial Department
- Administration Department,
- Legal Team,
- Independent Investment Projects Officer
- External/Public Relations Team.

The Fund Office was managed by the President of the Board with the assistance of the Board Members and the Office Director. The overall supervision over its organizational units and direct

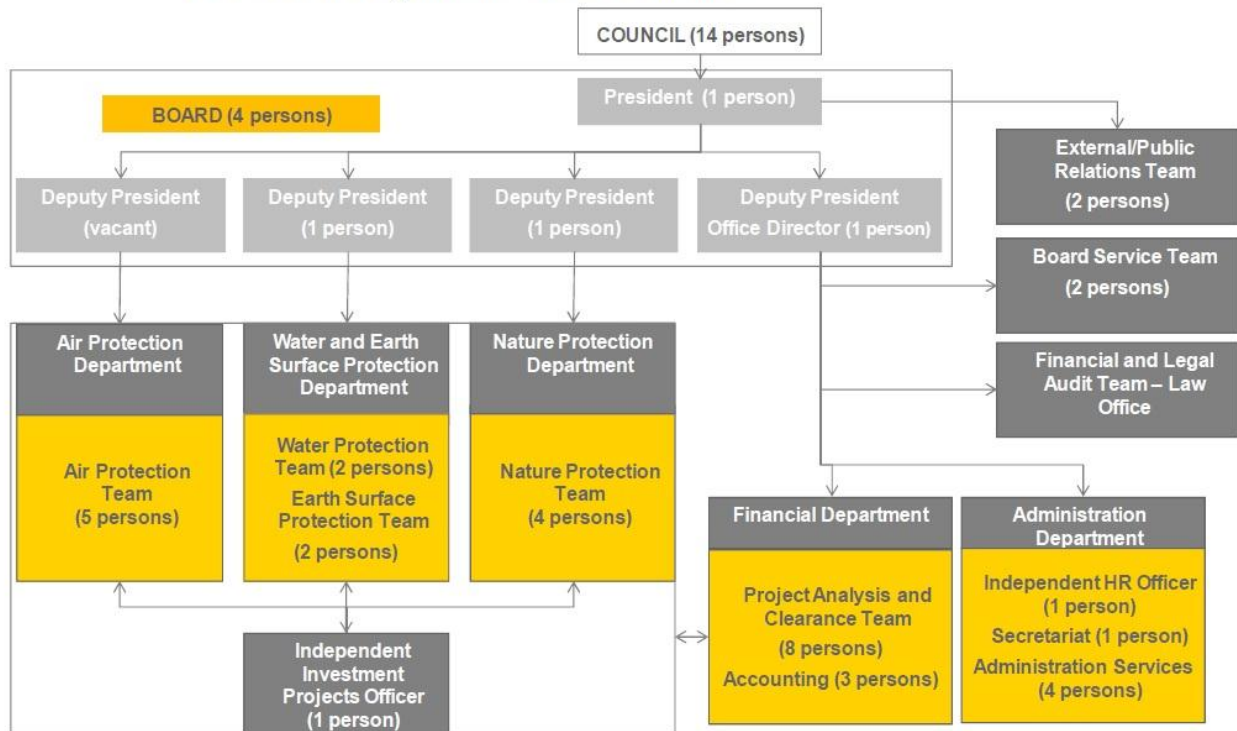
supervision over the External/Public Relations Team was exercised by the President of the Board. The Office Director directly supervised its organizational units. The Board Members (Technical Deputy Presidents) oversaw the Technical Departments. The Deputy President who was in charge of the Air and Earth Surface Protection Department additionally supervised the Independent Investment Projects Officer. The Board Member (the Deputy President in charge of the Financial Department) who was also the Office Director supervised the Financial Department, the Legal Team and the Administration Department.

Following graphs further illustrate the evolution of the EcoFund's governance system (source of all graphs: "Report on the Evaluation of the Debt-for-Environment Swap Program Implemented by the EcoFund, May 04, 2010" prepared by the Institute for Sustainable Development and Ernst & Young).

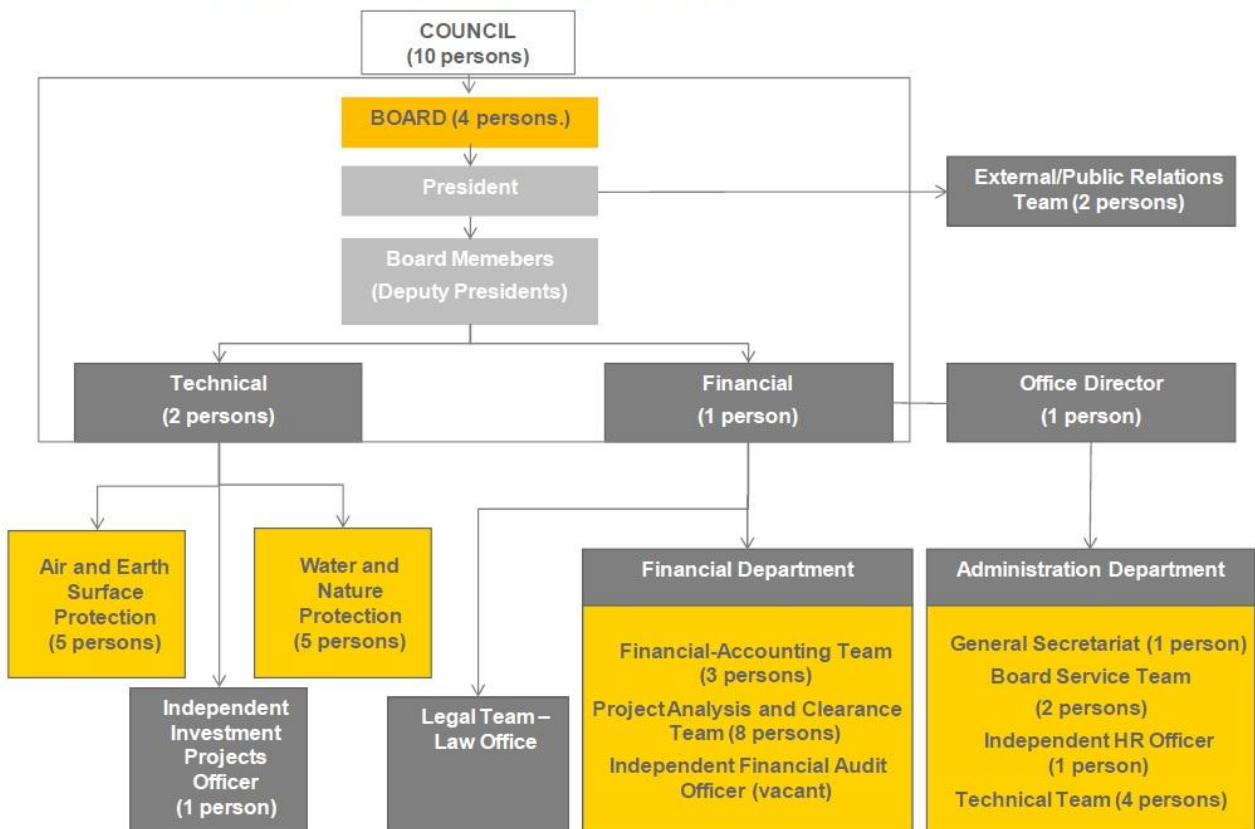
The first organizational structure of the EcoFund



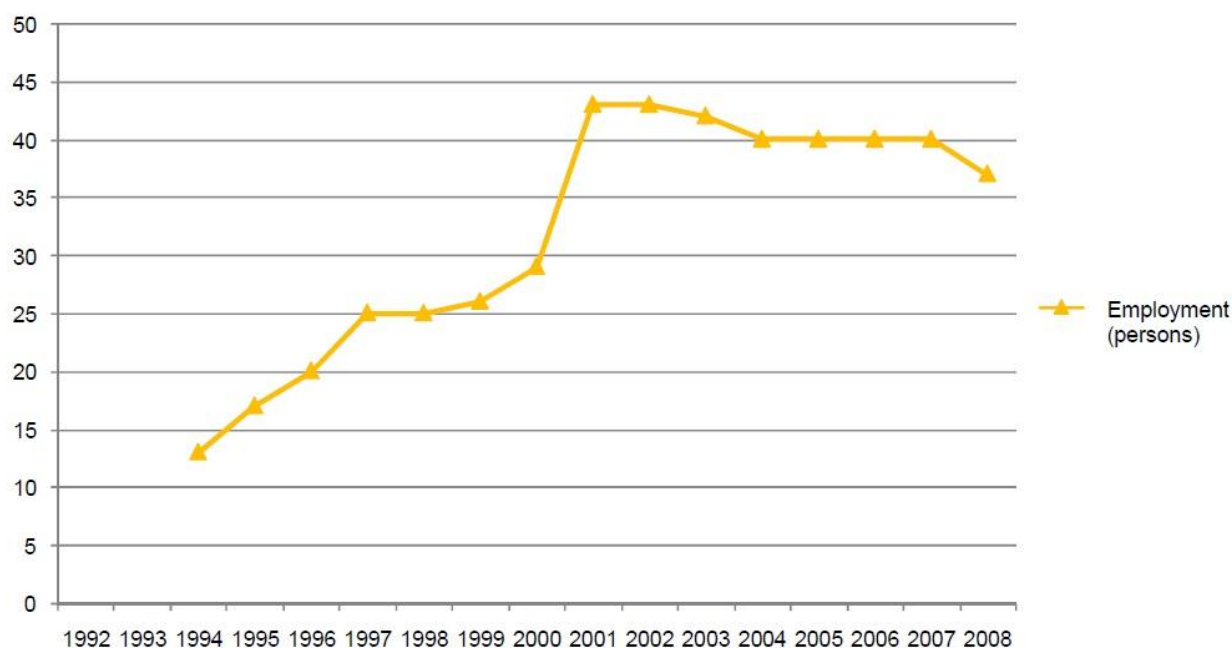
The EcoFund's organizational structure in 2004.



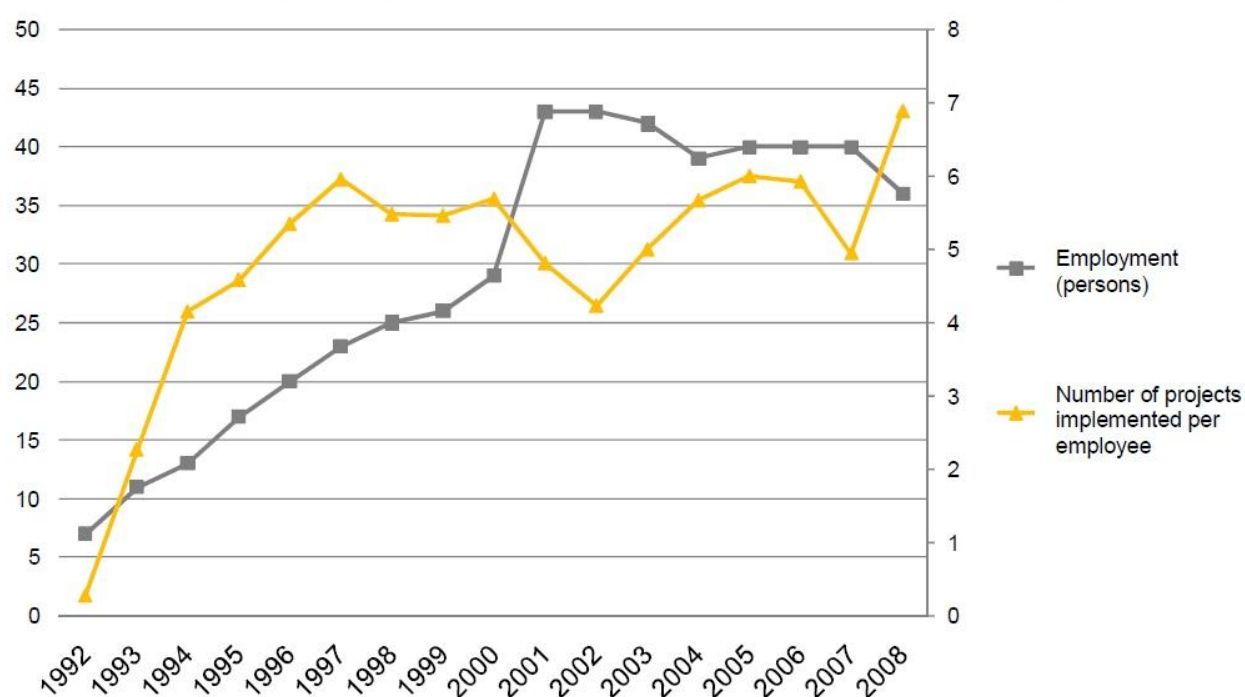
The EcoFund's organizational structure in 2008



Employment in the EcoFund in 1993-2008



Number of projects implemented per person against the number of employees (1992-2008)



Overall, the legal and regulatory framework governing the EcoFund includes:

- The Foundation Act
- The EcoFund Statute
- The Organizational Regulations of the EcoFund

- The Council Regulations (decisions made by the Council)
- The Board Regulations
- The Principles of Control and Supervision of Projects Financed by the EcoFund
- Tasks of financial specialists in phases I and II of subsidy application assessment - applicable procedures
- Job descriptions for all individual employment positions at the EcoFund

Annex 2.5.: Capitalization

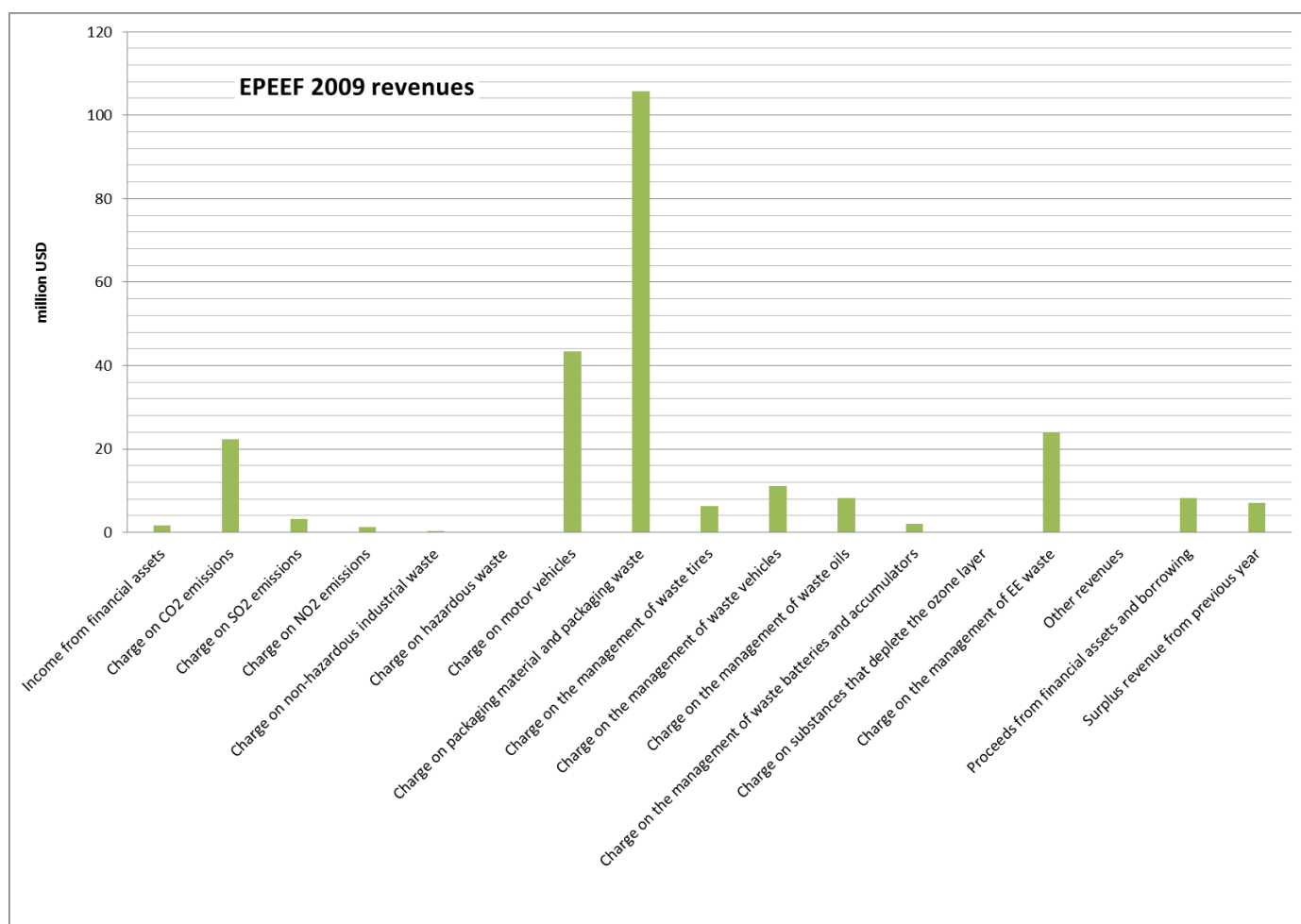
Croatian Environmental Protection and Energy Efficiency Fund

About 93% of the EPEEF's revenues in 2009 came from various environmental taxes, including air emission taxes (levied on CO₂, SO₂ and NO₂), industrial waste, motor vehicles as well as various waste related product taxes.

The EPEEF is involved in the collection of these tax revenues. Further details on each tax including underlying legislation can be found on the EPEEF's website, see <http://www.fzoeu.hr>.

The revenue structure is further illustrated in the table and graph below.

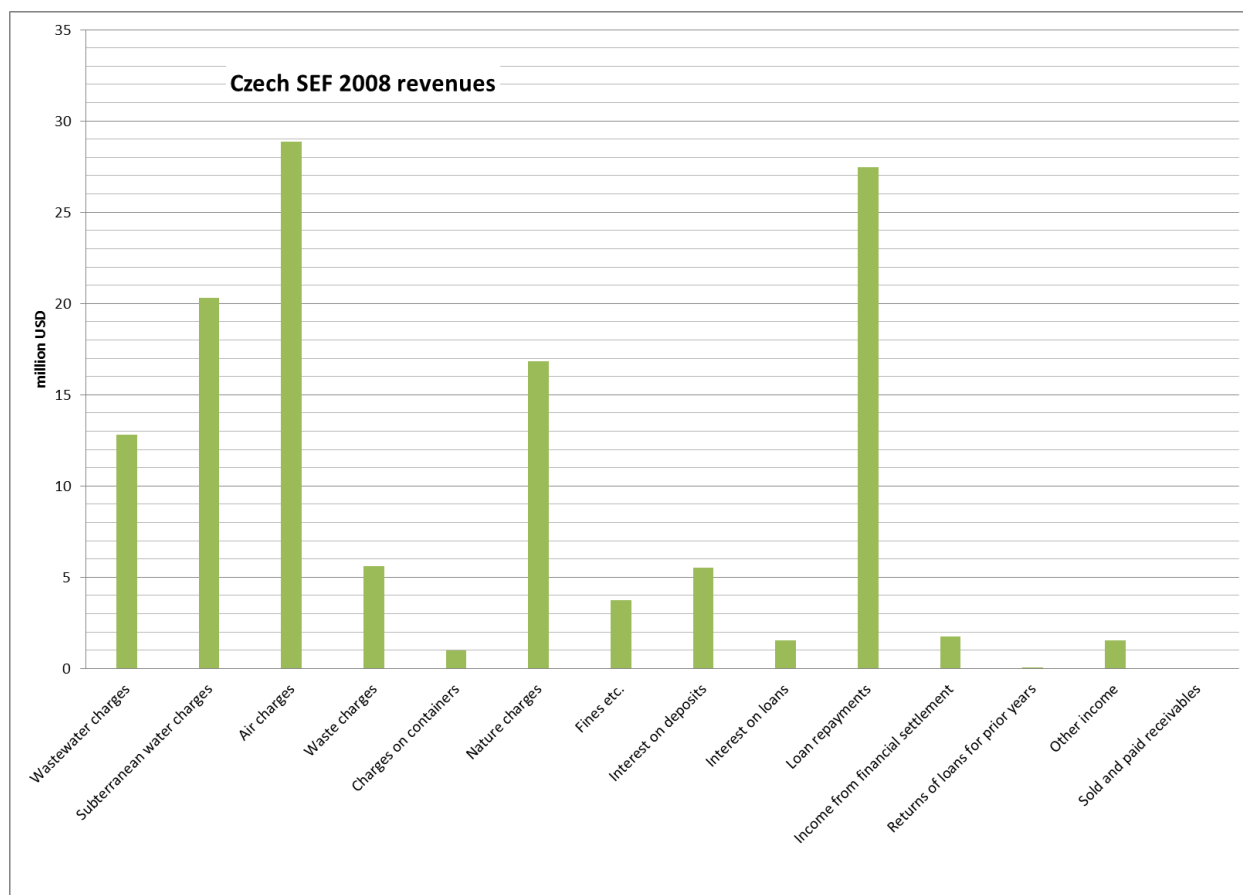
Revenues of the EPEEF in 2009	HRK	EUR*	USD*
Income from financial assets	8'794'660	1'207'560	1'730'892
Tax on CO ₂ emissions	113'134'095	15'533'996	22'266'108
Tax on SO ₂ emissions	16'189'161	2'222'870	3'186'215
Tax on NO ₂ emissions	6'459'910	886'985	1'271'386
Tax on non-hazardous industrial waste	1'488'391	204'365	292'933
Tax on hazardous waste	15'440	2'120	3'039
Tax on motor vehicles	220'711'302	30'304'998	43'438'556
Tax on packaging material and packaging waste	537'358'869	73'782'627	105'758'486
Tax on the management of waste tires	31'735'846	4'357'524	6'245'984
Tax on the management of waste vehicles	56'818'780	7'801'563	11'182'598
Tax on the management of waste oils	42'207'003	5'795'277	8'306'830
Tax on the management of waste batteries and accumulators	10'359'183	1'422'379	2'038'808
Tax on substances that deplete the ozone layer	902'291	123'890	177'581
Tax on the management of EE waste	121'776'162	16'720'604	23'966'968
Other revenues	626'814	86'065	123'364
TOTAL INCOME	1'168'577'907	160'452'823	229'989'747
Proceeds from financial assets and borrowing	41'526'828	5'701'885	8'172'964
TOTAL REVENUE AND RECEIPTS FOR THE YEAR	1'210'104'735	166'154'708	238'162'711
Surplus revenue from previous year	35'671'369	4'897'895	7'020'541
TOTAL	1'245'776'104	171'052'602	245'183'252
Source: IZVJEŠĆE O OSTVARIVANJU PROGRAMA RADA I POSLOVANJA FONDA ZA ZAŠTITU OKOLIŠA I ENERGETSKU UČINKOVITOST ZA 2009 GODINU, Zagreb, travanj 2010. * Exchange rates used for conversion (source: oanda.com) HRK/EUR exchange rate as of 31.12.2009: 7.283; HRK/USD exchange rate as of 31.12.2009: 5.081.			



Czech State Environmental Fund

More than two thirds of the SEF's 2008 revenues came from various environmental taxes, whereas most of the remainder of the Fund's revenues came from its lending business (details see below).

SEF revenues in 2008 (in millions of CZK/EUR/USD, as indicated)			
Revenue item	mln CZK	mln EUR*	mln USD*
Wastewater taxes	240.7	9.07	12.80
Subterranean water taxes	382.0	14.39	20.32
Air taxes	542.7	20.45	28.87
Waste taxes	105.0	3.96	5.59
Taxes on containers	18.3	0.69	0.97
Nature taxes	316.8	11.94	16.85
Fines etc.	70.6	2.66	3.76
Interest on deposits	103.6	3.90	5.51
Interest on loans	29.3	1.10	1.56
Loan repayments (without returns of loans)	516.0	19.44	27.45
Income from financial settlement	32.9	1.24	1.75
Returns of loans for prior years	0.2	0.01	0.01
Other income	29.2	1.10	1.55
Sold and paid receivables	0.0	0.00	0.00
Total	2387.3	89.95	126.98
Source: 2008 SEF Annual Report. *Exchange rate used: CZK/EUR as of 31 Dec 2008 = 26.54; CZK/USD as of 31 Dec 2008 = 18.80 (source: oanda.com)			



In recent years, the SEF has gradually received fewer revenues from its lending business while revenues from environmental taxes have remained more stable, although decreases from revenues highs in the late 1990ies can be recorded as the following table shows:

Development of the SEF's income in 1992–2008 (in millions of CZK)			
Year	Taxes and other income	Loan repayments	"Improving the air" program
1992	2422.5	0	0
1993	2727.4	40.2	0
1994	3287.6	201.5	1000.0
1995	3042.5	317.0	1600.0
1996	2837.3	516.9	2000.0
1997	3060.0	738.6	1500.0
1998	2730.1	1037.0	0
1999	2504.8	1215.0	0
2000	2154.6	1346.5	0
2001	1916.6	1325.1	0
2002	2135.2	1279.3	0
2003	2151.7	1043.3	0
2004	1976.2	979.2	0
2005	2017.2	850.5	0
2006	1802.6	752.9	0
2007	1964.3	638.1	0
2008	1871.3	516.0	0
Source: 2008 SEF Annual Report			

Annex 2.6.: Project Cycle Management

Polish EcoFund

The EcoFund adopted a variety of methods in the identification of good projects. Apart from passive project identification (project proponents applying directly to the EcoFund with their respective project idea), for example, several nation-wide competitions have been implemented over many years for projects in the following areas:

- energy saving in municipal heating systems;
- nature protection in landscape parks;
- protection of declining flora and fauna species;
- protection of water and marshland areas;
- protection of the avian areas of the NATURA 2000 Conservation Network in Poland

Another form of active project identification has been achieved by developing EcoFund's own multiannual sectoral or regional support programs aimed at comprehensively solving important ecological problems. Once developed, the EcoFund publicly announced the programs including the overall envisaged budget. This procedure proved, as a rule, to be a very strong incentive for project proponents to develop good projects that were able to meet the high selection criteria of EcoFund. Around 20 such programs were implemented, including the following:

- elimination of coal combustion within the Old Town area of Cracow;
- effective protection of eagles and other endangered species of the birds of prey;
- Restoration of water cleanliness in the Biebrza River in the Biebrza National Park;
- Restoration of water cleanliness in Puck Bay and the Gdansk Gulf;
- Revitalization of the forests of the Western Sudety Mountains;
- Protection of the environmental quality of the Tuchola Forest;
- "Green Energy for the Warmia and Mazury Region."
- Modernization of city buses fuel switch from diesel oil to CNG;
- construction of health care wastes incineration plants

The procedures for submitting, examining, selecting, contracting and monitoring applications for EcoFund support (project cycle management procedures) are described in some detail below.

At the first stage, a "Project Questionnaire" had to be prepared by filling in a standard form (that could be obtained from the EcoFund Office or downloaded from EcoFund's web site) to be submitted to the EcoFund address. The Project Questionnaire had to provide complete and reliable information that would be necessary for the EcoFund Board to take a decision whether the project proposed was consistent with any of the EcoFund's spending priorities and eligibility criteria. At this stage, particularly important was a brief project description with the specification of the project costs, pointing out of the anticipated environmental benefits, and indication of all

the project financing sources planned by the applicant. The submission of a Project Questionnaire was not required in the case of projects entered for competitions or proposed for the “fast path” of the awarding of grants.

In the case that an accepting decision was taken. The EcoFund Board sent the applicant an invitation to submit a “Grant Application”. The said invitation did not mean any EcoFund commitment to provide any financial support for the project. It only gave grounds for the submission of the Application, which had to be prepared in accordance with the “Instructions for the Preparation of an Application” available from the EcoFund Office or EcoFund’s web site. The Application had to provide clear-cut information about:

- Objectives of the project proposed (with a project justification);
- Technologies applied (or proposed) and/or 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 adopted;
- Material and financial schedule of project implementation, with the financing sources having been specified;
- Economic analysis of the project, showing that the financial liquidity of the project would be maintained both at the project implementation and operation stage (i.e. before and after the project completion).

The Application also had to supplement a number of appendices, such as:

- “Feasibility study” or “business plan” of the project;
- Source documentation related to the economic, financial, and tendering issues;
- All the permits as required by law for the project implementation and operation.

It was important, moreover, that the Environmental Impact Assessment of the project (if required by law) and all the available experts’ opinions and reviews concerning the project could be presented together with the Application. Only complete Applications prepared in accordance with the “Instructions for the Preparation of an Application” were accepted by EcoFund for appraisal.

The Application submitted was examined and appraised by EcoFund specialists and, in some cases, by external experts working on behalf of EcoFund. Three aspects of the project were subject to assessment, i.e. the technological, environmental, and economic/financial issues. As a result of the cooperation between the Applicant, EcoFund specialists, and other experts, the Application could be modified and supplemented according to EcoFund’s requirements.

When a positive result was obtained from such an analysis, the EcoFund Board approved the Application and presented it at an EcoFund Council meeting. Pursuant to EcoFund’s Statutes, the Council took a final decision on the awarding of the grant, on the grant amount, and on the grant-awarding terms. The form and amount of the grant awarded could differ from that proposed by the Applicant. The Council could also formulate additional grant-awarding conditions.

Apart from the examining of Applications submitted to EcoFund individually, the Foundation organized a number of competitions, where prizes were awarded in the form of significant

financial support for the implementation of the projects planned. The ways and required time of the entering of projects for a specific competition were precisely specified in the competition rules published in the press and available from the EcoFund Office and the EcoFund's web site. For projects entered for a competition, the submission of a Project Questionnaire was not required.

EcoFund examined both the Project Questionnaires and Grant Applications as they were received all year round. The Foundation was to reply to a Project Questionnaire within four weeks. A positive reply, being simultaneously an invitation to submit an Application, was valid for three months. Applicant's failure to submit the application within this time was understood as abandonment of the applying for an EcoFund grant.

The EcoFund Council's grant-awarding decision was valid for six months. Within this time, a Grant Agreement had to be signed between the Applicant and EcoFund. During this period, negotiations were carried out by the EcoFund Board with the Applicant on the tenor of the Grant Agreement. The Agreement stipulated the basic rights and obligations of the Foundation and the Grantee.

The grant was awarded for precisely specified investment tasks, with particular stress being put to the purchasing of modern technologies from the USA, Switzerland, Norway and/or European Union Countries.

It was required that accounts for particular project tasks should be cleared in stages according to the schedule of completion of the corresponding project stages. The division of a project into separate project implementation stages was important not only in financial terms (the grant was paid in a number of tranches and the Applicant accounted for using each of those tranches separately) but also for technical and organizational reasons. Every project part specified as a separate project stage in the project implementation schedule had to be related to the completion of making or building a specific facility or device that was subject to a technical acceptance procedure.

In the financing of a project in the part covered by an EcoFund grant, advance payments of the grant money could be allowed. For undertakings other than nature-related projects, the awarding of an advance payment and the determining of the amount to be paid in advance could only be based on the provisions of the contracts signed between the Grantee and the supplier of equipment financed from the EcoFund grant.

During the negotiations, EcoFund attached particular importance to the correct preparation and mutual acceptance of the following Appendices to the Agreement:

Appendix No. 1, which included the basic data on the entire project, its objectives, and anticipated environmental benefits, as well as the project implementation schedule, costs, and financing sources;

Appendix No. 2, i.e. the "EcoFund-Financed Procurement Plan", which included a list of the tasks, with specifying individual material parts thereof, and a list of the contractors/suppliers, with specifying the contractor/supplier selection methods;

Appendix No. 3, in which the individual project implementation stages and the grant payment schedule were defined.

It was a condition precedent to the signing of a Grant Agreement that documentary evidence had be submitted to EcoFund to confirm the availability of all the project financing sources specified in Appendix No. 1 to the Agreement and to show that all the formal and legal requirements related to the project implementation were met.

During the negotiations, the material scope of the project part covered by the EcoFund grant was more precisely specified (in comparison with the data provided in the Application). The details given in the list of tasks covered by Appendices Nos. 2 and 3 had to correspond to the material scope of the invoices to be presented to EcoFund when accounting for the grant funds spent for supplies and/or services. The following rules had to be complied with at the same time:

1. Basically, EcoFund covered the costs of supplies and services provided after the Grant Agreement signing date. For any departure from this rule, an approving decision of the EcoFund Board was required in each specific case.
2. The EcoFund grant money could not be used to cover the costs incurred by the Grantee or the General Project Contractor for such tasks as: preparation of technical documentation, construction of auxiliary facilities, carrying out of Investor's supervision and project coordination work, making of fencing, lighting, telephone network, process start-up, or carrying out of cleaning and tidying-up work, as well as the Grantee's personal payroll and administrative costs (except for such costs borne by environmental NGOs), related to the project implementation. For any departure from this rule, EcoFund Board's accepting decision was required in each specific case. The EcoFund grant money could not be used for the paying of taxes or other charges related to the project implementation.
3. In material terms, the EcoFund grant money could only be used to cover the costs of the construction and equipping of the basic technical facilities of the project and the costs of the devices necessary for the operation of the basic facilities (e.g. power supply installations).

If the Agreement was not signed within six months from the day of taking the grant-awarding decision, the said decision expired. On Grantee's request, when reasonable, the EcoFund Board could extend the decision validity period for up to the next six months.

All the EcoFund's liabilities towards the Grantee became effective at the time of the signing of the relevant Grant Agreement and were governed by the said Agreement.

During the project implementation process, EcoFund, in co-operation with the Grantee, inspected the project with regard to the following aspects:

- Conformity of the material scope of the project with the material and financial plan (project implementation schedule);
- Reasonability of the expenses incurred and conformity of the use of the grant money with the provisions of the Grant Agreement;
- The actual environmental benefits gained after the whole project is completed.

In the course of a specific stage of the project implementation process, the Foundation could pay the grant money on the grounds of invoices to cover the costs of the purchasing of equipment and services obviously related to the carrying out of the project stage involved, within the grant amounts awarded for the said project stage.

The documents to be produced by the Grantee to settle accounts with EcoFund for each project stage and each tranche of the grant awarded had to include:

- Summarized report of the completion of the tasks planned for the specific project stage, prepared in the form as required by EcoFund;
- Copy of the act of technical acceptance of the project stage, approved by the Grantee and the Supervising Inspector, or, in the case that particular jobs completed within the project

stage were subjected to separate acceptance procedures, a complete set of the technical acceptance acts drawn up for all the acceptance procedures carried out;

In the case of a non-investment nature-related project, the Grantee was obliged to submit a detailed report of the work carried out and the costs incurred and the relevant acceptance acts.

- Tabularized list of the project implementation costs covered from the EcoFund grant money, prepared in a form provided to the Grantee by the EcoFund
- Complete set of the invoices (with copies) that have been specified in the table as above, confirmed by the Grantee in formal and technical terms as eligible for financing from the EcoFund grant money.

The account settlement procedure for a specific project stage was considered as completed when the Foundation accepted the work completion report and the financial report of the clearing of accounts, presented by the Grantee and covering this project stage. In the case of large and technically complicated projects, the Foundation could commission an expert to assess whether the project had been correctly carried out.

Apart from thoroughly auditing the spending of the grant money awarded, the Foundation also examined the course of the implementing and financing of the whole project, inclusive of the project financing from other funding sources. Serious departures from the time schedule, material scope, and cash flows stipulated in the Agreement could finally cause the payment of the grant funds to be stopped or the Agreement to be dissolved by the Foundation.

EcoFund, represented by Members of the EcoFund Council and EcoFund Board as well as EcoFund Office staff members and consultants working to EcoFund's commission, visited the project site and carried out field inspections of the project co-financed by the Foundation. The purpose of the inspections was to ascertain the progress in the project implementation, to clarify problems, if any, and to examine any incorrect developments occurred in the project implementation process. The EcoFund's right to inspect the project had to be guaranteed in the contracts concluded between the Grantee and the Representing Investor, the Contractor, or any other unit of similar nature. The Grantee was obliged to immediately inform EcoFund about any facts or events that might affect the process of carrying out the Agreement with the Foundation, such as:

- Change of the Grantee's name, seat, bank, or bank account;
- Important change in the Grantee's legal or economic situation (e.g. resulting from ownership transformation, imminent bankruptcy, etc.);
- Plans to change the major contractors or suppliers;
- Occurrence of unexpected circumstances or technical, organizational, or economic difficulties that might be important for the project implementation process.

In the case of significant changes in the conditions of implementing a project financially supported by the Foundation, there was a possibility to renegotiate the Agreement (and its Appendices), e.g. with respect to the project implementation schedule or, exceptionally, to the material scope of the project, if this was justified by a reasonable expectation of significant improvement in environmental benefits. The said changes, however, could not cause any additional financial consequences for the Foundation. Any increase in the project cost, regardless of the reasons, could not affect the amount of the grant awarded.

Any modifications to the Agreement could be proposed to, and agreed upon with, the Foundation (in the form of an Annex to the Agreement) exclusively before the elapsing of the scheduled time of clearing accounts for the project stage involved. A failure to meet this requirement resulted in the imposing of a stipulated penalty, which was subtracted from the grant amount to be paid.

The Foundation reserved the right to dissolve the Agreement with immediate effect if it was proven that the Grantee used the EcoFund grant for purposes other than those stipulated in the Agreement or failed to carry out the work in the scheduled time or with due diligence.

If it was found after the project was completed and the accounts for the grant were cleared that the Grantee used the grant money wholly or in a part in a way that was contrary to the Agreement, then the Grantee was obliged to return the improperly used amounts plus the benefits lost by the Foundation as the interest that would otherwise accrue on these amounts in the bank account and, in addition to that, to pay a stipulated penalty equal to 25% of the improperly used amount of the grant.

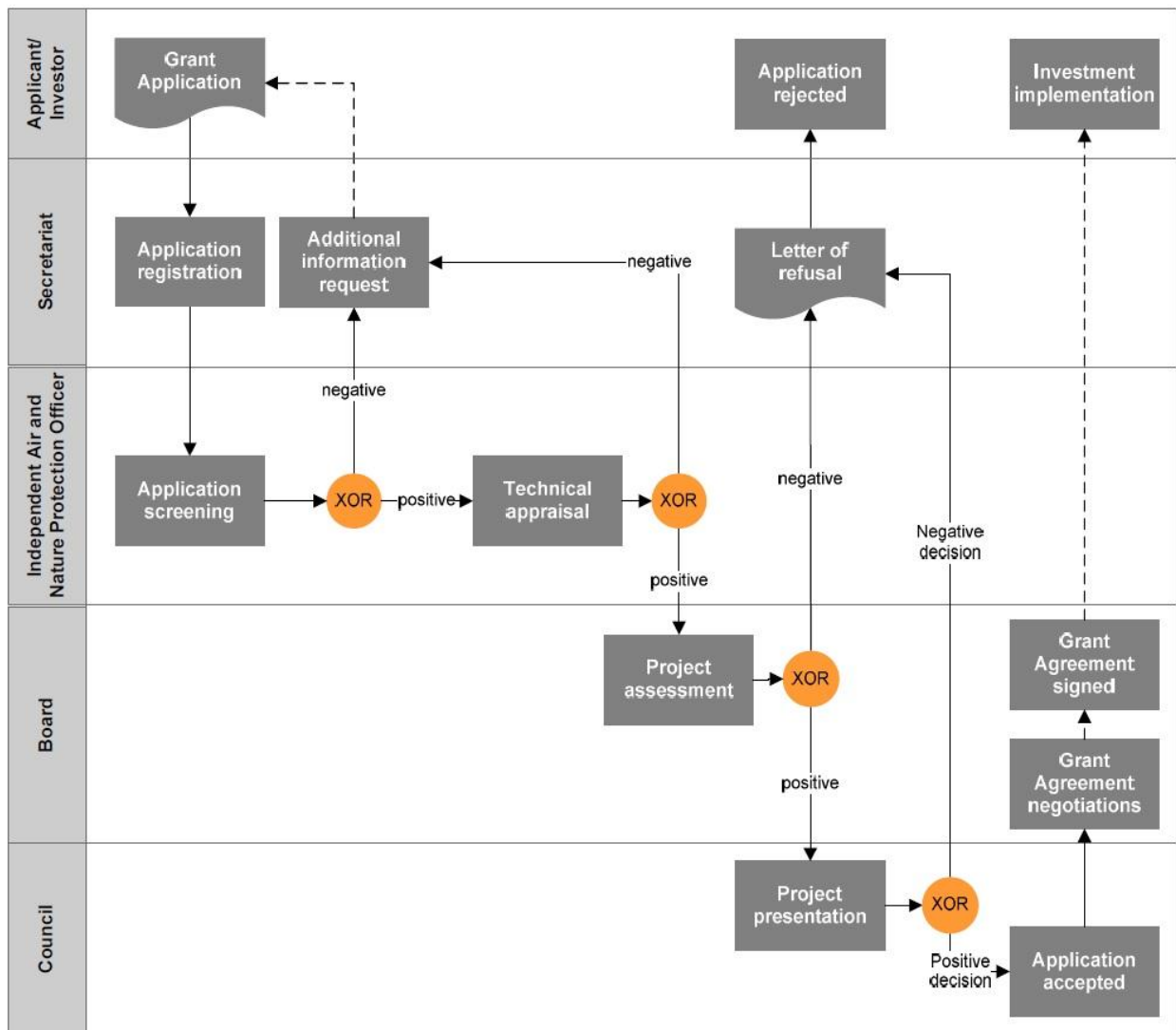
Simultaneously with the clearing of accounts for the project stage preceding the completion of the financing of the project from the grant money (or, in the case of single-stage projects, at least one month before the project completion date), the Grantee was obliged to arrange with EcoFund the date of a project completion ceremony. The Grantee was also be obliged to place a board with information about the EcoFund's financial support on the facilities built within the project and to distribute this information to the mass media.

As a prerequisite condition for the project implementation process to be finally completed and closed, the Grantee had to present:

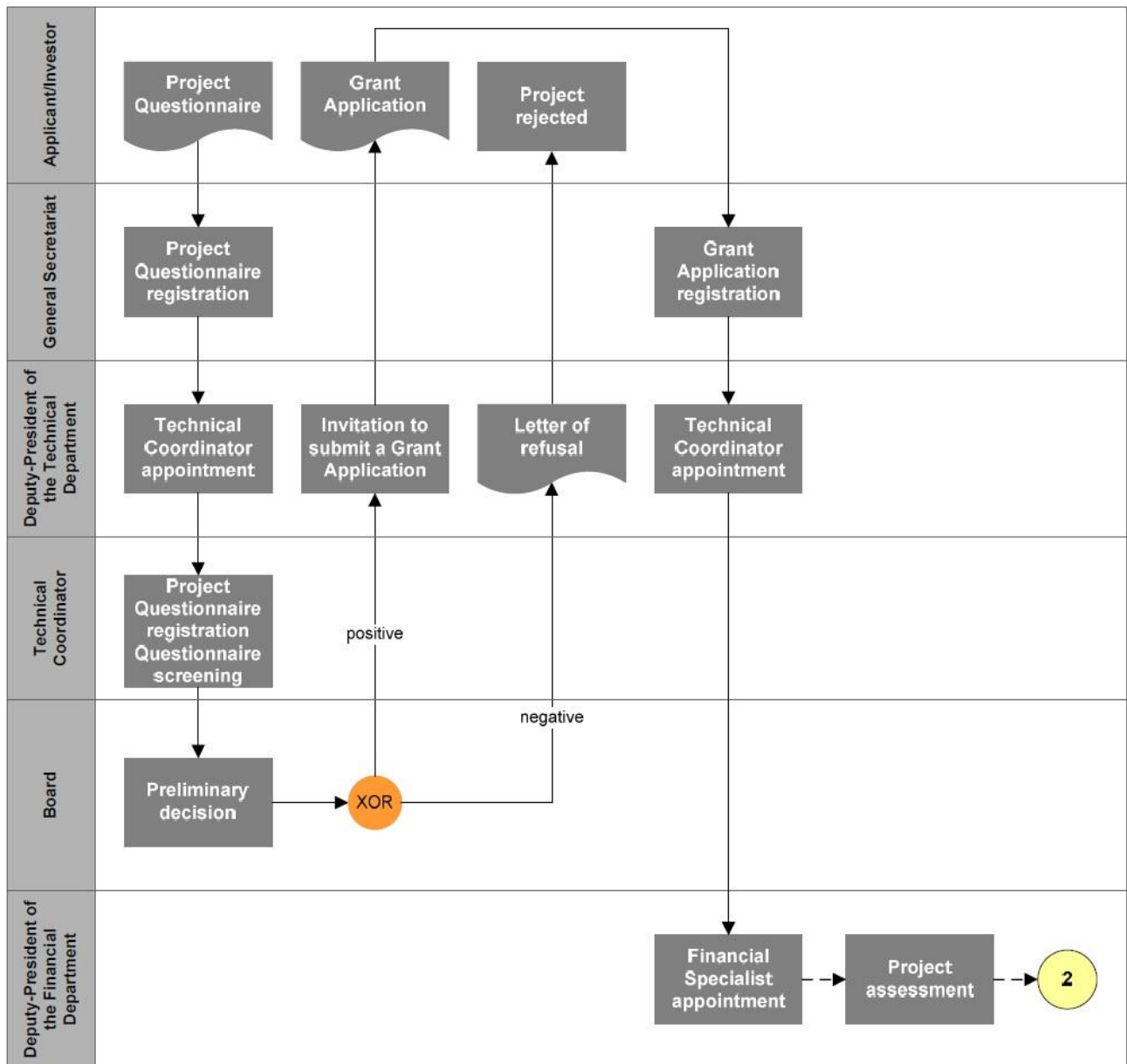
- General report of the whole project implementation process, covering both the technical and financial aspects;
- Project commissioning and technical acceptance act;
- Report on the actual performance characteristics of the project facilities and on the actual environmental benefits gained in result of the project or related to it, together with a report made out by appropriate functions or organs responsible for the approval of the project facilities for service; if it is justified by technical reasons or if the time of completion of the project part financed by EcoFund is different than that of the project as a whole then the aforementioned reports should be submitted to the Foundation in time as stipulated in the Agreement.

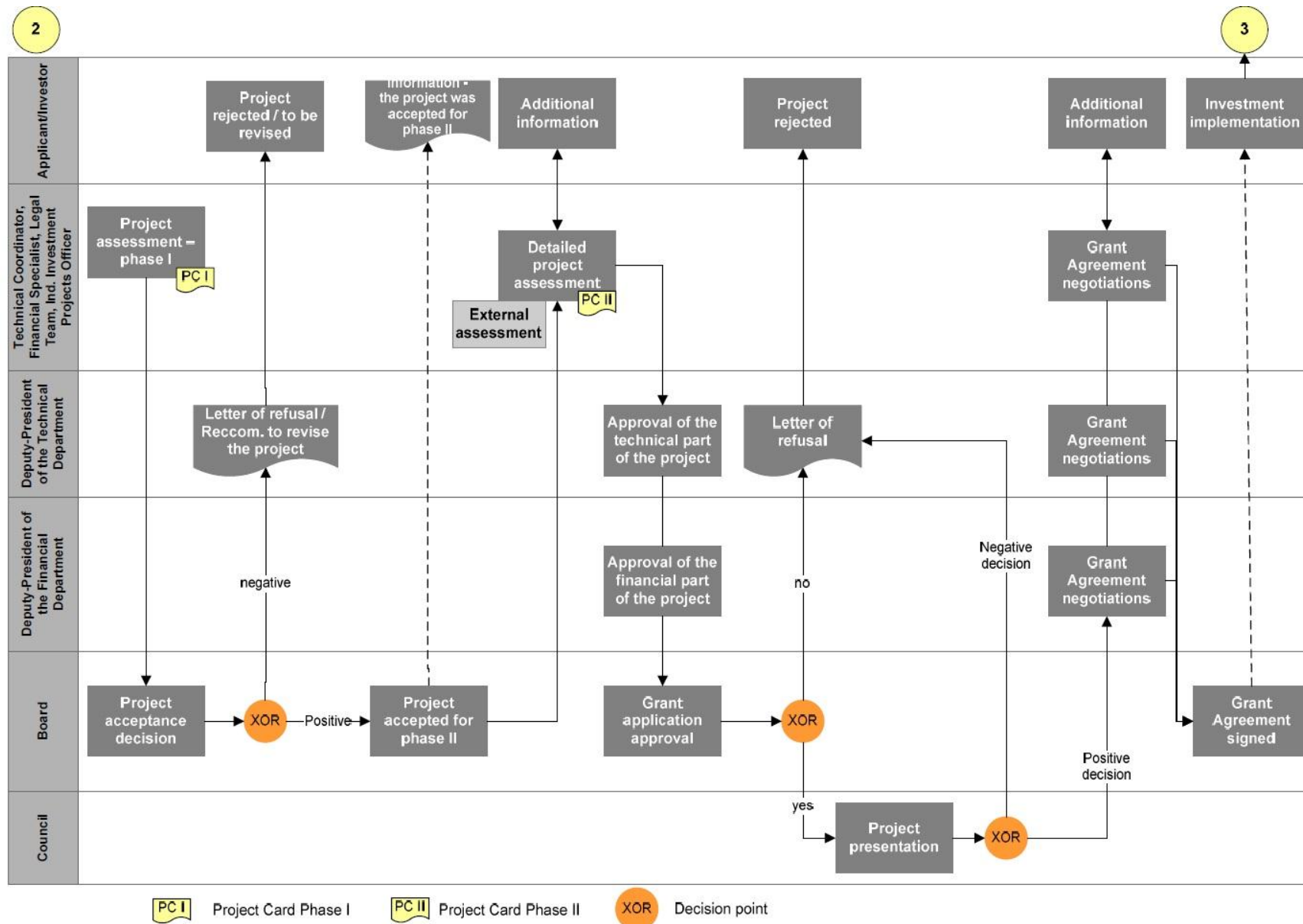
EcoFund then maintained contacts with the Grantee after project completion and the Agreement was closed after monitoring the actual environmental benefits gained in result of the project having been financially supported by the Foundation as well as the actual investment outlays and the costs of operation of the project facilities.

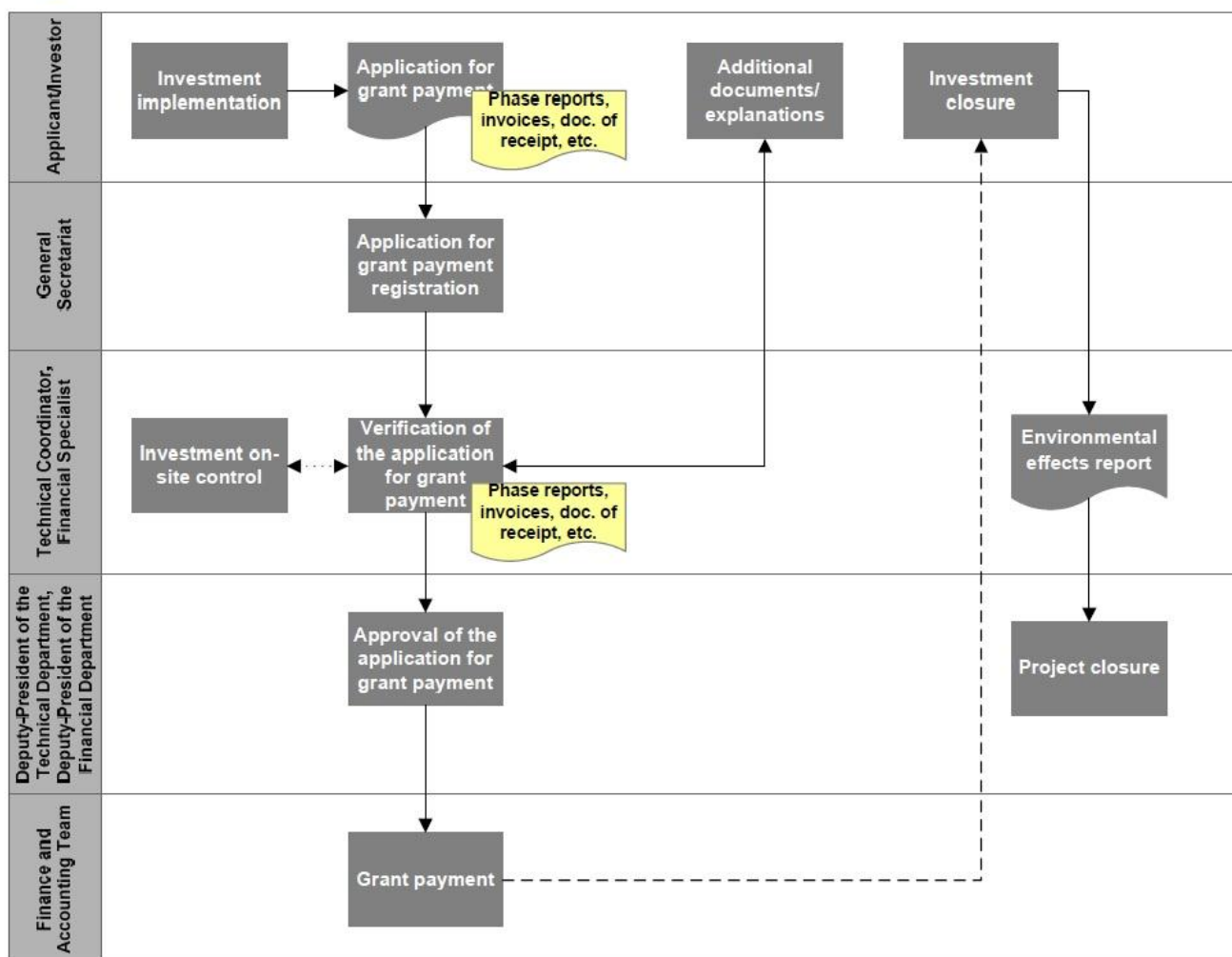
A schematic illustration of the EcoFund's project cycle management system in the earlier years of EcoFund operation is shown below:



Below follows a schematic illustration of the EcoFund's more detailed project cycle management system in 2008 (presented in three graphs).







Annex 2.7.: Spending Strategies

Polish EcoFund

Since start of operations, the EcoFund always communicated very clearly and precisely about its spending areas, giving potential project proponents a very clear idea of which projects could possibly be financed and which not. The following five environmental protection sectors have been declared in the EcoFund's Statutes as priority areas:

- Reduction of the transboundary transport of sulfur dioxide and nitrogen oxides and elimination of the low sources of such emissions (air protection);
- Reduction of the pollutant inflow to the Baltic Sea and protection of drinking water resources (water protection);
- Reduction of the emissions of gases that cause global climate changes (climate protection);

- Biological diversity protection (nature protection); and
- Waste management and contaminated soil reclamation.

These five spending areas were further detailed - the types of the projects that would be eligible for receiving EcoFund grants were:

- Sector I: Air Protection
 - Liquidation of low emission sources in towns of documented excessive concentration of sulfur dioxide;
 - Construction of fluidized bed boilers;
 - Construction of gas/steam turbine sets (systems using biogas, local resources of natural gas or waste gas will be preferred);
 - Reduction of air pollutant emissions from automotive vehicles in towns (exclusively modernization of the fleet of municipal transport service within a system of standardized grants).
- Sector II: Water Protection
 - Construction or modernization of sewage treatment plants and construction of sewerage systems within "The National Program for Municipal Sewage Treatment" in urban agglomerations of population ranging from 15 000 to 100 000 p.e. (population equivalent) and situated immediately on the Baltic or in the catchment basins of the Vistula Lagoon, the Szczeciński Lagoon, the rivers of the Baltic Sea coastal strip, the Vistula downstream of the confluence with the Brda, and the Odra downstream of the confluence with the Warta;
 - Construction or modernization of sewage treatment plants and construction of sewerage systems in urban agglomerations of population exceeding 15 000 p.e. that have an impact on the quality of the drinking water drawn for Warsaw and Cracow;
 - Construction or modernization of sewage treatment plants and construction of sewerage systems that would be necessary to preserve the cleanness of waters in lakes of outstanding natural value or within national parks and nature reserves;
 - Construction or modernization of sewage treatment plants and sewerage systems in the areas of Major Underground Water Reservoirs specified in the EcoFund's priority list;
 - Construction of sewage sludge management systems at municipal sewage treatment plants.
- Sector III: Climate Protection
 - Energy savings in municipal heating systems (exclusively within the competition for energy savings in heating systems);
 - Use of biomass for energy generation purposes in the household and welfare sector and at industrial plants;
 - Utilization of biogas obtained from farm wastes, municipal landfills, and sewage treatment plants, as well as waste gas generated at industrial processes;
 - Use of solar energy (photovoltaic panels and solar collectors within the system of standardized grants);

- Use of shallow geothermal energy (heat pumps);
- Promotion of the fuel cell technology;
- Utilization of waste energy generated at industrial and combustion processes.
- Sector IV: Nature Protection
 - Protection of endangered fauna and flora species;
 - Preservation of wetlands of high natural value;
 - Nature protection in national parks and landscape parks;
 - Protection of the areas of the NATURA 2000 EU Nature Conservation Network;
 - Construction of infrastructure for ecological education in national parks;
 - Adaptation of the species composition of forest to the habitats in national parks, natural park protection zones, and nature reserves.
- Sector V: Waste Management
 - Organization of comprehensive systems of the collection, recycling, and management of municipal wastes to serve areas with a population from 50 000 to 250 000 people;
 - Methods of the processing of biodegradable wastes generated by public utility facilities;
 - Safe disposal of dangerous wastes;
 - Construction of systems for the recycling of municipal and dangerous wastes;
 - Modernization of industrial technologies to eliminate the generation of dangerous wastes (promotion of “clean technologies”).

The Principles of EcoFund’s Operation were also published and communicated openly and stated that Grants from EcoFund’s resources may only be provided for investment projects directly related to environmental protection, except for nature-related projects, which may be eligible for EcoFund grants even if they are non-investment undertakings.

EcoFund did not subsidize projects dedicated to the carrying out of scientific, research, and development work, organization of monitoring actions, conferences, or symposia, or the conducting of educational activities in other forms. An exception of this rule was made for educational or instructing tasks carried out as parts of innovative or nature-related projects.

All the Grant Applications were examined and assessed in terms of environmental, technical, economic, and financial criteria, in accordance with the procedures adopted by the EcoFund. For a grant to be awarded to a specific project, all these project assessments had to end with positive opinions and the Applicant had to prove its financial and organizational reliability and the availability of all the funds necessary to cover the project costs in the part not covered by the EcoFund’s support.

EcoFund was able to financially support both the projects having just been started and those where the project implementation process was more advanced, unless the degree of financial engagement exceeded 60% on the day of submission of the Application to EcoFund.

In consideration of the administrative costs incurred by the Foundation, an EcoFund grant awarded for a single project could not be lower than PLN 50 000.

All projects examined by EcoFund were broken down into “technical” and “nature-related” undertakings. The technical undertakings could be either “typical” or “innovatory”. The projects were understood by the EcoFund as “innovatory” when they lead to the applying of a new technology for the first time in Poland or created a favorable environment for the introducing of such a technology onto the Polish market. The EcoFund’s task in this case was to promote and popularize the tried and proven solutions that had not yet been applied in the country. However, such solutions could not be prototype systems, not used before on the production basis, and having never been implemented elsewhere. Most of the technical projects, however, were typical undertakings representing a technical standard that was widely accepted and applied in developed countries. Such projects were predominantly proposed to EcoFund and co-financed by the Foundation. Nature-related projects were defined as those dedicated to the active protection of biological diversity according to the priorities specified for sector IV.

EcoFund did not co-finance projects that had been subsidized or had applied for a subsidy from the resources of the EU Cohesion Fund or Structural Funds or from the funds offered by the European Economic Area (e.g. the so called Norwegian Fund).

In terms of rules for subsidizing “technical projects”, the grant-awarding rules for typical projects proposed to EcoFund were as summarized in the table below.

Maximum share of EcoFund grants in total project costs		
Applicants		Maximum share of grants in total costs of typical projects
Entrepreneurs		Up to 15% (up to 30%, if the business unit is owned in 100% by local authorities)
Local authorities		
Group I	($x \leq X_{20}$)	Up to 60%
Group II	($X_{20} < x \leq X_{70}$)	Up to 50%
Group III	($X_{70} < x \leq X_{90}$)	Up to 40%
Group IV	($x > X_{90}$)	Up to 30%
Other applicants		Up to 50%
<p>Notes: x = Total per capita income, calculated as the arithmetic average of the values of this parameter annually recorded in the first three years of the four-year period preceding the year in which the grant is to be awarded. In the case of unions of Gminas or Poviats, the per capita income is calculated as the weighted average, with the weighting factor being defined as the ratio of the population of each Gmina or Powiat to the total population of the whole union.</p> <p>X_{20}, X_{70}, X_{90} – Income ratio thresholds (maximum per capita income values) for commune groups covering the poorest 20%, 70%, and 90% of all the communes ranked according to increasing total per capita income. For 2008, the following income ratio thresholds have been determined (in PLN): $X_{20} = 1\ 605$; $X_{70} = 1\ 922$; $X_{90} = 2\ 259$.</p> <p>The category of “Other applicants” covers charity and religious organizations and institutions, non-governmental ecological organizations, managing boards of national and landscape parks, educational and rearing institutions, health service institutions, housing cooperatives, and water associations.</p>		

EcoFund had also launched a so-called “fast path” for selecting and awarding grants for typical projects where products of similar nature were to be generated. The table below shows the products that could be subsidized by EcoFund in the form of grants awarded for projects where the grant amount would be proportional to the number of physical product units adopted as a basis for the calculation of grants.

Products eligible for “fast path” EcoFund appraisal and awarding					
Item	Product	Unit	Maximum grant per unit, [PLN]	Annual limit, [PLN/a]	Additional requirements
1.	Solar collectors	m ²	1 000	10 000 000	Grant limit of up to 40% of project costs
2.	Rotary composters	unit	200 000	4 000 000	Output capacity within the range of 800÷3 000 Mg/a; grant limit of up to 30% of the cost of a set of equipment
3.	Replacement or modernization of electric drive systems	MW	620 000 (control systems) 225 000 (basic equipment)	10 000 000	Up to 30% of project costs; Power capacity of the electric drive system not lower than 200 kW
4.	Buses fuelled with compressed natural gas (CNG)	piece	100 000 (50 000 without replacement of a chassis frame)	20 000 000	Grant limit up to 5 million PLN for a single applicant. The applicant may be a public transport company that serves a city populated with more than 100 000 inhabitants.

The grant limits specified in the two tables above were not applicable to projects selected via competitions organized by the EcoFund. In these cases, the requirements and grant amounts were individually specified in the competition announcements.

In terms of “innovatory” projects, the EcoFund applied following rules: By the supporting (co-financing) of innovatory projects, EcoFund promoted the use of the most recent engineering achievements for environmental protection purposes. The rules of the subsidizing of innovatory projects proposed to EcoFund were more favorable than those adopted for typical projects. The maximum share of a grant in the total project cost as specified in the table above was raised by 10 percentage points. Neither the so-called “fast path” of the awarding of EcoFund grants nor the competition procedures were applicable to the innovatory projects.

In terms of “nature-related projects”, the EcoFund applied following rules: The term “nature-related projects” covered all the projects co-financed by EcoFund within sector IV (biodiversity protection). Projects of this kind could be awarded EcoFund grants of up to 80% of the eligible project costs, except for projects related to the construction of educational infrastructure or to the rebuilding of tree stands, where the grant amount was limited to 50% of the eligible project cost.

Annex 2.8.: Promotion

Fund websites: the Czech State Environmental Fund

All three reviewed Funds have useful websites which can serve as examples on how a Fund can disseminate important information and effectively promote its activities. The website of the Czech State Environment Fund is presented and discussed in some detail below in order to point out some important information components and promotional concepts:

STÁTNÍ FOND ŽIVOTNÍHO PROSTŘEDÍ ČESKÉ REPUBLIKY

english | RSS

Vyhledávání

ZELENÁ ÚSPORÁM OP ŽIVOTNÍ PROSTŘEDÍ NÁRODNÍ PROGRAMY ŠVÝCARSKÉ FONDY OP INFRASTRUKTURA FOND SOUDRŽNOSTI | **KONTAKTY**

Právě se nacházíte: Úvodní stránka » Aktuality

Aktuality k povodním

Aktuality

Pro novináře

Státní fond životního prostředí ČR

Veřejné zakázky vyhlášené SFŽP

Audio-video prezentace

Svobodný přístup k informacím

Přijaté a schválené žádosti

Kariéra

Dokumenty ke stažení

Odkazy

NEWSLETTER E-MAIL

Napište adresu e-mailu, na který chcete dostávat aktuality SFŽP:

ANGLICKO-ČESKÝ ČESKO-ANGLICKÝ slovník životního prostředí

Atlas projektů z Operačního programu Infrastruktura

199 PROTIKORUPČNÍ LINKA 199

Aktuality

Nabídka podpory obcím ležícím v regionech národních parků

20.09.2010 Druhá výzva pro předkládání žádostí o podporu v rámci Programu podpory obcí ležících v regionech národních parků byla vyhlášena 20. září 2010.

Na webu je aktualizovaná verze Implementačního dokumentu

17.09.2010 Ke dni 30. srpna 2010 byl aktualizován Implementační dokument. Nejnovější verzi naleznete na webu v sekci Dokumenty ke stažení.

Program Zelená úsporám získal další prostředky

02.09.2010 Ministr životního prostředí Pavel Drobil a zástupce japonské firmy Mitsui & Co. pan Ken Abe včera - 31. srpna 2010 - uzavřeli smlouvu o prodeji dalších jednotek AAU¹⁰. Program Zelená úsporám tak získá nové prostředky, které budou využity pro zateplování rodinných a bytových domů, výstavbu domů v pasivním standardu a výměnu starých kotlů za ekologické vytápění.

Zelená úsporám

Cyklus seminářů, jak získat dotaci na projekt pro zlepšení kvality ovzduší a snížení emisí, začíná tento čtvrtek

31.08.2010 Ve čtvrtek startuje cyklus seminářů o možnostech financování projektů zaměřených na zlepšování kvality ovzduší a snižování emisí z Operačního programu Životní prostředí. Semináře se konají v průběhu měsíců září a října 2010 ve všech krajských městech ČR. Jména přednášejících a přesná místa konání budou průběžně doplňovány.

Ukončení příjmu žádostí o podporu na zateplení veřejných budov

31.08.2010 Dnes 31. 8. 2010 v 16 hodin končí příjem žádostí do programu Zelená úsporám na Realizaci úspor energie v budovách veřejného sektoru. K administraci budov přijaty pouze ty žádosti o podporu, které budou nejpozději do 16 hodin 31. 8. 2010 elektronicky předloženy do systému.

Po-Pa 7.30-16.00 **800 260 500**

dotazy@sfzp.cz

POVODNĚ 2010
pomoc MŽP a SFŽP ČR

TOP Kategorie
Energeticky úsporné výrobky

36. EKO FILM

Akce a pozvánky

22. 9. 2010
Seminář OPŽP - Administrace projektu "Schválením žádosti projekt nekončí..." v Hradci Králové
Státní fond životního prostředí si Vás dovoluje pozvat na informační seminář zaměřený na administraci schválených projektů v rámci dotací z OPŽP prioritní osy I. Zlepšování vodohospodářské infrastruktury a snižování rizika povodní, podoblast 1.1. Snižování znečištění vod

23. 9. 2010

» Archiv akcí a pozvánek

Aktuální výzvy národních programů

Aktuální výzvy OPŽP

Dotační program na zateplování a ekologické vytápění domů
www.sfp.cz

Looking at the website, it is immediately obvious that the site is produced using professional and up-to-date internet technologies. A decent design pleases and invites the reader. In terms of contents, a number of positive aspects are worth to be pointed out:

- The website is clearly structured.
- The homepage includes links to all main pages of the site.
- The website is available not only in Czech language - several pages are available also in English language. Although incomplete, the English language version is especially useful considering that:
 - the Fund plays an important role in Czech environmental policy in achieving compliance with EU environmental legislation, i.e. there is a clear supra-national dimension of all Fund operations;
 - the Fund continues to receive significant funds from bilateral and multilateral institutions (EU funding; cohesion funds from the Swiss Government);
 - the Fund apparently pursues a strategy of clear operational transparency and openness towards external/foreign parties.
- The website includes detailed information on the Fund's governance, including detailed contact information of relevant staff. The site also includes pages dedicated to persons seeking work at the Fund.
- The website includes detailed information on ongoing and past tenders and competitions organized by the Fund. This includes both complete and detailed tender materials for download, as well as summary information on the results of completed tenders.
- The website allows for subscribing to free electronic news from the Fund and offers for download of past issues of the Fund's of periodical newsletter.
- The website contains detailed information on all current operational programs, including direct access to information on how interested parties can apply for support.
- The website provides detailed information on seminars and meetings organized by the Fund, for example seminars which aim at instructing seminar participants on how they can apply to support from the Fund.
- The website offers easy and free of charge download of key documents including for example, Fund Annual Reports, promotional material, legislation regulating the Fund, press materials, specific documents related to operational programs, etc.
- The website offers a "news" section, which among others helps frequent website visitors use the site more efficiently.
- The website includes a dedicated press section to serve the needs of professional media.
- The website includes a complete site map, which further helps a visitor in quickly finding desired information. The current sitemap (see <http://www.sfzp.cz/sekce/215/mapa-stranek/>) shows that the Fund's website includes more than 100 pages.
- The website provides internet links to all relevant stakeholders of the Fund.

Annual Reporting: Polish EcoFund

In terms of annual reporting, the Polish EcoFund's 2008 annual report can be mentioned as a good example. This report is available on the EcoFund's website at <http://www.ekofundusz.org.pl/us/files/Sprawozdanie%202008ang.zip>

First of all it is noteworthy that this report is available both in Polish and English languages, not only satisfying information needs of domestic stakeholders but also of interested international stakeholders and experts.

The following type of information included in the report is noteworthy:

- The names and contact details of all those Fund representatives holding senior positions in governing and managing the Fund. Details on the governance system of the Fund.
- Address and registration information of the Fund.
- The purpose and objectives of the Fund as stated in the Fund's Statutes
- Detailed information on projects supported during the reporting year, including detailed information on how projects were identified and selected, how supported projects correspond to the priority spending areas, type and conditions of financial instruments, type of beneficiaries, etc. including detailed financial data related to all mentioned aspects.
- Detailed information on technological and economic impacts as well as environmental effectiveness of Fund support in the reporting year.
- Detailed information on administrative efficiency of Fund operations.
- Detailed information on financial results and reports in the reporting year (with comparison to previous reporting years), including: balance sheet, income statement, additional information to financial report, auditor's opinion concerning financial report. This information includes among others, details on the Fund's detailed revenues, detailed environmental expenditures, detailed co-financing arrangements implemented, detailed administrative expenditures, etc.
- In an annex, the report also includes summary information on each project supported by the Fund in the reporting period, including for each project information such as: project code, project title, details on the beneficiary of support, details on the support agreement (incl. total investment costs and support provided by the Fund), project objective, summary information on technical and financial project implementation, summary information on environmental benefits.

In turn, one could criticize, that the Polish EcoFund's annual report is very heavy on text. While this approach certainly allows for the provision of very detailed and transparent information, there would be a large potential to improve the readability and graphic attractiveness of the report (see for example a recent annual report of the Czech State Environmental Fund which is graphically on high level, however, provides for much less detailed information, see: <http://en.sfzp.cz/ke-stazeni/575/8671/detail/annual-report-2008/>).

Annex 2.9.: Procurement of Projects to be (Co-) Financed by the Fund

The Consultant strongly recommends that an Environmental Fund uses public procurement methods for identifying and selecting projects to be (co-) financed with resources of the Fund. This is instrumental for achieving full transparency and cost efficiency in the allocation of the Fund's financial means.

In principle and foremost, the Fund will have to comply with national procurement law and policy in force when procuring projects and organizing competitions. The Fund should be able to easily find support – if needed at all – from domestic advisors in how such procedures should be implemented properly and in compliance with the law.

In the following section, the Consultant provides for a summary of on good international practice as regards basic procurement requirements and policies as exercised by the EU in the framework of the European Development Fund, EDF. Studying this practice might be useful for at least two reasons:

- One of the options to capitalize a National Environmental Fund is to upgrade its operations such that it can and will be used by bilateral and/or multilateral foreign agencies as a project implementation unit or for co-financing environment related development assistance funds. Many of these institutions apply the EDF procurement rules (e.g., all EU member states, all EU financial instruments) and if the Fund aspires to attract such foreign finance it will have to demonstrate that its staff is capable to implement the EDF procurement rules and policies.
- Even if a Fund does not have aspirations in the short term to act as an administrator of EDF funds or development assistance funds from other relevant bilateral or multilateral donors, the Fund may all the same make use of some of the tested procurement templates and procedures developed under EDF in order to further improve and rationalize its own procurement policy.

EDF procurement policy, Practical Guide "PRAG" ⁷

The term "procurement" can be defined as the process of acquiring goods, works and/or services at the optimum possible total cost and in the correct amount and quality. Procurement starts at the point where a specific need is identified and finishes once the delivery of the goods, works or services in question has been completed satisfactorily. There are a number of key principles which should be applied to the procurement of goods, works or services using public funds:

- Value for Money: "Value for money" is the core principle that underpins the procurement process so as to ensure that the best available procurement outcome is achieved. "Value for money" is generally determined by evaluating all proposals for a particular procurement activity against the applicable evaluation criteria, and assessing all relevant risks, costs and benefits on a whole-life basis. A decision based on price alone does not necessarily represent best value for money and selection of the most economically

⁷ The text in this section is adapted from the report EU CARDS 2004, "Support for the further Approximation of Croatian Legislation with the Environmental Acquis" Republic of Croatia – Project Cycle Management, Manual for End Recipients of EU Funds in the Environmental Sector.

advantageous offer or tender (i.e. the tender offering the best price-quality ratio) is much more likely to achieve Value for Money.

- **Open and Effective Competition:** The principle of open and effective competition must be used to achieve efficiency, innovation and choice, and to provide transparency and probity to the Contracting Authority's procurement process.
- **Probity and Ethical Behavior:** The principle of probity and ethical behavior governs the conduct of all public procurement activities. All officers with the authority to procure goods and services on behalf of a Contracting Authority must comply with the required standards of integrity, probity, professional conduct, and ethical behavior.
- **Responsible Financial Management:** The principle of responsible financial management must be applied to all procurement activities. The funds available within an existing approved budget, and public funds, must be used efficiently and effectively to procure goods and services, and every endeavor must be made to contain the costs of the procurement process without compromising any of the procurement principles.
- **Risk Management:** The risks associated with procurement activity must be managed so as to avoid malpractices and unprofessional conduct. Regular risk assessments must be undertaken, particularly by internal and external auditors, and appropriate risk mitigation strategies must be developed and implemented.

There are strict rules governing the procurement of goods, works and services relating to all external aid projects financed from the European Communities' general budget. These help to ensure that suitably qualified suppliers, contractors and service providers are chosen without bias, and that projects are carried out in an efficient manner, with the full transparency required in the use of public funds. The rules are based on the various regulations which govern the use of EU funds. These are comprehensively detailed in the Practical Guide to Contract Procedures for EC External Actions (PRAG)⁸.

The responsibility for procurement rests with the Contracting Authority. While End Recipients are normally expected to prepare tender documents (usually with the assistance of consultants or advisors), the Contracting Authority is responsible for compiling Tender Dossiers, managing the procurement process and ensuring compliance with relevant rules and procedures.

This section provides a brief summary of the main procurement rules and procedures applying to external aid projects financed from the European Communities' general budget. Those requiring more detailed information are strongly advised to consult the PRAG.

Under PRAG, there are three main types of contract – Service Contracts, Supply Contracts and Works Contracts. These are described below.

Service Contracts

Service contracts are used to procure such services as insurances, rental of equipment and vehicles, accounting, market and statistical surveys, sanitation services, counseling, education, cleaning, catering, guarding and security, publicity, organization of exhibitions and meetings, broadcasting and publications, professional training, software development and website design, monitoring and evaluation, audit, pre-feasibility and feasibility studies, technical assistance, architectural / engineering design, works supervision, etc.

⁸ See http://ec.europa.eu/europeaid/work/procedures/implementation/practical_guide/index_en.htm

Study contracts generally specify an outcome, i.e. the contractor must provide a given product; the technical and operational means by which it achieves the specified outcome are irrelevant. These are, therefore, lump-sum (global-price) contracts and the contractor will be paid only if the specified outcome is achieved. Technical assistance contracts (fee-based) are used where a service provider is called on to play an advisory role, to manage or supervise a project, or to provide the experts specified in the contract.

Technical assistance contracts often only specify the means, i.e. the contractor is responsible for performing the tasks entrusted to it in the Terms of Reference and ensuring the quality of the services provided. Payment for these contracts is dictated by the resources and services actually provided. The contractor does, however, have a duty of care under the contract: it must warn the Contracting Authority in good time of anything that might affect the proper execution of the project.

Supply Contracts

Supply Contracts concern the purchasing of any kind of goods: equipment, machinery, agricultural items, vehicles, software, office furniture, stationery and consumables, fuel, IT equipment, spare parts, etc. They can also include the services directly related with the supply such as transport and delivery, pre-commissioning and training of the users, maintenance, repairs and after sales services.

Works Contracts

Works contracts cover either the execution, or both the execution and design, of works or a work related to one of the activities referred to in Annex I to Directive 2004/18/EC of the European Parliament and the Council (Budget) or the realization, by whatever means, of a work corresponding to the requirements specified by the Contracting Authority. A 'work' means the outcome of building or civil engineering works taken as a whole that is sufficient of itself to fulfill an economic or technical function.

This includes for example the construction or rehabilitation of landfill sites, wastewater treatment plants, buildings, hangars, warehouses, water towers, wells, rural roads, bridges, hydraulic and irrigation facilities, pipelines, communications and energy transmission lines and their related works of preparation of sites and materials, demolition and transport of debris, landscaping and similar construction works.

Contract Conditions

Generally speaking, all external aid contracts financed by the EU for the provision of services, goods or works must be based on the standard contract conditions contained in the respective Annexes of the PRAG.

Grounds for Exclusion from Participation in Procurement

Tenderers will be excluded from participation in procurement procedures if:

- They are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- They have been convicted of an offence concerning their professional conduct by a judgment which has the force of *res judicata*; (i.e. against which no appeal is possible);

- They have been guilty of grave professional misconduct proven by any means which the Contracting Authority can justify;
- They have not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established or with those of the country of the Contracting Authority or those of the country where the contract is to be performed;
- They have been the subject of a judgment which has the force of *res judicata* for fraud, corruption, involvement in a criminal organization or any other illegal activity detrimental to the Communities' financial interests;

Tenderers must certify that they are not in one of the situations listed above.

Fair Competition

No contract may be split in an attempt to evade compliance with the competition rules set out in PRAG.

To avoid any conflict of interest, any firm or expert participating in the preparation of a project must be excluded from participating in respective tenders based on this preparatory work.

The time-limits set for the receipt of tenders and requests to participate must be long enough to allow interested parties a reasonable and appropriate period to prepare and submit their tenders.

All requests to participate and tenders declared as satisfying the requirements must be evaluated and ranked by an Evaluation Committee on the basis of the exclusion, selection and award criteria announced in advance.

Procurement Procedures

The rules for applying the standard procurement procedures for external aid contracts financed by the EU are divided between those for services (e.g. technical assistance, studies, provision of know-how and training), supplies (i.e. equipment and materials) and works (i.e. infrastructure and other engineering works).

Once approval for an activity has been granted by the European Commission within a financing agreement, the Contracting Authority can proceed with tendering and contracting following these standard procedures. The following procedures are available:

Open Tender Procedure

Calls for tender are open where all interested economic operators may submit a tender. The contract is given maximum publicity through the publication of a notice in the Official Journal (S series) of the European Union, the official journals of all the ACP States (EDF) on the EuropeAid website and in any other appropriate media.

Under the open procedure, any natural or legal person wishing to tender receives upon request the tender dossier (which may have to be paid for), in accordance with the procedures laid down in the procurement notice. When the tenders received are examined, the contract is awarded by conducting the selection procedure (i.e. verification of the eligibility and of the financial, economic, technical and professional capacity of tenderers) and the procurement procedure (i.e. comparison of tenders), in accordance with the selection and award criteria. No negotiation is allowed.

Restricted Tender Procedure

Calls for tender are restricted where all economic operators may ask to take part but only candidates satisfying the selection criteria may submit a tender. Under the restricted procedure, the Contracting Authority invites a limited number of candidates to tender. Before launching a tender procedure, it will draw up a short-list of candidates selected as a result of their qualifications. The selection procedure, by which the long-list (all candidates responding to the published notice) is cut down to a short-list, involves examining responses to a procurement notice, in which the selection criteria and a general description of the tasks to be undertaken are set out.

In the second stage of the procedure, the Contracting Authority invites the short-listed candidates and sends them the tender dossier. In order to ensure fair competition, tenders must be submitted by the same service provider or consortium which has submitted the application form on the basis of which it was short-listed and to which the letter of the invitation to tender is addressed. No change whatsoever in the identity or composition of the tenderer is permitted unless the Contracting Authority has given its prior approval in writing.

A situation where such approval could be given is e.g. where a merger has taken place between a short-listed candidate / member of a consortium with another company and where the new company is found to meet the eligibility and exclusion criteria and does not give rise to any conflict of interest or unfair competition. The successful tenderer is chosen by the procurement procedure once the tenders have been analyzed in accordance with the selection and award criteria. No negotiation is allowed.

Competitive Negotiated Tender Procedure

Under the competitive negotiated tender procedure, the Contracting Authority invites tenders from candidates of its choice. At the end of the procedure, it selects the most economically advantageous tender in the case of service tenders and the cheapest compliant offer in the case of supplies or works tenders.

Framework Contracts

A framework contract is an agreement between one or more contracting authorities and one or more economic operators the purpose of which is to establish the terms governing specific contracts which may be awarded during a given period, particularly as regards the duration, subject, price, implementation rules and the quantities envisaged.

The framework contracts established with several economic operators are called multiple framework contracts, which take the form of separate contracts but concluded in identical terms. The minimum as well as the maximum number of operators with which the Contracting Authority intends to conclude contracts must be indicated in the specification. The minimum number of economic operators may not be less than three.

The duration of such contracts may not exceed four years, save in exceptional cases justified in particular by the subject of the framework contract. Contracting authorities may not make undue use of framework contracts or use them in such a way that the purpose or effect is to prevent, restrict or distort competition.

Specific contracts based on framework contracts shall be awarded in accordance with the terms of the framework contract and shall also respect the principles of transparency, proportionality, equal treatment, non-discrimination and of sound competition.

Selection and Award

All contract awards, partially or totally financed by the EU, must respect the principles of transparency, proportionality, equal treatment and non-discrimination. The basic principle governing the award of contracts is competitive tendering. The purpose is two-fold:

- To ensure the transparency of operations; and
- To obtain the desired quality of services, supplies or works at the best possible price.

Other important principles include:

- The Contracting Authority must draw up clear and non-discriminatory selection criteria in every procurement procedure for the purposes of assessing the financial, economic, technical and professional capacity of tenderers. Before deciding on the appropriate criteria, the Contracting Authority must consider which proof documents should be requested for the relevant criteria. For service and supply procedures, only successful tenderers shall be required to supply proof documents to support the information submitted in the application / tender submission form before the award of the contract. For works procedures, the mentioned proofs have to be submitted in accordance with the tender dossier.
- The Contracting Authority must specify in the procurement notice or in the call for expressions of interest or the invitation to submit a tender, the references chosen to test the status and the legal capacity of tenderers or candidates.
- A contract may not be awarded to any tenderer which, during the procurement procedure, was guilty of misrepresentation in supplying the information required by the Contracting Authority as a condition of participation in the contract procedure, or failed to supply this information.
- Contracts are considered to take effect from the date of signature of the last signatory. Contracts or contract addenda cannot be awarded retroactively (i.e. after the end of the execution period) under any circumstances. This means that no disbursements can be effected and no goods and services provided prior to the signature of the contract and / or addendum. All contracts must show the true dates of signature of the contracting parties.

Award Criteria

Contracts are awarded on the basis of award criteria applicable to the content of the tender after the capability of economic operators not excluded from participation has been checked in accordance with the selection criteria contained in the documents relating to the call for tenders, in one of the following two ways:

- Under the automatic procurement procedure, in which case the contract is awarded to the tender which, while being in order and satisfying the conditions laid down, quotes the lowest price;
- Under the best-value-for-money procedure (i.e. the most economically advantageous tender).

The award criteria should be precise, non-discriminatory and not prejudicial to fair competition.

Service contracts are awarded under the best value-for-money procedure, meaning to the most economically advantageous tender. Supply and works contracts are usually awarded according to the principle of the lowest price after the offer has been recognized as being fully compliant with the tender requirements.

Tender Dossiers

The responsibility for organizing and administering tenders and contracts rests with the Contracting Authority, including the entire procurement process - from the preparation of tender dossiers to the awarding and subsequent finalization of contracts.

A tender dossier is a set of documents compiled by the Contracting Authority and containing all the information and documentation needed to prepare and submit a tender. Tender dossiers must contain all the provisions and information necessary for the bidders to present their offers, for example the procedures to follow, documentation to be provided, award criteria and their weightings, and provisions relating to sub-contracting.

An overview of the typical contents of tender dossiers for the three main types of contract is provided in the textboxes below.

Contents of tender dossier for Service Contracts:

The Tender Dossier must contain all the provisions and information that tenderers who were invited to tender are required to provide in their tenders: the procedures to follow, the documents to provide, cases of non-compliance, award criteria and their weightings, stipulations regarding subcontracting, etc. The Contracting Authority is responsible for drawing up these documents. Tender dossier content includes:

a. Instructions to Tenderers must indicate:

- The type of contract (i.e. Service)
- The tender evaluation criteria (and any sub-criteria) and the weightings
- The possibility of interviews and the timetable for them
- Whether variants are allowed
- The proportion of subcontracting which may be authorized
- The maximum budget available for the contract
- The currency of the tender

b. Draft Contract and Annexes

- The Conditions of Contract
- The Terms of Reference for the project (which give instructions and guidance to the tenderers on the tenders they will need to submit and to serve as the contractor's mandate and which will become an annex of the contract), with a forecast timetable for the contract implementation and the forecast dates from which the key experts must be available
- An overall structure for the Organization and Methodology to be provided by the tenderer and which will become an annex of the contract
- A standard format for the summary and CVs of key staff, to be included as an annex of the eventual contract
- The format of the budget (for completion by the tenderer) which will become an annex of the eventual contract
- The General Conditions for service contracts
- The format to be used by a bank or similar institution to provide a guarantee for the advance payment under the contract
- Any additional contractual information such tax arrangements, etc.

c. Tender Submission Format

- The tender must be rejected if the format is not respected.
- Tenders must reach the Contracting Authority (CA) at the address, date and time given in the letter of invitation to tender.
- Tenders must be sent in one envelope containing two envelopes separately sealed, one containing the technical offers and the other the financial offer.
- In the tender dossier, a period of validity of tenders for 90 days from the deadlines of the submission of the tenders is required; therefore the evaluation process must be completed in time to allow the notification of the successful tenderer within the tender validity period.
- In exceptional cases, before the period of validity of the tender expires, the CA may ask tenderers to extend the period for a specific number of days, which may not exceed 40 days.
- The successful tenderer must maintain its tender for a further 60 days from the date of notification of award.

Contents of tender dossier for Supply Contracts:

The Tender Dossier must contain all the provisions and information that tenderers invited to tender need to present their tenders: the procedures to follow, the documents to provide, cases of noncompliance, the award criteria and their weightings, the stipulations regarding sub-contracting, etc. The Contracting Authority (CA) is responsible for drawing up these documents. Given the technical complexity of many supply contracts, the preparation of tender dossier – particularly the Technical Specifications – may require the assistance of one or more external technical specialist(s). Tender dossier content includes:

a. Instructions to Tenderers must indicate:

- The type of contract (i.e. Supply)
- The selection (concerning the tenderer's capacity to execute similar contracts, and technical capabilities) and award criteria (to be applied only to technically compliant tenders).
- The grid to be used to evaluate the tenders. Given the wide variety of supplies and their technical nature, the grid must be individually developed for each tender in a YES/NO format to allow clear assessment whether or not the offer responds to the Technical Specifications
- Whether variants are allowed
- Whether, and in what proportion, sub-contracting is permitted
- The currency of the tender
- The format to be used by a bank or similar institution to provide a tender guarantee (1-2% of the budget available for the contract)

b. Draft Contract and Annexes

- The Conditions of Contract
- The technical annexes, containing any plans and the Technical Specifications (which give instructions and guidance to the tenderers on the tenders they will need to submit, and to serve as the contractor's mandate and which will become an annex of the eventual contract), as well as a provisional timetable for performance
- The format of the budget (for completion by the tenderer)
- The General Conditions for supply contracts
- The formats to be used by a bank or similar institution to provide guarantees for the advance to be paid under the contract and the performance guarantee (10% of the contract value)
- Any additional contractual information

c. Tender Submission Format

- The technical and financial offers must both be submitted in a separate sealed envelope or each separately packed in an envelope.
- The technical offer must satisfy the Technical Specifications in all respects. Variant solutions must be prepared as a separate offer and can only be considered if a fully responsive technical offer has also been submitted by the tenderer and allowed in the tender dossiers.
- The financial offer must be in the currency requested in Tender Dossier and presented in the standard format to facilitate comparison of the financial offers. If this format is not respected, the tender must be rejected.
- The period of validity of tenders is fixed at 90 days from the deadline for the submission of tenders.
- In exceptional cases, before the period of validity expires, the Contracting Authority may ask tenderers to extend the period for a specific number of days, which may not exceed 40 days.
- The successful tenderer must maintain its tender for a further 60 days from the date of notification of award.

Tender Dossier for Works Contracts:

The Tender Dossier must contain all the provisions and information that tenderers need to present their tenders: the procedures to follow; the documents to be provided; cases of non-compliance; award criteria, etc. The Contracting Authority is responsible for drawing up these documents. Tender dossier content includes:

a. Instructions to Tenderers must indicate:

- The type of contract (i.e. Works)
- The selection and award criteria (selection criteria concern the tenderer's capacity to execute similar contracts, with particular reference to works executed in recent years. Following selection, the sole criterion for award is price)
- The grid to be used to evaluate the tenders. Given the wide variety of works and their technical nature, the grid must be individually developed for each tender in a YES / NO format to allow clear assessment of whether or not the offer responds to the Technical Specifications (which give instructions and guidance to the tenderers on the tenders they will need to submit, and to serve as the contractor's mandate and which will become an annex of the eventual contract)
- Whether variants are allowed
- Whether, and in what proportion, sub-contracting is permitted
- The currency of the tender
- The format to be used by a bank or similar institution to provide a tender guarantee (1-2% of the budget available for the contract)

b. Draft Contract and Annexes

- The General Conditions for the works contract
- The specific contract conditions which amplify, supplement or derogate from the General Conditions
- The technical annexes, containing any plans and the Technical Specifications, as well as a provisional timetable for performance
- The format of the Bill Of Quantities / budget (for completion by the tenderer)
- The formats to be used by a bank or similar institution to provide guarantees for: The advance to be paid under the contract; Performance (10% of the contract value)
- Any additional contractual information

c. Tender Submission Format

- The technical and financial offers must both be submitted in a single, sealed envelope or packet.
- The technical offer must satisfy the Technical Specifications in all respects. Variant solutions can only be considered if a fully responsive technical offer has also been submitted by the tenderer.
- The financial offer must be in Euro and presented in the standard format to facilitate comparison of the financial offers. If this format is not respected, the tender must be rejected.
- The period of validity of tenders is fixed at 90 days from the deadline for the submission of tenders.
- In exceptional cases, before the period of validity expires, the Contracting Authority may ask tenderers to extend the period for a specific number of days, which may not exceed 40 days.
- The successful tenderer must maintain its tender for a further 60 days from the date of notification of award.

Annex 2.10.: “Green” procurement of goods, works and services

An Environmental Fund will purchase and consume various goods, works and services. This can include goods, works and services that will be purchased as part of a projects supported by the Fund, or, goods, works and services purchased and consumed directly by the Fund.

The Consultant strongly recommends that any purchase decisions for goods, works and services will be made taking into account environmental and sustainability considerations. The technical term for such practice is “green public procurement” (GPP).

The Consultant’s following recommendations are based on several main considerations:

- Benefits from GPP can be significant, as below discussion shows.
- An Environmental Fund is in an ideal position to spearhead and promote GPP practice in Tanzania.

Introduction to GPP, experience with GPP in Europe

The European Union has defined Green Public Procurement (GPP) as “a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured.”

Why is GPP important? Public authorities are major consumers. According to the European Commission, in Europe public authorities spend approximately 2 trillion Euros annually (!), which is equivalent to some 17% of the EU’s GDP. By using their purchasing power to choose goods and services with lower impacts on the environment, they can make an important contribution to sustainable consumption and production. Green purchasing is also about influencing the market. By promoting and using GPP, public authorities can provide industry with real incentives for developing green technologies and products. In some sectors, public purchasers command a large share of the market (e.g. public transport and construction, health services and education) and so their decisions have considerable impact.

The benefits of GPP include:

- Obvious benefits associated with GPP are in terms of environmental impact. However, benefits are not limited to environmental impact, but can include also positive social, health, economic and political benefits. Green purchasing also means setting an example for the general public and the private sector, and influencing the marketplace. GPP can act as a useful channel for raising environmental awareness - by introducing greener products and services and providing information on the benefits of environmental procurement.
- Products and services purchased in line with GPP principles have the potential to meet higher quality standards and deliver better performance for public authorities and ultimately citizens. New products and services which have been developed to meet the requirements of GPP may also become popular with private consumers.
- GPP provides incentives to industry to innovate: Promoting green procurement gives important incentives for industry to develop 'green' technologies and products and promote them in the market place. In particular, small- and medium-sized companies may

profit from environmental procurement, as it offers an opportunity to find and service new markets for their innovative solutions and products.

- GPP can reduce prices for environmental technologies: Introducing 'green' tendering criteria can influence the marketplace and result in new entrants in the field of environmental technologies and products - potentially resulting in increased competition and reduced prices.
- GPP saves money and resources when the life-cycle cost of products is considered: By considering the life-cycle cost of the product, GPP often leads to savings - for public authorities making the purchases and for society in general. Purchasing more energy-efficient IT equipment, for example, can save money in many different ways: lower electricity use during operation as well as easier recycling or reuse at the end of its life.
- GPP is an effective way to demonstrate a public authority's commitment to environmental protection and sustainable consumption and production. A visible focus on 'greening' the purchase of products and services will likely result in a positive perception of the administration and/or government in charge.

Experience in the EU has shown that key challenges to the implementation of GPP include:

- Lack of political support: A high percentage of public authorities may say that the lack of management support and legal basis represents a barrier to implementation of GPP.
- Green products may be perceived to cost more. Using purchase price alone to decide between offers, rather than the full life-cycle cost (LCC) of the product or service, can affect the take-up of green products and services. Research has shown that if a LCC is taken into account, often purchases made using GPP are cheaper than those applying no GPP criteria. In addition, while applying environmental criteria to procurement procedures can sometimes mean higher initial purchasing costs, the overall costs often actually decrease since the higher purchasing prices of green goods and services may be compensated for by lower operating, maintenance or disposal costs.
- Lack of legal expertise in applying environmental criteria. Purchasers within public authorities will typically not know all the environmental and social impacts of purchasing particular products or services. In some cases purchasers may struggle to define what an "environmentally and/or socially preferable" product or service is, and how to include appropriate criteria to identify these in tendering. The ability to accurately assess information submitted by tenderers in response to environmental criteria may also constitute a challenge.
- Lack of practical tools and information on GPP.
- Lack of training: Staff responsible for carrying out specific tasks may not always have the skills, or may not be provided with the appropriate training. Training will generally be required for procurers on the legal and technical aspects of GPP implementation, on the concept of life-cycle costing and for end-users on the sustainable use of products.
- Limited established environmental criteria for products/services. For many product and service groups, public authorities will not have access to clear and verifiable criteria which allow them to incorporate environmental considerations into their tendering while complying with the requirements of the procurement law.

By adopting and systematically promoting GPP, an Environmental Fund could contribute to address and remove some of the mentioned barriers in Tanzania.

To support the introduction and use of GPP the European Commission published a handbook on environmental public procurement: “Buying Green! A Handbook on environmental public procurement”, see http://ec.europa.eu/environment/gpp/buying_handbook_en.htm). The handbook is a useful resource:

- The Handbook explains in concrete terms how environmental considerations can be integrated into public procurement procedures.
- It clarifies the legal possibilities of integrating environmental considerations in a tender’s technical specifications, selection and award criteria and contract performance clauses.
- It includes concrete examples of environmental tendering by public authorities in Europe.
- It is a strong promotional tool and primarily aimed at contracting authorities at all administrative levels.
- It is of particular use to local authorities, which may lack good legal and environmental advice.

In addition, the European Commission has published a toolkit designed for use by public purchasers and by GPP trainers, see http://ec.europa.eu/environment/gpp/toolkit_en.htm, which should be most useful also for the Fund, should the Fund decide to promote and use GPP in its operations. The toolkit consists of 3 modules:

- A strategic module which seeks to raise the political support for GPP.
- A legal module which seeks to clarify legal issues.
- An operational module aimed at purchasing officers.

Among others the toolkit includes concrete examples of environmental criteria which can be readily introduced in tender documents, including for the following product/service groups: 1. Copying and graphic paper; 2. Cleaning products and services; 3. Office IT equipment; 4. Construction; 5. Transport; 6. Furniture; 7. Electricity; 8. Food and Catering services; 9. Textiles; and 10. Gardening products and services.

Annex 3: Revenues from Eco-taxes in Tanzania and OECD countries in 2009

Revenues from environment related taxes in Tanzania and OECD countries in 2009			
	In percent of total tax revenue	In percent of GDP	Per capita, in nominal USD
Australia	6.2	1.8	803
Austria	5.9	2.5	1155
Belgium	4.4	2.0	931
Canada	3.8	1.2	469
Chile	5.6	1.0	100
Czech Republic	7.9	2.8	497
Denmark	8.2	4.0	2224
Estonia	14.9	2.7	381
Finland	6.2	2.7	1184
France	4.2	1.8	748
Germany	6.1	2.3	919
Greece	6.5	2.2	661
Hungary	7.7	3.0	389
Iceland	5.3	1.8	680
Ireland	8.1	2.3	1145
Israel	10.0	3.1	839
Italy	6.2	2.7	960
Japan	10.6	1.7	660
Korea	9.4	2.4	413
Luxembourg	6.6	2.5	2620
Netherlands	9.0	3.9	1862
New Zealand	3.3	1.0	282
Norway	5.8	2.4	1882
Poland	5.7	1.9	269
Portugal	6.6	2.5	548
Slovak Republic	6.6	2.0	313
Slovenia	8.5	3.2	772
Spain	5.3	1.6	522
Sweden	5.8	2.7	1170
Switzerland	6.6	2.0	1276
Tanzania	18.5	2.8	14
Turkey	14.2	3.5	300
United Kingdom	7.4	2.6	912
United States	3.3	0.8	359
Sources: Tanzania data are author's calculation, based on tax revenue data reported on the TRA and MoFEA websites, 2009 GDP data as reported on the IMF website, 2009 population data published on the World Bank website and 2009 average annual TZS/USD exchange rate as published on oanda.com. Data for all other countries as published on OECD eco-tax database (all websites accessed 25 March 2011).			

Annex 4: Draft Elements of TOR for Environmental Fund Expert Support

It will likely be most useful to base preparations leading to the establishment of an Environmental Fund in Tanzania on good international practice in public environmental expenditure management (as discussed in annex 1 and 2). This would probably require technical expert support. Below some draft elements of terms of reference for expert support in establishing and Environmental Fund in Tanzania is presented:

- Elaborate governance structures of the Fund (definition of Fund niche in relation to other, already existing financing mechanisms; definition of legal basis of Fund including elaboration of related legislation; elaboration of detailed Fund Statutes; definition of role and detailed responsibilities of Fund Board, Fund Director and other key Fund positions; elaboration of draft staff profiles)
- Elaborate and help implement revenue sources of the Fund – these could consist of earmarked product taxes, an earmarked CO2 tax, other earmarked environmental taxes/charges, initial and one-off budget allocations, contributions from bilateral and multilateral donors, etc. Elaborate legal bases for each applicable revenue source and inform/assist with political process leading to the introduction of the revenue sources.
- Elaborate short and long-term spending strategies of the Fund. This includes, among others, formulation of annual and long term budgets of the Fund; definition of key financing principles of the Fund (transparency, cost-effectiveness, accountability, additionality, objectivity, leveraging, co-financing, etc.); formulation of long term priority spending areas; formulation of annual work Fund program; development of specific financing instruments and products for each priority spending area; elaboration of cooperation agreements between the Fund and selected strategic financing partners of the Fund (including co-financing and leveraging agreements); definition of eligibility criteria, maximum award limits and indicative spending allocations.
- Elaborate Fund project cycle management procedures, including standardized administrative procedures and templates for: eligibility criteria, project identification (including tendering procedures), project application procedures/templates, project appraisal procedures/templates, project selection procedures/templates (e.g., scoring and ranking based on cost effectiveness, technical and financial criteria), contracting procedures/templates, project implementation, monitoring and cash flow management procedures/templates, project completion procedures/templates, project evaluation procedures/templates
- Elaborate Fund outreach and control strategies, in particular focusing on: corporate design / identity; contents of annual reports, detailed concept of Fund website, concept for regular Fund stakeholder meetings, concept for project preparation workshops to be organized by the Fund, promotion and marketing strategies of the Fund, supervision and control mechanisms of the Fund including technical control and annual, independent financial audits

Annex 5: References

The following reports, acts, policies and websites were used in preparing the present report:

- Earth Summit 2012 website: <http://www.earthsummit2012.org/>
- European Environment Agency (2005): Market-based instruments for environmental policy in Europe
- Environmental Management Act (2004)
- European Union Contract No. 2008/160146/2: Options for Promoting Environmental Fiscal Reform in EC Development Cooperation, draft report of 05 May 2010. (Includes case studies on EFR implementation in Uganda, Burkina Faso and South Africa)
- European Union's Environmental Technology Action Plan (ETAP) and Sustainable Consumption and Production (SCP) Action Plan, see <http://ec.europa.eu/environment/etap/> and http://ec.europa.eu/environment/eussd/escp_en.htm
- Fisheries Act (2003)
- Forest Act (2002)
- GTZ (2009): Tax Systems and Tax Harmonization in the East African Community (EAC)
- Klarer et. al. (1999): Sourcebook on Economic Instruments for Environmental Policy in Central and Eastern European Countries
- Mineral Policy of Tanzania (2009)
- Mining Act (2010)
- Ministry of Finance and Economic Affairs website, see <http://www.mof.go.tz>.
- Ministry of Finance and Economic Affairs (2009): Budget Background and Medium Term Framework 2009/10--2011/12.
- National Energy Policy (2003)
- National Environmental Policy (1997)
- National Fisheries Sector Policy and Strategy Statement (1997)
- National Forest Policy (1998)
- National Livestock Policy (2006)
- National Parks Policy (1994)
- National Strategy for Growth and Reduction of Poverty II, popularly known as MKUKUTA II (2010)
- National Trade Policy (2003)
- OECD (1998): Economic Instruments for Pollution Control and Natural Resources Management in OECD Countries.

- OECD (2003): Good Practices of Public Environmental Expenditure Management in Transition Economies
- OECD (2003): The Use of Economic Instruments for Pollution Control and natural Resource Management in Eastern Europe, Caucasus and Central Asia
- OECD (2006): The Political Economy of Environmentally Related Taxes
- [OECD-EEA internet database](#) on instruments used for environmental policy and natural resources management
- OECD's Green Growth Strategy: www.oecd.org/greengrowth
- Policy Forum website, see <http://www.policyforum.or.tz>.
- PricewaterhouseCoopers: Tax Services East Africa Tax Reference Guide – Doing Business, Know your Taxes 2009/2010
- Small and Medium Enterprise Development Policy (2002)
- State of the Environment Report (2008)
- Sustainable Industries Development Policy (1996)
- Tanzania Policy Forum (2011): The Citizen's Budget – A simplified version of the national Budget 2010/11
- Tourism Policy (1999)
- UNEP's Green Economy Initiative: <http://www.unep.org/greeneconomy/>
- UNESCAP's policy focus on green growth in the Asia and Pacific region (www.greengrowth.org/)
- UNDP_UNEP Poverty-Environment Initiative: environment for Growth - Economic instruments for promoting sustainable natural resource use, environmental sustainability and response to climate change (this report focuses on the use of economic instruments in Uganda)
- Vice President's Office (2010): Review of Current Practices in Applying Economic Instruments for Environmental Management in Tanzania
- Water Sector Development Strategy 2005 to 2015
- Wildlife Conservation Act (2009)
- Wildlife Policy of Tanzania (1998)