

## MANAGEMENT OF PUBLIC FINANCIAL RESOURCES FOR ENVIRONMENTAL PROTECTION IN PRE-ACCESSION BULGARIA

*Total environmental expenditure in Bulgaria and the share of the public sector are analysed and compared with the necessary investments for compliance with EU environmental standards. The main problems in the management of public financial resources for environmental management are identified on the basis of an analysis of the main financing sources (the state budget, earmarked funds - the National Environmental Protection Fund and the National Trust Ecofund, environmental charges, international assistance, incl. ISPA programme). The legal framework of the newly established Enterprise for Environmental Activities Management is compared with the good practices of public environmental expenditure management in transition economies. Areas for improving the management of public financial resources are outlined: continuing the capacity building of environmental institutions; consolidation of state budget resources; combination of public and private financial resources; broad public participation in decision-making and improving the implementation of existing environmental charges and non-compliance fees.*

*JEL: Q20, F36, E62, H20, H50*

Candidate countries for European Union (EU) membership have to adopt the environmental priorities of the EU and meet EU environmental standards. This is associated with a number of benefits, but requires approximation to the EU environmental *acquis* and huge investments for implementing certain directives in the pre-accession period. The *purpose* of this research is to explore public resources for environmental financing in Bulgaria and opportunities for managing them better in the pre-accession period. The research *focuses narrowly* on the mechanisms and instruments which are relevant to the pre-accession period<sup>2</sup> and addresses issues concerning the major investment challenge in the short-run. On the one hand, only environmental policy instruments relevant to financial resource management will be analysed, rather than all instruments which are used for pollution abatement and control. On the other hand, aspects of other policies (fiscal policy, international economics, etc.), that concern financial management, will be covered in addition to the environmental policy.

---

<sup>1</sup> Milkana Mochurova is research fellow in Institute of Economics, tel: (+359 2) 9875879, fax: (359 2) 9882108, e-mail: m.mochurova@iki.bas.bg.

<sup>2</sup> In this paper the period will cover 1990-2007. In 1990 the National Assembly of Bulgaria adopted a resolution that Bulgaria would like to become a full member of the EU. The European Commission published on 9.10.2002 a regular report for Bulgaria that supported the request of the country to become a full member in 2007.

## 1. Public Financial Environmental Resources in the Pre-Accession Period – Definitions and Total Investment Needs in Bulgaria

*Environmental protection expenditure* is "the money spent on all purposeful activities directly aimed at the prevention, reduction and elimination of pollution or any other degradation of the environment resulting from production processes or from the consumption of goods and services"<sup>3</sup>. According to the OECD/Eurostat methodology there are three sectors, incurring environmental protection expenditure<sup>4</sup>: the public sector, the business sector and specialised producers. The public sector includes central, regional and local governments, authorities, communities and government agencies. Environmental statistics in Bulgaria gradually improve to meet Eurostat standards in environmental expenditure<sup>5</sup>. As the approximation is not yet complete, the data available on environmental expenditure by the public sector is limited and it is not possible to apply the OECD/ Eurostat definition in this research. In this paper *public environmental financial resources* will mean the resources of the state budget, ministries, the Enterprise for Environmental Activities Management, the National Trust Eco Fund and international institutions. The term *Management*<sup>6</sup> will refer to raising and allocating mechanisms for public financial resources for prevention, reduction and elimination of pollution or any other degradation of the environment. The implementation of the EU environmental *acquis* in candidate countries will lead, on the one hand, to a wide range of *benefits*, including health benefits, eco-system benefits, benefits to natural resources, social benefits and wider economic benefits (e.g. promoting tourism or achieving energy-efficiency gains). The net present value of the benefits for Bulgaria till 2020 is estimated at between € 2850 – 21800 million<sup>7</sup>. On the other hand, the implementation of "investment-heavy"<sup>8</sup> directives will be particularly challenging, given the current status of the infrastructure and financial resources available. A World Bank study for Bulgaria<sup>9</sup> estimates the *total investment cost of complying* with the EU environmental legislation at between €5490 and €8022 million (in 1998 prices) regardless of the length of the implementation period. Inclusion of other accession-related investments, not necessarily driven by the environmental *acquis* but by the single market *acquis*, will raise the level of environmental investments to €6105-8637 million. The overall annual environmental costs have been estimated to range between €1.2-1.7 billion<sup>10</sup> per year. The following comparison provides additional evidence on the scope of the problem: the estimated annualised costs are 8-11% of 2001 GDP, and the real environmental expenditure in 2001 is only 2.1% of the 2001 GDP according to the National

<sup>3</sup> Eurostat, Eurostat Concepts and Definitions Database.

<sup>4</sup> Hereinafter called "environmental expenditure".

<sup>5</sup> Journal of Statistics (spisanie Statistika), National Statistical Institute, Bulgaria, issue 1/2003, p. 18.

<sup>6</sup> In this study "management" means "efficient resource usage and co-ordination", see Johansen, H., D.T. Page, World Dictionary on Management (Svetoven rechnik po menidjment), vol. I, Delfin Pres, 1992, p. 226.

<sup>7</sup> ECOTEC et al, The Benefits of Compliance with the Environmental Acquis for the Candidate Countries, DGENV Contract, Final Report, 2001.

<sup>8</sup> Water supply and waste water treatment; waste management; air quality control; industrial pollution control, see detail in CEC, Communication from the Commission – The Challenge of Environmental Financing in the Candidate Countries, COM (2001) 304 final, Brussels, 2001.

<sup>9</sup> Bucknall, J., R. Cestti, A. Damyanova, Bulgaria – The Challenges of Complying with EU Environmental Directives, Working Paper No 30, ECSSD, Word Bank, 29.03.2001.

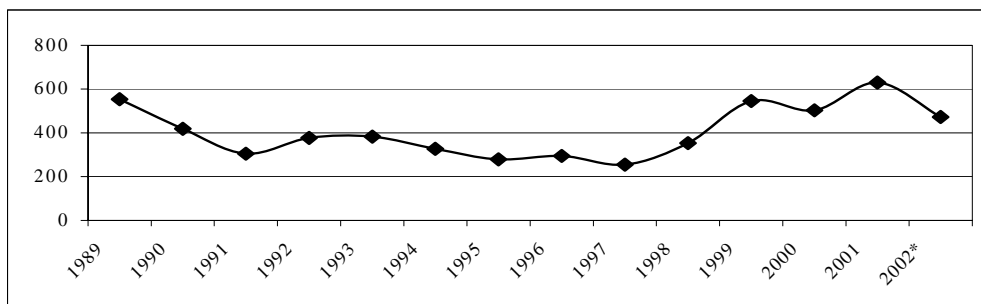
<sup>10</sup> See Bucknall J., et al, 2001, pp. 6-7 for detailed assumptions and estimations.

Statistical Institute (NSI)<sup>11</sup>. Even if the GDP is assumed to increase at an annual rate of 5%, the annual environmental costs in 2015 will represent 4.9%-6.7% of the estimated 2015 GDP. Thus, there is a *considerable gap* between the necessary and the actual environmental expenditure in Bulgaria, which brings up the issue of how to manage the existing financial resources better and/or how to secure new funds.

## 2. Environmental Expenditure in Bulgaria – Trends and the Public Resource Share

In the beginning of the 1989-2002 period (fig. 1) real expenditure decreased, during 1993-1998 there were no sharp fluctuations and in 1999-2001 there was an upward trend. The latter was not stable because in 2002 real expenditure dropped sharply. During the whole period the expenditures have been smaller than the 1989 expenditures, and although the 1999 expenditures reached for the first time the 1989 level, the real expenditures were still lower than the expenditures in the beginning of the period under review. The real expenditure fluctuations have proved that despite the various financial mechanisms that have been functioning in 1989-2002, a real increase in the environmental financing has not been achieved.

Figure 1  
Total Real Environmental Expenditures (in thousand BGN, 1989 prices)<sup>12</sup>



Source: Author's calculations based on the nominal expenditure data published by the NSI

\* Preliminary data for 2002

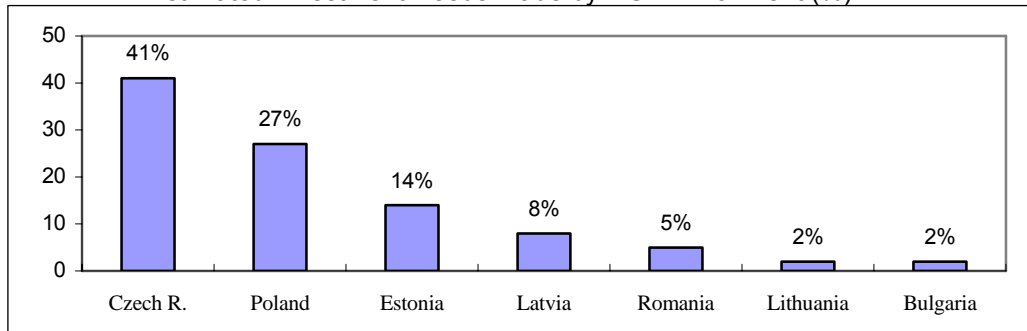
The insufficient amount of environmental investment is proven by the data on fig. 2 – *the total environmental protection investments in Bulgaria represented only 2% of the total investment needs for meeting the EU standards.*

During 1990-2002 the bulk part of total environmental expenditure represented operational and maintenance costs (fig. 3), and in 2001 alone the investments were 50% of the total expenditure and their share reached the 1989 level. In 2002 investments decreased again both in absolute and relative terms. Thus, during the period under review the opportunities for active investment policy have been missed.

<sup>11</sup> National Statistical Institute-Bulgaria, Environment 2001 (Okolna sreda 2001), Sofia, 2003, p. 73

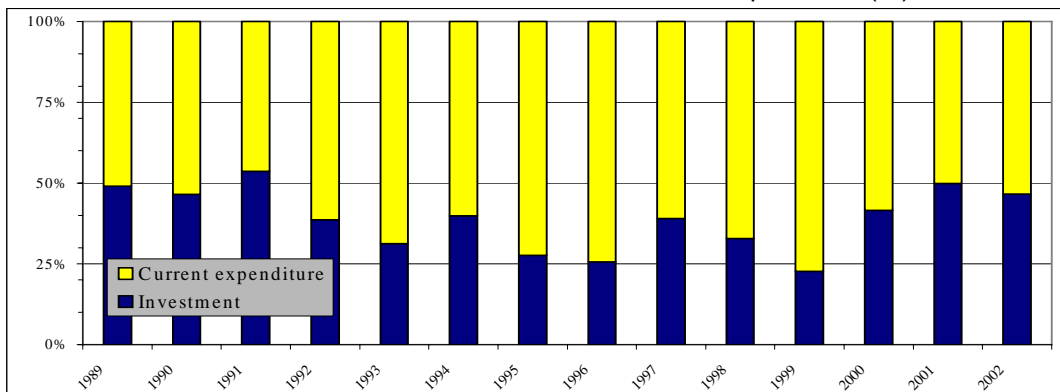
<sup>12</sup> Real expenditure is calculated by deflating the nominal amounts for each year. The GDP deflator is calculated on the base of chain indexes of the physical GDP volume.

Figure 2  
 Total Environmental Protection Investments During 1996-2000 in Relation to  
 Estimated Investment Needs Made by DG Environment (%)



Source: Eurostat, Environmental Protection Expenditure in Accession Countries, Data: 1996-2000, 2002

Figure 3  
 Share of Investment and Current Environmental Expenditure (%)

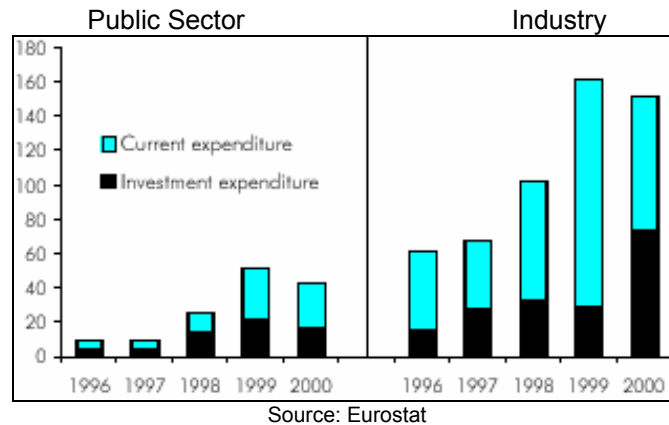


Source: Author's calculations based on data of the National Statistical Institute (NSI)

According to Eurostat data the *total environmental expenditure* by the public sector (fig. 4) is considerably lower than the expenditure by the industrial sector. On the one hand, high expenditure levels by the industry are a positive sign for market economy development, because of the advancement of privatisation of water and waste management enterprises (i.e. activities that were managed by state and local governments in the past), and in principle the private sector is considered to manage resources more efficiently. On the other hand, a minor share of public sector expenditures may lead to insufficient financing of administrative, monitoring, control, training, information, research and development activities. The latter statement is rather the case in Bulgaria, given the conclusions of the European Commission for the low administrative capacity of the Ministry of Environment and Water and its structures<sup>13</sup> and the problems with control functions that have arisen after the concession agreements of some water companies and mineral water resources.

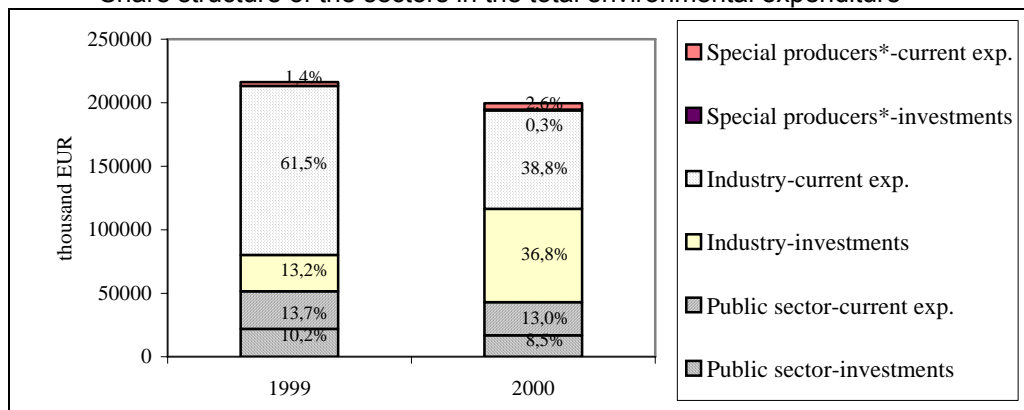
<sup>13</sup> European Commission, Regular Reports on the Progress towards Accession, 2001 and 2002 reports

Figure 4  
Environmental Protection Expenditure in Public Sector and Industry (1996-2000)  
Million ECU/EUR



The insufficient public sector activity is confirmed also by comparing the share structure of the sectors in the total environmental expenditure with the structure that the sectors should have according to the above mentioned World Bank study on the required environmental expenditure. According to the study, the sectors should have almost equal shares in total annualised environmental expenditures, whereas in 1999 and 2000 the public sector share was only 24% and 21% respectively (fig. 5). Thus, in the pre-accession period the public sector has been lagging behind (in view of the investment and current environmental expenditure).

Figure 5  
Share structure of the sectors in the total environmental expenditure



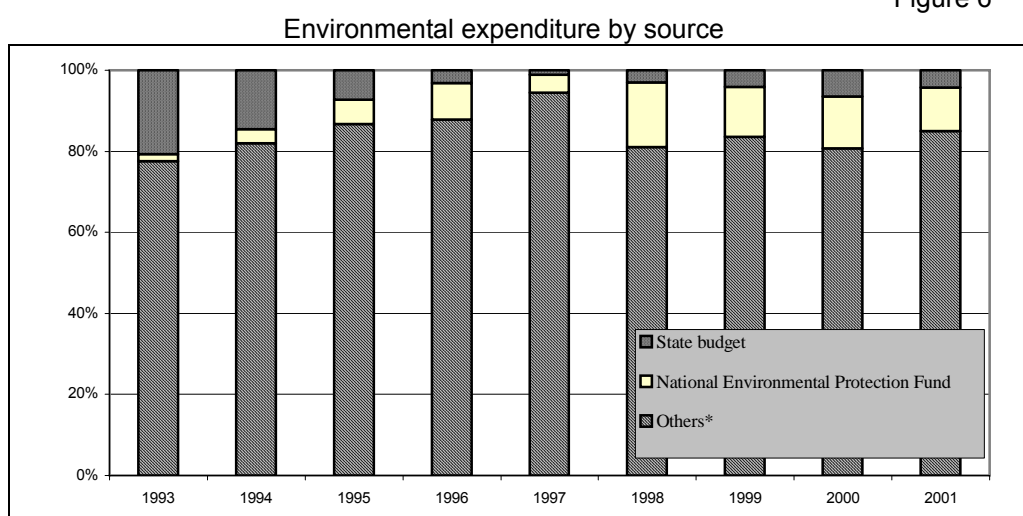
\* Identification of specialised producers was a problem when Eurostat collected data for Bulgaria  
Source: Eurostat

### 3. Public Sources for Financing Environmental Protection Activities

#### 3.1. Trends

The *major funding source* for environmental protection activities are business entities and municipalities - their share has been in the range of 78-85% (fig. 6). The share of the National Environmental Protection Fund (NEPF) and the state budget was considerably lower than the above figures. At the beginning the NEPF share was on the increase and reached 15.9% in 1998 and after that gradually decreased to 10.7% in 2001.

Figure 6



Source: Author's calculations based on MoEW, Green Book, issues 1993-2001

\*Others: includes the funds of economic entities and municipalities

The state budget share<sup>14</sup> moved in the opposite direction - initially it decreased to 3.1%, after 1998 it increased slightly and fluctuated between 4-6%. This could be explained by the fact that some revenues, that were collected and allocated by the state budget in the beginning of the 1990s, were gradually transferred to NEPF management.

#### 3.2. State Budget

The budget grants subsidies to the Ministry of Environment and Water (MoEW) and targeted subsidies to municipalities. The National Assembly passes each year a State Budget Act that includes a list of municipal environmental investment projects: urban wastewater treatment plants (WWTP), municipal landfills, etc. There are projects in the list co-financed by foreign donor programmes, projects of the National Waste Management Programme and the National Programme for Priority Construction of WWTP for Settlements exceeding 10000 Population Equivalent. Since 1999 the share of state budget subsidies has been increasing

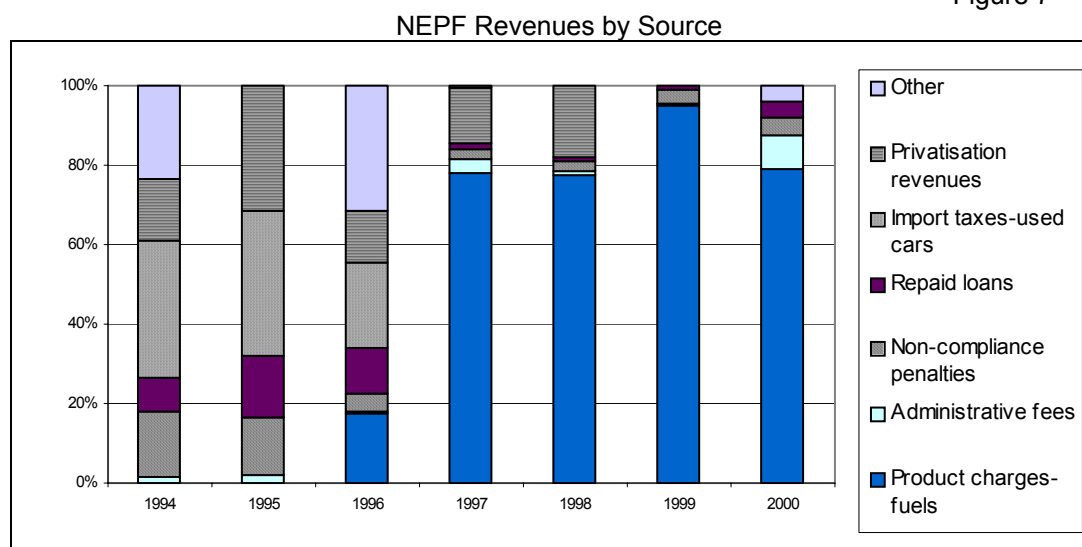
<sup>14</sup> State budget expenditure is not equal to Eurostat/ OECD public sector expenditure, defined in the previous section.

(fig. 6) and it has reached the NEPF share. Planned state budget environmental subsidies in 2003 (BGN 62.3 million)<sup>15</sup> were 36% higher than the annual budget of the Enterprise for Environmental Activities Management (EEAM) - BGN 40 million. In 2003 the state budget grants subsidies to municipal projects for water and waste management. EEAM extends grants to municipalities for projects in the same sectors (water and waste). The Ministry of Regional Development and Public Works (MRDPW) funds water projects too and the allocation of funding responsibilities between the two ministries (MoEW and MRDPW) is unclear. Thus, *the functions of various institutions in environmental financing are overlapping* and the state budget and the NEPF/ EEAM are equally placed as environmental funding sources as regards the total amount of financing and the funded sectors (water and waste). The state budget has an even larger share in the financing as compared to the EEAM.

### 3.3. National Environmental Protection Fund (NEPF)

NEPF was established within the MoEW in 1992. At the end of 2002 it was closed down and the Enterprise for Environmental Activities Management was established as a successor to the NEPF. The legislation on environmental financing has been amended repeatedly since 1992: procedures and environmental charges and sanction amounts have been updated; environmental funds have been established and closed down (e.g. the municipal environmental protection funds, Bulgarian Forest Fund, Environmental Projects in Mountain Regions Fund); the types of funding sources and their allocation between the NEPF and municipalities have been changing too (fig. 7).

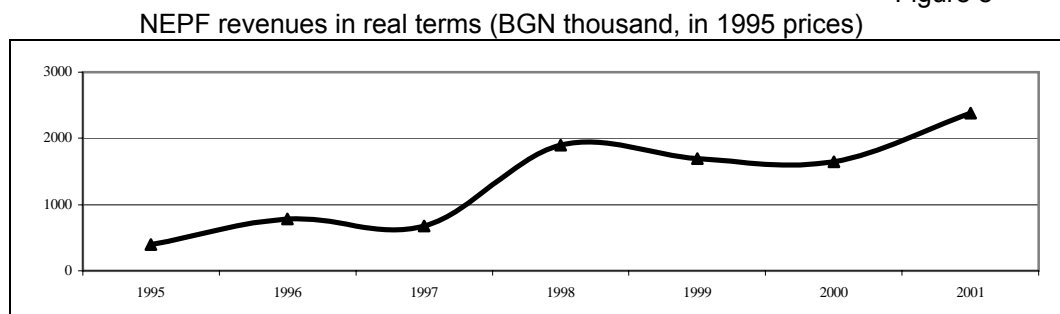
Figure 7



<sup>15</sup> Subsidy to MoEW - BGN 18.3 million, targeted subsidies for municipal projects - BGN 30 million, Ministry of Labour and Social Policy programme "From Social Benefits to Employment" - BGN 14 million for clearing 45 illegal dumps, [www.moew.government.bg](http://www.moew.government.bg); fixed exchange rate EUR 1=BGN 1.95583

The revenue structure has fluctuated considerably due to frequent changes in the legislative framework. During the last four years of NEPF activities the major source of revenues have been the product charges on liquid fossil fuels, which had replaced the import fees on used cars. Revenues from privatisation have played a major role till 1999. The share of non-compliance fees and administrative fees has been small and only in 2000 it increased (from 3.6% in 1997 to 13.1% in 2000). The major part of the funds has been extended as grants or interest-free loans and that is why the share of repaid loans in the total revenue structure has been small. There are considerable fluctuations in real NEPF revenues too (fig. 8) which indicates that amendments in legislation have not always been successful in "outrunning" the inflation processes and increasing NEPF revenues in real terms. In 1994-1995 the legislation that framed the NEPF revenue base was revised and the real revenues increased.

Figure 8



Source: Author's calculations based on the nominal revenue data published by the MoEW

The significant increase in 2001 is probably due to the rise in non-compliance fees and the new legislation which introduced additional earmarked environmental charges on pneumatic tyres, batteries and accumulators and water use<sup>16</sup>. Compared to previous years the sanction liabilities compliance rate improved considerably due to the operation of the State Receivables Collection Agency. In 2001 the Agency collected 60% of the NEPF revenues from sanctions.

NEPF spends a major part of its funds (over 90%) on municipal and corporate investment environmental projects and the National Environmental Media Monitoring System. A small part of financing is spent on research and development, public awareness activities, technical services, etc. With regard to environmental sectors: over 50% of the NEPF budget is spent on water projects, the funds for municipal waste management have increased for the past years. The expenditure for the main environmental sectors in 2000 is as follows: 52% - water, 28% - waste, 9% - air. More than half of NEPF expenditures are extended as grants (e.g. 67% in 1998 and 2000, and 92% in 1997). The remaining expenditures are interest-free and low-interest loans.

<sup>16</sup> The introduction of the above taxes has been delayed for almost four years, and the legislation was often amended. For example, the Act on Limiting the Harmful Impact of Wastes on Environment was adopted in 1997 and required the introduction of hazardous waste charges, but the relevant by-laws were adopted only in 1999-2000.



The comparison between the major revenue sources (80%- liquid fossil fuel fees) and the expenditure of the NEPF (52% - water protection projects and only 9% for air projects) proves that although the fees are earmarked on paper, in fact NEPF revenues are not earmarked for pollution abatement projects in the transport and energy sectors, where liquid fossil fuels are major polluters. Both the old and the new laws<sup>17</sup>, which regulate fuel charges, require the earmarking of these charges and their spending on "environmental projects and on pollution abatement caused by road transport and energy production", but there is no special provision as to what share of fee revenues should be spent on such projects.

The Enterprise for Environmental Action Management (EEAM) is a legal entity<sup>18</sup>, but not a commercial company and does not generate and distribute profits, its budget is separated from the MoEW budget. The Enterprise is still at the beginning of its operations and it is too early to compare the functioning of NEPF and EEAM. *The legislative frameworks could be compared only* - the Statutes of the EEAM and the abrogated Regulation of the NEPF.

Both the EEAM and the NEPF are *managed in practice by the MoEW*. The basic differences in the managing body are: the reduction in the number of representatives of some ministries, exclusion of the representative of the Bulgarian Academy of Sciences and inclusion of representatives of municipalities. MoEW dominate the management of both institutions and the participation of different interest groups is limited. EEAM management is much more clearly and precisely regulated (rights and responsibilities of the managing board, executive director, directorates). The newly established EEAM Inspectorate is an important difference, which is a precondition for improving the control on raising and spending funds, as compared to the NEPF.

The major differences between the NEPF and the EEAM concerning the revenue sources are: the percentage for allocating the sanction revenues between the state and municipalities; the administrative fees, collected by the MoEW, are transferred to the MoEW budget now, rather than to the EEAM (in the past they were transferred to the NEPF); the EEAM is allowed to raise money from portfolio investments and services. It is not possible to forecast how these legislative amendments will influence the total revenues of the EEAM. On the one hand, sanction revenues will decrease and there will be no more revenues from administrative fees. On the other hand, the collection level has increased in the course of past years due to the State Receivables Collection Agency.

There are *no significant differences* between the NEPF and EEAM concerning the expenditure types and funding terms (incl. the low requirements for co-financing by beneficiaries). The Enterprise as compared to the Fund has much more transparent procedure for financing environmental projects - detailed guidelines for applicants and application forms are published on the Internet. The financing of companies by the EEAM meets also the EU state aid rules - the Enterprise requires applicants to submit a permit issued by the Bulgarian Competition Protection Commission. Thus, the transformation of the NEPF into the EEAM is a positive change in the legal framework as far as both NEPF and EEAM make it possible to earmark budgetary resources for environmental projects, but the new

---

<sup>17</sup> Act on Liquid Fuel Charges for the National Environmental Protection Fund (adopted - State Gazette No 16/ 1996, abrogated - St. Gazette No 27/ 2000) and the Ambient Air Quality Act (St. Gazette No 45/ 1996).

<sup>18</sup> Established as a state enterprise according to the Commercial Act, article 62, para. 3.

institutional and policy framework of EEAM is a prerequisite for better management of the funds. This is due not only to the new regulations but also to the improved overall fiscal discipline<sup>19</sup> in the pre-accession period - the operations of the State Receivables Collection Agency, the Court of Auditors, the Competition Protection Commission. It is important to ensure the correct implementation of legislation and to observe the budget discipline in order to guarantee the effective allocation of limited financial resources for environmental protection activities.

An important aspect is the *functioning of the judicial system* too. The statistics<sup>20</sup> on crimes and persons convicted against environment show that the number of crimes with proceedings finished decrease from 174 in 1997 to 67 in 2001. The number of people convicted against environment dropped from 236 in 1997 to 99 in 2001. The above decrease could hardly be explained by the decrease in criminal violation of environment (taking into account the degradation of forests and protected natural areas during the past years), but rather by the mis-functioning of the judicial system.

Enclosure 1

Good practices of public environmental expenditure management

*Checklist 1: Performance in terms of environmental effectiveness  
Principles*

1. Additionality and consistency with other environmental policy instruments
2. Sound and well-defined programming framework
3. Sound consideration of environmental effects
4. Maximising environmental effect from available funds
5. Leveraging additional private and foreign finance for the environment

*Checklist 2: Performance in terms of fiscal prudence  
Principles*

1. Fiscal integrity of revenue
2. Negative efficiency impacts of earmarking are minimised
3. High standards of fiscal discipline and transparency
4. Accountability and transparency
5. Collection of revenues and public procurement separated from expenditure management

*Checklist 3: Performance in terms of management efficiency  
Principles*

1. Sound governance
2. Professional executive management
3. Sound project cycle management
4. Fair and unbiased relations with external stakeholders
5. Effective management of financial products and related risks

Source: UN ECE

<sup>19</sup> See the audit of MoEW budget in 2002, Audit Report No 0200012402, approved by the Bulgarian Court of Auditors, Record of Proceedings No 22/ 13.06.2003

<sup>20</sup> National Statistical Institute-Bulgaria, Environment 2001 (Okolna sreda 2001), Sofia, 2003, pp. 96-98

### *3.4. EEAM and the Good Practices of Environmental Expenditure Management*

The Task Force for the Implementation of the Environmental Action Programme for Central and Eastern Europe (EAP Task Force) and the Organisation for Economic Cooperation and Development developed "Good Practices of Public Environmental Expenditure Management in Transition Economies" which were discussed by several forums and accepted at the Fifth Ministerial Conference "Environment for Europe", held in Kiev, Ukraine on 21-23 May 2003<sup>21</sup>. The performance of public environmental expenditure agencies could be measured against good practices, which are grouped in three checklists: environmental policy, public finance and management efficiency. Each of the three checklists contains five major principles (Box 1).

As far as EEAM has been operating for only several months, the compliance with good practices will be measured on the basis of its legislative framework (the Environmental Protection Act and the Regulation on the structure and activity of the EEAM<sup>22</sup>) and not on the basis of EEAM real operations and the results of projects financed by the Enterprise.

#### ***Checklist 1: Performance in Terms of Environmental Effectiveness***

- According to good practices, environmental funds should not finance regular running costs of environmental administrations, but should finance investments only or precisely defined non-investment projects. EEAM Regulation (article 21) permits financing of non-investment activities such as: maintenance of the Environmental Media Monitoring System, educational and information activities, organising environmental forums - activities which should be part of the regular MoEW functions and must be financed by the MoEW and not by the Enterprise.
- EEAM Regulation should require that external auditors periodically review the environmental value-added of public expenditure.
- EEAM should require applicants to submit quantitative information on full lifetime costs, and not the investment costs only, as well as on the operation and maintenance costs. This information would ensure the calculation of full project costs and the application of a "cost-effectiveness" selection criterion.
- Co-financing by other sources should be required for all projects, both loans and grants, and not only for WWTP and waste management projects. This would ensure the leverage of public and private finance and that public funds do not crowd out other financial sources.

#### ***Checklist 2: Performance in Terms of Fiscal Prudence***

- In order to minimise the negative efficiency impacts of earmarking, earmarked revenues should be limited to specified periods of time. EEAM legislation has no such provisions. According to good practices, earmarking within earmarked schemes should be avoided as it further infringes on efficiency. A number of

---

<sup>21</sup> See UNECE, EAP Task Force/OECD Good Practices of Public Environmental Expenditure Management in Transition Economies, 2003 and UNECE, Report of the V Ministerial Conference "Environment for Europe"

<sup>22</sup> State Gazette, iss. 3/ 10.01.2003

laws require establishment of sub-funds within the EEAM<sup>23</sup>. Thus, these regulations impose additional fiscal fragmentation of EEAM public financial resources and break the second principle in Checklist 2. Moreover, the laws do not clearly specify how to earmark funds for targeted projects<sup>24</sup>.

- Good practices require that the implementation of environmental expenditure programmes does not cause unplanned fiscal deficits and that liabilities are not incurred without an explicit prior approval by fiscal authorities. The relevant clause in the Environmental Protection Act (article 61, para. 4) does not guarantee adherence to the above rule and does not exclude the possibility to incur liabilities, for example by concluding credit contracts with non-financial institutions. Moreover, EEAM has the right to participate in commercial or civil partnerships, which could enter into credit contracts with financial and non-financial institutions. This is another gap in the legal framework that makes it possible for EEAM as a partner in these companies to get into debt without an explicit approval from fiscal authorities.
- Good practices require accountability and transparency. EEAM regulation contains no provisions on the individual responsibility of managers and no specified criteria for measuring their performance.
- Collection of revenues and public procurement overlaps with environmental expenditure management in EEAM which could cause conflicts of interest.

#### ***Checklist 3: Performance in Terms of Management Efficiency***

- Governing bodies should represent key stakeholders with an appropriate balance between different interest groups. Interests in the EEAM Managing Board are imbalanced. The representatives of the Ministry of Environment and the Ministry of Finance hold a majority, there are representatives of the business sector and municipalities, but no representatives of research institutions, environmental civil society organisation, etc.
- EEAM Regulation should require that international quality management systems are applied and specify a deadline for introducing such system.
- According to good practices appraisal procedures have to be relatively simple, based on clear, transparent criteria and conflicts of interest should be prevented. EEAM has published eligibility and evaluation criteria by project types, but there is no information on score calculation, which could cause a biased selection.

#### ***3.5. Environmental Charges***

Both the NEPF and EEAM raise revenues from a number of taxes and sanctions. These are elements of applying economic instruments in environmental management and adhering to the Polluter-Pays Principle (PPP). On the basis of

---

<sup>23</sup> For example, according to the Ambient Air Quality Act (art. 31) liquid fossil fuel charges are to be spent on environmental projects and on the reduction of pollution caused by road transport and energy generation. According to the Waste Management Act (art. 35) revenues from product charges and non-compliance fees shall be spent on waste treatment projects.

<sup>24</sup> NEPF experience shows that in practice these regulations are not observed. The majority of NEPF revenues are fuel charges, but they are spent on waste and waste management projects, instead on air quality projects.

Bulgarian experience in using environmental taxes and sanctions, the following conclusions could be made in relation to the management of public environmental financial resources in the pre-accession period:

- If there is no functioning market economy, incl. private ownership, tax authorities and judicial system, sanctions will affect neither the behaviour of business entities, nor budget revenues, because of the low collection rate. The Polluter-Pays Principle provides the framework for environmental finance in market economies. In many transition economies the PPP is becoming reinterpreted in a way that diverges from the OECD tradition<sup>25</sup>. In general it means that the polluter must bear the cost of pollution abatement and control (PAC) measures (later the PAC concept was expanded in that the damage costs should be borne by the polluter too) irrespective of whether these costs are incurred as a result of the imposition of pollution charges or through some market mechanism or are a response to some direct regulation enforcing pollution reduction. The government is responsible for providing environmental public goods and offer financial assistance in exceptional cases. Thus, the PPP is essentially a principle of not-subsidising private sector environmental measures. Deviation from the "no subsidy" philosophy could be accepted in exceptional cases only. According to the research, cited above, transition economies often introduce and maintain many and excessively strict environmental standards irrespective of the administrative capacity to enforce them and the polluters' costs to comply. The author of the research summarises that governments pretend to be stringent, and polluters pretend to comply, while claiming subsidies to finance abatement measures. The Polluter-Pays Principle becomes equivalent to the notion that polluters should pay some pollution charges and receive their revenues as subsidies. Similar problems arise with NEPF, as well as EEAM. On the one hand, NEPF had a low revenue collection rate till 2001 and moreover, no interest was accrued to overdue payments. On the other hand, problems listed in 3.4 in applying the good practices in terms of fiscal prudence are caused exactly by the incorrect interpretation of the principle and the focus on subsidising. For example, sub-funds within the earmarked EEAM imply that polluters in some sub-sectors will pay pollution charges and after that the EEAM will subsidise them to reduce pollution in the same environmental sub-sector. This infringes on efficient resource allocation and on targeting resources to priority cost-effective projects. It is not possible to apply the "pure" PPP in the pre-accession period and some environmental measures should be subsidised, but the good practices of environmental public expenditure management (section 3.4.) must be strictly followed.
- It was proven (Fig. 6 and Fig. 7) that NEPF revenues from environmental fees and sanctions have a minor share in the total environmental financing in Bulgaria. It is not feasible to apply in the short-run the "pure" PPP to polluters - businesses, as well as to households and to require them to pay full investment and operation environmental costs in water and waste sectors. Thus, even if new taxes are introduced, significant increase of their share in the total financing in the pre-accession period could not be expected. That is why, this

---

<sup>25</sup> Peszko, G., Innovative Mechanisms to Manage Public Environmental Expenditures in Countries Undergoing Transition to Market Economy (CEE, NIS, China), OECD, 2002, p. 7

study does not analyse in detail different environmental tax types in Bulgaria and does not propose specific taxes to be introduced in the near future.

### 3.6. International Assistance – General Trends

Given the data availability, it is not possible to calculate precisely the share of international assistance in the total environmental expenditure in Bulgaria. Environmental expenditure is underestimated, data on all donors is lacking and a number of international projects are difficult to be classified and referred to the environment sector. Comparisons of the total data indicate that *international assistance does not play a dominant role in environmental financing* and trends in Bulgaria are in line with that in other Central and Eastern European countries (CEEC). Various studies show that public environmental expenditure in CEEC is funded mainly by internal sources and transition economies have never been aid dependent countries.<sup>26</sup>

Table 1

Environmentally Related Commitments to Bulgaria, in EUR Millions

Donor	1998	1999	2000	2001	Total	% of Total
International financial institutions	33,3	48,6	72,3	14,7	177,2	44,7%
Bilateral donors*	5	15	8	17,4	55,1	13,9%
European commission /EC/**	7,2	44,2	55,4	57,5	164,3	41,4%
Total	45,5	107,8	135,7	89,6	396,6	100 %

\* Excludes commitments from the EC

\*\* Include commitments within PHARE national programmes, LSIF and ISPA

Source: Regional Environmental Centre for Central and Eastern Europe (REC), Environmental Financing in Central and Eastern Europe 1996-2001, Szentendre, Hungary, 2003

More than half of the total international assistance (table 2) is in the form of technical co-operation or investment-related technical co-operation, financed by grants.

Since international assistance is a small part of the total environmental financing in Bulgaria and investment funding is a small share of the assistance, a conclusion could be drawn that international public resources have not dominated the investment financing in the period under review. International assistance has played a more significant role for institution building, development of policies and programmes, drafting legislation, approximated to EU environmental *acquis*, capacity strengthening of environmental non-governmental organisations.

EC and international financial institutions (IFIs) are expected to play a major role in environmental financing by public international resources after 2001-2002. ISPA is the most important EC programme for supporting the environmental sector in the pre-accession period. ISPA projects require co-financing by national sources and IFIs. Thus, the implementation of ISPA projects is an indicator of the absorption of EC funds, as well as the IFI resources, and that is why it will be analysed in detail below. The role of bilateral donors will be very limited in the pre-accession period and this study will not examine each individual donor country, but only the National Trust Eco Fund and the proposed expansion of its activities by the establishment of Protected Areas Fund. This Fund will make attempts to attract individual donors in the pre-accession period.

<sup>26</sup> Peszko, G., Innovative Mechanisms..., p. 12

Table 2

Distribution of International Assistance in the Natural Resources Sector in 2000

Type	Amount (in US\$ thousands)	Terms (in US\$ thousands)		Total %
		Grant	Loan	
Free-standing technical co-operation	6 094	6 094	0	14,9%
Investment project assistance	953	953	0	2,3%
Investment project assistance with technical co-operation component	19 698	1 498	18 200	48,3%
Investment-related technical co-operation	664	664	0	1,6%
Programme. budgetary aid (one project - environment and privatisation loan by the World Bank)	13 400	0	13400	32,8%
	Total %	Grant	Loan	
		22,6%	77,4%	100%

Source: UNDP, Bulgaria Development Co-operation Report 2000

### 3.7. ISPA Programme

ISPA<sup>27</sup> funds large projects (above EUR 5 million) targeted at meeting the requirements of the "investment-heavy" directives in the transport and environment sectors. The programme implementation will be analysed in two aspects of project cycle management - programming (project development and approval) and project implementation (the absorption of money).

#### Programming

ISPA assistance is in the form of grants and is allocated in a balanced way among the candidate-countries. Some flexibility in the management of ISPA funding is allowed and Bulgaria could absorb between 8-12% of total ISPA funds. The EC is aiming to reach the middle of the range for each country (for Bulgaria 10%) over a period of several years. Therefore, total ISPA funds available to Bulgaria range between EUR 616 837 – 925 255 thousand, and the aim is to absorb EUR 771 046 thousand<sup>28</sup>. Thus, total ISPA financing for the environment sector (49%) is between EUR 302 250 и 453 375 thousand, and the targeted funds amount to EUR 377 813 thousand.

As mentioned in section two of this study, environmental investment needs in Bulgaria are estimated at between EUR 5.49 и 8.02 billion. *EC commitments for the environment under the ISPA programme (EUR 377 813 thousand) are only between 5-7% of the total investment needs of environment in Bulgaria.*

The audit of Phare and ISPA environmental projects during 1995-2001 by the European Court of Auditors<sup>29</sup> has confirmed the conclusion that both Phare and ISPA programme budgets represent a small share of the huge financial needs in the environment sector in all candidate-countries (Tabl. 3).

<sup>27</sup> Instrument for Structural Policies for Pre-accession, Council Regulation N° 1267/1999 - 21 June 1999

<sup>28</sup> DG Regio-ISPA, Overview of Projects Proposed to the Management Committee 2000-2002, Brussels 2002, p. 3

<sup>29</sup> European Communities, Court of Auditors, Special Report No5/2003 (pursuant to Article 248 (4), second subparagraph, EC) concerning PHARE and ISPA Funding of Environmental Projects in the Candidate Countries together with the Commission's Replies.

According to 2000-2003 financial memoranda<sup>30</sup> the total project budgets amount to EUR 354 900 thousand, of which EUR 263 635 thousand are ISPA grants. Thus, EC has already approved projects for 70% of the total planned assistance for environment in Bulgaria, i.e. the major part of the available ISPA funding is "spent" - allocated to specific projects. The total budget of approved projects is only 4-6% of investment needs. The required balance between the transport and environment sectors is achieved, but environmental projects are in two sub-sectors only: construction of landfills and water management. There are no projects for air quality protection and in fact almost half of investment needs are in the air sub-sector. Thus, the *ISPA programme will satisfy a small part of the estimated investment needs of Bulgaria and will not contribute significantly to reach EU environmental standards.*

#### *Project Implementation*

Only financial memoranda for 2000 will be reviewed below in terms of total contracted and spent amounts (Tabl. 4), because of long ISPA project cycles. Since these are the first concluded memoranda, they must have made good progress so far. The summary information should be analysed carefully as it refers to two ISPA projects only. It is difficult to base conclusions concerning overall ISPA programme implementation on limited time series data. There are considerable delays in the implementation of projects under review: contracted amounts are less than half of projects' budgets (44%); spent amounts are 8% of contracted amounts and 3.6% of total projects' budgets. Thus, the absorption of ISPA funds within 2000 memoranda is very low.

Table 3  
Phare and ISPA Commitments 1995-2000 for Environment Infrastructure Projects by Environmental Sub-Sector Compared with Estimated Total Needs (EUR Million)

Sector	Phare	ISPA	Phare&ISPA Total	Estimated total needs	Phare&ISPA as % of total needs
Water and wastewater treatment	225.0	366.8	591.8	54 000	<b>1.10</b>
Solid and hazardous waste	18.7	94.0	112.7	15 000	<b>0.75</b>
Air	15.0	0	15.0	53 000	<b>0.03</b>
<b>Total</b>	<b>258.7</b>	<b>460.8</b>	<b>719.5</b>	<b>122 000</b>	<b>0.59</b>

Source: European Court of Auditors

A report on Phare and ISPA projects by the European Court of Auditors confirms the above conclusion and finds weaknesses, for example, in tendering and supervision. Although since 1998 a key criterion for selecting Phare projects has been their readiness for implementation, in reality projects approved for funding often required significant further preparation<sup>31</sup>. This combined with the inexperience in organising tenders led to delays and many projects audited were contracted in the last quarter of the schedule laid down in financial memoranda.

<sup>30</sup> They cover 11 projects with memoranda dated 2000-2002 (as reported by the Ministry of Finance) and 5 new ISPA environmental projects approved by the EC on 10 Nov. 2003 (as reported by MoEW).

<sup>31</sup> European Communities, Court of Auditors, Special Report No5/2003, p. 23-26



Delays in ISPA project implementation have been caused also by weaknesses in European Commission (EC) operations, inadequate work by consultants financed by the EC to draw up tender documentation; differences between European Bank for Reconstruction and Development (EBRD) and EC procurement procedures. Some projects were problematic in their implementation after the completion of tendering and the beginning of construction works.

### 3.8 National Trust Ecofund

The National Trust Ecofund (NTEF) was established in 1995 for the management of revenue earmarked from the debt-for-environment swap agreement signed between Bulgaria and Switzerland. The agreement expired in 1999. Priority areas for support by the NTEF are: cleanup of past pollution (32% of total financing), reduction of air pollution (36%), clean water protection (37%), protection of biodiversity (4%)<sup>32</sup>. The main beneficiaries of the NTEF are municipalities (46% of total financing). Committed support for environmental projects amounts to US\$ 10.920 million, i.e. the *NTEF budget is considerably smaller as compared to the total financial needs* for complying with EU environmental requirements. An important performance indicator for the Fund is the average rate of NTEF participation in financing projects - 19% of estimated total project costs. Therefore, the Fund fills the financing gap (the outstanding financing) in well-prepared environmental projects in priority areas. The NTEF has succeeded in leveraging additional finance for the environment, whereas the other environmental fund, NEPF, has failed to attract substantial co-financing from other sources. The NEPF has been successful in projects in the air protection sector and projects of private companies. As already mentioned, other environmental financing schemes in Bulgaria have only a few projects in this troublesome sector. The NTEF has clear and transparent criteria for selecting projects and is audited by an international audit company.

Table 4  
Project Implementation in Environment Sector – Financial Memoranda Year 2000  
(Project 1: Group of 6 regional landfills, managed by MoEW and Project 2: Urban waste water treatment plants in the Maritsa river basin, managed by MRDPW)

Title	Project 1	Project 2	Total /EUR/
Budget in the financial memorandum, incl.:	60 577 513	43 399 688	103 977 201
ISPA grant	45 433 135	32 549 766	77 982 901
national co-financing	15 144 378	4 339 969	19 484 347
financing by international financial institutions	0	6 509 953	6 509 953
Contracted (commitments after tendering procedures)	44 097 057	1 799 647	45 896 704
<b>Contracted amount as % of the budget (%)</b>	<b>72,79%</b>	<b>4,15%</b>	<b>44,14%</b>
Total spent	3 745 750	0	3 745 750
<b>Spent amount as % of the contracted amount (%)</b>	<b>8,49%</b>	<b>0%</b>	<b>8,16%</b>
<b>Spent amount as % of the budget (%)</b>	<b>6,18%</b>	<b>0%</b>	<b>3,60%</b>

Source: National Fund, Ministry of Finance, Bulgaria, data as of 30.09.2003

In April 2003 MoEW presented to foreign donors in the field of environment a project for establishing Protected Areas Fund within the NTEF<sup>33</sup>. The proposal is

<sup>32</sup> For detailed information on NTEF see [www.ecofund-bg.org](http://www.ecofund-bg.org)

<sup>33</sup> Presentations at the 6<sup>th</sup> Donors' Meeting with MoEW, 8.04.2003

that the fund should function like the other endowment conservation funds all over the world and finance protected areas in Bulgaria. The proposed priority areas for support are: ecotourism, natural resource management, education, monitoring, protected areas infrastructure.

Protected areas management does not fall within the scope of "investment-heavy" directives. Therefore, *the establishment of a separate financial scheme for protected areas is justified*. Nevertheless, problems in managing such a public fund are likely to arise in the pre-accession period. The *main issues* are listed below:

- The National Environmental Strategy and the National Action Plan have not yet been updated and a list of priority projects is lacking. Biodiversity, incl. protected areas, is not listed as a priority sector in the National Economic Development Plan<sup>34</sup>. Therefore, it is difficult to prove to potential donors that the Fund is consistent with the overall environmental policy in Bulgaria.
- The proposed Protected Areas Fund does not comply fully with good practices of public environmental expenditure management (Box 1). Some of the most important discrepancies are:
  - ⇒ The Fund will finance regular running costs of protected areas' administrative bodies, and not only investment costs or precisely defined non-investment projects, which are not regular duties of administration;
  - ⇒ The Fund is proposed to be established as a sub-fund within an existing earmarked fund - NTEF, which is an apparent contradiction in terms of "fiscal prudence" principles.

### 3.9. National Programming Documents – Foreseen Environmental Financing

Issues of public financing for environmental protection are covered by a number of national programming documents:

#### *National Economic Development Plan*

A basic policy document in Bulgaria is the National Economic Development Plan (NEDP) 2000-2006, updated in June 2003. The Plan includes several priorities. Environment and transport sectors are covered by the Basic Infrastructure Programme. Proposed financing in the pre-accession period is presented in table 5.

The average annual financing in the two sectors is EUR 388 million. Estimated annual investment needs<sup>35</sup> in the environment sector only amount to EUR 645 - 942 million and environmental requirements concern mainly the municipalities and private sector. Thus, *the needs in the environmental sector alone are considerably higher than the total financing for transport and environment sectors planned in NEDP*. The NEDP does not plan participation of state and private enterprises in financing environmental investments during 2003-2006 (Tabl. 5). The major share

---

<sup>34</sup> See the Main Action Plan in the field of environment and the Indicative Programme "Improving Infrastructure and Environmental Protection" in the National Economic Development Plan 2000-2006, updated version, adopted by the Council of Ministers on 5 June 2003, pp. 178, 225

<sup>35</sup> Data from the same World Bank study, which are included also in the Country Assistance Memorandum, are cited in the NEDP - p. 228

of financing is expected to come from ISPA programme (54%), state budget (24.6%) and loans (18.8%). Therefore, the Plan does not foresee any private sector participation in environmental protection. The *proposed structure of financing sources does not correspond to trends in the structure of financing sources*, outlined in this study: major share of private sector financing (70-80%), potential for increasing private sector participation through public-private partnerships and a small share of financing by the state budget and the Enterprise for Environmental Activities Management. The forecast share of grant financing (2.4%) is in line with the expected trends of decreasing bilateral donor financing.

Table 5  
Financing for the NEDP for the period 2003-2006, Basic Infrastructure Programme (transport and environment), million EUR <sup>36</sup>

Year	Total	National financing					European Union				Other grant financing
		Consolidated state budget	incl. municipalities	State enterprises	Private enterprises	Loans	Phare institut. building	Phare invest.	ISPA	SAPARD	
2003	207.7	51.1	0	0	0	63	0	0	89.1	0	4.5
2004	374.9	85.8	0	0	0	105	0	0	169.1	0	14.9
2005	337.3	75.1	0	0	0	71	0	0	179.2	0	12
2006	632.7	170.6	0	0	0	53.5	0	0	402.9	0	5.7
<b>Total</b>	<b>1552.6</b>	<b>382.6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>292.5</b>	<b>0</b>	<b>0</b>	<b>840.3</b>	<b>0</b>	<b>37.1</b>
<b>%</b>	<b>100%</b>	<b>24.6%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>18.8%</b>	<b>0%</b>	<b>0%</b>	<b>54.1%</b>	<b>0%</b>	<b>2.4%</b>

#### *Environmental Strategy for ISPA Programme*

The first strategy, published in 2000, did not include a specified list of priority projects. This infringes on the efficient allocation of ISPA funds. The updated strategy, published in July 2003 (three years after ISPA was launched) corresponds to NEDP priority sectors (air, water, waste) and contains a list of prioritized projects. According to the strategy, in order to secure necessary funding, efforts will be focused, among other things, on "*attracting foreign private investments* for improving the quality of municipal services through concessions of solid waste management, water supply, sewerage, waste water treatment"<sup>37</sup>. Therefore, *this section of ISPA strategy is not in conformity with the NEDP*, where no independent private sector participation or combinations of public and private resources are planned.

#### *National Environmental Strategy and National Action Plan 2000-2006*

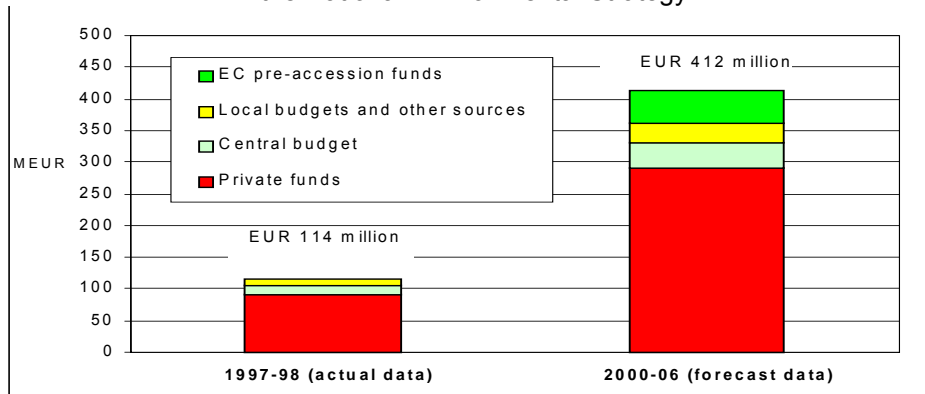
They were adopted in 2001 and should be updated. The estimated total annual amount of environmental financing - EUR 412 million (Fig. 9) and its structure (private funds having the major part) in this strategy is not in line with the amount and structure of financial sources in the new NEDP (tabl. 5).

<sup>36</sup> National Economic Development Plan of the Republic of Bulgaria for 2000-2006, updated version, adopted by the Council of Ministers on 5 June 2003, p. 305

<sup>37</sup> MoEW, Environmental Strategy for ISPA Programme, p. 28

Figure 9

Actual and Forecast Amount of Average Annual Environmental Expenditure in the National Environmental Strategy



Source: National Environmental Strategy, 2001

3.10. Major Problems in the Management of Public Financial Resources for Environmental Protection in Bulgaria

Problems in the existing financial mechanisms in the public sector during the pre-accession period could be summarised in two groups: (1) problems in financial planning and (2) problems in the actual implementation of laws and by-laws, strategies and plans, projects, etc. Problems in planning (programming) are important because they impede the identification of priority projects for financing, and this infringes on the efficient allocation and spending of scarce resources. Implementation problems do not allow the realisation of selected priority projects and ultimately slow down environmental improvements and the approximation to EU environmental standards.

Financial Planning Issues

- Statistics on environmental protection expenditure in Bulgaria have not yet been fully harmonised with OECD/ Eurostat methodology. This makes it difficult to gather reliable and comparable data, to analyse the economic impact on environment, to develop programming documents and select priority projects on the basis of accurate primary information.
- Implementation of "investment-heavy" directives and the adoption of EU environmental standards will have a number of social, economic and ecosystem benefits for Bulgaria. At the same time it requires allocation of substantial resources for investment and operational costs in the air, water and waste sectors. Estimated necessary average annual environmental expenditure as a share of GDP exceeds many times the share of GDP currently allocated to the environment. There are different sector programmes for implementing EU environmental requirements, directive-specific implementing programmes, but there is no overall investment financing programme for the environment sector. Such a programme should summarise

the needs and costs for specific projects, compare them with resources available and the level of costs affordable for the private sector and households and should have a feasible implementation time frame.

- The legislative base of public environmental expenditure management, strategies and action plans have been changed frequently. There have often been delays in the adoption or update of relevant laws, by-laws and plans. Many documents are not in conformity with each other - there is a lack of correspondence between the actual state of environmental financing and the possibilities for its future development and financial data in the above documents. Changes in NEPF legal and institutional framework have not contributed towards an increase in NEPF revenues in real terms and in its relative share in total environmental financing.
- The new legislation on EEAM is a precondition for improving to some extent the control and transparency in managing earmarked environmental financing in Bulgaria. There are no substantial differences between NEPF and EEAM concerning the mechanisms for raising and spending funds. EEAM legislation is not fully in line with good practices in public environmental expenditure management and a number of principles in terms of environmental effectiveness, fiscal prudence and management efficiency.
- The proposed expansion of NTEF activities is troublesome because it is not fully in conformity with national programming documents and good practices in public environmental expenditure management.

#### *Actual Implementation*

- A great number of environmental projects have been implemented in the pre-accession period. Nevertheless, total environmental expenditure in real terms decreased during 1990-2000, and only in 2001 reached the level of 1989 real expenditure. As a result, actual total investments represent just a small share of necessary investments. Therefore, a drastic change in environmental financing in the pre-accession period is necessary, in order to meet EU requirements on schedule.
- The structure of real investments by environmental sectors is not consistent with the structure of necessary investments for meeting EU requirements. Investment activities in the air and water sectors are lagging behind and public sector activities are insufficient. Thus, projects implemented during the period under review have no significant contribution for reaching EU environmental standards.
- Overall impact assessments of implemented projects are lacking and it is not possible to evaluate their effectiveness, to amend programming documents and project cycles, if necessary, and to multiply the results of pilot projects.
- In the pre-accession period business entities play the main role as sources of environmental financing. The share of the earmarked fund (NEPF) and the state budget is small (10-15%). Different budgetary institutions finance environmental projects and their rights and responsibilities are not clearly defined and circumscribed.

- Environmental charges and non-compliance fees, collected and spent by the earmarked fund, are not substantial financial sources in the pre-accession period.
- International assistance has not been dominant in environmental financing, but the roles of the European Union and international financial institutions are expected to be intensified.
- ISPA programming is relatively successful, but ISPA funds satisfy a small part of investment needs in Bulgaria. ISPA financing is not balanced in terms of the different environmental sub-sectors. The absorption of funds within the framework of the first financial memoranda is very low.
- The activity of the NTEF is an example of a successful swap deal, good management of public resources, catalysing of additional private sources for environmental protection. The other fund, NEPF, that functioned simultaneously, i.e. under similar external conditions, failed to achieve similar results. Many projects do not succeed in attracting co-financing from different types of sources.

#### **4. Areas for Improving the Management of Public Financial Resources for Environmental Protection in Bulgaria in the Pre-Accession Period**

Most mechanisms for financing environmental protection have been well known and have been used for a long time in Bulgaria. Therefore, the question in the pre-accession period *is how to improve the implementation of existing financing approaches* by developing sources already known and combining individual mechanisms. The experience of many countries, reviewed by the World Bank, UNEP and IMF<sup>38</sup>, suggests that the biggest potential sources would hardly come from generating new resources, but rather from freeing up existing resources through improving efficiency, incl. elimination of perverse subsidies. Possibilities for improving the management of public resources could be grouped in the following five directions:

##### *4.1. Capacity Building*

It is necessary to continue to build the capacity of institutions working in the field of environment<sup>39</sup>. Strengthening capacity of all levels and sectors will contribute to solving most of the problems identified in 3.10. The European Court of Auditors found that "the Phare programme has only been partially successful in developing institutional capacity" and "the Twinning instrument by no means always achieved the so-called 'guaranteed' results foreseen"<sup>40</sup>. It is recommended that "more ISPA resources should be devoted to providing technical assistance at the level of final beneficiary to improve the chances of operational and financial sustainability of infrastructure investments". Such assistance is necessary particularly for developing projects in the air sector where investment activities in Bulgaria are insufficient. Assistance is needed also for introducing the Extended Decentralised

<sup>38</sup> World Bank, UNEP, IMF, Financing for Sustainable Development, An input to the World Summit on Sustainable Development, 2002

<sup>39</sup> The principle is that one should spend money in order to earn money after that.

<sup>40</sup> European Communities, Court of Auditors, Special Report No5/2003, p. 26

Implementation System for ISPA and Phare programmes<sup>41</sup>, in order to prepare Bulgaria for managing EU structural funds and the Cohesion Fund after accession. It is important to *expand the capacity building process* beyond central government administration and include local authorities, private enterprises, non-governmental organisations (NGO). The capacity building process should enhance their knowledge and skills on implementing new environmental legislation; on project management; procurement and tender procedures; executing contracts; developing and implementing environmental strategies; opportunities offered by public-private partnerships; the role of participation of the public in environmental decision-making. Thus, the project cycle management would be improved and the absorption of EU funds (so-called adsorption capacity<sup>42</sup>) would increase, as well as the attracting of co-financing from other sources. It is necessary also to raise the awareness of all stakeholders on sources of environmental financing and possibilities for their combination and leverage. According to the UNECE mission that conducted the environmental performance review in Bulgaria<sup>43</sup>, "applicants rarely knew from which source they might eventually receive support". Moreover, each source has its own requirements for applications and applicants are frequently unable to tailor an application to the requirements of the ultimate source. Private sector enterprises should be supported to introduce *certified systems for environmental quality management* (ISO 14001 and EMAS) and promoted to participate in national and global initiatives for sustainable development (e.g. Global Contract, World Business Council for Sustainable Development<sup>44</sup>, etc.). Improving the quality of the environment depends to a great extent on the change of *public awareness*, which is a slow process and could be achieved by different measures, incl. training, campaigns, etc. The awareness-raising process should be continuous, and not limited to pilot NGO projects, where activities usually stop after the end of project financing.

Particular efforts should be focused on building the capacity of the financial sector in Bulgaria<sup>45</sup>, taking into account huge investment needs, scarce external resources and the under-utilised financial sector. For example, financial experts should acquire knowledge on the special characteristics of environmental projects, profitable opportunities for financial institutions to participate in project co-financing by combining different sources of environmental financing, etc. The State Enterprise for Environmental Actions Management could promote participation of the financial sector by requiring co-financing and insurance for all projects.

---

<sup>41</sup> Ministry of Finance, Concept for Introducing the Extended Decentralised Implementation System for Phare and ISPA programmes, 2002

<sup>42</sup> It is important for ISPA financing, where if Bulgaria absorbs the average quota (10%) of the total funds, it could apply for increasing the quota to 12%

<sup>43</sup> UN ECE, Environmental Performance Reviews, Bulgaria, 2000, p. 51

<sup>44</sup> World Business Council for Sustainable Development is a leading platform for business co-operation in the field of sustainable development. Corporate representatives develop know-how on topics such as eco-efficiency, innovation and corporate social responsibility, European Environmental Agency, Europe's Environment: the Third Assessment, 2003, p. 290

<sup>45</sup> In developed countries the key role of financial institutions for sustainable development has been recognized long ago. UN Environmental Programme (UNEP) works closely with the financial sector for developing environmental management strategies. UNEP FI - financial initiatives for innovative financing for sustainability - functions within UNEP. There are above 275 participants - commercial banks, investment banks, insurance and reinsurance companies, fund managers, international development banks, venture capital funds, etc., [www.unepfi.net](http://www.unepfi.net)

#### 4.2. Common Financing Strategy and Consolidation of State Budget Resources

It is imperative to develop a common environmental financing strategy. It will be an instrument for co-ordinating and catalysing the existing resources; co-ordinating the required co-financing by projects and attracting new donors. It will contribute to reducing the share of ISPA financing below 75%, as well as the co-financing by the EEAM and it will facilitate the allocation of grants in a more efficient way. A similar pilot strategy was developed for Lithuania by the Danish Environmental Protection Agency<sup>46</sup>. The strategy analysed: the capacity of different levels for project cycle management; environmental expenditure in the country; demand for environmental financing; domestic and foreign sources of financing, and estimated the overall financial gap in the environmental sector in Lithuania. Moreover, an environmental investment programme for municipalities was developed. The latter is of great importance to Bulgaria, because municipalities have to play a major role in environmental financing, on equal terms with the private sector.

A common financial strategy will identify and justify the specific financing needs for each environmental component, and the quantity information *would improve project justifications and ultimately - project proposals*. This information would help donors<sup>47</sup> to co-ordinate their efforts and target resources to areas that have real needs for additional financing. Thus, international assistance will be tailored to the country's needs. The strategy, together with a list of priority projects and assessments of institutional capacities would be useful also in identifying complicated projects, that really need technical assistance, pre-feasibility studies, etc.

A precondition for developing a common strategy is *a thorough analysis of necessary costs* for approximation to EU environmental requirements of each directive. Studies on necessary costs for Bulgaria were made during late 1990s by different institutions and the range of estimates was quite significant. Therefore, investment needs should be revised. It is necessitated by the closure of negotiation with the EU on Chapter 22 Environment and the specification of transitional periods, as well as by the need to take into account amendments in environmental *acquis* or newly adopted legislation (e.g. Water Framework Directive).

Direct and indirect *subsidies* in Bulgaria should be analysed too, and perverse subsidies, that encourage environmental pollution and overexploitation of natural resources, should be eliminated.

Sources from bilateral co-operation are far from exhausted. Bulgaria has signed co-operation agreements in the field of environmental protection with a number of countries but there are few implemented projects. For example, within the Regional Environmental Reconstruction Programme (REReP)<sup>48</sup> there are projects under only two out of four programme priorities. Therefore, the *opportunities for co-operation with Balkan countries are under-utilised*.

---

<sup>46</sup> DEPA/DANCEE (Danish Environmental Protection Agency/ Danish Cooperation for Environment in Eastern Europe) Lithuania. Environmental Financing Strategy, 2001

<sup>47</sup> One of the weak points of international financing, noted often by researchers, is that it imposes international priorities and forces beneficiary countries to adapt their requests to the available assistance, REC, Environmental Financing in CEE 1996-2001, Hungary, 2003, p. 83

<sup>48</sup> See UNECE, The Regional Environmental Reconstruction Programme for South Eastern Europe (REReP) – Model for a Successful Assistance Mechanism, Fifth Ministerial Conference, Environment for Europe, Kiev, 2003 for details on the programme priorities and implementation progress.



The possibilities for concluding a *new debt-for-environment swap* agreement should be examined carefully. The Fifth Ministerial Conference "Environment for Europe" welcomed "the recent initiative by Georgia to develop a debt-for-environment swap" and other indebted countries were encouraged to "work with their creditors to develop similar initiatives"<sup>49</sup>. Therefore, there is a favourable climate now for negotiations with creditors and concluding swap deals.

The analysis in section 3.2. has already proven that regular activities and investment projects in the field of environment are financed and managed by different budget sources and institutions - the state budget, the budgets of the MoEW, MRDPW, EEAM, ISPA implementing agencies in the MoEW and MRDPW, Phare implementing agencies, etc. Inevitably, the overlapping of functions results in dissipation of scarce financial and human resources, conflicts of interest among institutions and it is in contradiction with fiscal prudence principles. The comparison between the legal framework of NEPF and EEAM shows that there are no considerable differences between the two institutions in terms of management, raising and spending funds. Therefore, the transformation of NEPF into EEAM is not necessary and justified. Moreover, the legislation on EEAM has a number of weak points and is not fully in conformity with the good practices in environmental protection expenditure management and EEAM faces the risk of misappropriation of public financial resources. In 2002 (at the time of transformation of NEPF) there was an alternative option - the transformation of NEPF into an ISPA implementing agency. This would have facilitated the co-ordination of national and ISPA environmental co-financing, consolidation of programming, qualified human resources, improvement of project management, incl. financial control. This opportunity was missed, and now it is not advisable to conduct new major restructuring of EEAM in the midst of the pre-accession period. It is *compulsory to amend the legislation on EEAM* in conformity with the good practices in public environmental expenditure management.

When a common financial strategy is developed, the possibility to establish a united *environmental investment agency* should be explored. Improving the management of existing mechanisms requires the consolidation of public financial resources.

#### 4.3 Combination of Public and Private Resources

The state budget, ecofunds and foreign resources have never dominated environmental financing in Bulgaria (fig. 4 and fig. 6). Resources owned by enterprises have always played a main role, which demonstrates that private sector's potential to participate in the financing of huge investments should not be underestimated in the pre-accession period. A clear conclusion from many interviews conducted by the UNECE experts was that in Bulgaria "environmental investments have very much been limited to, and mainly perceived as, technical and institutional improvements in the public sector only" and "environmental improvements and investments are still primarily seen as a Ministry or State problem"<sup>50</sup>. The new National Economic Development Plan 2003-2006 shows that the above perception has not changed yet. The Plan does not foresee any

---

<sup>49</sup> UNECE, Report of the Fifth Ministerial Conference "Environment for Europe", 2003, p. 14

<sup>50</sup> UNECE, Environmental Performance Reviews, Bulgaria, 2000, p. 50

participation in environmental financing by the private sector. Moreover, an aspiration to expropriate some functions in the field of environmental management could be observed in the enlarged scope of EEAM activities. Thus, no change has yet occurred concerning the perception on the role of the private sector in Bulgaria. The attitude that environmental financing concerns only the government should be shifted towards awareness of responsibilities of the private sector and support to private investment activities.

The public and the private<sup>51</sup> sectors are going to have independent roles in environmental financing in the pre-accession period. Since environmental investments in Bulgaria represent only a minor share of investment needs, it implies that if both sectors continue to invest after the current pattern, it would not be possible to meet European environmental standards on schedule. Therefore, the only possibility left in the pre-accession period is the combination between public and private resources, incl. through *public-private partnerships*. The private sector alone could not be able to meet the huge environmental investment needs. Instead of attempting to finance fully (100%) a small number of projects, the *public sector could play the role of a catalyst (accelerator)* - by financing small parts of the budgets of many projects and attracting co-funding by different national and foreign private sources.

Although mismanaged public-private partnerships pose a number of risks and the experience with PPP companies in Bulgaria and abroad is ambiguous<sup>52</sup>, there is no other feasible possibility for substantial increase in environmental financing in the short-run but the combination of public and private resources. Public-private partnerships require improvements in the national legislative framework, as well as in ISPA guidelines.

#### 4.4. Environmental Charges and Non-Compliance Fees

Economic instruments of environmental policy are going to arouse strong interest in the context of preparing for joining the EU. Studies show that "The traditional dichotomy between economic instruments and 'command-and-control' instruments, i.e. regulatory instruments, is becoming increasingly obsolete"<sup>53</sup>. On the one hand, economic instruments cannot exist without a legal framework, on the other hand, legal norms can be more effective thanks to economic instruments. EC directives do not require candidate countries to introduce specific taxes and charges with the exception of the minimum excise duties for mineral oil products. According to the above study it looks quite unlikely that candidate countries will have to abandon some of the existing economic instruments for environmental policy on the base of EU legislation. EU countries have similar environmental charges to those in the candidate countries.

Although there were a number of amendments in the legislative framework in the transition period, in real terms total revenues from environmental charges and non-compliance fees did not change substantially and had a small share in

---

<sup>51</sup> Here "private sector" is used in a broad sense and includes Bulgarian and foreign enterprises, joint ventures, multinational companies, financial institutions, etc.

<sup>52</sup> Bulgaria has negative experience so far in concessions of water companies and mineral water springs.

<sup>53</sup> ECOTEC et al., Study on the Economic and Environmental Implications of the Use of Environmental Taxes and Charges in the EU and its Member States, Final Report, 2001, p. 50

environmental financing in Bulgaria. Past experience in this country showed that usually there were delays in adopting environmental laws and by-laws. Thus, if new charges are proposed, it is unrealistic to expect that new legal norms would be adopted on schedule, new charges would be introduced quickly<sup>54</sup> and would have a significant impact on environmental financing during the remaining three years till joining the EU. Therefore, *it is not feasible to expect that environmental charges and non-compliance fees could be a significant financing source in the pre-accession period.*

A World Bank study<sup>55</sup> confirms the problems with non-compliance fees in Bulgaria: non-compliance fees for water, air and soil pollution are not in relation to environmental damages and expenditure for reduction of the negative environmental impacts. Damages on health, agriculture, tourism, etc. by different polluters are not measured and calculated. Non-compliance fees are considerably lower than the expenditure for pollution reduction. Fees are not indexed to inflation, which encourages delay in payments<sup>56</sup>. The low capacity of environmental authorities for implementing legislation also limits the role of economic instruments. According to the World Bank study the collection rate was about 50%.

The above issues concerning the system of environmental charges are confirmed also by the analysis of the current state of charges in candidate countries<sup>57</sup>. According to this study the following modifications implemented in recent years are likely to have assisted the implementation and effectiveness of charges:

- "reduction of the number of pollutants covered and overall simplification of the charge rate system;
- collection of pollution payments has been included in the existing tax structure resulting in higher collection efficiency;
- late payments are charged interest and are collected by tax inspectorates;
- charge rates have been phased-in via announced percentage increases;
- charge rates have been linked to inflation;
- charge rates have been increased to promote abatement measures;
- penalty rates have been introduced with substantial multipliers to provide incentive for pollution reduction".

Therefore, in the pre-accession period *it is feasible to attempt to improve the implementation of existing charges in the areas, listed above, and not to introduce new charges.*

#### *4.5. Broad Participation of the Public in Environmental Decision Making*

The public - in the form of individual citizens, industry, and non-governmental organisations (NGOs) – should be empowered and encouraged to participate in environmental decision-making processes at the earliest possible stage. This would ensure the choice of decisions that are supported by main stakeholders, and

---

<sup>54</sup> Moreover, EU *acquis* does not require candidate countries to implement specific charges and as the introduction of new charges would not be driven by the EU accession, it would not be a priority in environmental policy.

<sup>55</sup> World Bank, Study on the Environmental Strategy of Bulgaria. Review and Follow-up, Report No 13493 BUL, 1994, p. 23

<sup>56</sup> Interests for overdue non-compliance fees were introduced only in Sept. 2003 with the new regulation on sanctions for environmental damage or pollution (State Gazette No 63/ 5.08.2003)

<sup>57</sup> ECOTEC et al., Study on the Economic and Environmental Implications ..., p. 50

ultimately, it would contribute to the effective allocation of natural and financial resources. The more transparent the operations of central and local governmental bodies and international financial institutions are, the more limited corruption practices are. In Bulgaria the legal framework on the mechanisms for public participation has already been established. At the same time, many issues concerning the implementation of laws and functioning of the judicial system still remain unresolved.

A number of successful multilateral pilot projects (financed by EU, UNDP, USAID, etc.) for promoting public participation and strengthening partnerships between the public and the private sector were implemented. There are also many demonstration projects for practical market-based solutions for environmental management. In spite of that, a major problem is the lack of information and an overall evaluation of results and impacts of donors' programmes. Another acute problem is that in 2002-2003 many programmes came to an end, some big donors (the USA, Switzerland) are reconsidering their priorities and are limiting their activities in candidate countries. At the same time, Bulgarian environmental NGOs are still far from being financially viable. The above problems hinder the multiplication of successful projects and the dissemination of accumulated knowledge and experience in the field of public participation in decision-making. Therefore, projects' impact is lost and valuable resources are wasted. Donors should stay open and transparent and continue to support NGOs, as well as to finance only projects, that have a positive impact on sustainable development.

## **5. Conclusion**

Environmental investments that have been made in the pre-accession period represent a small share of the necessary investments for meeting the EU environmental standards. Environmental expenditure should increase several times in the near future. There are potential areas for improving the management of the existing public financial resources through capacity building of institutions; development of a common financing strategy and consolidation of state budget resources; broad public participation in decision-making and improving the implementation of existing environmental charges and non-compliance fees.

The state budget, eco funds and foreign assistance are not able to play a dominant role in environmental financing in the pre-accession period. There is no other possibility for considerable increase in environmental financing in the short-run, except the combination of public and private resources in all possible ways, incl. within the framework of the ISPA programme. The public sector should act as a catalyst for additional funding by financing a small part of project budgets. It should not crowd out other sources, on the contrary, it should attract co-financing from different national and foreign private sources of finance.

Financing environmental protection activities is crucial for each policy aspect in this field. The expected economic, social and environmental benefits from environmental improvements and from the EU accession could be derived only after securing the necessary resources and implementing all projects, necessary for meeting the EU requirements.