

# Environmental management and the impact of regulation in Bulgaria

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## ABSTRACT

In placing increased emphasis on good environmental management, the Bulgaria government began providing resources on environmental management, such as guidance documents, case studies, and benchmarking studies. It also motivates businesses to understand the full spectrum of environmental costs and incorporate these costs into decision-making. Some of the difficulties are non-uniform definitions and non-uniform executions, and lack of comparable information.

The report discusses the needs for good quality information to be available to both managers and society before further advances can be made.

Keywords:

- Environmental management; Environmental guidance documents, case studies, and benchmarking studies in Bulgaria, National schemes for environmental management, eco-audit, eco-account, full cost accounting, benefit/effect, return the cost of services in the water sector,

**JEL Classification:** M41, M42, Q56

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## ENVIRONMENTAL GUIDANCE DOCUMENTS FOR BULGARIA

### Framework agreements, plans and programs related to European integration of Bulgaria on the environment

#### *Introduction*

The subject of this article is to present the achievements in the management of the environment and the problems that stand in front of environmental management in Bulgaria.

There is the main legal basis, government, regional and municipal structure of the management of the environment, sources of funding and management at central and local level, the activity of the company to finance protection the environment in Bulgaria, the national strategic plan for development of its management, benchmarking in the introduction of measurement of benefit/ effect in national policy for water management in which Bulgaria is concentrated at several cost management and investment.

The presentation of this report also aims and receipt of advice and opinions of those attending the Conference of scientists and specialists in the field of environmental accounting for the further development of the management of the environment in Bulgaria in terms of the use of methods and best practices in accounting the environment.

#### **1. Basic laws relating to the management of the environment in Bulgaria**

EU legislation on the environment contains about 300 legal documents, including directives, regulations, decisions and recommendations and their amendments. They are added a large number of releases and other documents related to EU policy in environmental.

Based on environmental legislation, however, consists of about 70 directives (some of which have changed several times and supplemented by subsidiary directives ") and about 20 regulation. Approximately half of them are associated with the movement of goods in the domestic market and cover of the White Paper of the European Commission since 1995 From 1996 to today in Bulgaria adopted framework law

- Act Environmental Protection,
- Law on Clean Air,
- ACT waste management, biodiversity Act,
- Act resources,
- Protected Areas Act,
- Water Act, Act protection from harmful effects of chemicals

and significant part of the regulations to them.

These framework laws bring fundamental requirements of the framework of EU directives respective areas and provide the possibility of introducing other "Subsidiary" directives by-laws, much of already adopted and applied.

Bulgaria plans to achieve full harmonization with the currently existing European environmental legislation on the date of accession with the adoption of the National Assembly of imported by the Council of Ministers Act genetically modified organisms (GMOs), Members of the Law on Environment and ACT protection of environmental noise.

## Legal basis (Extracts from the Basic Regulation adopted in Bulgaria):

### 1.1. Arrangements to Chapter 22 on Bulgaria's accession to EU<sup>1</sup>

With the contract for its EU accession Bulgaria assume commitments under Chapter Environment to carry out

- effective monitoring of levels of pollution; systems for information about the state of the environment;
- combating local, regional and transboundary air pollution and water;
- sustainable, efficient and environmentally efficient production and use of energy; securing industrial plants;
- management of water resources of border watercourses, including transboundary watercourses, in accordance with the principles of international law and in particular in accordance with the provisions of the Convention on the conservation and use of transboundary watercourses and international lakes;

harmonization of laws (by standards of the community), regulations, standards, standards and methodology

Cooperation at the regional level, including for example, including implementation of joint programmes at the international level, particularly with regard to the management, conservation and water quality of transboundary watercourses; cooperation within the European Environment Agency, after it begins their work;

developing strategies, in particular with regard to climate and global problems;  
Study of the effects on the environment;

improving management of the environment, including water management

### 1.2. Sixth Environment Action Programme of EU<sup>2</sup>

✓ Eco-label<sup>3</sup>

### 1.3. Environmental liability - White Paper<sup>4</sup>

### 1.4. LIFE+: a financial instrument for the environment<sup>5</sup>

### 1.5. Assessment of the effects of plans and programmes on the environment (SEA Directive)

The **Strategic Environmental Assessment (SEA) Directive** stipulates that plans and programmes which are liable to have significant effects on the environment must be subject to an environmental assessment prior to their adoption.

Prior to the adoption of a plan or programme or its submission to the legislative process, the competent authority of the Member State concerned will be required to carry out an environmental assessment and, after consulting the competent environmental authorities, to prepare an environmental report

**1.6. ACT of the European commission about Environmental taxes and charges**

The Commission is evaluating ways to promote the use of fiscal instruments by Member States to increase the efficacy of environmental policy and ensure that environmental taxes and charges are used in accordance with Community legislation.<sup>6</sup>

**1.7. CO<sub>2</sub> emission limits on new vehicles<sup>7</sup>**

**1.8. Council Regulation (EEC) No 1836/93 of 29 June 1993 allowing voluntary participation by companies in the industrial sector in a Community eco-management and audit scheme<sup>8</sup>**

**Environmental indicators and green national accounting (OJ C 287/115, 30.10.1995 9**

And:

**1.9. Directive 97/11/EC (OJ L 73/5, 14.3.1997), the Council amended Directive 85/337/EEC, for it considered that the main principles of the assessment of environmental effects should be harmonised, and that the Member States may also lay down stricter rules to protect the environment**

## Eco-audit

In the field of Eco auditing Bulgaria is engaged with the

***Regulation no 1836/93 on the voluntary participation of undertakings in a community eco-audit system has been enacted.***

It creates a new system designed to improve environmental protection by companies through the introduction of environmental management. Companies which, besides complying with current legislation, commit themselves to the continuous improvement of their environmental protection may draw attention to the advanced level of environmental protection by displaying an EU symbol at their registered sites. The Regulation lists the requirements for the establishment of environmental management systems and for environmental reviews at a company's sites and stipulates that the environmental statement prepared by the company must be validated by an independent environmental verifier. The aim is to 'internalise' environmental protection as part of a company's activities and to show that environmentally aware production eventually leads to cost reductions.

By Decision 97/264/EC of 16 April 1997 (OJ L 104/35, 22.4.1997), the Commission recognised that accreditation according to the criteria laid down in any one of the following approaches to the accreditation of certification bodies will ensure that appropriate certification procedures are employed by certification bodies, acting within the scope of their accreditation, who have been accredited according to these requirements and guidelines:

- 6 the 622 Austrian Federal Law of 1995;

And

- the guidelines issued in September 1996 by the German Ministry for the Environment;
- the European accreditation of certification guidelines of June 1996.

#### 1.10. The Environment Policy of the Europe

By Decision 97/265/EC of 16 April 1997, the Commission recognised **the**

✓ **International standard ISO 14001:1996** and the

✓ **European standard EN ISO 14001:1996,**

**establishing specification for environmental management systems, since they are identical and include specification for environmental management systems and audit corresponding to certain requirements of Regulation No 1836/93 (OJ L 104/37, 22.4.1997).**

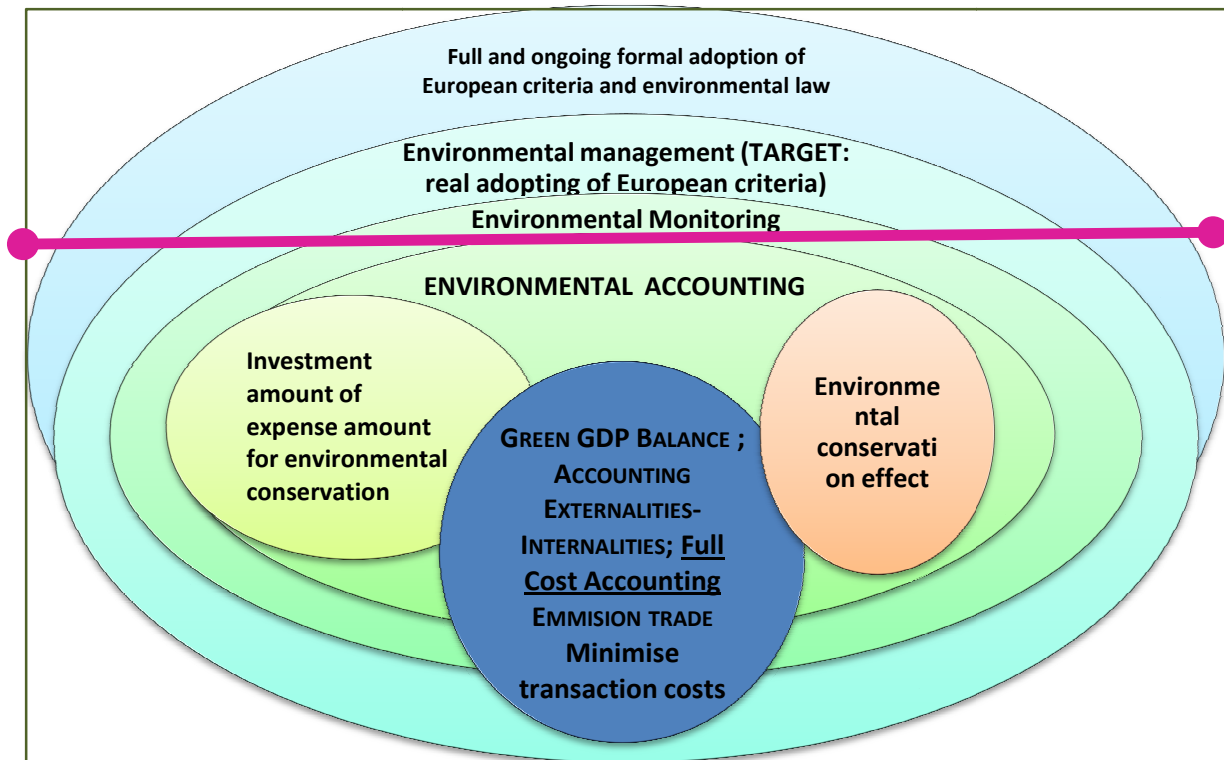
✓ **On 30 October 1998 the Commission issued a proposal for a Council Regulation allowing voluntary participation by organisations in a Community Eco-Management and Audit scheme (EMAS) (COM(98)0622).**

The objective of EMAS shall be to promote continual improvements in the environmental performance of organisations by:

- the establishment and implementation of environmental management systems by organisations;
- the systematic, objective and periodic evaluation of the performance of such systems;
- the provision of information of environmental performance to the public and other stakeholders;
- the involvement of employees.

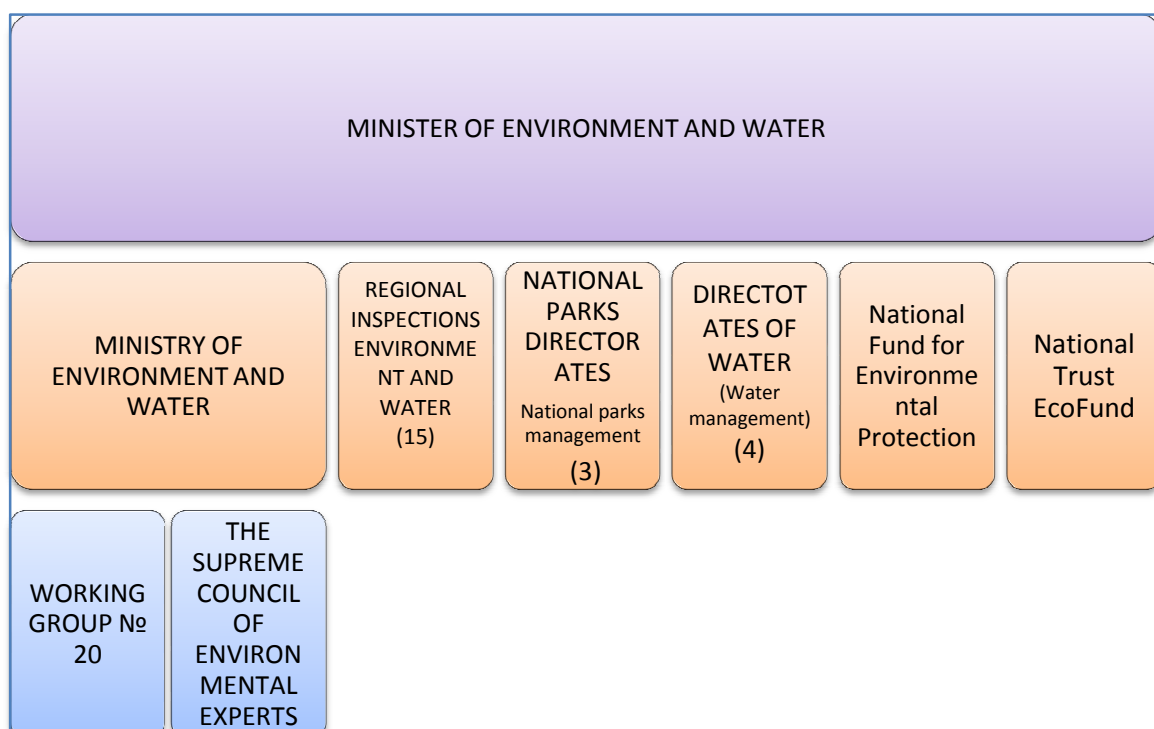
An 'organisation' is defined as a company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration. 'Environmental audit' means a management tool comprising a systematic, documented, periodic and objective evaluation of the performance of the organisation, management system and processes designed to protect the environment. EMAS is to be open to any organisation dedicated to improving its overall environmental performance, subject to its registration to EMAS under certain conditions

**Figure 1. Level achieved and non achieved by Bulgaria**



## CENTRAL AND MUNICIPAL SYSTEM OF ENVIRONMENTAL MANAGEMENT IN BULGARIA

Figure 2 Scheme of central managerial structure



**(I) ESTABLISHMENT OF BOARD OF ACTIVITIES FOR ENVIRONMENTAL PROTECTION;** This is the Supreme Council of Environmental Experts auxiliary body is directly subordinate to the Minister of Environment and Water Main activity of the enterprise is the realization of environmental projects and activities for the implementation of national and local strategies and programs on the environment

*FUNCTIONS AND OBJECTIVES.* The main composition of the Supreme Council of Environmental Experts have the following functions:

1. offers solutions to assess the environmental impact;
2. offers a solution in a report assessing the environmental damage caused by past actions or inactions, on privatization, including the programme for elimination of past environmental damage;
3. proposes to approve programs to bring the activities of privatised companies under the regulations of Environment, presented by the buyer in the privatization deal (or his authorized representative);

In its composition entering and:

***(1) Intergovernmental Council of Environmental Experts have the following functions:***

1. proposes to approve documents, including assignments for design and investment projects relating to the implementation of programmes to remedy environmental damage caused by past actions or inactions, on privatization;
2. assisted in monitoring the implementation of programmes to remedy environmental damage

***(2) Inter-Agency Committee has the following functions:***

1. offers opinions on solutions for environmental assessment of plans and programmes.
2. discuss reports on environmental assessment / environmental part of the plans and programmes.

***(3) Spetsializiraniyat staff on plans to manage protected areas have the following functions:***

1. Decides project management plans for national parks or nature under 19, paragraph 1 of the Ordinance to develop management plans for protected areas;
2. decide on projects for the introduction of changes to approved plans for the management of national parks or nature under chl.25, 2, item 1 of the Ordinance to develop management plans for protected areas;
3. decide on projects to update management plans for national parks or nature under chl.26 of the Ordinance to develop management plans for protected areas.

**(II) REGIONAL INSPECTIONS ENVIRONMENT AND WATER AND DIRECTORATES OF WATER ARE** under the authority of the Minister

1. Water Directorate - Blagoevgrad, West Region
2. Water Directorate - Varna, the Black Sea region
3. Water Directorate - Pleven, Danube region

#### 4. Water Directorate - Plovdiv, East region

1. Directorate National Park - Bansko, Pirin
2. Directorate National Park - Blagoevgrad, Rila
3. Directorate National Park - Gabrovo, Central Balkan
  1. Regional Inspectorate of Environment and Water – Blagoevgrad
  2. Regional Inspectorate of Environment and Water - Burgas
  3. Regional Inspectorate of Environment and Water - Varna
  4. Regional Inspectorate of Environment and Water - Veliko Tarnovo
  5. Regional Inspectorate of Environment and Water - Vratsa
  6. Regional Inspectorate of Environment and Water – Montana
  7. Regional Inspectorate of Environment and Water – Pazardzhik
  8. Regional Inspectorate of Environment and Water - Pleven
  9. Regional Inspectorate of Environment and Water – Plovdiv
  10. Regional Inspectorate of Environment and Water – Ruse
  11. Regional Inspectorate of Environment and Water – Smolyan
  12. Regional Inspectorate of Environment and Water – Sofia
  13. Regional Inspectorate of Environment and Water - Stara Zagora
  14. Regional Inspectorate of Environment and Water – Haskovo
  15. Regional Inspectorate of Environment and Water - Shumen

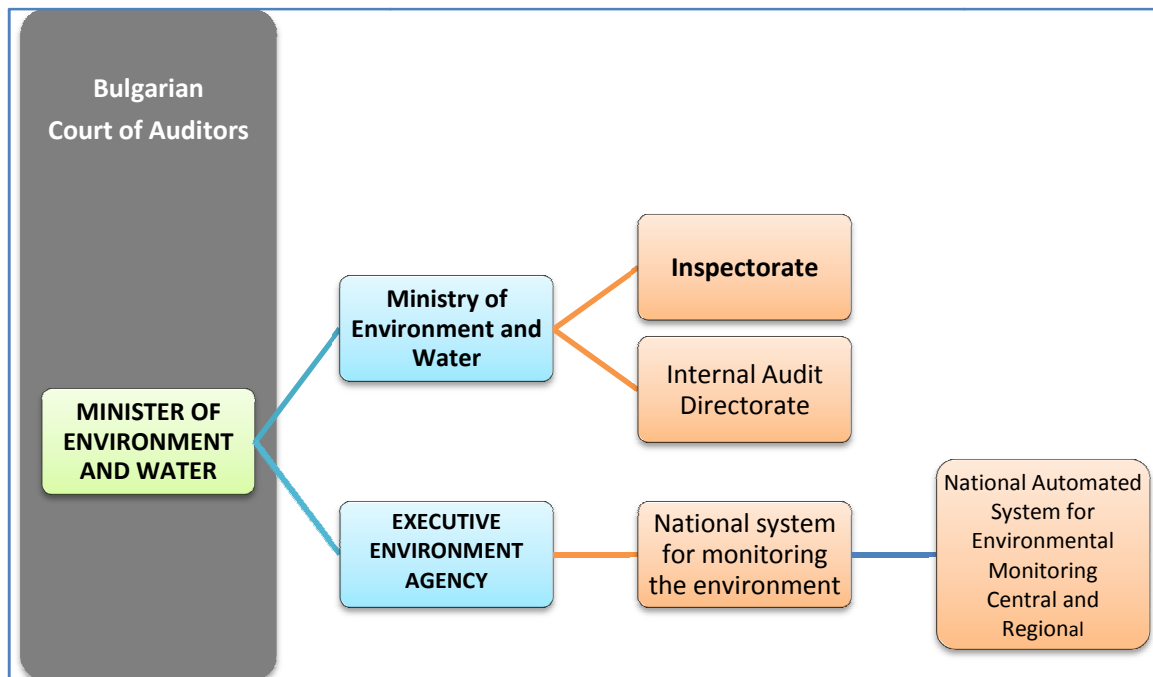


Figure 3 Map of territorial location of the structures of central management by regions

## CENTRAL AND MUNICIPAL MONITORING AND AUDIT STRUCTURE

Figure 4 Scheme of central monitoring and audit structure





- **INSPECTORATE** supervise the activities of the ministry, regional inspections Environment and Water, Directorates of the National Parks and Directorates of water; Carries out periodic checks, providing information to the Minister for the findings of the inspections and make proposals to remove the admitted violations. Control: a) performance of the functions of structural units; b) performance and level of interaction between structural units; c) the legality of the acts in the development and implementation of policy.
- **INTERNAL AUDIT DIRECTORATE**
  1. planned, conducted and report on internal audit activities in accordance with the requirements of the Act on internal audit in the public sector standards for internal audit in the public sector, the Ethics Code of Internal Auditors, the Statute of the unit's internal audit and approved by the Minister of Finance methodology internal audit in the public sector;
  2. prepare on the basis of risk assessment three-year strategic plan and annual business plan to be approved by the Minister;
  3. prepare audit plan for each audit engagement, which contains the scope, objectives, duration and allocation of resources to implement the commitment audit approach and techniques, the type and volume of checks;
  4. gives the Minister of independent and objective assessment of the state of audited systems for financial management and control;
  5. evaluates the processes for identifying, evaluating and managing risk introduced by the Minister;
  6. examine and evaluate the compliance of activities with the law, internal regulations and treaties; credibility and universality of the financial and operational information; organization created to protect assets and information, effectiveness, efficiency and economy of activities, carrying out tasks, contracts, commitments and achieve objectives;
  7. advise the minister at his request, giving advice, opinion, education and others. in order to improve the processes of risk management and control without assume management responsibility for this;
  8. report and discuss with the minister and the heads of the entities whose activities are audited, the results of any audit carried out commitment and submit audit report;

9. makes recommendations in the audit reports to improve the adequacy and effectiveness of systems for financial management and control, the minister assisting in the preparation of an action plan and carry out checks to track implementation of the recommendations;
10. prepare and submit to the Minister an annual activity report on internal audit in accordance with art. 40 of the Act on internal audit in the public sector, which is sent to the Internal Control Directorate of the Ministry of Finance by 28 February next year;
11. provide increasing training of internal auditors and carries out contacts with other units for internal audit of the public sector organizations for the purpose of exchange of good practices.

- **WORKING GROUP 20<sup>10</sup>**

It has a function to:

1. analyse policies and regularly monitor changes in European Union legislation in the field;
2. develop proposals for measures and actions to be included in the program under Art. 1, para. 1, item 2;
3. develop projects outline positions on issues under consideration by the European Council, the Council of the European Union and its subsidiary bodies, and in the process of committee;
4. carried out an impact assessment in preparing the framework positions;
5. develop projects of positions for meetings of the European Council and the Council of the European Union, including informal meetings and submit to the Council of European Affairs;
6. draw up guidelines for implementing the framework positions;
7. discuss the draft regulations, which adopted measures at national level necessary for implementation and enforcement of regulations of the European Union, and gives opinions on them and on the correlation table;
8. conducted an analysis of the obligations arising from membership of Bulgaria in the European Union, and prepare materials, documents and statements;
9. prepare and provide the necessary information on the procedure started by Art. 226 or 227 of the Treaty establishing the European Community;
10. analyzes and advises the Council of European Affairs measures relating to the implementation of priorities and obligations arising from membership of Bulgaria in the European Union;
11. coordinates of translated texts of the bulgarian language acts of the European Union;
12. notification of the acts performed by the Bulgarian legislation, which adopted measures at national level necessary for implementation and enforcement of European Union instruments;<sup>11</sup>

- **EXECUTIVE ENVIRONMENT AGENCY:**

Place guiding, coordinating and information functions in terms of control and environmental protection. Designs and manages the national system of environmental monitoring and information on the state of components and environmental factors on throughout the country. Reference centre within the European Environment Agency

## MUNICIPAL LEVEL

On Municipal level the main management structure in the field of environment are the Municipal Councils and the Mayors of municipality.

The Mayor of Municipality rules the Municipal Found for Environmental protection and monitored the realizing of the Program for environmental protection.

The Mayor is the Executive authority and in Organization and control over the collection of waste, information about environment Removing the effects of pollution and environmental disasters Under Municipal authorities is and the Public environmental inspections on Environment.

**Figure 5 Management and audit on Municipal level**



## STRATEGIES

### PLANS, PROGRAMMES

#### National Environmental Strategy

National Environmental Strategy is a Ten year programme.

Priorities in it are:

1. Reduce and prevent risks to human health;
2. reduce and prevent risks to biodiversity;
3. reducing consumption of natural resources and energy;
4. impact on the development of economic sectors, particularly tourism and agriculture.

## Municipal programs for environmental protection

They are 1, 2 and 3 years programs.

## Assessing the impact on the environmen

The assessment of environmental impact identify, describe and evaluate in an appropriate manner and in accordance with appropriate direct and indirect impacts of the proposal and design solutions for construction, operations and technology on human and environmental components: plant and animal world, soil, water , Air, climate and landscape, land womb, and material and cultural heritage and interaction between them.

This mean the evaluation of environmental impact, similar to the assessment provided for in **Council Directive 85/337/EEC of June 27, 1985 (OJ L 175, 5.7.1985, p. 40, as amended by Directive 97/11/EC - OJ L 73, 14.3.1997, p. 5) for assessing the environmental impact of certain public and private projects).**

## National schemes for environmental management and audit and eco-label

### A national scheme for the management of Environment and auditing (Currently creating)

#### Goals:

- 1.Creating and implementing management systems on the Environment.
- 2.Sistentic, objective and periodic evaluation of the effectiveness of these systems through its auditing
- 3.Sabirane information on the results achieved against the environment and discuss them with the public.
- 4.Active inclusion of staff in the management systems of Environment.

The participation of organizations in the National scheme for the management of Environment and auditing is voluntary.

### National scheme for eco-label

- Goals

The aim of the scheme is to promote the development, production, distribution and use of products that have the potential to reduce the negative environmental impact compared with other products in the same group.

### Independent verifiers

Independent verifiers are accredited by the Executive Agency "Bulgarian office for accreditation. She leads a public register of accredited verifiers.

## FINANCING

### Sources of financing

Sources of funding for programmes (projects) in the field of environmental protection can be national (Bulgarian) or international organizations, funds and other mechanisms, which make direct investments through: budgetary subsidies, grants and donations, loans on preferential conditions for implementation of projects in the field of environmental protection, indirect investments, etc.

### The main national and international sources to finance activities for achieving the objectives of the policy on environmental protection are:

- ❖ **State budget**
- ❖ **Enterprise management activities in environmental protection (PUDOOS/ CMAEP)**
- ❖ **National Trust eco-fund**
- ❖ **Mechanism "Joint Implementation" in the framework of the Kyoto Protocol to the Framework Convention on Climate Change**
- ❖ **Bilateral cooperation agreements - with Austria, the Kingdom of Belgium, Britain, the Federal Republic of Germany, the Principality of Monaco, the Kingdom of the Netherlands, Japan**
- ❖ **International organizations and financial institutions - Schedule for global environmental protection;**
  - ◆ Nordic - Funds; CIM (Centre for International Migration and Development) - projects;
  - ◆ Central European Initiative,
  - ◆ U.S. Agency for International Development (USAID);
  - ◆ World Bank; Program *ALTENER*; SAVE Program
- ❖ **Pre-EU funds for the candidate countries for membership –**
  - *ISPA*,
  - *Phare*,
  - *European Regional Development Fund*
  - *SAPARD*
- ❖ **European Cohesion Fund.**

*(Now are not available under the last measures of European Commission under the ban of EC after auditing and Report of OLAF)*

### Organizations engaged in financing

#### *Company management activities for environmental protection (pudoos/ CMAEP)*

The undertaking given in the form of funds: grants, interest-free or low-interest loans and grants to cover part or full amount due to interest on bank loans granted for the implementation of environmental projects and facilities.

#### *National eco trust fund*

The Fund was established as independent legal entity with the Law on Environmental Protection to manage the funds provided as a donation to Bulgaria by the Government of the Swiss Confederation in the transaction "Debt against the environment" between Bulgaria and Switzerland.

In 2004, the NATIONAL ECO TRUST FUND was created to fund **Protected Areas**. It is raising funds from donations / international and national, private and public, as revenue from the management will be spent for projects in protected areas.

### ***Mechanism "joint implementation" within the proceedings of kyoto to framework convention on climate of amendment***

Bulgaria has signed **Memorandums** and **agreements** for cooperation on joint implementation mechanism with the following countries: *the Netherlands, the Republic of Austria, Denmark, the Swiss Confederation Prototipniya Carbon Fund and the World Bank Federal Republic of Germany and Japan.*

To participate in joint implementation mechanism is necessary to develop a draft of the above areas and to calculate the expected reductions of carbon dioxide equivalent for the period 2008 – 2012.

Bulgaria signed the Kyoto Protocol in 2002. Bulgaria accepted a National Plan of Action on Climate Change - 2000 adopted by the Ministerial Council on - is now being updated.

## **ECO - ACCOUNTING**

### **The goal – Full cost accounting**

On October 26, 2007, the European Commission issued its decision on Bulgaria's allowance allocation plan for 2008-2012, requiring a reduction of about 37.4%. It also published its decision on allocations for 2007 (the year Bulgaria joined the European Union), which requires a cut of about 20%.

EC give and the following recommendations for Bulgaria:

#### **Full Cost Accounting**

##### ***Recommendations for Bulgaria***

#### **(1) Modify the current accounting system into a full cost accounting system**

(2) Augment the current financial evaluation framework

(3) Support a research program on full cost accounting

(4) Initiate a training program on full cost accounting

#### **(5) Take full cost accounting**

(6) Establish a fund for decommissioning, waste disposal, etc.

## **THE COST MUST PAYD BY BULGARIA**

Overall implementation of the requirements of EU environmental law requires significant financial resources. As to specific cost to comply only ten Directives, the country which originally stated a need for transitional periods, and in fact these are the most expensive struvashite measures to

be implemented, the total amount of necessary investments amount to around **7 billion euro, about 30% of them should be borne by the private sector for a period of about 10 years.**

**Table 1 Total costs and protection of environment in fields (thousands BGN) 1997-2006**

Divisions	1997	1998	1999 <sup>1)</sup>	2000	2001	2002	2003	2004	2005 <sup>3)</sup>	2006
<b>Total</b>	<b>16480</b>	<b>27920</b>	<b>444</b>	<b>433</b>	<b>608</b>	<b>473</b>	<b>569</b>	<b>655</b>	<b>629</b>	<b>1 010</b>
	5,298	9,751	626	282	376	533	750	232	944	095
<b>For water resources</b>	50995	11772	127	121	150	123	177	199	182	225
	,481	8,063	042	584	791	266	975	364	198	273
<b>Such as:</b>										
<b>Industrial waste water treatment plants</b>	21001	47803	45	43	50	36	52	76	48	79
	,632	119	973	277	566	959	137	961	629	625
<b>Municipal wastewater treatment plants</b>	16886	28896	37	46	42	35	38	43	44	59
	,927	058	836	285	842	357	063	557	899	535
<b>For current water</b>	8530,	14393	19	18	38	53	48	41	41	60
	069	,925	402	611	273	835	654	898	497	068
<b>For air</b>	44013	64215	176	119	166	80	129	161	153	413
	,647	,797	010	679	705	608	819	181	914	478
<b>Conservation of soil and groundwater</b>	13532		13	18	24	19	18	26	31	43
	,844		443	037	535	390	331	003	655	663
<b>For Forest</b>	3832,	5470,	17	27	16	7	10	10	8	
	016	229	933	614	160	502	268	927	415	6 126
<b>To protect biodiversity and protected areas and sites</b>	121,8	330,4	792	373	223	389	309	630	3	1 961
	66	97							652	
<b>For hunting and ribnostopanskite events</b>	364,5	3600,	7	14	24	1	1	1	1	
	85	178	471	587	770	191	359	772	614	1 564
<b>For waste</b>	36007	46465	60	96	118	112	114	123	156	218
	,878	,675	420	591	570	957	320	702	888	923
<b>For noise</b>	298,3	413,5	308	429	612	426	54	232	258	50
	92	3								
<b>For research</b>	819,1	659,1	5	751	698	4	9	30	8	3 559
	38	76	018			867	555	119	130	
<b>Educational, educational and other similar activities</b>	33,36	143,9	188	203	226	291	694	1	787	332
	7	69						092		
<b>For administratio</b>	2051,	2992,	5	7	20	11	9	13	13	14
	09	226	209	317	974	756	927	536	479	915
<b>Costs for activities carried out by national and municipal funds for the environment</b>	77,03	955,6	2	1	1	-	-	-	-	-
	9	75	248	206	496					
<b>Equipment for monitoring and control</b>	4127,	7165,	9	6	44	57	48	44	27	20
	886	219	142	300	343	055	485	776	457	183

**Table 2 Annual Payment of Bulgaria for the membership in international organizations<sup>12</sup>**

Annual Payment of Bulgaria for the membership in international organizations		
Area	BGN	EURO
<b>In the field of water management</b>	<b>274108,97</b>	<b>138055,387</b>
In the area of waste management	40892,9792	20595,8092
In the area of biological diversity	29250,2609	14731,937
In the area of national system of environmental monitoring and information security	371340,3	187026,089
In the field of management of Climate Change	3458275,1	1741765,35
In the field of geology, resources and protection of the earth womb and soilza 2008 r.	43681	22000
<b>Total</b>	<b>4176655,63</b>	<b>2103578,76</b>

**Table 3. Financing of consolidated costs of the programs in the field of environment and water (in million BGN)<sup>13</sup>**

	Law 2007		Law 2008		Forecast 2009		Forecast 2010	
	milBGN	%	milBGN	%	milBGN	%	milBGN	%
<b>Total financing</b>	<b>753,30</b>		<b>562,20</b>		<b>1 333,80</b>		<b>904,80</b>	
<b>1, Subsidy from Bulgaria</b>	<b>38,80</b>	<b>5,15</b>	<b>43,70</b>	<b>7,77</b>	<b>39,10</b>	<b>2,93</b>	<b>41,80</b>	<b>4,62</b>
<b>2, Transfer of PUDOOS/ Company management activities for environmental protection for MEW</b>			<b>6,00</b>	<b>1,07</b>	<b>6,00</b>	<b>0,45</b>	<b>6,00</b>	<b>0,66</b>
<b>3, Financing Ientral state budget</b>	<b>6,00</b>	<b>0,80</b>	<b>15,00</b>	<b>2,67</b>	<b>15,00</b>	<b>1,12</b>	<b>15,00</b>	<b>1,66</b>
<b>4, Own revenue - MEW</b>	<b>6,10</b>	<b>0,81</b>	<b>6,60</b>	<b>1,17</b>	<b>6,60</b>	<b>0,49</b>	<b>6,60</b>	<b>0,73</b>
<b>5, State Enterprise</b>	<b>67,40</b>	<b>8,95</b>	<b>68,80</b>	<b>12,24</b>	<b>82,00</b>	<b>6,15</b>	<b>85,70</b>	<b>9,47</b>
<b>6, Target subsidy for municipalities</b>	<b>40,00</b>	<b>5,31</b>	<b>77,70</b>	<b>13,82</b>	<b>90,00</b>	<b>6,75</b>	<b>90,00</b>	<b>9,95</b>
<b>7,European Union Funds / ISPA + Cohesion Fund /</b>	<b>447,60</b>	<b>59,42</b>	<b>244,10</b>	<b>43,42</b>	<b>743,60</b>	<b>55,75</b>	<b>511,00</b>	<b>56,48</b>
<b>8, Co-financing National Found</b>	<b>116,00</b>	<b>15,40</b>	<b>74,80</b>	<b>13,30</b>	<b>327,50</b>	<b>24,55</b>	<b>124,70</b>	<b>13,78</b>
<b>9, Loan from the Iinternational Bank Rresearch and Ddevelopment</b>	<b>22,00</b>	<b>2,92</b>	<b>20,00</b>	<b>3,56</b>	<b>13,30</b>	<b>1,00</b>	<b>12,50</b>	<b>1,38</b>
<b>10 Rrepublic Bbudget financing for programs to eliminate back injury</b>					<b>10,70</b>	<b>0,80</b>	<b>11,50</b>	<b>1,27</b>
<b>11, National Trust EcoFund</b>	<b>1,30</b>	<b>0,17</b>	<b>0,40</b>	<b>0,07</b>				
<b>12, A grant from World Bank</b>	<b>8,10</b>	<b>1,08</b>	<b>5,10</b>	<b>0,91</b>				
<b>% of GDP</b>	<b>1,50</b>		<b>0,90</b>					

The dominate part of financing comes from EU and the forecast shows that their part will be rising in the future.

*Now these funds are not available under the Report of the EC.*

**Table 4 Total Expenditures for Environmental Protection for 2008 in Bulgaria**

BGN	EURO
<b>566 376 655,63</b>	<b>285 256 436,98</b>



## The “Company management activities for environmental protection” (PUDOOS/CMAEP)

### Benchmarking company for the state financial environmental management

#### Analysis of the legal status and balance sheet undertaking management activities Environment

##### *Legal status*

The main characteristics of this company are given from the legislator are the following:

Art. 2.

(2) Enterprise management activities Environment (PUDOOS/ CMAEP)) is a legal entity established under the Law on Environmental Protection, based in Sofia.

(3) *The undertaking is not a commercial company, not generate profits not distributed.*

Art. 4. (1) the main business of the undertaking is the realization of environmental projects and activities for the implementation of national and local strategies and programs on the environment.

(2) The establishment and carry out other activities that provide or complement its main fields of activity<sup>14</sup>

Art.5

2) The state is not liable for the obligations of the enterprise.

Chapter Four: Expenditures and collection of resources.

Art. 19. The activities of the enterprise are financed with the proceeds from:

1. Fees established by special laws on the environment;
2. Target provided funds from the state budget for environmental programs pursuant to a decision of the competent authorities;
3. donations from local and foreign individuals and legal entities;
4. revenue from interest on deposits;
5. penalties and fines for administrative violations under the Act to protect the environment imposed by the Minister of Environment and Water and authorized by its officials;
6. proceeds from recovered loans and interest paid on them;
7. income from portfolio investments with short-term government securities and bonds;
8. revenue from services and activities related to the activities of the enterprise;

9. other revenue, down by legislative act.

Art. 20. Utility funds provided in the form of:

1. grants;
2. interest-free or low-interest loans;
3. subsidies to cover part or full amount of interest payable on bank loans granted for the implementation of environmental projects and facilities.

Art. 21. The resources of the enterprise is spent on:

1. implementation of environmental investment projects;
2. neinvestitionsionni implementation of projects and activities to protect and restore the environment;
3. research and applied research by nature, commissioned by the Ministry of Environment and Water;
4. payment of services of scientific and technical expertise, studies and environmental assessments commissioned by the Ministry of Environment and Water;
5. developing and maintaining a national system for monitoring the environment and water; insurance inpatient and mobile equipment, activities related to recruitment of samples, monitoring and control;
6. conducting and participating in conferences, symposia, workshops, exhibitions, competitions and other forums with the environmental dimension;
7. education and information;
8. salaries of members of the Governing Council for any participation in meetings in size a minimum wage for the country;
9. administrative costs of the enterprise;
10. other activities provided by the act.

Art. 22. When funds in art. 19 are not spent in the current financial year, they qualify next year, while maintaining the goal of spending them.

Audit:

Art. 23. The internal current and subsequent control over the collection and spending of funds of the enterprise is done by Inspectorate of the enterprise.

Art. 24. Utility organize and carry out its book business under the Accounting Act and prepare the accounting information as follows:

1. in periods;
2. total for overall activity and directorates;

3. on sites and facilities under Art. 17, section 1;
4. in forms of delivery;
5. directions of spending;
6. sources of revenue;
7. Reporting on another decision of the Governing Council.

Art. 25. (1) annually by 28 February of the current year undertaking lodged with the Ministry of Environment and Water and the Ministry of Finance annual financial report for the previous year.

(2) The annual financial statement of the undertaking is endorsed by certified public accountant.

*Report of the Enterprise management activities Environment (PUDOOS/ CMAEP))<sup>15</sup>*

**Table 5 Annual reports of PUDOOS/ CMAEP)**

2006			2007			2008 r.			Extraordinary income for 2007 by budget surplus											
income 2006		expenditure 2006		income 2007		expenditure 2007		Project-income 2008		Project-expenditure 2008		%								
As species laws::	BGN	%	BGN	%	As species laws::	BGN	%	BGN	%	As species laws::	BGN	%	Investment environmental projects							
													61	73,45	Fifansirane for targeted activities in Nature 2000	991	0,99			
Water Act	26 840,00	38,52	Investment environmental projects	49 298,00	96,52	Water Act	23 932,00	57,90	Investment environmental projects	103 626,00	95,78	Taxes on Water Act	41 450,00	48,91	Investment environmental projects	4 000,00	4,78	For consumables, chemicals, laboratory equipment and others. fixed assets for regional laboratories EEA	8 500,00	8,50
Law on waste management:	7 993 215,00	11,47	Investment environmental projects	826 536,00	1,62	Law on waste management	13 984 757,00	33,83	Investment environmental projects	2 071 149,00	1,93	Taxes on Charges on packages	6 000,00	7,08	Activities commissioned by MEW (monitoring and control NEMS - maintenance of the system EEA)	6 000,00	7,18	For environmental investment projects for municipalities including	90 508 775,00	90,51
Fees tires	2 227 480,00	3,20	Participating in conferences, seminars for information activities with an environmental focus	301 206,00	0,01				Conducting and participating in conferences, seminars and information with environmental focus	264 509,00		Fees for tires	2 200 000,00	2,60	Conducting and participating in conferences, seminars and information with environmental focus	4 000,00	0,00	Wastewater treatment plants for waste water	10 472 279,00	

Batteries and battery charges	1 644 958,00	2,36	Activities commissioned by MEW (monitoring and control NEMS - maintenance of the system EEA)	650 000,00	1,27	Batteries and battery taxes	1 700 000,00	2,01	Sanitation	48 309 940,00
Fees motor vehicles	4 766 918,00	6,84				car tax	10 000,00	11,80	Small water projects	19 101 943,00
Processed oils	1 514 507,00	2,17				Такси масла Fees oils	1 400 000,00	1,65	Landfill for municipal solid waste	12 624 612,00
Electrical and electronic equipment	4 799 854,00	6,89				Elektrische sko fees and equipment ebektronno	6 000 000,00	7,08		
In the Protected Areas Act	227 172,00	0,33	Protecting Areas Act	232 839,00	0,56	Protecting Areas Act	300 000,00	0,35	Providing interest-free loans	10 000 000,00
Act to protect Clean Air	3 613 900,00	5,19	Act to protect Clean Ear	2 755 817,00	6,67	Act to protect Clean Ear	3 500 000,00	4,13		
Law on Environmental Protection	156 808,00	0,23	Law of Environmental Protection	355 985,00	0,86					
Under the biodiversity	2 949,00	0,00	Law of Biodiversity	14 471,00	0,04					
Act resources	82 107,00	0,12	Act Recources	42 965,00	0,10					
Act medicinal plants	1 900,00	0,00	Act medicinal plants	5 945,00	0,01					
Under the soil pollution	2 710,00	0,00	Ac of the soil pollution	2 046,00	0,00					

Act for protection against the harmful effects of chemical substances and preparations	4 000,00	0,01			Act for protection against the harmful effects of chemical substances and preparations	6 500,00	0,02												
Revenue from services	1 521 919,00	2,18			Incineration of hospital waste	1 599 913,00	1,49			Income from incinerator's work	2 200 000,00								
Income from interest on loans	267 912,00	0,38																	
Interest income FIB	17 000	0,00																	
Other revenue used for information	2 313,00	0,00																	
Proceeds from repayment of loan installments:	14 012 388,00	20,11								Incinerator income repayment of contributions	10 000 000,00								
-from municipalities	1 845 284,00	2,65																	
- from firms	12 167 104,00	17,46			Administrative expenditure	597 385,00	0,56			Administrative and expenditure for the maintenance of Incinerator incineration of hospital waste	2 200 000,00								
Total income 2006	69 683 067,00	100,00	Total expenditure 2006	51 076 260,00	99,42	Total income 2007	41 334 054,00	100,00	Total expenditure 2007	107 538 582,00	99,75	Total regular income 2008	84 750 000,00	Total regular expenditure 2008	83 619 000,00	97,369019	Extraordinary expenditure	100 000,00	100 000,00



**Table 6 Distribution of the funds spent by PUDOOS (CMAEP) for 2007 on components of the environment, BGN<sup>16</sup>**

	Service contracts (numbers) 2006	Service contracts (numbers) 2007	Amount (BGN) 2006	Amount 2007 (BGN)	% of Total amount 2006	% of Total amount 2007
<b>Water</b>	<b>181</b>	<b>344</b>	<b>36344088</b>	<b>89628539</b>	<b>78,33</b>	<b>87,10</b>
Waste	37	50	9041515	11647753	19,49	11,32
Ear	1	1	333818	328890	0,72	0,32
Biodiversity	8	12	330154	968855	0,71	0,94
Ecotourism	8	8	351025	325534	0,76	0,32
<b>Total</b>	<b>235</b>	<b>415</b>	<b>46400601</b>	<b>102899571</b>	<b>100</b>	<b>100</b>

The most tangible in PUDOOS (CMAEP). have income from payments for the use of water.

Symmetrically:

Almost all of PUDOOS funding is directed towards water, as seen from the table – 78% for 2006 and 87 % in 2007. So that the main business of managing the environment in Bulgaria is that in the water.

Maybe, one of the reasons for this are the direct and commitments of Bulgaria in its accession protocol with the EU on water management.

### **The case study with water management in Bulgaria - the main point in the state environmental policy. The definition and evaluation of the Benefit/Effect on public policy on water management**

The Strategic and operational objectives in the field of the water management in Bulgaria are:

- Strategic goal: "Improving water management"

Operational objectives:

- "Evaluation and management of water resources;
- "Conservation of water resources

#### ***Measurement of the benefit / effect on public policy on water management***

- *the polluter pays principle*
- *return the cost of services in the water sector*
- *"cost-effect"*

Ministry of Environment and Water has developed a programme of measures, including measurement of the benefit / effect on public policy on water management.

Among them, and achieve the benefits to society will be indispensable:



application of economic regulators to achieve— sustainable water use and protect them, including the effective implementation of *the polluter pays principle* and return the cost of services in the water sector, including the cost of resource and its preservation and providing adequate pricing policy by 2010, with appropriate incentives for consumers to encourage and efficient use of water;

implementation of measures to maintain and restore the plant and soil cover associated with reproduction of water;

the conduct of coordinated action between the state and municipal authorities, companies, NGOs and the scientific community in the implementation of measures to protect and improve the status of water in compliance with the requirements for choosing the most effective in terms "cost-effect" combination of measures, the coordination of water management in cross-border river basins of basin and national level.

The benefit to society is achieved through the implementation of a program with two sections:

Program 1: "Assessment, management and conservation of water resources of the Republic of Bulgaria"

Section A. Assessment and management of water resources in Bulgaria

Section B. Conservation and improve the state of water resources

### ***Indicators for finding and measuring the benefit effect and target values for the period 2008-2010***

Bulgaria and has developed indicators for finding and measuring the benefit effect and target values for the period 2008-2010 on

- 1. First indicator - Annual volume permitted to use natural water for drinking and household water supply to the population in the country.**
- 2. Second indicator - Annual volume seized and delivered to consumers water for drinking and household water supply to the country's population.**

Brief description of the first and second indicators benefit effect:

The indicators determine the ratio between the total permitted water for drinking and household water supply to the population (in thousand cubic meters) (under licences issued for vodovzemane), seized by water facilities for drinking and household water and delivered to consumers quantities of water for drinking and household water supply to the population (in thousand cubic meters).

*The Full Effect measurement:*

The full effect should be achieved through bringing the value of the relationship between the first and second indicator to 1 (unit) after reducing the total loss of water in water systems (technical losses amortised water supply network, and non reported and in-cash water quantities etc.)..

- 3. Third indicator - Annual volume allowed natural waters for the country's economy**
- 4. Fourth indicator - Annual volume seized natural waters for the country's economy**

Brief description of the third and fourth indicators benefit effect

The indicator determines the ratio of total allowed water to the economy of the country (in thousand cubic meters) (under licences issued for water taking), seized quantities of water for irrigation, livestock, aquaculture, industrial water and hidroenergetika (in thousand cubic meters ) and others. It should be noted that about 90% of the water levels are authorized to hidroenergetics.

*The Full Effect measurement:*

The full effect should be achieved through bringing the value of indicators to 1 (unit) after reducing losses of water systems in the profession and saving and rational utilization of water resources in all sectors of economic activity through the introduction of water - saving technologies in production and effective use of applied and allowed water levels.

**5. Fifth indicator - Total number of water bodies**

**6. Sixth indicator - Number of water bodies with good standing water**

Brief description of the fifth and sixth indicators benefit effect

The indicator determines the ratio between the total number of water bodies in Bulgaria and the number of water bodies with good standing water.

*The Full Effect measurement:*

The full effect should be achieved through bringing the value of the relationship between the indicators to 1 (unit), after the implementation of planned measures to achieve and maintain good condition of all water in the country.

**7. Seventh indicator - Total volume of waste water from settlements (in thousand meters <sup>3</sup>)**

**8. Eighth indicator - prechistenite volume of waste water from settlements (in thousand meters <sup>3</sup>)**

Brief description of the seventh and eighth indicators benefit effect The indicator determines the ratio between the total volume of wastewater from the settlements (in thousand meters <sup>3</sup>) and prechistenite volume of waste water from settlements (in thousand meters <sup>3</sup>).

*The Full Effect measurement:*

The full effect should be achieved through bringing the value of the relationship between the indicator to 1 (unit), after the construction of sewage systems, including the purification stations for waste water from settlements.

**9. Ninth-General indicator volume of wastewater from the country's economy (in thousand meters <sup>3</sup>)**

**10. Tenth indicator - prechistenite volume of waste water from the country's economy (in thousand meters <sup>3</sup>)**

Brief description of the ninth and tenth indicators benefit effect The indicator determines the ratio between the total volume of wastewater from the country's economy (in thousand meters <sup>3</sup>) and the volume of waste water prechistenite economy of the country (in thousand meters <sup>3</sup>).

*The Full Effect measurement:*

The full effect should be achieved through bringing the value of the relationship between the first and second indicator to 1 (unit), after the construction of facilities for treatment of wastewater from economic projects.

**11. Eleventh indicator - Total number of health-protective zones of facilities for extraction of water for human consumption**

**12. Twelfth indicator - Number of established and built sanitary security zones**

Brief description of the eleventh and twelfth indicators benefit effect

The indicators determine the ratio between the total number of health-protective zones of facilities for drinking and household water supply and the number of established and built sanitary security zones.

*The Full Effect measurement:*

The full effect should be achieved through bringing the value of the ratio of indicators to 1 (unit) after the design, establishment and construction of sanitary security zones.

**13. Thirteen indicator - Total number of health-protective zones of facilities for extraction of mineral water**

**14. Fourteenth indicator - Number of established and built sanitary security zones**

Brief description of the thirteenth and fourteenth indicators benefit effect.

The indicators determine the ratio between the total number of sanitary security zones vodivzemni facilities for mineral waters, exclusive state property and the number of established and built sanitary security zones.

*The Full Effect measurement:*

The full effect should be achieved through bringing the value of the ratio of indicators to 1 (unit) after the design, establishment and construction of sanitary security zones.

*Target values on performance indicators*

**Strategic goal:** IMPROVING THE MANAGEMENT OF WATER

**Benefits / effects:** Optimum security of the population and economy with natural water in the required quantity and with adequate quality, equitable distribution of available water resources, ensuring their effective use in reporting the impact on related ecosystems, achieving and maintaining good condition of all water throughout the country and prevent or mitigate the effects of the harmful effects of water when flooding and drought on.

**Table 7 Table presenting the indicators to measure the benefit / impact on society**

Performance indicators	Unit	Target value			
		2007	2008	2009	2010
<b>1. Annual volume allowed natural water for drinking and household water supply to the population in the country</b>	thousand meters <sup>3</sup>	1394090	1541160	1779740	2129742
<b>2. Annual volume of water used by consumers for drinking and</b>	thousand meters <sup>3</sup>	Take account of	Take account of	Take account of	Take account of

<b>household water supply to the country's population</b>		NSI *	NSI *	NSI *	NSI *
<b>Ratio between the first and second indicators</b>		-	-	-	-
<b>3. Annual volume allowed natural waters for the country's economy</b>	thousand meters <sup>3</sup>	50398010	51628260	53296572	55218901`
<b>4. Annual volume of water used for the country's economy</b>	thousand meters <sup>3</sup>	Take account of NSI *	Take account of NSI *	Take account of NSI *	Take account of NSI *
<b>Ratio between the thirt and fourth indicators</b>		-	-	-	-
<b>5. Total volume water bodies</b>	number	888	932	932	932
<b>6. Number of water bodies with good standing water</b>	number	413	389	389	391
<b>Ratio between the fifth and sixth indicators</b>		2,15	2,4	2,4	2,38
<b>7. Total volume of waste water from settlements</b>	thousand meters <sup>3</sup>	1307950	782878	870607	973509
<b>8. Volume of purified of waste water from settlements</b>	thousand meters <sup>3</sup>	354540	243029	270507	328251
<b>Ratio between theseventh and eight indicators</b>		3,69	3,22	3,22	2,96
<b>9. Total volume of wastewater from the country's economy</b>	thousand meters <sup>3</sup>	1211190	170454	198985	253169
<b>10. Total prechistenite of waste water from the country's economy</b>	thousand meters <sup>3</sup>	730200	35 504	41333	48732
<b>Ratio between the ninth and tenth indicators</b>		1,66	4,8	4,81	5,19
<b>11. Total number of sanitary security zones water catchment facilities for drinking and household water supply</b>	number	4836	4836	4836	4836
<b>12. Number of established and built sanitary security zones</b>	number	1210	1114	1234	1334
<b>Ratio between the Eleventh i and Twelfth indicators</b>		3,99	4,34	3,92	3,62
<b>13. Total number of sanitary security zones vodovzemni facilities for mineral water</b>	number	197	182	177	177
<b>14. Number established and built sanitary security zones</b>	number	46	108	146	146
<b>Ratio between the Thirteen and f Fourteenth indicators</b>		4,28	1,69	1,21	1,21

Such rezcheti are made and adopted and other environmental activities in Balgariya.

In reporting indicators 2 Annual volume of water used by consumers for drinking and household water supply to the country's population and 4. Annual volume of water used for the country's economy we see that the data provided by the National Statistical Institute of Bulgaria. A matter of concern that NSI used for their research companies Subcontractors who do not have the necessary qualifications in this area. This is the practice of NSI to be terminated because casts doubt on the reliability of the data.

## The water

### Environmental accounts.

**Table 8 Water use balance (million<sup>3</sup>/per year)**

*Total gross abstraction of freshwater; Returned water (before or without use); Desalinated water; Reused water; Total waste water generated in comparison with other countries<sup>17</sup>*

Total gross abstraction of freshwater					
	2001	2002	2003	2004	2005
Bulgaria	5833	6589	6918	6282	6017
Czech Republic	1839	1908			
Greece					
Spain	37496	37221	38512	38158	
Italy					
Romania	7343	7239	6500	5850	5301
Returned water (before or without use)					
	2001	2002	2003	2004	2005
Bulgaria	28	18	6	4	3
Czech Republic	67	93			
Greece					
Spain	16286	17175			
Italy					
Romania					
Desalinated water					
	2001	2002	2003	2004	2005
Bulgaria	0	0	0	0	0
Czech Republic					
Greece					
Spain	118	129	325	370	
Italy					
Romania					
Reused water					
	2001	2002	2003	2004	2005
Bulgaria				7	
Czech Republic					
Greece					
Spain	205	181	363	393	
Italy					
Romania					
Total waste water generated					
	2001	2002	2003	2004	2005
Bulgaria	785	746	1194	1192	
Czech Republic	1421	1416			
Greece					
Spain					
Italy					
Romania					

## COST FOR ENVIRONMENTAL STATISTICAL MEASUREMENT

### National program for statistical issues 2008 for the needs of the System of National Accounts (SNA)

**Table 9. The Cost for environmental statistical measurements (mill.BGN) National programme statistical studies in the year 2008.** <sup>18</sup>

	1997 <sup>1)</sup>	1998 <sup>1)</sup>	1999 <sup>1)</sup>	2000	2001	2002	2003	2004	2005 <sup>2)</sup>	2006
Total	165	279	445	433	608	474	570	655	630	1 010

<b>Acquisition costs of tangible and intangible assets with ecological purpose</b>	64	92	101	180	303	221	274	325	320	609
<b>Costs for maintenance and operation of tangible assets with environmental purpose and conducting activities to protect and restore the environment</b>	101	187	344	253	305	253	296	330	310	401

**NOTE:**

1) 1997 and 1998 recalculated in denominated BGN<sup>19</sup>.

2) From 2005 amortization costs are not included at the cost of environment.

## CONCLUSIONS

Bulgaria has adopted all the basic documents of the EU and the international community on environmental protection including those who are obliged to introduce European and international standards in managing the environment. Bulgaria continues to adopt its domestic law to the new documents and requirements in this area.

In Bulgaria is made up government, regional and municipal administration for the management of environmental protection.

Introduced a system for assessing the impact on the environment, Eco-audit and made the first steps in the collection of information on the introduction of eco-system for Accounting and Measuring the benefits and impact of activities in environmental management. A structure for the financing of measures in environmental protection, central place in which occupies the Enterprise to manage the activities of environmental protection. Adopted the National Strategic Plan on environmental protection.

These systems remains to begins to work effectively and provide expectation results.

At this stage the costs which are made in Bulgaria in the management of environmental protection highly exceed revenue from ecology respectively. This formed a high cost of environmental activities. The costs will be borne mainly by the EU's programmes and budget Ministry of Environment and Water.

Bulgaria is still far from the positive facts like: Revenue obtained by recycling, Reduction of costs achieved by energy conservation, Reduction of waste processing costs achieved by recycling.

At this moment one of the most important tasks for reducing the cost of environment and efficient management of the environment in Bulgaria

1. Collection of correct data on the state of environmental for purposes of national accounts statistics, a prerequisite for objective analysis and decision-making. This responsibility falls upon the Central Environmental Authority, its regional units and municipalities, and the National Statistical Institute.

(Unfortunately, this process is in its early stages and may have some doubts in the approach of the National Statistical Institute to the use of sub-companies with questionable quality in the collection of data.)

2. The introduction of environmental accounting firm level, based on perfect primary information provided by domestic companies and national sources of information.

Main problems in this aspect are:

1. The negative manifestations of corruption in all places in the Bulgarian administration, established in the last monitoring report the European Commission, which is one of the main reasons to be stopped the funds from the EU for Bulgaria. Without this support Bulgaria is unable to cope with the requirements of EU Environment.

2. The lack of broad knowledge and training of specialists in the field of environmental accounting and a system for their training and information in this field.

Prosledenite environmental costs increased from 1996 to 2008 continuously, and the forecast for 2009 and 2010, as we can see from the data given in the article.

The apparent effect of them is the creation of a management structure. Their increase, however, to this day has not given effect in the return of input in environmental resources and reducing the environmental cost.

The funds for ecology in Bulgaria have set up administrative staff, but have not yet contributed to improving the environmental situation in the country and to reduce the environmental cost.

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<sup>1</sup> Article 81 Environment

1. The parties will develop and strengthen their cooperation on **environment** and human health, which they regarded as a priority.

2. Cooperation will affect:

**effective monitoring of levels of pollution; systems for information about the state of the environment; combating local, regional and transboundary air pollution and water; sustainable, efficient and environmentally efficient production and use of energy; securing industrial plants; management of water resources of border watercourses, including transboundary watercourses, in accordance with the principles of international law and in particular in accordance with the provisions of the Convention on the conservation and use of transboundary watercourses and international lakes;**

classification and safe use of chemicals;

water quality, particularly of transboundary watercourses (including the Danube and Black Sea);

effectively prevent and reduce water pollution, particularly sources of drinking water;

reducing the quantity, recycling and safe waste, implementation of the Basel Convention;

the impact of agriculture on the environment, deterioration, salting and acidification of soils;

protect forests and their fauna and flora; recovery of environmental sustainability of rural areas;

planning of land use, including construction and planning gradoustroystvenoto;

management of coastal zones;

use of economic and fiscal instruments;

global climate changes and their prevention;

Education and dissemination of knowledge about the environment;

implementation of regional international programs, including for the pool of the Danube and Black Sea.

Cooperation will take place in particular by:

Exchange of information and experts, including experts and information relating to the transfer of clean technologies;

**Training programmes;**

harmonization of laws (by standards of the community), regulations, standards, standards and methodology;  
 Cooperation at the regional level, including for example, including implementation of joint programmes at the international level, particularly with regard to the management, conservation and water quality of transboundary watercourses; cooperation within the European Environment Agency, after it begins their work;  
 developing strategies, in particular with regard to climate and global problems;  
 Study of the effects on the environment;  
 improving management of the environment, including water management.

4. And **Protocol No 8** about outlines the arrangements applicable to the management, conservation and water quality of transboundary watercourses.

common interest of the parties to establish a financial assistance of Obshtnosttasaglasno relevant provisions of Part VIII system for monitoring the quality and quantity of water in their cross-border rivers, in order:

To reduce sufficiently the level of water pollution of transboundary rivers, ensuring environmental saobrazenoto their use in the economy, and efforts to prevent all other forms of contamination of these waters and in particular the pollution caused any accidents;

To establish a system for early warning to combat floods or dangerous levels of pollution of water in these rivers;

To strengthen efforts to fight against soil erosion, which is caused by transboundary watercourses;

To promote the rational use of water resources of transboundary rivers in accordance with the provisions of the Convention on the conservation and use of transboundary watercourses and international lakes;

To promote effective conservation of flora and fauna in the mouths of transboundary rivers in their respective territories.

A national programme to introduce European legislation

Program for building and strengthening the administrative capacity to implement European legislation on environment

Environmental Strategy for the instrument ISPA (Environment sector) (now blocked after the last monitoring Report of EC for the development of Bulgaria)

<sup>2</sup> Working in partnership with business could involve:

encouraging a wider uptake of the Community's Eco-Management and Audit Scheme ( EMAS);

encouraging companies to publish their performance and to comply with environmental requirements;

introducing company environmental performance reward schemes;

encouraging voluntary commitments;

establishing an integrated product policy;

promoting the use and evaluating the effectiveness of the eco-label scheme ;

the promotion of green procurement;

the adoption of legislation on environmental liability

**Eco-Management and Audit Scheme (EMAS)**

Any organization wishing to take part in the scheme must:

adopt an environment policy setting out the objectives and principles of its environmental measures;

conduct an environmental review of its activities, products and services (in accordance with Annexes VII and VI), except for organizations which already have a certified, recognized environmental management system;

introduce an environmental management system (in accordance with Annex I);

carry out regular environmental audits (in accordance with the requirements set out in Annex II) and make an environmental statement which includes: a description of the organization, together with its activities,

products and services; the organization's environmental policy and environmental management system; a description of its environmental impact, the aims with regard to the impact; the environmental performance of the organization and the date of the statement. That statement must be validated by an environmental verifier whose name and number must appear in the statement;

register the validated statement with the relevant Member State body;

make the statement available to the public

**Environmental liability – Directive**

The first EC legislation whose main objectives include the application of the "**polluter pays**" principle, this Directive establishes a common framework for liability with a view to preventing and remedying damage to animals, plants, natural habitats and water resources, and damage affecting the land. The liability scheme



applies to certain specified occupational activities and to other activities in cases where the operator is at fault or negligent. The public authorities are also responsible for ensuring that the operators responsible take or finance the necessary preventive or remedial measures themselves

<sup>3</sup> The eco-label aims to promote products with a reduced environmental impact compared with other products in the same product group.

<sup>4</sup> In the run-up to drafting and adopting the Directive on environmental liability implementing the polluter pays principle, this White Paper set out the structure of the planned Community liability regime. It describes the key elements needed to make this regime effective and practicable.

Environmental liability aims at making the cause of environmental damage (the polluter) pay for remedying the damage that he has caused (the "polluter pays" principle).

For the principle of liability to be effective:

polluters must be identifiable;

the damage must be quantifiable;

There must be a link between the polluter and the damage.

It is difficult to evaluate damage caused to biodiversity and this has to be done taking account of the cost of restoration or the cost of alternative solutions if restoration is not possible.

The overall economic impact of environmental liability at EC level

The impact of a Community liability regime on the EC's external competitiveness must be limited. The data on existing liability regimes have been examined and these show that their impact on the competitiveness of national industries has not been disproportionate. The effectiveness of any legal liability regime depends on the existence of effective financial security based on transparency and legal certainty with regard to liability. The Community regime should be devised so as to minimize transaction costs.

In conclusion, the Commission believes that the optimum solution would be to have a framework directive, which would invoke strict liability on the part of persons performing an activity and authorize certain defenses as regards traditional environmental damage, and provide for fault-based liability in the case of damage caused to biodiversity by non-hazardous activities

<sup>5</sup> LIFE+ finances schemes that contribute to the development, implementation and updating of Community environmental policy and environmental legislation. This financial instrument also seeks to facilitate the integration of the environment into other policies, and achieve sustainable development in the European Union. LIFE+ replaces a number of financial instruments used for environmental policy.

LIFE+ co-finances environmental schemes in the European Union (EU) and in certain third countries (EU candidate countries, EFTA countries that are members of the European Environmental Agency, and the Western Baltic countries that are part of the Stabilization and Association Process). Either private or public bodies and institutions may submit projects for funding

LIFE+ comprises three thematic components: "Nature and biodiversity", "**Environment Policy & Governance**" and "Information & Communication". The multi-annual strategic programme set out in Annex II to this Regulation details the priority areas of action for Community funding.

The Commission carries out audits of funding, monitors implementation of the activities, recovers any sums improperly received, and implements the activities funded

The Commission will carry out a mid-term review of LIFE+ by 30 September 2010 at the latest

<sup>6</sup> The Commission is evaluating ways to promote the use of fiscal instruments by Member States to increase the efficacy of environmental policy and ensure that environmental taxes and charges are used in accordance with Community legislation.<sup>6</sup>

#### **ACT**

Commission Communication of 26 March 1997 on environmental taxes and charges in the Single Market  
SUMMARY

In addition to framework measures harmonized at Community level, the implementation of an environmental policy also requires the provision of a number of economic, technical or fiscal instruments.

Environmental taxes and charges can be a way of implementing the "polluter pays" principle by inducing consumers and producers to adopt more environmentally compatible behavior.

There are two categories of environmental levies:

those charged on pollutant emissions (taxes on water pollution and on noise emissions in the field of aviation); Those charged on products (taxes on pesticides, excise on gasoline...).

Member States have considerable room for man oeuvre in fiscal matters (the annex contains a table of current national taxes). The revenue may be used to finance environmental protection activities, but also to decrease other taxes which are perceived as distorting the economy (such as labor taxes).

However, it is important to fix the level of environmental taxes and charges at an appropriate level to ensure that they have a real effect on the market

<sup>7</sup> The Commission is proposing to set a CO<sub>2</sub> emission limit on vehicle manufacturers for new cars registered in the European Union in order to achieve the average objective of 130 g CO<sub>2</sub>/km. If this is exceeded, the manufacturer concerned will be liable for financial penalties.

#### PROPOSAL

Proposal of 19 December 2007 for a regulation of the European Parliament and of the Council setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles.

<sup>8</sup> Official Journal L 168 , 10/07/1993 P. 0001 – 0018

<sup>9</sup> The Commission presents report on environmental indicators and green national accounting  
Achieving sustainable development needs better availability of data and better interactions between the economy and the environment. This is the main conclusion of a progress report the European Commission has transmitted to the Environment Council for discussion today, based on the Commission communication from 1994 on Environmental Indicators and Green National Accounting. The report further states that the pursuit of sustainable development, beyond the usual model looking exclusively at economic growth, requires a better integration of economic, environmental and social concerns and policies. Formulation, policy making and communication of environmental issues to the public would be strongly facilitated and improved with a sound basis of integrated data on economy and environment, showing in particular the environmental consequences of economic activity and the economic back-lashes of environmental degradation. "Knowledge and proper analysis of environmental indicators and green national accounting could also be highly relevant when the Commission before June 1998 draws up its strategy on how to integrate environmental protection requirements into the European Union's (EU) policies and activities, in particular with a view to promoting sustainable development as decided by the European Council in December 1997", said Commissioner for the Environment, Ritt Bjerregaard.

The progress report takes stock of the work done since adoption of the communication "Directions for the European Union on Environmental Indicators and Green National Accounting: Integration of economic and environmental information systems" in 1994. The communication aimed at providing a European system of integrated economic and environmental indicators and indices, as well as an European system of environmental accounts as instruments to facilitate sustainable development.

The communication set up a 5 year programme to develop an EU-wide framework for the integration of economic and environmental information systems, with a view to both integrating economic aspects in environment policies and environmental concerns in economic policies. Economic accounts mostly consider short term and market orientated flows, whereas aspects related to long term environmental phenomena such as global warming and the needs of future generations, are underestimated.

The report concludes that satisfactory progress has been achieved so far by volunteer Member States and European Union services. While there is a great convergence on the best concepts to be used, the main lesson learnt is that availability and quality of basic data is often the bottleneck for the development of both environmental indices and accounts.

#### Environmental pressure indicators

The goal of the pressure indicators project is to give a comprehensive description of the most important human activities having a negative impact on the environment.

A set of a selection of the sixty most important indicators will be published in 1998 from which 25 are already available. It is envisaged to aggregate these physical indicators to form a preliminary set of ten pressure indices with the help of panels of scientists designated by former associations and environmental NGOs.

Environmental Accounts to national accounts

A prototype methodological framework has been developed for most areas with experts from Member States. These frameworks, covering natural resources (forests, subsoil assets and water), emissions (to air and water) and data with environmental relevance in national accounts (environmental protection expenditure, eco-taxes, eco-industries) are being tested in practice by statistical offices of volunteer Member States. These pilot test accounts will be completed around the end of 1997, involving the countries most concerned by the particular problem. Suitably modified in the light of the experience gained, the accounts will be extended to all countries by the end of 1999.

Research into physical and monetary valuation

The relation between the national accounts (usually expressed in monetary terms) and environmental accounts (mostly expressed in physical units) and the necessity to fulfil gaps in data will require a significant work in the field of valuations of environmental resources. This work will provide data concerning the stocks, use, depletion and the degradation of environmental resources. Some first results are already available.

#### *Background*

All the work done and to be done was foreseen in the framework of the Commission's Communication COM(94)670 of 21 December 1994 outlining "Directions for the European Union on Environmental Indicators and Green National Accounting: Integration of economic and environmental information systems". The Communication was discussed and approved by the Parliament on 11 October 1995 but not so far by the Council. Raising the political debate on this issue is part of the objective of the transmission to the Council of a progress report on this matter.

<sup>10</sup> Decree N 85 from April 17, of Council of Ministers of Bulgaria 2007 FOR ORGANIZATION AND COORDINATION ON ISSUES OF THE EUROPEAN UNION / Prom, SG. 35 in 2007 /

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Art. 5. (1) Creates a Council of European Affairs at the Council of Ministers:

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Art. 7. (1) At the Council of European Affairs is set up and run works groups with leading institutions  
Council on the Environment - Minister of Environment and Water  
Working Group № 20 Name Environment - leading Office The Ministry of Environment and Water

<sup>11</sup> Art. 10. (1).

<sup>12</sup> Report by Dzhevdet Chakarov Minister of Environment and Water on the budget of the Ministry of Environment and Water in programming format for 2008

<sup>13</sup> Report by Dzhevdet Chakarov Minister of Environment and Water on the budget of the Ministry of Environment and Water in programming format for 2008

14 Rules for establishment of business and management of activities for environmental protection. Adopted by Decree № 319 of 29.12.2002 laying Act. SG. 3 of 10.01.2003, forced from 1.01.2003.

<sup>15</sup> Reports on the activities of the Enterprise to manage the activities of environmental protection (PUDOOS) in 2006 and 2007; Provisional budget for 2008

<sup>16</sup> Report by Dzhevdet Chakarov Minister of Environment and Water on the budget of the Ministry of Environment and Water in programming format for 2008

<sup>17</sup> Source: Euro stat

<sup>18</sup> Source: National Statistical Institute.

<sup>19</sup> Law for the denomination of Bulgarian lev published in the Journal I i bDarzhaven is no. 20 of March 5, 1999,(Adopted by XXX VIII of the National Assembly on February 19, 1999,amend., vol. 30, 1999, suppl., Vol. 65, 1999)Art. 1. From July 5, 1999, the Bulgarian lev is presented as U.S. \$ 1,000 to replace the old for 1 new Bulgarian lev.