

## **BULGARIAN NATIONAL REPORTING TO CSD-18**

### **Geographic, demographic, spatial and economic characteristics of the Republic of Bulgaria**

The Republic of Bulgaria is located on the Balkan Peninsula in the south-eastern part of Europe. Its borders are with the Danube River and the Republic of Romania to the North, with the Black Sea – to the East, with Turkey and Greece – to the South and with Serbia and Macedonia – to the West. The country's territory is 110 994 m<sup>2</sup>.

As a result of the demographic and migration processes by 31.12.2007 the constant Bulgarian population is 7 640 238 people of which 71% live in the cities and 29% - in the villages.

The political-geographic structure of the country is formed by 3 main territorial units: municipalities, districts and planning regions.

In Bulgaria there are 264 municipalities, whose size varies greatly – from 45 sq.km to over 1 200 sq.km. Each municipality consists of the settlements which comprise it and the adjoining land. The number of these settlements varies from 1 to 134. The Bulgarian municipalities are administrative and territorial units where the local self-government is carried out. They are legal bodies entitled to possess property as well as their own municipal budget. The municipalities correspond to level IV of the European statistical classification for territorial units NUTS.

The country is also divided into 28 districts. The districts are administrative and territory units implementing the regional policy of the government and providing compliance between the national and local interests. The administrative borders of the districts include 10-11 municipalities in average. The Bulgarian districts correspond to level III of the European statistical classification for territorial units NUTS.

There are 6 planning regions: North-Western, North-Central, North-Eastern, South-Western, South-Central, and South-Eastern. The planning regions correspond to level II of the European statistical classification for territorial units NUTS.

According to preliminary data of the National Statistical Institute (NSI), the real Gross Domestic Product (GDP) growth for the third quarter of 2008 is 6.8% which is by 0.3 percentage items less than the figure value for the first half of the year (7.1%). This is due to the unfavourable financial situation, the lowering of prices and of foreign demand for key products of the Bulgarian economy. In the third quarter of 2008 the GDP is 18 609.6 mill. BGN according to current prices, which is 2 430.0 BGN per capita. With average quarter currency rate of 1.301156 BGN = 1 USD, the GDP is equal to 1.301156 mill USD and 1 867.0 USD per capita. Calculated in euro, the amount of GDP is 9 514.9 EUR, which is 1 242.2 EUR per capita.

In the last quarter of 2008 the business climate in the country started to worsen. The lower level of the indicator is mainly due to worse expectations for the future business climate caused by the international financial crisis.

## COMMON ISSUES

In the rapidly changing, increasingly globalizing world and global crises (financial, food, energy and climate) we are facing, the success of nations, communities and individuals may be linked to, now more than ever before, how they accept the opportunity to reform global economic relations by a shift towards a green economy on the one hand and on the other, how well they adapt to change, learn and share knowledge.

That is why we should find the perspective on human well-being by answering how human and social capital and institutional arrangements and conditions are mutually reinforcing, and how they and their interaction contribute to positive social and economic outcomes – to well-being. This requires a discussion of the policy challenges and options involved in strengthening human and social capabilities.

Sustainable development means maintaining a delicate balance between the human need to improve one's lifestyle and feeling of well-being on the one hand, and preserving the natural resources and ecosystems on which we and the future generations depend, on the other. The challenge is to combine the protection of environmental quality with the continuing economic growth in a way which is sustainable over the long term. That is why the human capital plays a vital role in the achievement of the sustainable development goals.

With regard to this, there is political recognition (UNECE, 2003) that to achieve sustainable development and protect the environment it is necessary to include environmental requirements and objectives in the decision-making process within the different sectors of the economy. In this connection, Bulgaria is facing the challenge of achieving both the EU standards and requirements for the environment and sustainable development and of reforming the economy towards a more efficient use of resources. Bulgaria is also part of the Community's efforts in implementing the Energy-Climate Package and the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan. The response to this can be found in the Draft National Strategy for the Environment 2009 – 2018, which has been developed by the Bulgarian Ministry of Environment and Water and approved by the Council of Ministers this year. The Strategy builds upon the necessity to integrate the environmental dimensions into the economic and social ones. It will be the key document for conducting efficient environment policy by the respective institutions at national, regional and local level.

### **Mobilization of financial resources from all sources**

The following table shows the budget of the Ministry of Environment and Water between 2007 and 2009:

	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Ministry of Environment</b>	<b>EUR 136 million</b>	<b>EUR 289 million</b>	<b>EUR 570 million</b>

\* at an exchange rate of 1.942 BGN / 1 EUR

Concerning the EU Funds, the total amount of funds under the Cohesion Fund for 2008 is EUR 6,674 million. The transport sector received a significant contribution in Bulgaria, almost one third of the total EU funds (EUR 1.982 million). As regards the distribution of EU

funds over transport modes in Bulgaria, it can be stated that rail transport received less than half of the amount (EUR 464 million, 7.0%) that was allocated to road transport (EUR 1,064 million, 15.9 %), which last year generated criticism by NGOs. It should be mentioned, however, that these values are comparable to those of other New Member States (6.3%, for rail transport, and 13.4 % for all types of road transport).

Environment and risk activities were supported with EUR 1,461 million in 2008. These activities were financed mainly under the priorities of the Operational Programme Environment (improvement and development of water and wastewater infrastructure in settlements with over 2000 PE and in settlements below 2000 PE within urban agglomeration areas, improvement and development of waste treatment infrastructure, preservation and restoration of biodiversity).

The energy sector was supported with EUR 243 million, of which EUR 63 million was set aside to promote renewable energy and EUR 126 million to support energy efficiency. Energy efficiency and renewable energy production are promoted in the Operational Programme Competitiveness, under Priority Axis 2 “Increasing efficiency of enterprises and promoting supportive business environment”. The subobjectives are as follows: improvement of technologies and management in enterprises, creation of business support infrastructure, introduction of energy-saving technologies and renewable energy sources, promotion of business networking and clustering.

EUR 636 million was allocated for R&D in general, of which EUR 23 million was related to environmental processes. The Operational Programme “Regional development” 2007–2013 will provide resources for decreasing fuel consumption in public transport, energy efficiency in public buildings (hospitals, schools, social centres for disabled, etc.), as well as rehabilitation (including energy efficiency) in around 2000 apartment buildings.

The National Innovation Fund's (NIF) budget for promoting new technologies had a budget of BGN 3 million (EUR 1.5 million) in 2008. In order to support scientific and research projects the sum of BGN 500 000 (EUR 257,500) will be allocated; likewise for technical, economical and pre-project research the amount of- BGN 15 million (EUR 7.724 million) will be set aside.

One successful project proposal under the new EU [Financial Instrument for the Environment, LIFE+](#), was submitted by Bulgaria within the 2007 application procedure. The project is in the field of Nature and Biodiversity. The Bulgarian beneficiaries are partners in two international LIFE+ projects under LIFE+ component Nature and Biodiversity and in three international LIFE+ projects under LIFE+ component Environment Policy and Governance.

## THEME-SPECIFIC ISSUES

### CHEMICALS

#### *Risk assessment of chemicals including*

#### *Mechanisms for assessment, classification and labeling of chemicals, including initiatives for harmonized classification and labeling of chemicals”*

The **Global harmonized system for classification and labeling (GHS)** was adopted in 2002 from the United Nations Economic and Social Council (ECOSOC) and revised in 2005 and 2007. GHS aims to improve communication regarding dangers for workers, users and responsible persons for emergency safety, as well as in the transport sector through harmonized labels and where appropriate – with safety data sheets. The criteria of the Global Harmonized System for placing on the market and the use of chemical substances have been introduced in the legislation by Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures (CLP), which will replace the existing system. The new rules are coming into force for the substances on 1.12.2010 (1.12.2012 for the substances, placed on the market before 1.12.2010) and for mixtures on 1.06.2015 (1.06.2017 for mixtures, placed on the market before 1.06.2015).

In terms of national legislation, the criteria for classification, packaging and labeling of chemical substances have been introduced by the **Law of protection from harmful impact of the chemical substances and preparations (LPHICSP)**, Chapter 2. Pursuant to its provisions, any person who markets chemicals must classify them on the basis of their physicochemical, toxicological and ecotoxicological properties, and pack and label them according to requirements in the event that the substance is classified in one or more risk categories.

Regulation (EC) 1907/2006 of the European Parliament and the Council of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (**REACH**) introduces the requirement for companies producing or importing chemicals in quantities above one ton per year, to **register** those substances in the new Chemicals Agency in Helsinki. Registration is a requirement for industry to collect and generate a specific set of data on the properties of substances. This information is used to assess the dangers and risks that this substance may represent and to control these risks. The main objective of this system is to achieve a high level of protection of human health and environment by strengthening the role and responsibility of industry to provide reliable information on substances and to ensure safe use in the conditions of free movement of chemicals in the internal European market. REACH will facilitate further evaluation of **substances** for which there is reason to suspect might, pose a risk to humans and environment, as provisioning a system for **authorization** of substances of particular concern, such as substances that cause cancer, infertility, genetic mutations, generic defects, and also substances that are persistent and accumulative in the human body and in the environment.

*“Initiatives to assess the toxicity of substances, risk and danger assessment and participation in various international and regional initiatives; strategies for assessing exposure, environmental monitoring and improving the procedures for using toxicological*

**and ecotoxicological data for predicting and evaluating the effect of chemicals on human health and the environment”.**

Requirements for toxicological and ecotoxicological evaluation of chemicals on human health and the environment have been introduced in **LPHICSP** and regulations thereto. Biocidal products are marketed and used after authorization by the Minister of Health. The draft permit is considered at the Expert’s Council on Biocides, based on toxicological expert opinion, prepared by the Ministry of Health (MoH) and ecotoxicological expert opinion, prepared by the Ministry of Environment and Water (MEW).

Plant protection products (PPP) are placed on the market after issuing a certificate for marketing, prepared by the Minister of Agriculture and Food (MAF). The draft of the certificate is accepted by the Committee for authorization of plant protection products on the basis of:

- expert ecotoxicological evaluation prepared by MEW;
- expert toxicological evaluation prepared by the Ministry of Health (MH);
- report for physical and chemical properties, analytical methods, residues and efficacy of PPP, prepared by MAF.

**“Exchange of information and cooperation, ensuring data quality, implementation of criteria for assessment and activities in relation to risk reduction”**

Regulation (EC) 1907/2006 of the European Parliament and the Council of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) introduced a procedure of registration for a period of 11 years for approximately 30.000 chemical substances that are current-use, a process that will allow the missing information about the dangers caused by substances to be collected , and at the same time enable the appropriate risk management measures to be identified.. The industry will be committed to collecting the necessary data for the substances and identifying measures to control risk.

***“Effective management of toxic substances:***

**Policy, undertaking measures for exclusion of chemicals, which poses hard controlled risk for human health and environment, such as ozone depleting substances”**

In the Law on Protection from the Harmful Impact of Chemical Substances and Preparations (LPHICS) measures for the implementation of Regulation (EC) 689/2008 of the European Parliament and of the Council concerning the export and import of dangerous chemicals and Regulation 850 /2004 of the European Parliament and of the Council on persistent organic pollutants **have been listed.**

In line with a requirement of the Regulation (EC) 689/2008, the exporters of dangerous chemicals, which are used and put on the market are banned or firmly restricted in the EU (such as plant protection products, biocides or industrial chemicals for professional or mass uses) and are obliged to notify of the first year’s export, giving information about the dangers and risks of these substances. In addition, the export of certain dangerous chemicals is realized only after receiving the explicit consent for import of the competent authorities of

those countries, which accept import. This consent may contain additional conditions and dates.

Persistent organic pollutants (POPs) are not produced in Bulgaria. The import of POPs is prohibited in Bulgaria as follows:

Preparation	Years of prohibition
Aldrin	1969
Dieldrin	1969
Endrin	1969
Mirex	Never have been imported
Toxaphene	1985
Hexachlorobenzene	Never have been imported
Heptachlor	1991
Chlordane	Never have been imported
DDT	1969

Annually awarded funds from the Enterprise for Management of Environmental Protection Activities (EMEPA), are granted to municipal projects for safe storage in repaired or newly renovated centralized warehouses or permanent storage in BB – cubes or disposal abroad of obsolete pesticides.

Bulgaria does not produce substances that deplete the ozone layer. Therefore, the criteria for performance of obligations under the Montreal Protocol is only about their import, export and use.

In 1996 the import of chlorofluorocarbons (CFC) was prohibited, and since 2007 the use of recycled or reclaimed CFC for maintenance of existing refrigeration and air conditioning has been prohibited. The use of partially halogenated chlorofluorocarbons (HCFC) is authorized, in accordance with the timetable for phased termination of their use.

Since its accession to the European Union in 2007, Bulgaria has implemented the requirements of Regulation (EC) № 2037/2000 on substances that deplete the ozone layer. Measures for the implementation of the Regulation are established as amended in 2006 by the Clean Air Act (promulgated SG. 99/8.12.2006 ) and amendments to the Decree № 254/1999 for management and control of substances that deplete the ozone layer (amended and supplemented by Decree №.28/06.02.2007 ).

Regulation (EC) № 2037/2000 provides for termination of the marketing and use of ozone depleting substances (ODS) for a short time, including the HCFC, than those set forth in the Montreal Protocol and its amendments. The European Commission (EC) has introduced an electronic licensing of imports and exports of ODS; permits are issued by the Commission after the approval of the Member States. Each year before September, the European Commission publishes notices in the Official Journal to potential users, importers and exporters in the European Community.

## **„Policies and frameworks for the prevention of accidents, preparedness and response”**

In the Environment Protection Act, Chapter VII "Preventing and reducing the industrial pollution" and in the Regulation for prevention of major accidents involving dangerous substances and limiting their consequences, measures have been introduced limiting their consequences for human life and health and for the environment. Under these regulations, any operator of a new or existing establishment and / or installation in which certain quantities of dangerous chemicals are used and / or stored, shall be classified as an establishment and / or installation with low risk potential or establishment and/or installation with high risk potential about which the Minister of Environment and Water is to be informed..

The Minister of Environment and Water issues a permit under Art. 104, para. 1 of the Environmental Protection Act (EPA). The permit may set conditions concerning the construction and operation of the establishment and / or installation.

Documents necessary for authorization of an establishment with **low risk potential**:

- Notification for classification of establishment and / or installation and
- Report on the policy to prevent major accidents (RPPMA).

RPPMA comprises information on: general objectives and policies regarding the safe operation of the establishment and / or installation, measures to be taken by the operator to reduce the risk of major accidents; management system for safety measures.

Documents necessary for authorization of an establishment with **high risk potential**:

- notification for classification of establishment and / or installation
- Safety report (SR).

The SR contains: report on policy for preventing major accidents; information about the environment in the area of establishment and / or installation; installations, processes and activities in the establishment; risk assessment of major accidents and the measures and means to prevent and / or limit their consequences; information about the organization created to comply with the rules and regulations for fire safety - risk assessment of fire, measures and means to prevent and / or reduce and mitigate the fires, documents on the status of automatic fire and the fire appliances and equipments.

- Emergency plan for the establishment and / or installation, containing specific individuals and actions to be taken in case of emergency situation.

## **MINING**

### **Policy and regulations**

#### ***National legislation***

Underground resources in the Republic of Bulgaria are owned exclusively by the state. Their exploiting is provided under permission and concessions arrangements through the provision of rights for prospecting and/or researching and mining rights.

Relations in the field of mining are regulated by the Law on Underground Resources (LUR) adopted in March 1999. The competent authorities in the implementation of LUR are the Council of Ministers, the Minister of Environment and Water, the Minister of Economy and Energy, the Minister of Regional Development and Public Works. Mineral resources are divided into 7 groups. The Council of Ministers grants mining rights – concessions. The terms of the concessions are set up by the Ministry of Economy, if the object of the extraction is in the field of metal, non-metal, oil and gas or solid fuel and by the Ministry of Regional Development and Public Works if the object of the extraction is in the field of construction and rock-lining materials.

The permits for prospecting and/or researching are issued by the aforementioned authorities, depending on the natural resources group after the explicit consent of the Council of Ministers.

The Law ensures the implementation of the competitive principle in the provision of rights for prospecting and/or researching. Candidates for these rights could be a local or foreign natural or legal person who is registered as a trader in accordance with the legislation of the place of business of the trader.

The candidate trader is free to choose the area of prospecting and/or researching, but there are 3 types of restrictions:

- The applicant should have the necessary management and financial capacity and his working programme should meet the technical and technological standards and environmental requirements;
- The required area should not exceed the designated maximum size and be available;
- There is no threat to the national security and defense of the country, to the earth's womb and environment, protected areas, sites and monuments of culture, health of the workers.

### ***Fiscal policies and counteracting market fluctuations***

The prospecting and extracting are performed on behalf of the holders of the rights. The holder of the permit for prospecting and/or researching should pay an administrative fee for issuing a permit and an annual area fee which is charged per square kilometer occupied area and varies depending on the natural resources group. Some clauses for reduction of the concession fee up to 50% or exemption from the obligation to pay for the period of 5 years, if there are unfavourable mining, geological, technological and economical characteristics of the field or renovation of the extraction in the municipalities with long-term unemployment are laid down in the Law. In order to counteract the market fluctuations the provisions of the concessional agreements could be agreed on subsequently, but within the limits specified in the regulation.

Regarding the other state claims such as customs duty and taxes – corporate, profits, value added, they are defined and regulated by relevant common laws and no exceptions and preferences are provided for extractive companies.

### ***Regulations and mechanism for compliance and monitoring***

The activities regarding permits for prospecting and/or researching, as well as the activities of mining and processing mineral resources, are performed in accordance with work projects elaborated by the holders and approved by the Minister of Environment and Water. The work projects include detailed activities, ways of their implementation, environmental protection measures, conducting self monitoring and the amount of the funds. The implementation of work projects is supervised by the competent public authority having concluded a contract for prospecting and/or research or for extraction, as well as by the Regional Inspectorates on Environment and Water. Other public bodies have issued special permits, such as for explosive work, discharge of mine waters etc., control the compliance with the conditions of those permits.

### ***Guidelines for artisanal, small and medium scale mining***

The same requirements apply, regardless of the size of the undertaking, the volume of extraction and the type of the mineral resources.

### ***Public/stakeholder consultation and participation in decision-making related to mining***

In the process of issuing permits for prospecting and/or researching the district governor and the Mayor of the settlement where the area of prospecting and/or researching is located, are notified by providing the copy of the permit, including the coordinates of the area. The Mayor of the settlement provides information to the local population and takes the project into account in planning the municipality's activities. This information is necessary in planning the development of the municipality, because the Law (LUR) protects the fields of mineral resources and prohibits construction over them. This is a short-term prevention and security measure at early stage, because not all activities regarding prospecting and/or researching lead to the establishing of a field. When a field is established by a permit holder, investment intention for mining shall be subject to assessment of the need of Environmental Impact Assessment (EIA). The procedure of conducting the assessment is regulated in the Environmental Protection Law, where the procedure for public consultation on the investment proposal for extraction is provided. The legal proposals and requirements of the local population are taken into account and included in the decision issued under the the Environmental Protection Law. The decision includes requirements related to all stages of the investment proposal – projection, construction, exploitation and closure.

### ***Public governance and transparency in the mining sector***

All rights to mineral resources (permits, concessions) shall be published in special registers, access to which is free. All operators are required to keep records on the plans and measures on environmental protection, public safety and health, and to provide information to the stakeholders. Operators of the larger sites create and maintain information centers. At the same time the access to public information is guaranteed by the Public Awareness Law.

## **Mining best practices**

### ***Environmental Impact Assessment and monitoring of all phases of a mining operation***

As mentioned above each of the investment proposals is subject to estimation of the need for EIA. The Minister of Environment and Water and the 16 Regional Inspectorates on Environment and Water are the Competent authorities to carry out this estimation. When the estimation confirms the need for EIA, the Investor awards the preparation of a report for EIA which is widely discussed by the public.

The conduction of investor's self-monitoring is a mandatory clause of the Decision.

### ***Private Public Partnership (PPP) for sustainable mining***

Public private partnership in the field of mining is carried out by the concession. The concession is a payment right for usage, when the activity is conducted on behalf of the concessionary and the state has received the concession fee. In accordance with the Law (LUR), the concessioner shall pay 30% of the concession fee directly to the municipality/municipalities on whose territory the concession facility is situated. The concession also may include a requirement for mandatory improvements. These improvements are most often connected with public utilities.

### ***Emergency Response Plans and Preparedness at the local level***

Every holder of mining rights shall draw up emergency plans which have to be agreed with the competent authorities.

### ***Risk assessment of mines and mining activities***

In assessing the risk the conditions in the region where extractive activities will be carried out, the nature of the activities and their consequences are taken into account.

### ***Rehabilitation of affected communities and life-supporting ecosystems, including mine site decommissioning***

Rehabilitation activities for the areas which will be affected by mining activities are planned together with the projection of the mining activities themselves. Depending on the conditions and the technologies applied, the rehabilitation is done in parallel with the extraction or after its completion. Extraction companies produce and periodically update the work projects for rehabilitation of the affected lands and the mining site closure.

### ***Technological, institutional and social initiatives for protecting the health of mining workers***

The work projects include parts or sections on labour protection and safety which identify measures for safe operations and the creation of safe and healthy working conditions.

Labor medicine departments which monitor, analyze and evaluate the health of workers in relation to existing working conditions and assist employers in implementing new initiatives for ensuring safe and healthy working conditions are being created in the extractive companies.

### ***Mine Closure Planning (Land use plans & site rehabilitation, site safety, decommissioning, waste dump & tailing, site water management, off-site infrastructure, community socio-economic programs and employees)***

The closure of mining sites is conducted after the finishing of the mining activities. For this reason projects for liquidation of the site are elaborated, as well as projects for recultivation of affected terrains. Mining waste facilities shall be closed by special projects in accordance with an order defined in the regulation.

## **TRANSPORT**

The basic goals of the national transport policy are focused on sustainable development of the road and railway infrastructure of national and international importance, improvement of the transport safety, encouragement of maritime and inland waterway navigation, integration of national transport system in the EU transport networks, achievement of balance and development of links between different transport modes.

Achievement of these goals is a pre-condition for sustainable and balanced long-term economic growth. The improvement of existing infrastructure and the development of transport links in the direction of the Trans-European transport corridors passing through the territory of Bulgaria will increase passenger and cargo flows. This will have an immediate positive impact on the national economic development, the growth of employment and the prosperity. The development of environmentally friendly transport and the extensive construction of by-passes encircling urban settings will contribute to achieving ecological balance and enhance the quality of life in cities and regions.

Over the recent years, we are pleased to note that progress has been made in access to transport services, including by the rural population. The process of restructuring in the railway sector had a largely positive impact in this area. The strategy of the Bulgarian State Railways – Passenger Services Ltd. which reflects market trends, includes as follows:

- Quality improvement of offered railway transport services, in particular quality improvement and use of the rolling-stock;
- Volume of the transportation services, appropriated to market conditions and adequate behaviour of the operators in the conditions of a strong competition between transport modes;
- Full state compensation of the loss of the social transportation services of Bulgarian State Railways – Passenger Services Ltd.

- Fulfilment of the assigned public service obligations by the national rail carrier in order to reach a certain level of transport servicing, as well as conditions for free of charge and discount railway journeys of benefit to society (for particular social groups specified and approved in the legislative acts of the Council of Ministers, in compliance with the Public Service Obligations Contract between the State and the carrier)
- Priority development of inter-city transport;
- Development of tourist and special travels using specific rolling-stock on the railway network of Bulgaria.

The fuel price increase is the main instrument for putting the consumers under pressure for economical use of the road transport. In the last years there is a rise in the oil price on the international market, there is a significant increase of the fuels prices but despite this there has been increased consumption of fuels in the transport sector. The active measures directed at achieving energy efficiency are: fuel taxes; technical inspections; speed limits outside of the cities, etc. The removal of excise duty on biofuels, which facilitate the usage of these types of fuels with production price far higher than diesel and petrol, is also a measure.

We can say that in Bulgaria there are already some working measures (similar to other EU countries), contributing for reduction of transport fuel consumption, namely:

- taxes on the use of liquid fuels for transport
- The excise duty and VAT are about 50% of the petrol and diesel fuel prices;
- Tax reductions for biofuels and other clean fuels – zero excise duty for biofuels and natural gas and reduced tax rates for the liquefied petroleum gas
- Obligatory regular technical inspections of the vehicles – at six months interval for the public transport vehicles and annual for the rest.

The “National long-term programme for promotion of the biofuels use in the transport sector 2008-2020” defines the national indicative targets for biofuels consumption as follows: 2008 – 2%, 2009 – 3.5%, 2010 – 5.75%, 2015 – 8%, 2020 – 10%. The wider use of biofuels in the transport sector is one of the measures for achieving the objectives of the Kyoto Protocol. It is also one of the Bulgarian instruments for lowering the usage of imported fuels and energy and as such will contribute to securing the energy supply in medium and long-term.

For Bulgaria, 2008 was the first year with a specific target for biofuels consumption in the transport sector and the usage of biofuels is still insignificant.

A main issue of the Ministry of Transport’s policy is the development of intermodal transport and logistics infrastructure. In order to create effective logistics chains there is a need for obstacle elimination, for optimum use and combination of all transport modes, for encouraging training and best practices exchange in the EU, for improvement of the standardisation and the operational compatibility between the different transport modes. The intermodal terminals are the most important part of the logistics chain and the Ministry of Transport directs its efforts towards construction of such terminals and, subsequently freight villages. The following projects are in a process of realisation: “Construction of intermodal terminal in Sofia” and “Construction and development of new container terminals at the ports of Varna-East and Bourgas-West”. The funding of the projects for construction of intermodal terminals at Plovdiv and Rousse was approved in the TEN-T Annual Programme 2007.

The Republic of Bulgaria develops an effective urban transport policy according to the Green Paper “Towards a new culture for urban mobility”, elaborated by the European Commission in 2007.

The achievement of sustainable urban mobility is a challenge for all big cities in the world. In this respect, a common policy coping with this problem is needed, a policy which will be able to respond to the people's expectations and will reduce the negative environmental impacts.

The joining of efforts at all levels: local, regional, national and European is necessary in the implementation of transport policy.

The sustainable urban mobility should make possible the long-term economic development of the cities, the quality of life of their inhabitants and the protection of the environment.

Among the main challenges that the big cities in Bulgaria face, are : traffic congestions in towns; pollution of the environment and the noise negative effects; more efficient urban transport organisation and improvement of the accessibility, as well as raising the safety and security issues of urban transport.

In the urban transport planning and development Bulgaria conducts a policy orientated towards development of accessible infrastructure, usage of more environmentally friendly and secure vehicles, introduction of intelligent transport systems for urban traffic control, utilisation of integrated transport schemes and charging schemes for overall improvement of the urban transport.

Other important issues are the improvement of the energy efficiency in the transport sector and ensuring a more favourable impact on the environment, the air quality and climate change ect..

The only sector in which the consumption growth exceeds the GDP growth significantly is the transport sector and respectively the energy intensity as a ratio of the consumption and GDP is growing. The transport's share in the overall energy consumption has increased from 23.1% in 2001 to 28.1% in 2007.

The road transport, which uses about 90% of the overall energy consumption in the transport sector, has the greatest impact on the energy consumption,. The road transport relies mostly on oil fuels, whereas the railway transport is much more energy effective – more than half of the used energy is electric power (56% for 2007).

Taking into account these facts and the expected growth of the freight transport in the period 2000-2020 with about 50%, the policy in the area of energy efficiency in the transport sector is focused on:

- Improving the transport infrastructure;
- Renovating the motor fleet;
- Improving the organisation and enlargement of the scope of intermodal transport;
- Encouraging the share growth of energy effective modes of transport (railway, inland waterway and maritime);
- Encouraging the use of public transport;
- Improving the organisation and traffic control in the urban areas;
- Encouraging the use of biofuels;
- Improving the professional competency of the vehicle drivers.

The state policy concerning the energy efficiency in the transport sector is implemented in accordance with the Energy Efficiency Law and by the realisation of: energy efficiency orientated programmes in the transport sector – “First national energy efficiency action plan 2008-2010”, “National long-term programme for promotion of the use of biofuels in the transport sector 2008-2020”, etc.

The legislation on the effective control of the vehicle efficiency concerns:

- Routine inspections on the technical roadworthiness of the motor vehicles – obligatory technical inspections and emissions control of the vehicles. Due to high average age of the motor fleet in Bulgaria, the maintenance and the repair of the vehicles has direct impact on the reduction of the fuel consumption. The inspection is done in special stations for technical examination and public transport vehicles are checked at every 6 month; the rest of the vehicles are checked annually. The inspection includes control of the technical condition of the main systems of the vehicles and the permitted level of the CO<sub>2</sub> emissions and smoke in the exhausted gases;
- Approval of new types of motor vehicles according to the permitted level of noise and the type of the exhaust system;
- Approval of new types of vehicles with diesel engines in terms of the permitted level of the exhausted emissions;
- Approval of new types of motor vehicles according to the permitted level of air pollution by emissions from engines.

In the transport research development we carry out a policy focused on the cooperation with the Bulgarian Academy of Science, as well as with many universities, institutes, associations and branch organisations in the country.

Science and research sector representatives take an important part in the activities, related to the high-technologies, research issues, as well as in the European and international climate change policies. We organise regular meetings and discussions with the participants of branch organisations, syndicates, non-governmental organisations and associations dealing with current transport sector topics. A favourable business environment was created and a constructive dialogue was achieved in the elaboration of the legal base in cooperation with participants from different branch organisations.

Two Framework Agreements for cooperation between the Ministry of Transport, the University of National and World Economy and the University of Architecture, Civil Engineering and Geodesy were signed in 2008. These agreements are a good basis for cooperation with Bulgarian science representatives in the development of a policy in the field of research and transport technologies.

The main goals underlined in the European Commission's Seventh Framework Programme in which the Ministry of Transport performs coordinating functions are related to the achievement of a technological and operational progress on the European transport policy, the development of integrated, safe, greener and more modern Trans-European transport networks for the benefit of all citizens.

The intermodal transport development is one of the main factors for the increase of the competitiveness by modes of transport. The intermodality is the most universal and perspective transport system which combines the advantages of the transport modes and in this respect the system provides benefits for the individual participants as well as the society in general. The intermodality is the basis of the present transport logistics and plays a key role in the urban mobility development in Europe. It is related to the achievement of other significant goals as the environmental protection and the security of the energy supplies.

The development of the urban transport is very important for the performance of a sustainable transport policy in relation to decreasing of vehicles utilisation and promoting the utilisation of environmentally friendly vehicles. The road congestions are the main

obstacle to urban transport development and have negative effect on economy, lead to increase in costs, pollution and loss of time.

The main measures to mitigate congestions are related to the improvement of the management and utilisation of the existing capacities, changing systems implementation, adding capacity where it is needed. We consider that a close cooperation between transport authority, industry and private sector is needed in order to elaborate a strategic approach to deal with the congestions.

In March 2009 the Council of Ministers of Bulgaria adopted a new directive promoting clean and energy efficient road transport vehicles. The directive aims at stimulating the market for clean and efficient vehicles and at prompting development and investments by the industry.

The uniform standards and the introduction of strong environmental criteria for purchase and exploitation of transport vehicles stimulate supply and demand of alternative and energy efficient technologies.

Another possible measure directed at energy conservation in the transport is the development of on-ground and underground public transport. The project for extension of the Sofia underground is included in one of the priority axis of the Operational Programme on Transport. The realisation of this project started in the end of 2008 and its successful completion will improve the environmental situation and the traffic in the city.

## **WASTE MANAGEMENT**

The Ministry of Environment and Water plays a leading role in collection, publishing and dissemination of information for the state of the environment and in particular the information related to waste management. The Ministry performs these functions through the Executive Environmental Agency and through the system of Regional Inspectorates of Environment and Water, in compliance with the Waste Management Act.

In the centre of the sustainable economic approach is the improvement of environmental effectiveness and the effectiveness of the use of materials, which is of specific importance to waste management. Profitability and efficient use of raw materials, recycling and the substitution of conventional raw materials with bio-materials from renewable sources become increasingly important. At the same time, better solid waste management would also lead to greenhouse gas emission reduction.

In retrospect, waste landfilling has been the most frequently used solid waste treatment method in the EU, but a significant drop has been recorded in its use during the last two decades. From an environmental point of view this is also the least preferred possibility in the waste management hierarchy. According to European Environment Agency, 47 % of the total waste amount in the EU has been land filled in 2004. This trend is expected to be kept and landfilling to reach 35 % in 2020. Utilization and recycling are also expected to rise from their present level of 36 % and reach about 42 % in 2020. Incineration is used only for 17 % of the solid waste in 2004 and the trend is this percentage to reach 25 % in 2020.

These past and expected trends are partially due to dedicated policies directed towards raise in recycling and utilization of packaging waste (ex. Directive on packaging and packaging waste) and divert biodegradable municipal waste away from landfills (ex Directive on the

landfill of waste). Reduction as a whole of the solid waste intended to landfilling as a result of the efforts at national and European level to achieve the goals predicted in the 6<sup>th</sup> Environment Action Programme is observed.

In implementation of the EU commitments of Bulgaria, related to the establishment of a system of facilities ensuring environmentally sound treatment and disposal of the total waste generated in the country and closing of all existing facilities which are not in conformity with the requirements of the legislation and the modern technical standards, the National Waste Management Programme 2009-2013 defines a long term sustainable waste management strategy and a framework of decision making in compliance with the EU legislation and policy.

### **Packaging waste**

Pursuant to the Waste Management Act a hierarchy of waste management has been introduced as a first priority. The second priority is utilization of waste through recycling, reuse and / or extraction of secondary raw materials and energy. At the end of 2006, the organized solid waste collection has covered 90 % of the population of the country. The stage by stage introduction of a separate packaging waste collection started in 2003. Projects in 7 municipalities were started by 2005 with co-financing from the Enterprise for Management of Environmental Activities. In 2006, projects for separate packaging waste collection of 4 municipalities were approved.

At present six packaging waste recovery organization are operating on the territory of the whole country.

### **Pre-treatment facilities**

In the period of action of the National Waste Management Programme the construction of 23 facilities for pre-treatment, including separation, composting and mechanical and biological treatment to be placed on the territory of the regional landfills or at separate sites depending on the specific conditions in the municipalities is planned.

### **Hazardous Wastes**

Information on hazardous waste on the territory of the country is collected only by the structures of the MOEW.

The generated hazardous wastes quantities for the period 2003-2006 are presented in Table 4. The presented data are based on the annual reports submitted by the companies that generate or treat hazardous waste.

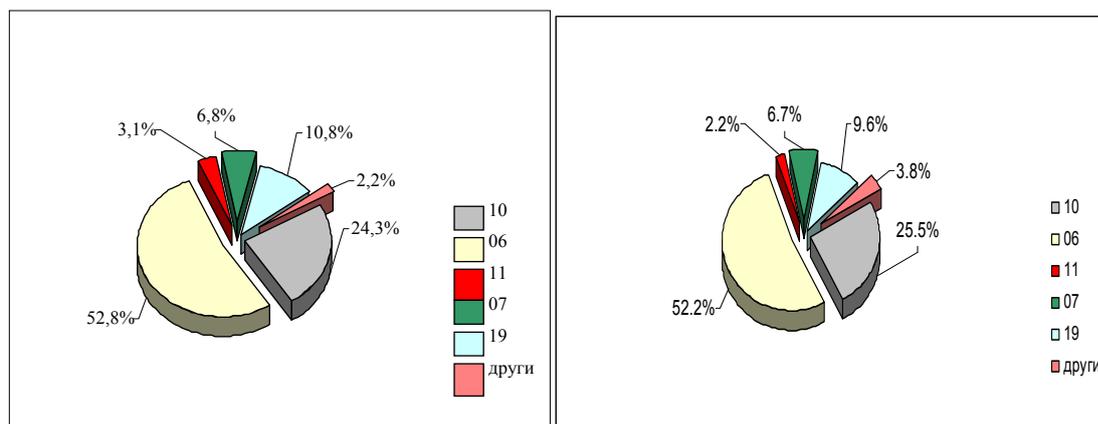
Table 4. Hazardous wastes quantities reported by groups for the period 2003 – 2006

	Waste quantities [t]				
	year	2003	2004	2005	2006
Generated hazardous waste		625 167	526 087	1 113 160	859 875

Source: ExEA

The data reported by the industrial enterprises show that in 2006 the hazardous wastes generated from the inorganic chemical processes take the largest share /52,2 %/, followed by waste resulting from thermal processes /25,5%/ and from the equipment of the waste water treatment plants and the water industry (drinking and process water) /9,6 %/. For the year 2000 their share was respectively– 52,8%, 24,3% and 10,8%, which shows relatively constant waste quantities, generated by these activities.

#### Hazardous waste - Groups with the largest share in 2005 and 2006



Group 10 – waste from thermal processes

Group 06 – waste from non-organic chemical processes

Group 11 – waste from surface chemical treatment and coverings on metals and other materials; from non-ferrous hydrometallurgy

Group 07 – waste from organic chemical processes

Group 19 – waste from facilities for treatment of waste from WWTP and from facilities for preparation of drinking water and water for industrial use.

In medium and long terms it can be expected that the quantities of hazardous waste will be reduced as a result of the implementation of the measures envisaged in the corporate programs related to prevention and reducing the content of hazardous substances in waste.

Transport of hazardous waste is carried out mainly by the waste owners or by persons with licence for carrying out activities with that type of waste. The transportation is carried out in compliance with the international legal acts for transportation of hazardous loads, ratified by the Republic of Bulgaria, and in compliance with the national legislation.

## **Import, export and transit of waste on the territory of the Republic of Bulgaria is carried out in accordance with Regulation 1013/2006/EO**

### **Landfilling of hazardous waste**

By the end of 2008 11 landfills for hazardous waste are operating in the country, 8 of which comply with the regulatory requirements for environmental protection.

The main part of the hazardous waste landfills in operation are constructed by the enterprises, generating the waste, accepting only their own waste. The exceptions are only the cells for hazardous waste in the regional landfills of Rousse and Sevlievo as well as the hazardous waste cell on the landfill of “KCM – Plovdiv”, which will accept certain types of waste from other generators.

### **Hazardous waste disposal facilities**

Taking into account the requirement for ensuring an adequate system of disposal installations and facilities it is necessary to construct a National centre for disposal of hazardous waste generated mainly by the activities of small and medium waste generators. The Centre will consist of a hazardous waste landfill and respective auxiliary sites. The national infrastructure for hazardous waste disposal will also include the hazardous waste cells of some of the regional waste landfills.

The companies generating large quantities of hazardous waste, mainly from oil processing and non-ferrous metallurgy, have constructed or are constructing their own disposal facilities, in compliance with the issued Integrated Permits for Pollution Prevention and Control and the endorsed Plans for bringing the existing landfills in compliance with legislative requirements.

In order to ensure the hazardous waste disposal in the country before the establishment of the national system, the export of hazardous waste will be implemented, mainly in the EU observing the requirements of the legislation in force – Regulation 1013/2006 on shipments of waste and the Basel convention on the control of transboundary movements of hazardous wastes and their disposal.

Eighteen installations for disposal of infectious waste from hospitals are operating in the country. Most of them treat their own waste by using autoclave and microwave technologies and some of them work as separate installations collecting and receiving waste for treatment from different hospitals.

## **Solid (Non-hazardous) waste and sewage**

### **Solid waste disposal facilities**

The National Waste Management Programme covers measures and activities on reconstruction and construction of 55 regional landfills for solid waste disposal, some of which with separate hazardous waste cells. These landfills should have the necessary capacity to receive the whole quantity of subject to landfilling waste in the country. By 2008, 27 regional landfills have been constructed and operated which are in compliance with Directive

1999/31/EC on the landfill of waste. They service about 55 % of the population of the country. Six regional landfills are in a process of construction and 23 regional waste landfills are at different stage of preparation for construction.

### **Industrial non-hazardous waste disposal facilities**

The construction of new facilities for disposal and/or recovery of industrial non-hazardous waste, which to substitute the existing landfills in the enterprises, is an obligation of the respective operators, according to the deadlines in the endorsed Plans for bringing the existing landfills in compliance with the legislative requirements or the issued Integrated Permits for Pollution Prevention and Control. The big generators of industrial non-hazardous waste, mainly from thermal power plants, chemical industry and ferrous metallurgy, are in a process of construction of their own waste disposal facilities.

The smaller generators of industrial non-hazardous waste will use the system of regional waste disposal landfills.

### **Waste water management (Sewage)**

As a result of the climate change the water resources in Southern Europe will decrease. Bulgaria is one of the countries in Europe which are most deficient in water resources. The annual quantity per capita is about 2300 – 2400 m<sup>3</sup>, and the usable part of it is 800 – 1000 m<sup>3</sup>/capital/year. The use of accessible water is limited by its worsened quality as a result of pollution with urban and industrial waste water as well as contamination by diffusion sources. Taking into consideration the tendency towards increasing of water consumption, it is expected that the deficit of water will grow and will become a very serious social, economical and environmental problem for the country. That is why the waste water treatment is very important.

The main act for water protection at European level is Directive 2000/60/EC establishing a framework for Community action in the field of water policy (Water Framework Directive). It unifies the requirements of different Directives in order for a general objective to be reached, i.e. the achievement of good condition of the water no later than 31.12.2015 through implementation of the requirements of the single Directives.

One of the most important Directives, included in the Water Framework Directive as an instrument for achievement of good condition of water is Directive 91/271/EEC concerning urban waste water treatment. The engagements of Bulgaria under this Directive are related to the construction of sewage networks and the provision of biological treatment of the urban waste water for all agglomerations with more than 2000 population equivalent.

For carrying out the Directive, Bulgaria elaborated an Implementation Programme. It indicates the needed investments and the terms for construction of the sewage networks and the wastewater treatment plants for every one of all the 430 agglomerations.

The Republic of Bulgaria negotiated the following transitional periods for implementation of the Directive with the European Commission:

- For construction of wastewater treatment plants and construction of sewage networks within agglomerations of settlement with over 10 000 population equivalent – no later than 31 December 2010;
- For construction of wastewater treatment plants and construction of sewage networks within agglomerations of settlement with population equivalent between 2 000 and 10 000 – no later than 31 December 2014.

At this stage there are 80 wastewater treatment plants in the country – 16 of them provide only mechanical treatment and 64 provide both mechanical and biological treatment. In some of the wastewater treatment plants technologies for removing the biogenic elements – nitrogen and phosphorus are applied. Many of the wastewater treatment plants have to be expanded, reconstructed and modernized, because they were put into operation more than 20 years ago and their capacity or used technologies do not meet the current requirements.

Fifteen river valleys are identified in Bulgaria, but almost 1/3 of all existing urban waste water treatment plants are located within only one of them - the Black sea river valley, that corresponds to the national priorities in the field of tourism. With respect to the sewage system, settlements with the fully constructed sewage systems are few of the total number of settlements in Bulgaria. In a big part of the country the sewage system has to be constructed.

In order to implement the commitments for sewage network construction, as well as waste water treatment construction, Bulgaria uses different financial sources. In the period before Bulgaria's EU accession, construction of the sewage network and urban waste water treatment plants was implemented with financial support from the State budget, Enterprise for Management of Environmental Protection Activities (EMEPA), as well as from the pre-accession EU instruments – ISPA and PHARE.

As a full member of the European Union, Bulgaria can use its structural and cohesion funds. In this respect Operative Programme “Environment 2007-2013”, was elaborated and approved by the European Commission at the end of 2007. “Improvement and development of water and wastewater infrastructure in settlements with over 2000 PE and in settlements below 2000 PE within urban agglomeration areas” was fixed as its first priority axis. The real implementation of the Programme started in 2008 with the announcement of three procedures for project proposals selection in the Water sector, one of them for technical support for project preparation and two for construction.

Due to the fees, collected by EMEPA under the Tariff of fees for the right of water use and/or permitted use of water body, approved by the Council of Ministers in 2000, different ecological projects have been financed, including projects for construction of a sewage system in the settlements and small fresh water supply networks and treatments for the population at a local level.

However, National Funds and EU financial support can not cover the necessary costs of infrastructure for collection, treatment and disposal of wastewater, that is why in the coming years Bulgaria will rely significantly on funding opportunities through public-private partnerships.

## SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

### SCP in national priority areas

#### *Inclusion of SCP in policies, laws, regulations and guidelines*

The **Energy efficiency law** was adopted in 2004 and amended in 2007. Its main objectives are introduction of voluntary agreements for providing energy efficiency services; increasing the energy efficiency; introducing a system of activities and measures for the final energy consumers and traders; increasing the competitiveness of the economy; improving the security of energy supply and environmental protection.

**Operational Programme “Development of the Competitiveness of the Bulgarian Economy”** (OP “Competitiveness”) is one of the seven operational programmes under the National Strategic Reference Framework for the period 2007 – 2013. The main purpose of this programme is to develop a competitive and efficient production and business potential, to contribute to increasing the economic effect and to assist the necessary structural changes in the economy with a view to achieving sustainable progress and feasible cohesion during the programme period. The overall objective of OP “Competitiveness” is to develop a dynamic economy competitive at the European and world market. The Operational Programme “Development of the Competitiveness of the Bulgarian Economy” is funded by the European Regional Development Fund and co-financed from the national budget.

The general objective of the operational programme shall be implemented through two specific objectives that cover both aspects of competitiveness – the preparedness of the Bulgarian enterprises for the Common European Market and for the fast changing conditions on international markets, as well as the condition of the environment in which they function.

One of the activities under OP “Competitiveness” is **improvement of technologies and management in enterprises**. A major operation under this topic is to support enterprises for investments in modern tangible and intangible assets, aiming at improvement of their business performance and expanding their operations, improving management, entering new or expanding on existing markets, etc. Special attention is paid to enterprises purchasing and introducing innovative technologies.

Another type of actions to be supported, is SMEs' projects aiming at achieving compliance with internationally recognised market standards – introduction of quality management systems (QMS), EMAS, IT-based management systems, GMP, etc.

Actions aiming at the introduction of energy saving technologies, as well as at the utilisation of renewable energy resources by enterprises will also be supported.

Another activity under the same Programme is **support for the creation and commercialization of innovations in enterprises and protection of industrial property rights**. The support under this thematic group of operations will be focused on start-ups or existing enterprises with innovative potential, aiming to bridge the gap between enterprises and research institutions which will lead to improvement of the productivity of enterprises, development of new or improved products and services with high added value, as well as improvement of the production methods, processes and their penetration to new markets.

Under this priority, innovative start-ups will be supported in their initial stage of existence by integrated support, covering the variety of their needs, such as business advice and coaching, initial investments in assets and for introducing their products on the market. These interventions should result in growing number of highly innovative, yet commercially sound enterprises in the Bulgarian economy.

On the one hand, companies will also be offered financial support for the costs of their R&D activities, including feasibility studies, industrial research and pre-competitive development and on the other hand, integrated support (consultations, investments, training of management and/or personnel) needed for introduction of products' or process innovations in their manufacturing and management practices. The expected result of this intervention is an increase in the number of successful R&D projects conducted by enterprises, as well as an increase in the overall expenditure of this sector on research and development.

In order to increase employment of researchers and highly qualified technicians in enterprises, support will be rendered to enterprises to hire PhDs and other R&D specialists for implementation of their own R&D projects. In addition, with the purpose of introducing the most recent innovative solutions and R&D results in the Bulgarian Economy Doctoral Programmes with strong applied potential will be supported under the condition that its future application, in case of successful result, be assured by a previously signed contract with an enterprise or consortia of enterprises.

In order to assure protection of the developed innovations in Bulgarian enterprises and research organizations, support for industrial property protection through national and international application and registration of patents, trade marks and designs, (including Community Trade Mark, Community Design, the Madrid Agreement and the Protocol attached to it, etc.) will be also provided.

### **Eco-efficiency/eco-design**

The Ministry of environment and water conducts the innovation policy in the field of environment in two ways:

- **By the instruments for the prevention control (implementing procedures of environmental impact assesment and issuing of of Permits for Integrated Pollution Prevention and Control for the Construction of New and the Operation of Existing Industrial Installations and Equipment)**
- **Voluntary Schemes**
  - **Eco-labeling scheme** – it aims to encourage elaborating, producing, distributing and using products which have potential to decrease the environmental impact
  - **Ecoenvironment Management and Auditing Scheme (EMAS)** – it requires from the registered organizations to continuously improve the results concerning environmental protection.

The Environmental Protection Law introduces the requirements of Regulation №1980/2000 and Regulation №761/2001.

<b>SECTORS AND ISSUES</b>	<b>Current Government Priority</b>	<b>Expected Future Priority</b>
<b>Solid waste management</b>		
- Waste disposal	The quantity of waste, which generation can't be prevented and/or recovered by landfilling or burning, has to be disposed	
- Reuse and recycling		
- Waste reduction,		
- Others		
<b>Transport</b>		
- Clean fuels and vehicles		
- Public and alternative transportation		
- Urban and regional transportation planning		
- Others		
<b>Cleaner production</b>		
- Resource efficiency		
- Pollution prevention		
- Technology strategies		
- Others		
<b>Energy efficiency and renewable energy</b>	Given the still rather high energy intensity of the economy, households included, energy efficiency has become a priority. The Energy Efficiency Act, together with five regulations, build up the legal framework for introducing the energy efficiency into industry, transport, services, households, and agriculture significant energy consumers. The Long-Term National Programme for Energy Efficiency is based on projected adverse trends in the primary and end energy consumption until 2015, caused by economic development and the substitution of solid, liquid and gaseous fuels for electricity. To offset these negative tendencies, a number of legislative, organisational and financial measures have been developed.	
- Industrial energy efficiency	Given the sector's restructuring and migration to less energy intensive technologies and the energy savings	

	introduced by new owners after the privatisation of enterprises, the total sum of process and combustion air emissions had dropped significantly. Measures in this sector include: heat loss reduction; promotion of natural gas; monitoring of industrial energy consumption; modernisation of steam generators and compressor installations; and the introduction of highly efficient construction machinery.	
- Household energy efficiency	Measures in the sector include: household gas supply and various financing arrangements for the introduction of solar collectors, hybrid hot-water installationsmeasures aimed at reducing energy consumption , etc.	
- Renewable energy markets	The introduction of renewable energy sources in the framework of Bulgaria's legal harmonisation with the EU law is provided under the Energy Act. RES incentives include preferential electricity purchasing prices. An important element of Bulgaria's RES policy is the promotion of biomass and liquid biofuels. Hydroelectric generation and the utilisation of wind and geothermal energy also attract interest. The country has adopted an indicative target to achieve 11 % share of RES in total domestic electricity consumption by 2010.	
- Others	Measures to reduce energy consumption in the transport sector include: introduction of dispatch systems to manage road and railway transportation; railway and public urban transport modernisation; infrastructure improvements and the introduction of biofuels.	
<b>Housing and construction</b>		
- Energy efficiency		
- Building materials		
- Construction standards		
- Building operations		
- Others		

<b>Food and clothing</b>		
- Organic products	Organic farming amounted to mere 0.4% of the total area utilized for agricultural purposes in 2007, which is quite low as compared to EU-15 average (4,3%)	
<b>Chemical management</b>		
<b>Hazardous waste</b>		
<b>B. POLICY INSTRUMENTS</b>	Current Government Activities	Expected Future Priorities
<b>General policy instruments</b>		
- Taxes, subsidies		
- Preferential tariffs and trade policies		
- Economic instruments		
- Tax reform		
- Consumer protection policies		
- Polluter-pays principle		
- Integrated product policies		
<b>Changing consumer behaviour</b>		
- Education and public information		
- Consumer information		
- Labeling, eco-labels		
- Consumer organizations		
- Public procurement policies		
- Others		
<b>Changing production patterns</b>		
- Regulation of emissions and effluents		
- Charges or incentives for cleaner production		
- Product standards (e.g. energy efficiency)		
- Cleaner production programmes		
- (R&D, training, technical assistance)		
- Pollutant reporting and registers	National GHG emissions registry- the purpose of the registry is to ensure accurate accounting of the issuance, holding, transfer, acquisition, cancellation and retirement of emission units.	
- Strategic industrial and technology planning		
- Investment incentives		
- Voluntary initiatives and codes of conduct		
- Corporate social/environmental responsibility		

- Improved management accounting		
- Investment analysis		
- Others		
<b>Analytical tools</b>		
- Life-cycle analysis		
- Indicators of sustainability		
- Technology impact assessment		
- Policy impact assessment		
- Impacts of globalization and urbanization		
- Impacts of changes in international markets		
- Others		

## **PART II: UPDATED INFORMATION ON NATIONAL FOCAL POINT FOR SUSTAINABLE DEVELOPMENT**

**Name(s) of National Focal Point for sustainable development:**

1) Mr. Shteryo Nozharov

**Title(s):**

Director of “Investment Policy, Public Procurement and Climate” Directorate

**Ministry/Office(s):**

Bulgarian Ministry of Environment and Water

**Key functions in relation to national reporting:**

Representative of the Ministry of Environment and Water in the National Advisory Council for Sustainable Development. The key functions of the Council are to prepare the National Strategy for Sustainable Development and to report of its advance to International Bodies.

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