

MINISTRY OF FINANCE

TAXATION
AND ENERGY EFFICIENCY

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- The focus of this presentation is on the role and significance of the taxation in the increase of the energy efficiency and the environmental protection.
- The presentation includes:
 - The new European energy policy;
 - The environmental taxes in EU;
 - Taxation and energy efficiency in Bulgaria;
 - The tax policy in support of the new energy strategy of the country.



INTRODUCTION

- The energy is the reason for 80% of the emissions of greenhouse gases in EU. It is the cause of climate change and, to a great extent, the cause of the pollution of environment.
- From an economic point of view, the improvement of the energy efficiency is one of the most effective way to combat climate change and decrease emissions of greenhouse gases and other pollutants.
- The reduction of emissions of greenhouses gases could be achieved by:
 - Using smaller amount of energy by improving the energy efficiency in the production and use of energy;
 - Using cleaner energy by improving the energy mix via increasing the share of low emission power supply sources;
 - Fast technological progress by means of implementing new energy technologies (innovations for economically and energy efficient productions).
- There is a close relationship between energy efficiency and environmental protection.



NEW EUROPEAN ENERGY POLICY

- By implementing the new policy of EU in the field of the energy industry and the environment a farseeing political programme is developed to achieve the major energy objectives of the Community for sustainable development, competitiveness, and securing the energy supplies.
- The initiative of EU “20-20-20”
 - 20% reduction of the emissions of greenhouse gases;
 - Increase by 20% the share of renewable energy sources in the consumption of energy;
 - Improving the energy efficiency by 20%.
- The objectives of the energy policy of EU are supported by market-based instruments (mainly environmental taxes, subsidies, incentives, compensation schemes and also the EU Emissions Trading Scheme), by development of energy technologies (particularly technologies for energy efficiency and renewable energy sources or low-carbon energy) and through the financial instruments of the Community (European Energy Programme for Recovery, etc.)



MARKET-BASED INSTRUMENTS

- For the implementation of the energy objectives of EU, the Member States, including Bulgaria, use mainly two types of market-based instruments:
- **Environmental taxes**
- “Environmental tax is defined as a tax whose tax base is a physical unit (or a proxy of it) of something that has a proven specific negative impact on the environment” (Eurostat, 2001).
- **EU Emissions Trading Scheme**
- The EU ETS is a cornerstone of the European Union's policy to combat climate change and its key tool for reducing industrial greenhouse gas emissions cost-effectively. The EU ETS works on the "cap and trade" principle. This means there is a "cap", or limit, on the total amount of certain greenhouse gases that can be emitted by the factories, power plants and other installations in the system. Within this cap, companies receive emission allowances which they can sell to or buy from one another as needed. The limit on the total number of allowances available ensures that they have a value.



- **Types of environmental taxes:**
 - Energy taxes;
 - Transport taxes;
 - Pollution taxes;
 - Resource taxes.
- **Energy taxes** – energy taxes include taxes on energy products used both for stationary (e.g. coal, fuel oil, natural gas and electricity) and transport purposes. By convention, CO₂ taxes are also included in this tax category.
- **Transport taxes** – transport taxes mainly include taxes related to the ownership and use of motor vehicles.
- **Resource and pollution taxes** cover different types of taxes: taxes on extraction of raw materials, on measured or estimated emissions to air (as NO_x and SO₂) and water, on noise and on the management of waste.



- In 2009, the revenue from environmental taxes in the EU-27, collected by general government was 300 billion euro and accounted for almost 2.4% of GDP and for 6.3% of the total taxes and social contributions.
- Denmark recorded by far the highest level of environmental taxation in the EU (5.7% of GDP).
- Four countries, the Netherlands, Malta, Bulgaria (3.4%) and Cyprus had environmental taxes between 3% and 4% of GDP.
- Only four Member States registered levels of environmental taxes slightly below 2% of their GDP.
- The total amount of the environmental taxes in Bulgaria for 2009 comes up to EUR 1 060 million.

Source: Eurostat, 2011



ENVIRONMENTAL TAXES IN EU (2)

- In the EU-27 the energy taxes in 2009 accounted for almost 74% of total environmental taxes. In most European countries, their share in total environmental taxes is higher than 50%.
- In Bulgaria the share of energy taxes in total environmental taxes is 88% (932 million euro).
- Transport taxes accounted for 22% of total environmental taxes at EU-27 level in 2009. This type of environmental tax was significant in some European countries. It is the case, for example, in Malta, Cyprus, Ireland and Greece where their share in total environmental taxes is above 40%.
- The share of pollution and resource taxes in total environmental taxes was 4% in EU-27 in 2009. Only for Estonia, Slovakia, the Netherlands and Denmark were the percentages higher than 10% of the total environmental taxes.

Source: Eurostat, 2011



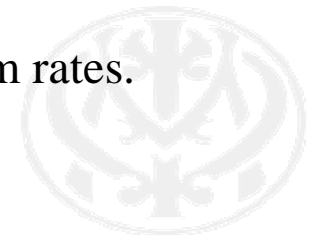
TAXATION AND ENERGY EFFICIENCY IN BULGARIA



- The Bulgarian tax system, like the tax systems of other countries, includes a large number of tax measures oriented towards increasing the energy efficiency and the environmental protection.
- Environmental taxes
- Excise duty on energy products and electricity (incl. tax incentives);
- Vehicle tax (incl. tax incentives).
- Environmental fees;
- Other tax incentives for energy efficiency:
 - Accelerated tax depreciation for machinery and equipment acquired in connection with investment increasing the energy efficiency;
 - Tax recognised expenses for grants benefitting of Fund “Energy Efficiency and Renewable Energy Sources”;
 - Exemption from taxation with real estate tax.



- The excise duties at EU level are entirely harmonized. The Bulgarian excise duties legislation is based on the EU rules (Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for taxation of energy products and electricity).
- The Excise Duties and Tax Warehouses Act stipulates the energy products and their types of use that make them subject to taxation.
- **Tax base**
 - Coal, gas, electricity – energy content of the product.
 - Mineral oils (gasoline, gas oil, kerosene, LPG) - quantity (litre/kg).
- **Excise duty rates**
 - The excise duty rates applicable to each energy product in particular are depending on that whether it is used as motor fuel or as heating fuel.
 - The excise duty rates applicable in EU Member States could not be lower than the minimum tax rates specified in the Directive.
 - Each Member State can stipulate higher excise duty rates than the minimum rates.



EXCISE DUTIES ON ENERGY PRODUCTS AND ELECTRICITY (2)

- National excise duty rates

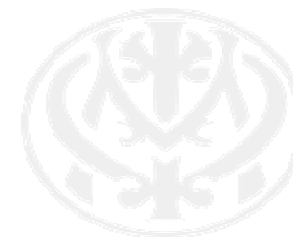
ENERGY PRODUCT	EXCISE DUTY RATE	
	Motor fuels	Heating fuels
Leaded gasoline (euro/1000 l.)	424	x
Unleaded gasoline (euro/1000 l.)	363	x
Gas oil (euro/1000 l.)	315	25.6
Kerosene (euro/1000 l.)	315	25.6
LPG (euro/kg.)	174	x
Heavy fuel oils (euro/kg.)	307	25.6
Coal and coke (euro/GJ)	x	0.30



- The Energy Taxation Directive provides for a right of choice for EU Member States to exempt entirely from taxation or apply reduced excise duty rates to particular energy products that fulfil specific criteria.
- Bulgaria has introduced in its national legislation tax incentives for several energy products with the objective to stimulate their production and use.
 - Zero excise duty rates for natural gas, used as motor fuel and heating fuel;
 - Zero excise duty rate for electricity used by households;
 - Zero excise duty rates for biofuels in pure form;
 - Reduced excise duty rates for biofuels in mixtures.



- **Description** - the tax incentive comprises zero excise duty rates for natural gas, used as motor fuel and heating fuel.
- Option in compliance with Art.15, It.1, letter “g” of Directive 2003 /96 /EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity. The Directive provides an opportunity for Member States where relative share of natural gas in the final energy consumption is less than 15% in 2000 to apply complete exemption for a period not longer than ten years from the date of enforcement of the Directive, or until the national share of natural gas in the final energy consumption reaches 25%, whichever of the two occurs first.
- **Objective of the tax incentive** – environmental protection. Natural gas is the energy product which causes least pollution to the environment.



TAX INCENTIVE – ZERO EXCISE DUTY RATE FOR ELECTRICITY USED BY HOUSEHOLDS

- **Description** - the tax incentive comprises zero excise duty rate for electricity, used by households.
- Option in compliance with Art.15, It.1, letter “f” of Directive 2003 /96 /EC of 27 October 2003 restructuring the Community framework for taxation of energy products and electricity. The Directive provides an opportunity for Member States to implement exemption from taxation of electricity used by households.
- **Objective of the tax incentive** - environmental protection. The electricity has a minimal polluting effect on the environment.



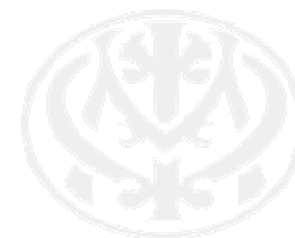
TAX INCENTIVE – ZERO EXCISE DUTY RATES TO BIOFUELS IN PURE FORM

- **Description** – the tax incentive provides for zero excise duty rates on biofuels in pure form – bioethanol and biodiesel used as motor fuel.
- **Objective of the tax incentive** – environmental protection by encouraging the use of biofuels and other renewable fuels for transport purposes.
- **Terms of use** – the biofuels should comply with the requirements of the Renewable Energy Act and also be classified as renewable energy sources.
- **Beneficiaries of the tax incentive** – legal entities that release for use excise goods in compliance with the Excise Duties and Tax Warehouses Act.
- The application of zero excise duty rates to biofuels in pure form is a tax incentive representing state aid and is, thus, approved by the European Commission.



TAX INCENTIVE - REDUCED EXCISE DUTY RATES ON BIOFUELS IN MIXTURES

- **Description** – the tax incentive provides for the application of an excise duty rate reduced by 3% to the mixtures of biofuels with liquid fuels of petrol origin (gasoline and gas oil) used as motor fuels.
- **Objective of the tax incentive** – environmental protection by encouraging the use of biofuels and other renewable fuels for transport purposes.
- **Terms of use**
 - the biofuels (bioethanol and biodiesel) should comply with the requirements of the Renewable Energy Act;
 - the contents of the biofuels in the mixtures should be at least 4 % in vol.;
 - the mixture of the biofuels with the liquid fuels of petrol origin shall be done exclusively in a tax warehouses possessing a license in compliance with the provisions of the Excise Duties and Tax Warehouses Act.



- **Beneficiaries of the tax incentive** – legal entities that release for use excise goods in compliance with the Excise Duties and Tax Warehouses Act.
- The application of reduced excise duty rates to biofuels in mixtures is a tax incentive containing state aid and is, thus, approved by the European Commission.



TENDENCY IN THE ENERGY TAXATION AT EU LEVEL

- In 2011 the European Commission issued a proposal for Council Directive amending Directive 2003 /96 /EC (Energy Taxation Directive), on the following grounds:
- The provisions of the existing directive are out-of-date and inconsistent, and the taxation on grounds of physical quantities of consumed energy products could not be a solution for the purposes of EU in the field of energy production and climate change (Strategy 2020).
- Taxation of energy products shall take into account more precisely their energy contents and their impact on the environment - at present the taxation is not related to the emissions of CO₂ and the energy content of the products.
- Lack of European framework for taxation of CO₂ emissions.
- Lack of synchronisation with EU ETS - double taxation or non taxation of CO₂ emissions.
- The EU ETS is the major tool regulating the emissions of CO₂ at EU level. Four sectors remain outside the scope of the scheme: transport, agriculture, SMEs and households.



- In the proposal for a Council Directive a new structure for taxation of energy products and electricity is proposed.
- The taxes on energy products and electricity will comprise two components: the first one is related to the emissions of CO₂ and the second one is based on the energy contents of the products.
- **CO₂ related taxation (CO₂ component)**
 - The new tax has as an objective to supplement the EU ETS and will be imposed to all sectors which are not included in the EU ETS at present.
 - CO₂ related taxation shall be calculated in EUR/t of CO₂ emissions on the basis of the reference to the CO₂ emission factors set out in the Annex to the Directive.
- **General energy consumption taxation (energy component)**
 - General energy consumption taxation shall be calculated in EUR/GJ on the basis of net calorific value of energy products and electricity as set out in Annex to the Directive.



VEHICLE TAX

- In compliance with the provisions of the Local Taxes and Fees Act , annual vehicle tax is accrued on motor vehicles, registered for road traffic in the Republic of Bulgaria.
- The tax is paid by the owners of the motor vehicles.
- The vehicle tax depending on the type and characteristics of the vehicle.
- The tax on cars is determined on the basis of power of the engine, corrected by the factor of the year of production.
- The tax rate is determined by each municipality within ranges stipulated in the law.
- Main drawback of the currently enforced vehicle tax on motor vehicles is that it is not complied with the eco characteristics of the motor vehicles.
- Tax incentives for motor vehicles



TAX INCENTIVE - REDUCTION BY 50% OF THE VEHICLE TAX

- **Description** – the tax incentive provides for a reduction by 50% of the vehicle tax for motor vehicles with nominal engine power of 74 kW incl. supplied with existing catalysing devices.
- **Objective of the tax incentive** – environmental protection.
- **Beneficiaries of the tax incentive** – owners of such motor vehicles.

- **Description** – the tax incentive is expressed by a decrease of 50% of the vehicle tax for buses, trucks, tractor-trailers and road tractors, supplied with “eco engines”, complying with the standards Euro-2, Euro-3, Euro-4 and Euro-5.
- **Objective of the tax incentive** – to stimulate the use of eco engines for motor vehicles.
- **Beneficiaries of the tax incentive** – owners of such motor vehicles.



- The producers or importers (or entities performing an intra-community acquisition) of products the use of which leaves large amounts of waste have to pay a product fee based on the type of waste.
- The entities can avoid paying the product fee if they collect or recycle certain amount of the waste produced by their products either on their own or through a licensed collective waste management organization.
- The products subject to the product fee are as follows:
 - Certain motor vehicles and tires;
 - Goods with plastic, paper, metal, glass, wooden, textile, etc. packaging;
 - Batteries;
 - Motor oil;
 - Electric or electronic apparatus and appliances.



TAX INCENTIVE - ACCELERATED TAX DEPRECIATION OF MACHINERY AND EQUIPMENT

- **Description** – the tax incentive provides for the application of an accelerated tax depreciation for machinery, production equipment and apparatuses acquired in connection with an investment increasing energy efficiency. The annual tax depreciation is of the amount of up to 50% (in the general case the depreciation rate of these assets is up to 30%).
- **Objective of the tax incentive** – increase the energy efficiency of the economy.
- **Terms of use**
 - the machinery, production equipment and apparatuses have to be brand new;
 - the assets shall be acquired in connection with an investment increasing the energy efficiency;



TAX INCENTIVE - ACCELERATED TAX DEPRECIATION OF MACHINERY AND EQUIPMENT (2)

- executed voluntary agreements in compliance with the provisions of the Energy Efficiency Act.
- **Beneficiaries of the tax incentive** – local legal entities and permanent establishments of foreign legal entities in Bulgaria, forming profit in compliance with the Corporate Income Tax Act.



- **Description** – the tax incentive is expressed in the recognition for tax purposes of accounted costs for grants benefitting the Fund “Energy Efficiency and Renewable Energy Sources” up to the amount of 10% of the accounting profit.
- **Objective of the tax incentive** – support energy efficiency.
- **Terms of use**
 - the accrued accounting costs for grants shall be of an amount of up to 10% of the accounting profit, and also
 - the deductions shall benefit the Fund “Energy Efficiency and Renewable Energy Sources”.

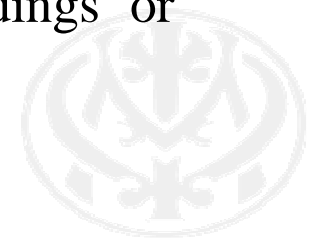


- Where the grant is benefiting directly or indirectly the managers or there is reasonable ground to believe that the object of the grant is not received the whole expense spent on granted shall not be recognised for tax purposes.
- **Beneficiaries of the tax incentive** – local legal entities and permanent establishments in Bulgaria of foreign legal entities, forming profit in compliance with the Corporate Income Tax Act.
- **Fund “Energy Efficiency and Renewable Energy Sources”:**
 - finances investment projects for energy efficiency leading to the decrease of greenhouse gases’ emissions in the atmosphere;
 - facilitates the development of the market for projects on energy efficiency.

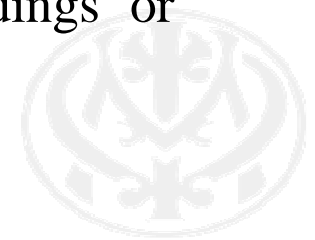


TAX INCENTIVE - EXEMPTION FROM TAXATION WITH REAL ESTATE TAX

- **Description** – the tax incentive provides for real estate tax exemption of buildings set in operation before 1st January 2005 and having acquired Certificate A, issued in compliance with the Energy Efficiency Act as follows:
 - for a term of 7 years starting from the year following the year of issuing the Certificate;
 - for a term of 10 years starting from the year following the year of issuing the Certificate in the event when measures are implemented for operation and use of renewable energy sources for the production of energy intended to satisfy the needs of the building;
- **Objective of the tax incentive** – to increase energy efficiency.
- **Beneficiaries of the tax incentive** – owners of the such buildings or residential beneficiaries with established right of use.



- **Description** – the tax incentive is expressed in an exemption from real estate tax of buildings set in operation before 1st January 2005, and having acquired Certificate B, issued in compliance with the Energy Efficiency Act, as follows:
 - for a term of 3 years starting from the year following the year of issuing the Certificate;
 - for a term of 5 years starting from the year following the year of issuing the Certificate in the event of measures implemented for operation and use of renewable energy sources for production of energy intended to satisfy the needs of the building.
- **Objective of the tax incentive** – to increase the energy efficiency.
- **Beneficiaries of the tax incentive** – owners of the such buildings or residential beneficiaries with established right of use.



TAX POLICY IN SUPPORT OF THE NEW ENERGY STRATEGY OF THE COUNTRY



- In connection with the new energy policy of EU, in 2011 Republic of Bulgaria has adopted a new national energy strategy for until 2020.
- The national strategy reflects the political vision of the Government, complies with the updated EU framework of energy policy and the world tendencies in the development of energy technologies.
- Sustainable energy development and energy efficiency are the objectives of the energy policy of Bulgaria and their achievement is bound to the following long-term goals up to 2020:
 - 20% reduction of the emissions of greenhouse gases;
 - Increase by 20% of the share of renewable energy sources in the total energy mix and achieving 10% share of renewable energy sources in transport sector;
 - Improving energy efficiency by 20%.



- The tax policy is one of the instruments for stimulating the development of energy efficient economic branches and for encouraging investment in cleaner eco technologies and eco industry.
- In 2011, an overall survey of the tax system has been done with the objective to establish to what extent the currently enforced system is able to support the implementation of the Government objectives in the field of energy efficiency and environmental protection.
- Three main sectors have the greatest potential for energy saving and improving energy efficiency: transport, industry, and buildings.
- In terms of the said three sectors, tax measures are being considered to facilitate the energy efficiency.



- Tax measures for energy efficiency - three main groups
- **First group** – tax measures to stimulate the development of sustainable transport and electric mobility in Bulgaria;
- **Second group** – tax measures to stimulate the energy efficiency in the industrial sector;
- **Third group** – tax measures to improve the energy characteristics of the existing buildings and for development of energy-independent buildings.



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