

Policy Background

A European energy policy must pursue the objective of a sustainable, competitive and secure supply of energy. If the EU continues on its present course, this key objective will not be attained. In January 2007, the European Commission adopted an energy policy for Europe. This was supported by several documents on different aspects of energy and included an action plan to meet the major energy challenges Europe faces. Each European citizen must be informed of these challenges and the role they should play in meeting them.

A diversified mix of energies will increase security of supply.

Key Issues

Bulgaria exhibits a fairly diverse energy mix with an average dependency on imported fuels (oil and natural gas from Russia and also solid fuels). Domestic production includes nuclear energy and solid fuels which are also the main fuels for electricity generation. Bulgaria's role as electricity exporter in the region is expected to change following the closure of two additional nuclear reactors as part of an agreement for EU accession. There are plans to restore nuclear capacity through construction of a new plant. Renewable energy contribution (biomass and hydro) has been increasing in recent years, although is still below EU average. Final energy consumption has decreased considerably in recent years and industry is still the most energy-consuming sector. Bulgaria exhibits the highest energy intensity within the EU.

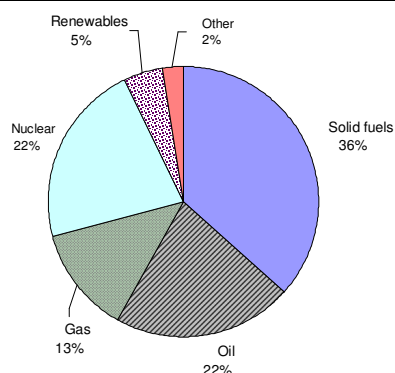
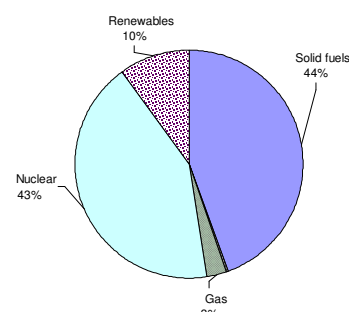
Key Figures (2004)

Mtoe	Primary Energy Supply	Domestic Production	Net Imports	Final Energy Consumption	Electricity Generation (TWh)
Solid fuels	7.2	4.5	2.9	1.0	18.9
Oil	4.3		4.3	3.4	0.8
Gas	2.5	0.3	2.4	0.9	1.7
Nuclear	4.3	4.3			16.8
Electricity			-0.5	2.1	
Renewables	1.0	1.0		0.7	3.2
Other	-0.5			0.9	0.2
Total	18.9	10.2	9.1	9.0	41.6

The source for all data is the European Commission, unless otherwise stated

Key Indicators (2004)

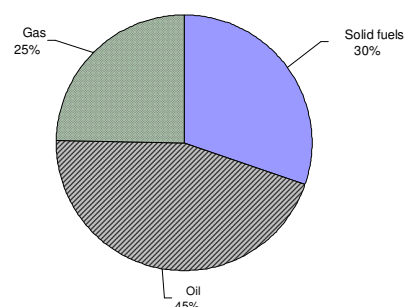
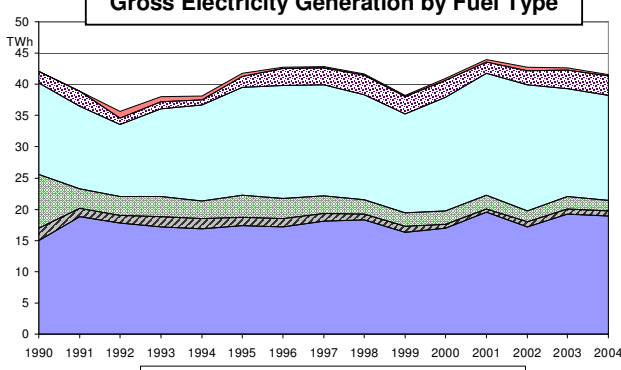
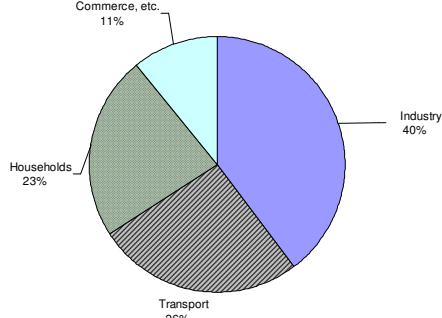
	BULGARIA	EU-27
Energy per capita (kgoe/cap)	2 425	3 689
Energy intensity (toe/MEUR '00)	1 142	185
Energy import dependency %	48.0	50.1
CO ₂ Emissions (Mt)	44	4 004
CO ₂ intensity (tCO ₂ /toe)	2.3	2.2
CO ₂ per capita (kg/cap)	5 671	8 180

2004 Primary Energy Supply

2004 Domestic Production

Primary Energy Supply

Bulgarian primary energy supply is fairly diverse, with solid fuels holding the majority share (just over a third), oil and nuclear following, with significant contribution also by natural gas. The shares of solid fuels and nuclear energy are significantly above the corresponding EU-27 average values (18% and 14% respectively). Total consumption has decreased by 33% since 1990 and this reduction is reflected mainly on the reduced supply of oil and natural gas (55% and 54% decrease respectively, since 1990). In 2004, renewable energy supply was five times greater than in 1990 and their share is close to the EU-27 average of 6%.

Domestic Production

Bulgaria has significant domestic energy production, consisting mainly of solid fuels and nuclear energy. Total production has increased by 12% since 1990. Renewable energy production doubled between 1997-2004 with biomass being used mainly for heat production and hydro for electricity.

<p>Imports</p> <p>Bulgarian energy import dependency is slightly below EU-27 average. Oil accounts for 45% of imported energy, whereas gas accounts for 25%. The Russian Federation is the main source of oil for Bulgaria and also the only supplier for natural gas. The remaining 30% of total imports are solid fuels. Imported energy has declined by 49% over period 1990-2004, mainly due to reduced energy consumption. Bulgaria has been one of the region's main electricity exporters.</p>	<p>2004 Net Imports by Energy Product</p>  <table><tr><th>Energy Product</th><th>Share (%)</th></tr><tr><td>Oil</td><td>45%</td></tr><tr><td>Solid fuels</td><td>30%</td></tr><tr><td>Gas</td><td>25%</td></tr></table>	Energy Product	Share (%)	Oil	45%	Solid fuels	30%	Gas	25%																																																																																																								
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<p>Electricity Generation</p> <p>Electricity generation is largely based on coal and nuclear energy (total 86% share). 6 nuclear power reactors provided almost 40% of generated electricity, but four of these have closed as part of the agreement on EU membership. New reactors will be built to replace the existing ones. The share of gas and oil in electricity generation has been steadily decreasing, whereas the share of renewable sources has been increasing.</p>	<p>Gross Electricity Generation by Fuel Type</p>  <table><tr><th>Year</th><th>Coal</th><th>Oil</th><th>Gas</th><th>Nuclear</th><th>Renewables</th><th>Other</th></tr><tr><td>1990</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>1991</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>1992</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>1993</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>1994</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>1995</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>1996</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>1997</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>1998</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>1999</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>2000</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>2001</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>2002</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>2003</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr><tr><td>2004</td><td>15</td><td>10</td><td>5</td><td>10</td><td>2</td><td>2</td></tr></table>	Year	Coal	Oil	Gas	Nuclear	Renewables	Other	1990	15	10	5	10	2	2	1991	15	10	5	10	2	2	1992	15	10	5	10	2	2	1993	15	10	5	10	2	2	1994	15	10	5	10	2	2	1995	15	10	5	10	2	2	1996	15	10	5	10	2	2	1997	15	10	5	10	2	2	1998	15	10	5	10	2	2	1999	15	10	5	10	2	2	2000	15	10	5	10	2	2	2001	15	10	5	10	2	2	2002	15	10	5	10	2	2	2003	15	10	5	10	2	2	2004	15	10	5	10	2	2
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<p>Final Energy Consumption</p> <p>Although the consumption of final energy by industry has been reduced by 60% since 1990, industry is still the most energy-consuming sector. The share of industry is significantly higher than the EU-27 average of 28%. Transport accounts for a 26% of final energy consumption. Final consumption in 2004 was 44% lower than in 1990. Oil and electricity have the highest shares of final energy consumed.</p>	<p>2004 Final Energy Consumption by Sector</p>  <table><tr><th>Sector</th><th>Share (%)</th></tr><tr><td>Industry</td><td>40%</td></tr><tr><td>Transport</td><td>26%</td></tr><tr><td>Households</td><td>23%</td></tr><tr><td>Commerce, etc.</td><td>11%</td></tr></table>	Sector	Share (%)	Industry	40%	Transport	26%	Households	23%	Commerce, etc.	11%																																																																																																						
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<p>For further information</p> <p>If you want to find more data on Bulgaria or other Member State energy markets, go to http://epp.eurostat.ec.europa.eu/http://ec.europa.eu/dgs/energy_transport/figures/pocketbook/2006_en.htm</p> <p>Further fact sheets on Bulgaria and other Member States can be found on: http://ec.europa.eu/energy/energy_policy/facts_en.htm</p> <p>What is meant by.....?</p> <p><i>Energy Import Dependency</i> shows the extent to which a country relies upon imports in order to meet its energy needs. It is calculated using the following formula: net imports / (primary energy supply + bunkers)</p> <p><i>Energy Intensity</i> gives an indication of the effectiveness with which energy is being used to produce added value. It is defined as the ratio of Primary Energy Supply to Gross Domestic Product</p> <p><i>Final Energy Consumption</i> is the energy finally consumed in the transport, industrial, commercial, agricultural, public and household sectors. It excludes deliveries to the energy transformation sector and to the energy industries themselves</p> <p><i>Primary Energy Supply</i>: The quantity of energy consumed within the borders of a country: primary production + recovered products + imports + stock changes - exports - bunkers (i.e. quantities supplied to sea-going ships)</p> <p>Disclaimer</p> <p><i>Views expressed in this document have not been adopted or in any way approved by the European Commission and should not be relied upon as a statement of the Commission's views.</i></p> <p><i>The Commission does not guarantee the accuracy of the data included in this document, nor does it accept responsibility for any use made thereof.</i></p>																																																																																																																	