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

Spain strongly depends on energy imports, while domestic production is mainly related to nuclear energy. Energy demand has increased significantly since 1990. Transport and industry are the most significant energy-consuming sectors. In the electricity sector, coal is still the main fuel, but the contribution of gas, nuclear and renewable sources is remarkably high. Gas has exhibited the most significant increase in the share in electricity generation. Spain has a significant share of electricity generated by renewable sources and has become the second largest country in the world in terms of installed wind capacity. The increase of both gas and renewable sources in the electricity mix are important in terms of climate change.

Key Figures (2004)

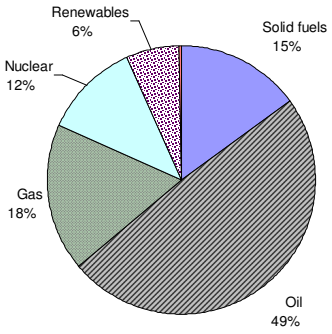
Mtoe	Primary Energy Supply	Domestic Production	Net Imports	Final Energy Consumption	Electricity Generation (TWh)
Solid fuels	21.1	6.5	14.2	1.9	79.1
Oil	68.9	0.3	75.5	52.1	23.8
Gas	25.2	0.3	24.6	16.8	56.7
Nuclear	16.4	16.4			63.6
Electricity				19.8	
Renewables	9.0	9.0		3.8	50.2
Other	-0.3				6.5
Total	**140.2**	**32.4**	**114.3**	**94.3**	**280.0**

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

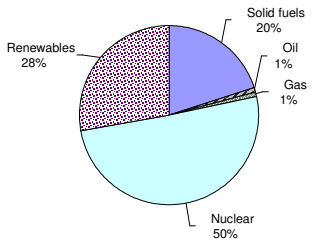
Key Indicators (2004)

	SPAIN	EU-27
Energy per capita (kgoe/cap)	3 285	3 689
Energy intensity (toe/MEUR '00)	197	185
Energy import dependency %	77.4	50.1
CO_2 Emissions (Mt)	326	4 004
CO_2 intensity (tCO_2/toe)	2.3	2.2
CO_2 per capita (kg/cap)	7 632	8 180

2004 Primary Energy Supply



2004 Domestic Production



Primary Energy Supply

Oil and natural gas dominate Spain's primary energy supply, with an aggregate 67% of total. The consumption of both sources, but mainly of gas, has increased dramatically in recent years (total increase for both of 125% since 1990). The consumption of renewable sources has also increased significantly and in 2004 was at the EU-27 average (6%). Solid fuel consumption has increased only slightly since 1990, while remaining below the EU-27 average (18%).

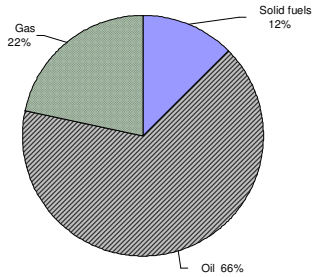
Domestic Production

The domestic production of Spain is mainly focused on nuclear energy, whose share (50%) is much higher than the EU-27 average of 28%. The share of renewable sources has increased substantially since 1990 being far above the EU-27 average of 12%. On the other hand, the production of solid fuels (mainly coal and lignite) used to be quite important in the past but has since declined and is slightly below the EU-27 average (22%).

Imports

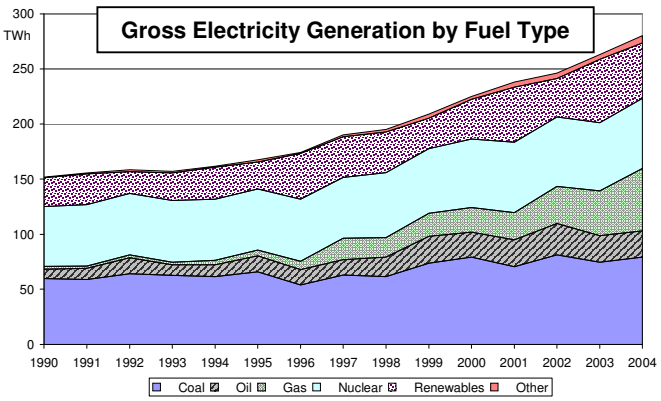
Spain's energy balance depends strongly on imports. Import dependency is above the EU-27 average. A large percentage of imports consists of oil and gas, covering an 88% of total imported energy. Algeria is the main source of imported natural gas for Spain (through a pipeline and by LNG delivery). Nigeria is also a major supplier, both for gas (LNG) and crude oil. Significant quantities of oil are imported from the Russian Federation and Mexico.

2004 Net Imports by Energy Product



Electricity Generation

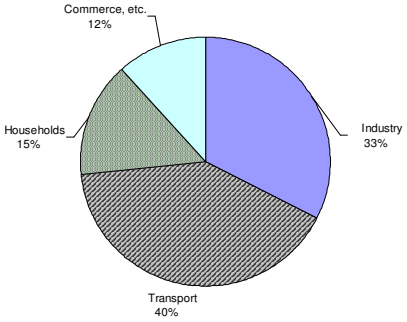
Electricity generation has been increasing steadily over the past 10 years. Generation in 2004 was 7% higher than in 2003. The increased availability of natural gas through imports from Algeria has led to an increasing share of natural gas in the electricity fuel mix. Moreover, renewable sources participate in electricity generation with an increasing share (Spain is the second largest country in the world in terms of installed wind capacity with just over 10 GW at the end of 2005. Source: http://www.ewea.org/). Hydro generation, which is significant in Spain, varies from one year to the next as it depends on the annual rainfall.



Final Energy Consumption

Final Energy Consumption in Spain has increased significantly since 1990 (66%). Transport is the greatest energy-consuming sector, with 40% share of total final energy consumption in 2004 (above the EU-27 average of 31%). It has also exhibited significant growth, with an increase of 72% over the period 1990-2004. Industry is another important energy-consuming sector, with 22% share in total consumption, while the commercial sector has exhibited the largest growth since 1990 (116%). Oil dominates in terms of the type of energy consumed, with a significant contribution also by natural gas and electricity.

2004 Final Energy Consumption by Sector



For further information

If you want to find more data on Spain 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
Further fact sheets on Spain and other Member States can be found on: http://ec.europa.eu/energy/energy_policy/facts_en.htm

What is meant by…..?

Energy Import Dependency 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)

Energy Intensity 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

Final Energy Consumption 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

LNG (Liquefied Natural Gas): Natural gas processed to take a liquid form in order to make it more cost-efficient to transport over long distances where pipelines do not exist

Primary Energy Supply: 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)