Energy is identified in the Lisbon Treaty (2007) as an area of shared competence, meaning that both the EU and member state governments are able to legislate on energy issues. However, the member states, including the UK, must comply with the EU’s energy strategies and directives.

**Energy 2020**

The Energy 2020 strategy is the overarching initiative, launched by the EU in 2010, which details the EU’s priorities with regard to energy. It has three aims:

- A reduction in greenhouse gas emissions from EU member states of 20% by 2020, when compared to 1990 levels;
- An increase in the share of renewable energy sources in energy consumption of 20% by 2020, and
- An increase in energy efficiency of 20% by 2020.

The priorities of the strategy incorporate existing energy legislation and inform future legislation aimed at ensuring the objectives of the principle Energy 2020 strategy.

**Emissions Trading Scheme**

(Est. 2003/87/EC, 13/10/03)

The EU’s Emissions Trading Scheme (EU ETS) was launched in 2005 in an attempt to combat climate change. It is a cap and trade system for greenhouse gas (GHG) emissions, and is the first of its kind worldwide. A cap is placed on the amount of emissions of carbon dioxide and other GHGs from the most emitting 12,000 European sources, primarily factories and power plants. Within the cap, companies receive emissions allowances which they can buy or sell if they produce more or less emissions than their allowances permit. If at the end of the year a company does not have enough allowances to cover all of its emissions and has not bought enough to cover the gap, it can be punished with fines. The number of allowances is reduced over time so that the levels of emissions fall.

Each one allowance permits the emission of one tonne of CO₂ or an amount of another GHG, such as nitrous oxides, which has the same effect on global warming as one tonne of CO₂.

In phase II of the ETS (2008-2012), the UK will allocate just over 246 million emissions allowances per year.

The scheme is being extended in 2012 to cover emissions from aviation and in 2013 by reducing the number of credits being given out for free, with more being auctioned.

Questions have been raised about the effectiveness of the ETS in achieving its objective of reducing emissions. The targets have not been particularly ambitious and so more allowances have been allocated than the expected volume of emissions, resulting in little effect. Companies may also move abroad to avoid complying with the system, meaning a limited impact on emissions levels globally. Further issues surrounding the inclusion of aviation in the ETS include the loss of business opportunities for Europe if international airlines avoid the EU due to the need to comply with the rules, and an increased cost of flights for the consumer as the price of compliance is passed down.

Large Combustion Plant Directive (2001/80/EC, 23/10/01)
The Large Combustion Plant Directive (LCPD) was introduced in 2001 in an attempt to limit the emission of pollutants into the air from large combustion plants. Limits are placed on the levels of sulphur dioxide, nitrogen oxides and dust emitted from combustion plants with a thermal input equal to or greater than 50MW each year. Plants covered had three options related to the LCPD:

- Accept the emissions limits and comply with the LCPD;
- Take part in the UK National Emissions Reduction Plan (NERP), a scheme of trading emissions based allowances, or
- Choose not to comply, and consequently be restricted to operating for a further 20,000 hours or until 31 December 2015, closing when whichever circumstance arises first.

The LCPD aimed not only to fight against climate change but also the protection of human health, as nitrogen oxides react with organic compounds in the presence of sunlight to form ozone, which has a significantly damaging effect on human respiration.

As a consequence of the implementation of the LCPD, several UK power plants decided to take the third option and close.

Nine UK electricity generating power plants opted out of the LCPD, leading to a loss of 12.0GW (14%) of electricity generation capacity by 2015.

Figures from DECC:

The Industrial Emissions Directive (IED) represents the bringing together and replacing of seven other directives, including the LCPD, into one piece of legislation. Like the LCPD, the IED aims to reduce harmful industrial emissions across the EU to the benefit of the environment and human health. Industrial installations covered by the IED are required to obtain a permit for their: emissions to air, water and land; waste; energy efficiency, and noise, among others. The emission limit values (ELVs) introduced in the IED are expected to be significantly more stringent than the limits in the LCPD and are likely to cause the closure of more electricity generation plants in the UK.

Like under the LCPD, industrial plants have three options:

- Accept the conditions and comply with the IED from 1 January 2016;
- Opt into the IED under the Transitional National Plan (TNP), set by the UK government, with transitional emissions limits to be set until 2020, or
- Opt out of the IED and run for a maximum of 17,500 hours between 1 January 2016 and 31 December 2023.

Plants are not expected to make their final decisions on whether to opt in or out of the IED until 2014 but it could affect up to a quarter of UK power generation.

The Renewable Energy Directive (RED) promotes the use of energy from renewable sources. Each member state is given a target for the proportion of energy from renewable sources in its energy consumption, in line with the EU’s goal of 20% by 2020. Additionally, the share of energy from renewable sources consumed in the transport sector must be at least 10% by 2020.

In the UK, energy consumption from renewable sources totalled 1.3% in 2005.
The UK’s 2020 target for energy consumption from renewable sources is 15%.
It achieved just 2.9% in 2009.

Figures from European Commission, Renewable Energy Targets by 2020:
http://ec.europa.eu/energy/renewables/targets_en.htm