

Energy

The legal basis of the Energy policy is the EURATOM Treaty, the ECSC Treaty, and Articles 49 to 55, Title XV and Title XIX of the Treaty establishing the European Community.

The EU and 11 countries of southeast Europe in late 2004 agreed to set up an Energy Community in which rules on energy will be the same everywhere. This will be good for security of supply because interconnections to the EU's sources of supply often pass through these countries. It will also make markets more efficient. This will help lower the price of power supplies throughout this area and lead to a release of government funds currently used to subsidise all power prices to provide targeted assistance for those who really need it.

Some 80% of the energy the EU consumes is from fossil fuels – oil, natural gas and coal. A significant and increasing proportion of this comes from outside the EU. Dependence on imported oil and gas, which is currently 50%, could rise to 70% by 2030. This will increase the EU's vulnerability to supply cuts or higher prices resulting from international crises. It also needs to burn less fossil fuel in order to reverse global warming. The way forward is a combination of energy savings through more efficient energy use, – around 1% of consumption annually, alternative sources – particularly renewables within the EU, and more international cooperation.

The EU keeps strategic stocks of fuel to reduce its vulnerability to problems on world markets, but long-term security of supply also means ensuring the EU is not over-dependent on a few countries for supplies, or that dependence is compensated for by close co-operation. A close energy dialogue is developing as a result with Russia, a major source of fossil fuels and potentially of electricity.

Even so, to reduce dependence on imports and cut pollution, the EU must become a low-carbon economy using less fossil fuel in industry, transport and the home, and making use of renewable energy sources to generate electricity, heat or cool buildings, and fuel transport, particularly cars. This presupposes an ambitious switch to wind (particularly offshore wind), biomass, hydro and solar power and bio-fuels from organic matter. The following step will be to become a hydrogen economy. A European Hydrogen and Fuel Cell Technology Platform is drafting a blueprint for the eventual transition.

Caring for the environment

Caps on the amount of emissions of carbon dioxide (CO₂) EU industry can spew into the atmosphere now apply to industry. Companies who exceed their emissions allowance trade with others who have not used up all their allowance. This will encourage more efficient energy use and above all cut pollution and keep the promises the EU has made in the Kyoto Protocol on climate change and reversing global warming.

Saving energy by using it more efficiently

Another way in which the EU backs more efficient fuel use is by promoting the use of 'co-generation'. Gas-fired co-generation plants produce both electricity and heat, mainly in the form of steam. This maximises the use of the gas and is also environmentally friendly because gas produces less CO₂ than other fossil fuels.

Energy is also saved through energy performance standards for new buildings and those being renovated, requiring boilers and air-conditioning to be inspected regularly and buildings to have energy certificates. Standards like these have the potential to cut 25% of the demand generated by the anticipated doubling of air-conditioning use by 2020.

More efficient transport is equally crucial: more people and freight should travel by rail, and better use should be made of public and private transport. This means getting more kilometres to the litre, better traffic management and better urban planning. Traffic jams and commuting waste fuel and vehicle

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exhausts pollute. The EU hopes that bio-fuels (from organic matter) will provide 5.75% of total energy consumption by 2010. The Commission believes it should be possible to replace 20% of the oil we use with bio-fuels by 2020.

The single energy market

A competitive energy market helps efficient energy use. Now, markets have been opened up to competition and national borders in energy markets are disappearing, though the European Commission would like to see even faster progress.

All businesses and many consumers are already free to choose their own supplier of gas and electricity.