

# Energy

#### Introduction

Since 1999 UK energy production has shown a reducing trend year on year, with total production in 2007 down 38.9% on 1999 levels at 185.9 million tonnes of oil equivalent (mtoe). This is largely due to the depletion of the North Sea oil and gas fields<sup>1</sup>.

Total UK energy consumption in 2007 was down 2% on the previous year at 231.2mtoe - 24% more than UK production during the same year. Coal based energy consumption stood at 43mtoe, petroleum 76mtoe, natural gas 92mtoe, nuclear 14mtoe, wind/natural flow hydro 1mtoe with net imports adding 0.5mtoe. Coal and other solid fuel consumption decreased by 6.5% on 2006 figures. Oil consumption fell by 1.6% in 2007. Gas consumption rose by 2.6% in 2007.

In 2005, energy consumption in Wales (industrial and domestic combined) was 8,727.6 kilotonnes of oil equivalent (ktoe), comprising of; 237.9ktoe from coal, 281.1ktoe from manufactured solid fuels, 3,688.2ktoe from petroleum, 2,950.2ktoe from natural gas, 1,510.5ktoe from electricity and 59.7ktoe from renewables and waste<sup>III</sup>.

According to the UK Government Department for Business, Enterprise and Regulatory Reform (DBERR), approximately 8GW™ of coal-fired power stations in the UK will close before 2015 under EU environmental legislation, with 10GW of nuclear power stations reaching end of life by 2023. Further, increasing growth in electricity demand will require substantial investment in up to 25GW of new electricity generation capacity across the UK (equivalent to 30% of today's existing capacity) by 2025.

Welsh energy policy is currently comprised of the following five strands (as outlined in the Energy Wales Route Map 2005°); securing 4TWh per annum of renewable energy production by 2010 and 7TWh by 2020; greater energy efficiency in all sectors; more electricity from cleaner, high efficiency fossil-fuel plants; significant energy infrastructure improvements, and; achieving measurable carbon dioxide emission reduction targets by 2020.

### Current and proposed legislative competence of the Assembly

Energy policy in the United Kingdom is predominantly a non-devolved matter. DBERR is responsible for energy consents under Section 36 of the *Electricity Act*<sup>vi</sup> for proposed generating stations which are in excess of 50 megawatts. Where an onshore generating station produces 50 megawatts or less, it is a matter for the Welsh Assembly Government and the local planning authorities. Although the Assembly Government is consulted by DBERR on proposals for onshore power stations in excess of 50 megawatts, it plays no formal part in the decision-making process.

### Forthcoming EU and UK primary legislation

A draft Climate Change Bill was published in March 2007 and introduced in the House of Lords in November 2007<sup>vii</sup>

A White Paper on Energy was published on 23 May 2007 and an Energy Bill was introduced in the House of Commons on 10 January 2008.

#### **EU Policy**

On 10 January 2007, the European Commission adopted its first major package of proposals on energy policy as requested by Members States. The key objectives are sustainability, competitiveness and security of supply. At the March 2007 European Council, heads of state agreed to reduce greenhouse gas emissions by 20% (on 1990 levels) by 2020 and to produce a fifth of its energy via renewable sources.

A second strategic energy review is scheduled to be completed by 20 November 2008. The review will assess progress towards strategic objectives agreed at the March 2007 European Council and will take forward further work on an EU energy policy for Europe.

A Directive on the promotion of renewable energy<sup>x</sup> was published on 23 January 2008.

A review of the Energy Taxation Directive<sup>xi</sup> is envisaged to be completed by the fourth quarter of 2008.

## Key Welsh Government strategy documents and action plans

- The *Energy Wales Route Map Consultation (2005)* was launched on 20 June 2005, and set out the Assembly Government's vision with regard to the future of energy production in Wales.
- A National Energy Efficiency and Savings Plan will look at how the Assembly Government can reduce energy use across Wales. A consultation document will be launched in December 2008 with the results feeding in with those from the Renewable Energy Route Map consultation to form Wales' Energy Strategy. The strategy is due to be published in summer 2009.
- A two year feasibility study into harnessing tidal power on the Severn Estuary was launched on 22 January 2008 by John Hutton, Secretary of State for the Department for Business Enterprise and Regulatory Reform (BERR) and Jane Davidson, Minister for Environment, Sustainability and Housing, Welsh Assembly Government.
- In July 2008 the UK and Assembly Governments launched a feasibility study to consider 10 possible options for harnessing energy from a Severn Tidal System<sup>xii</sup>.

#### **Useful Links**

- European Commission: Energy for a Changing World: An Energy Policy for Europe:
  <a href="http://ec.europa.eu/energy/energy\_policy/doc/2007\_03\_02\_energy\_leaflet\_en.pdf">http://ec.europa.eu/energy/energy\_policy/doc/2007\_03\_02\_energy\_leaflet\_en.pdf</a>
- European Commission: Energy Homepage: http://ec.europa.eu/energy/index\_en.html
- UK Government Department for Business, Enterprise and Regulatory Reform (BERR): Energy Homepage: http://www.berr.gov.uk/energy/index.html
- BERR, UK Energy in Brief (July 2008):
  <a href="http://www.berr.gov.uk/energy/statistics/publications/in-brief/page17222.html">http://www.berr.gov.uk/energy/statistics/publications/in-brief/page17222.html</a>
- The National Energy Foundation: <a href="http://www.nef.org.uk/">http://www.nef.org.uk/</a>
- Assembly Government, Technical Advice Note (TAN) 8, Renewable Energy (2005):
  <a href="http://new.wales.gov.uk/about/departments/depc/epcpublications/PlanPubs/TAN/TAN8?lang=en">http://new.wales.gov.uk/about/departments/depc/epcpublications/PlanPubs/TAN/TAN8?lang=en</a>

#### **Further information**

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UK Government Department for Business, Enterprise and Regulatory Reform, Energy Trends (March 2008)

<sup>&</sup>quot; Ibid

BERR, total final energy consumption by region for 2005 (most recent data available at Sep 2008)

 $<sup>^{\</sup>text{iv}}$  1TW = 1000 GW = 1,000,000 MW = 1,000,000,000 kW = 1,000,000,000,000 W

Assembly Government, Energy Wales: Route Map, Clean, Low-carbon and Competitive Energy for Wales (2005)

vi The Electricity Act 1989 can be accessed online.

UK Government, Department for Environment, Food and Rural Affairs (DEFRA), <u>Draft Climate Change Bill</u>

VIII UK Government Energy White Paper

ix UK Government, Energy Bill

<sup>\*</sup> European Commission, <u>Directive on the promotion of renewable energy</u>

xi European Commission, Directive on Energy Taxation

xii Welsh Assembly Government, Severn Tidal Feasibility Study