

# ***National Energy Policy and Energy Supply***

## **COURSE OVERVIEW**

### **Purpose**

This module considers the issue of national energy policy and energy supply, and the planning implications for instance with respect to provision of necessary infrastructure.

### **Audience**

This module is aimed at planning and related professional working in the public or private sectors whose work relates to the supply of energy and associated infrastructure, as well as others with an interest in these topics, including students and politicians.

### **Benefits**

This module will inform its audience of the implications of national energy policy and energy supply needs and constraints in terms of spatial planning and development, including provision of infrastructure.

### **Learning method**

A knowledge builder which provides a fact file of useful information, background and context with a detailed range of additional sources of information from the web. Also a comprehensive range of further reading is provided for those who wish to become expert in the subject. Includes voluntary self assessment for recording continuous professional development (CPD).

### **Time to Complete**

2 hours

### **Participants**

1

### **Published**

February 2009

### **Related Solutions**

Biomass Energy

Energy Efficiency

Renewable Energy

Waste Incineration

## ***NATIONAL ENERGY POLICY AND ENERGY SUPPLY***

### **Introduction**

This module is concerned with national energy policy and energy supply and the implications for spatial planning and development, including the provision of necessary infrastructure.



### **Regional relevance**

The content of this module is relevant to the situation in England, Scotland, Wales and Northern Ireland applying at the time of publication.



## Key terms

**Biomass:** this is biological material derived from living or recently dead organisms, which can be used for fuel and energy production.

**Carbon capture and storage (CCS):** this refers to an emerging combination of technologies which could assist in the reduction of emissions from fossil fuel power stations.

**Combined heat and power (CHP):** this is a highly efficient way to use both fossil and renewable fuels by means of the simultaneous generation of heat and power.

**Decentralised energy supply:** this is energy supply, usually on a relatively small scale, generated from local renewable and low-carbon sources (namely on-site and near-site, but not remote off-site).

**Development:** this refers to the carrying out of building, engineering, mining or other operations in, on or under land, or the making of any material change in the use of any buildings or other land (Town and Country Planning Act 1990, Section 55, and related legislation elsewhere).

**Gigawatt (GW):** *one GW* equals 1000 megawatts (MW).

**Liquefied Natural Gas (LNG):** this is natural gas (primarily consisting of methane) that has been converted to a liquid form for ease of storage and transportation.

**Megawatt (MW):** one MW equals 1000 kilowatts (kW).

**National developments (in Scotland):** these are developments (essentially comprising infrastructure, including energy-related) judged to be of critical importance to the strategic future of Scotland, and set out in the *National Planning Framework for Scotland*.

**Renewable energy :** this refers to energy generation from energy flows that occur naturally and repeatedly in the environment, including in relation to wind, ocean movement, the sun, and from biomass.

**Renewables obligation (RO):** this places a requirement on licensed energy suppliers to source an increasing proportion of their sales of electricity from renewable sources, or to pay a financial penalty. The aim of the RO is to provide a financial incentive for investment in renewables so that these can become part of the mainstream of the UK's energy market (DTI, 2007).

**Statutory planning policy:** this is policy that is required to be produced by legislation, for instance the current *National Planning Framework for Scotland* (after the Planning etc. [Scotland] Act 2006, which made the *Framework* a statutory planning policy document which was required to be produced by the Act).

## Context and background

### Energy supply

In the UK around 90% of energy needs are met by oil, gas and coal, and fossil fuels are forecast to supply most energy needs by 2020. However, between 2004 and 2030, world demand for energy (on current trends) is forecast to increase by 53%. In addition, the concentration of global oil and gas reserves in relatively few locations brings issues of security of supply. Furthermore, as the UK's resources continue to decline, and are only in part replaced by renewable resources, the UK will become more dependent on imports.

In terms of **oil and gas**, 37 billion barrels of oil equivalent (boe) had been produced by 2007, with estimates of remaining capacity from hydrocarbons in the UK's continental shelf ranging from 16-25 million boes (the total oil and gas production from the UK's continental shelf peaked in 1999). Untapped reserves of oil and gas exist for instance to the west of Shetland (comprising around 17% of the UK's remaining oil and gas capacity). In terms of the oil market, 68% of the UK's oil demand is for transport; however, while the UK in 2007 produced around the same amount of oil as it consumed, more than 60% of production was for export. In terms of the gas market, natural gas formed 69% of domestic energy consumption in 2007 (BERR, 2008a); it is forecast that demand for gas will grow in response to increased demand from the power sector, with the consequence of increasing imports (DTI, 2007).

In terms of **coal**, generators have committed investment to enable 20 gigawatts of existing coal-fired power stations to comply with EU emissions legislation,

and there are plans for new coal-fired power stations which use cleaner coal technologies (which can accept CCS technology when this is commercially viable). For instance, E.ON proposes to build new coal-fired generation capacity at Kingsnorth (an existing 1,985 megawatt dual-fired coal or oil power station) in Kent. The development would involve the replacement of existing coal-fired units with two new supercritical cleaner coal units, each rated at 800 megawatts. If completed, this would be the first new coal powered plant in the UK since the completion of the DRAX power station in 1986. It is expected by E.ON that the supercritical units could reduce carbon dioxide emissions per unit of electricity by around 20% as compared to the existing subcritical plant. Moreover, E.ON states that the new units will allow the option of retrofitting with carbon capture and storage (CCS) (but see commentary below). In addition, the UK has significant recoverable coal reserves though production has significantly declined in recent decades (for instance from 40 million tonnes in 1998 to 18.6 million tonnes in 2006).

In terms of **nuclear** energy, in 2007 nuclear power accounted for approximately 18% of UK electricity generation and 7.5% of total energy supply (DTI, 2007.)

In terms of **electricity generation**, the UK in 2006 had around 76 GW of generation capacity; this was around 20% higher than the expected level of peak demand, with a previous winter peak demand of around 63 GW. There are over 2,000 power generating stations, which are owned by several different companies as a consequence of the privatisations which took place in the 1980s and early 1990s (including gas, electricity, coal and nuclear power) with the consequent creation of a plethora of generation and distribution companies. Most power stations are fuelled by coal, gas or nuclear energy; in addition, however, there are many other generating stations which use renewable fuels such as hydro, wind, landfill gas, wastes and biomass, and there are also combined heat and power (CHP) stations. All these tend to be much smaller than conventional power stations and so their combined capacity is smaller. Overall, in terms of electricity generation by fuel type, in 2006 this was as follows:

- coal 37%;
- gas 36%;
- nuclear 18%;
- renewables around 4%;

with the remainder comprising other sources such as oil-fired power stations and electricity imports (DTI, 2007).

The composition of the UK's existing electricity generation capacity is in large part the result of the large number of gas-fired power stations that were built in the 1990s (the so-called 'dash for gas'). Overall, a diverse mix of capacity helps to avoid exposure to risks associated with dependence on a single fuel or technology type, which helps in turn to ensure security of supply. The diverse

mix also helps to provide a degree of flexibility to accommodate variations in demand which occur at different times of the day or at different times of year, or which are brought about by changes in fossil fuel prices. In addition, since it is not yet technically or commercially feasible to store electricity on a large scale, some level of spare capacity for generation is needed.

This mix of generation capacity meant in 2006 that electricity generation in the UK accounted for around one third of the UK's total carbon emissions. While renewable energy and CHP clearly have potential to address issues such as low-carbon provision as well as security of supply, some renewable sources (such as wind) are variable, so environmental and security objectives must be balanced against the disadvantages of having a larger proportion of UK generation coming from variable sources.

In terms of the capacity for renewable generation and CHP, in 2006 this was as follows (DTI, 2007):

- 4814 MW for CHP above 10 MW;
- 977 MW for CHP up to 10 MW;
- 1351 MW for onshore wind power;
- 214 MW for offshore wind power;
- 1453 MW for biofuels and wastes;
- 1513 MW for hydro-electric power;
- 11 MW for solar voltaics.

In terms of power transmission and distribution, most electricity is transported over high and low voltage power lines via a nationwide grid. Some energy is lost (mainly as heat) as it is transmitted; the transmission network (high voltage) loses 2% overall, though around 5% is lost for the distribution system as a whole. In addition, over two thirds of gas is supplied via a nationwide grid. (DTI, 2007)

## Explaining the topic

### Energy policy

The Government's policy on energy use is set out in the *Energy White Paper* (DTI, 2007). This aims to:

- cut the UK's carbon dioxide emissions
- maintain the reliability of energy supplies

- promote competitive markets
- ensure that every home is adequately and affordably heated.

In this context, renewable electricity generation can make a significant impact, and the White Paper aims for 20% of electricity to be supplied by renewable generation by 2020. It also confirms the intention to strengthen the Renewables Obligation (RO). It notes the importance of the global context, with energy demand worldwide continuing to increase. It asserts that coal, oil and gas must play a key role in energy supply for the foreseeable future, and that the UK must seek to manage the risks associated with the global concentration of fossil fuel reserves in fewer places.

Since over two thirds of the UK's heat comes from gas via the nationwide gas grid, it notes the long-term possibilities for alternatives via for instance the production and use of hydrogen, which could also enhance diversity and therefore security of supply. It adds that in the medium term there is the possibility for producing and using heat at a local level via distributed or decentralised energy, including microgeneration, district heating schemes, combined heat and power, and biomass-fuelled heating at community and industry levels.

In spite of the dominance of gas in terms of UK energy, the White Paper highlights the UK's diverse mix of power stations, which helps minimise dependence on a single fuel type. Nevertheless, it adds that much new investment will be needed in further decades as nuclear and coal power stations close, and it highlights the need to develop technologies to mitigate the emissions from burning fossil fuels in the context of the need for cleaner large-scale electricity generation, for instance by means of carbon capture and storage (CCS) technology. It notes the implications of the EU's Large Combustion Plant Directive in terms of the need to reduce sulphur dioxide and nitrogen oxide. It argues for the reduction in dependence on imports by means of the maximisation of economic recovery of oil and gas from the UK continental shelf as well as from remaining coal reserves. In the context of nuclear power, it suggests that 'the advantages outweigh the disadvantages and...the disadvantages can be effectively managed' (p17); it therefore proposes that the private sector should be encouraged to invest in new nuclear power stations.

Overall, the White Paper highlights the critical importance of security of energy supply, with the consequent need for substantial private sector investment in gas infrastructure, power stations and electricity networks. It predicts the UK will need around 30-35GW of new electricity generation capacity in the next 20 years with around two thirds of this needed by 2020, to replace power stations and meet rising demand. It also indicates that private sector investment in infrastructure is needed to bring energy from overseas, with gas import capacity needing to increase by 15-30% by 2020. It stresses the need to maximise the economic recovery of the UK's remaining reserves of oil and gas by increasing investment in the North Sea, and notes that coal reserves continue to offer

potential for exploitation 'where it is economically viable and environmentally acceptable' (p20), as a contribution to diversity and security of energy supply. In terms of distribution, the White Paper envisages the possibility of a more decentralised low carbon energy system with more local energy supply and greater use of renewables, which it suggests could reduce losses arising from the transmission of centrally-generated electricity.

The Energy Act 2008 contains provisions to implement legislative aspects of the 2007 White Paper. In particular, it includes the following provisions:

- A strengthened regulatory framework to enable private sector investment in offshore gas supply infrastructure so as to help maintain security of energy supply.
- A regulatory framework to enable private sector investment in carbon capture and storage (CCS).
- A strengthened UK Renewables Obligation to bring about greater and speedier deployment of renewable energy.
- The introduction of feed-in tariffs to support low carbon electricity generation for projects up to 5 megawatts (enabling a guaranteed payment for generation).
- Strengthened statutory provisions for the decommissioning of offshore renewables and oil and gas installations.
- Measures to ensure the operators of new nuclear power stations meet the full costs of decommissioning and waste management; and introduction of a financial support mechanism for renewable heat, ranging from large industrial sites to the household level.

### **Nuclear strategy**

The *White Paper on Nuclear Power* (BERR, 2008b) encourages the development of nuclear power by the electricity industry 'subject to meeting the normal planning and regulatory requirements' (Foreward, p 4). It adds that 'Nuclear power is a tried and tested technology. It has provided the UK with secure supplies of safe, low-carbon technology for half a century. New nuclear power stations will be better designed and more efficient than those they replace' (Foreward, p 4). However, it specifies that the responsibility of funding, developing and building new nuclear power stations will lie with the energy companies, including meeting the full costs of decommissioning and 'their full share of waste management costs' (p10).

### **Biomass strategy**

The 2007 *Biomass Strategy* (DEFRA, 2007) sets out the potential of using biomass resources for energy supply including heat and electricity generation,

particularly in the context of the need for renewable electricity generation (with electricity generation from biomass eligible for support under the RO).

### **Combined heat and power (CHP) strategy**

The 2004 *Strategy for Combined Heat and Power* (DEFRA, 2004) aims to ensure that at least 10,000MW of good quality CHP capacity can be achieved by 2010. It notes the positive contribution CHP can make to a range of sustainability objectives, as well as for security, diversity and competitiveness of energy supply. It adds that CHP could play an increasingly important role in reducing carbon emissions, with the future likelihood of more demanding international commitments in relation to climate change.

### **Climate change**

The issues of climate change and energy supply are clearly linked, and the Climate Change Act 2008 aims to improve carbon management and assist the transition towards a low carbon economy. It specifies legally-binding targets in relation to reduction in greenhouse gas emissions of at least 80% by 2050, and reductions of at least 26% by 2020 (against a 1990 baseline). It also incorporates measures on biofuels.

### **Sustainable communities**

The Sustainable Communities Act 2007 enables local authorities (in England and Wales) to submit proposals on what Government can do to help them sustain their communities. Such proposals are intended to consider a range of issues including sustainable energy generation. The proposals will go to the Local Government Association, which will consult with Government to prepare a shortlist as the basis of a national action plan to go before Parliament.

### **Commentary**

Many aspects of energy supply and energy policy are subject to dispute. For instance, in overall terms, it may be argued that the UK's energy policy is flawed, for instance in that the aim of 20% of energy to be obtained from renewable sources is unachievable. A more pragmatic solution, it may be argued, would be for a greater priority to be given to the replacement of inefficient, polluting coal-fired power stations with new coal-fired stations, as well as a significant increase in gas and electricity storage. Security of supply, it may be argued, could also be furthered by maximising links between the UK and Norway, Germany and the Netherlands. Moreover, more emphasis could arguably be placed on nuclear power for instance with a longer term move to generation IV reactors. In addition, financial incentives could be used to restore investor confidence and establish a minimum floor price for low-carbon, new-build electricity generation. More rigorous building regulations could also

encourage provision of solar heating and cooling. In addition, a Severn Barrage could provide 5% of the UK's electricity from tidal power. Furthermore, while the 2007 White Paper argues for more decentralised energy supply, this may be argued to be less efficient than the use of centralised power stations. (Fells and Whitmill, 2008.)

Nevertheless, the development of new coal-fired power stations (such as that at Kingsnorth) may be argued to be inconsistent with wider aims (as reflected for instance in the Climate Change Act 2008) for carbon reduction – particularly the commitment to reduce greenhouse gas emissions by 80% by 2050. This is because burning coal produces almost twice as much carbon dioxide per unit of heat energy generated as natural gas, with oil in between. In addition, the proposal for Kingsnorth has been criticised because of the lack of CCS (as opposed to the capacity for CCS) within it, and some (such as Greenpeace) also display scepticism about the viability of CCS and its capacity to reduce emissions.

The effectiveness of the planning system in enabling the delivering of key energy-related national infrastructure in the UK is clearly of critical importance for issues of energy supply, and modernisation of planning in the UK is in part intended to allow key developments of national importance to progress more expeditiously, as indicated in Relevance to planning, below. Hence in Scotland, while national infrastructure developments will still need planning permission, designation in the *National Planning Framework* establishes the need for these developments, so any subsequent examination of planning implications, for instance via a public inquiry, will not be concerned with the principle of the development but only with detailed matters such as siting (Scottish Government, 2008). However, it has been argued that the arrangements for national developments in Scotland (following from their inclusion as proposals in the *Framework* ) implies a loss of accountability since such inclusion establishes the principle of need, and consultation on the *Framework* itself (and therefore on this principle) has arguably been insufficient. Moreover, the provisions in the Planning Act 2008 for the establishment of an independent infrastructure planning commission may be argued to represent an erosion of democratic accountability.

Furthermore, it may be argued that the relationship as outlined above between the English and Scottish policy contexts in terms of energy infrastructure is rather unclear, with doubts remaining about precisely how the very different approaches to infrastructure approval can be resolved in the context of UK or Great Britain-wide policy. For instance, it is unclear if national policy statements on energy infrastructure could cover site-specific locations in Scotland. These issues are compounded by the different timescales in relation to the production of national policy statements in England and the production of the *National Planning Framework* in Scotland. In addition, there may be particular difficulties with reconciling the two systems where there are fundamentally different political views and priorities. In the case of nuclear energy for instance, the current administration in Scotland is not in favour of such development, and there could be conflicts where a national policy statement on energy proposes such infrastructure in Scotland (Macdonald, 2007). More generally, the UK

Government's confirmation in 2008 that new nuclear power stations are to be supported is contended by some in view of the limited capacity of such power stations to address overall reductions in emissions, and their overall costs, as well as issues related to waste management and disposal.

## Relevance to planning

The requirement for secure, sustainable energy is an important aim of Government to which the planning system can contribute. Specifically, the White Paper *Planning for a Sustainable Future* (DCLG, 2007) highlights the need for infrastructure to provide clean, secure and affordable energy supplies, and states that 'We need investment in...new electricity generation capacity over the next two decades – equivalent to about one-third of our existing capacity. If we do not do this in a timely fashion, then we may not have enough capacity to meet our energy demands. At the same time we are becoming more dependent on imported energy as our supplies from the North Sea decline. This means that we also need to modernise our infrastructure by constructing import terminals and storage facilities for liquefied natural gas if we are to get the energy we need at competitive prices. We can also seize the opportunity presented by the need to renew capacity to help support the shift towards renewable and low carbon energy' (p13).

The White Paper also highlights problems in relation to the processing of major infrastructure developments since this is seen as too slow and complicated, and it sets out proposals to enable the speedier and more effective processing of planning applications for national infrastructure, within a policy framework set by national policy statements, so that 'policy statements for the energy sector would consider what development was necessary to meet our objectives in relation to security of supply, in a way that takes full account of economic, environmental and social considerations' (DCLG, 2007: p43).

These proposals are essentially carried forward in the Planning Act 2008, particularly in relation to the establishment of a new independent Infrastructure Planning Commission to take decisions on major infrastructure (including in relation to energy supply and distribution), based upon new national policy statements to be subject to public consultation and Parliamentary scrutiny. The Act establishes a unified consent regime for such infrastructure development which means that 'development consent' will give the necessary authorisation so that separate application for consent for power stations under the Electricity Act 1989 will no longer be needed. In particular, the Act sets out the following specific types of energy-related nationally-significant infrastructure:

- Construction or extension of a generating station (over 50 MW for inshore proposals and over 100 MW for offshore proposals).
- Installation of an electric line above ground (with some exceptions).
- Development relating to an underground gas storage facility.

- Construction or alteration of a LNG (Liquefied Natural Gas) facility (subject to criteria).
- Construction or alteration of a gas reception facility (subject to criteria).
- Construction of a pipe-line by a gas transporter (subject to criteria).
- Construction of a pipe-line other than by a gas transporter (subject to criteria).

### Devolution issues

In this context it is important to note that Scotland, Wales and Northern Ireland have fully devolved responsibilities for spatial planning policy and decision making. However, the UK spatial planning policy context for sectors such as energy is complex (as indicated in the Commentary, above), and the White Paper *Planning for a Sustainable Future* notes that 'Responsibility for planning for nationally significant infrastructure is largely devolved, but the arrangements differ between nations and between infrastructure sectors... The Government is working closely with the Devolved Administrations...to ensure that the planning systems in the UK operate effectively alongside each other' (DCLG, 2007: p165). It adds that 'The Government intends that any national policy statements for...energy would be developed for the whole of Great Britain or the UK as appropriate. These policies would be developed with the full involvement of the Devolved Administrations and...consultation...would encompass the whole of Great Britain or the UK. Welsh, Scottish and Northern Ireland ministers would be statutory consultees in the development of relevant national policy statements' (p165). It confirms that planning decisions on energy projects in Scotland and Northern Ireland will continue to be taken by these Administrations.

In Wales, the White Paper indicates that decisions on major energy infrastructure projects will be transferred to the infrastructure planning commission in the same way as in England, in the context of the relevant Great Britain or UK national policy statement. In addition, it suggests that the commission should take account of the views of the Welsh Assembly Government as well as appropriate Welsh experts, and that Welsh ministers will be statutory consultees in the development of national policy statements.

In relation to cross-border infrastructure projects, the White Paper indicates that these will require consent from the Devolved Administrations as well as the infrastructure planning commission, and it adds that the Government will work with the relevant Devolved Administrations in order to put in place effective arrangements for joint determination of such projects.

### Planning policy

The issue of energy supply is a relevant factor in relation to decisions concerning the location of new residential and Spatial Strategies and Local

Development Frameworks. Hence for instance, *Planning Policy Statement (PPS) 3: Housing* (DCLG, 2006) indicates that availability of relevant infrastructure (including in relation to energy) is a factor in taking decisions on (and in strategic planning for) the provision of new housing. In addition, it states that criteria in Regional Spatial Strategies for selecting the broad location for new housing should take into account 'the contribution to be made to cutting carbon emissions from focusing new development in locations...where it can readily and viably draw its energy supply from decentralised energy supply systems based on renewables and low-carbon forms of energy supply, or where there is clear potential for this to be realised' (p3).

In relation to the development of power stations themselves, most of these require planning permission from local authorities (though see provisions of the Planning Act 2008 above) and may require other permits such as environmental permits. In addition, the building and operation of power stations with a capacity of over 50 megawatts in England and Wales are subject to the consent of the Secretary of State for Business, Enterprise and Regulatory Reform (formerly Secretary of State for Trade and Industry [DTI]) under section 36 of the Electricity Act 1989.

In relation to planning policy and guidance, the following are of particularly relevant to energy supply:

In England, *Planning Policy Statement (PPS) 1: Delivering Sustainable Development* (ODPM, 2005) sets out the need for prudent use of national resources, and indicates that planning policies at all levels should address issues in relation to promotion of renewable energy. These issues are addressed in more detail in *Planning Policy Statement (PPS) 22: Renewable Energy* (ODPM, 2004a), and *Planning for Renewable Energy. A Companion Guide to PPS22* (ODPM, 2004b) gives practical guidance on the planning and development of renewable energy schemes. In addition, *Planning Policy Statement: Planning and Climate Change* (DCLG, 2007) highlights direct implications for energy supply including renewable and low carbon energy generation, and encouragement of decentralised energy for new development.

In Scotland, following the Planning etc. (Scotland) Act 2006, key 'national developments', including energy supply and distribution infrastructure, are identified in the *National Planning Framework for Scotland 2: Proposed Framework* (Scottish Government, 2008), and the final version of the *Framework* is to be published in 2009. It plays a key role in aligning strategic investment priorities, including in relation to energy supply infrastructure. Planning authorities must take it into account in preparing development plans, and it may constitute a material consideration in determining planning applications. The *Framework* provides a signal of long-term infrastructure priorities; for instance, it indicates the need to strengthen parts of the electricity transmission network so as to realise the potential of renewable energy resources. The *Framework* is also linked to the Government's Infrastructure Investment Plan and will inform the investment programmes of public agencies and infrastructure providers. Proposed national developments in the *Framework* include the following:

- A new (clean coal fired) power station at Hunterston, Ayrshire.
- New non-nuclear baseload electricity generating capacity and associated infrastructure at other existing power station sites (Longannet, Cockenzie and Boddam).
- Electricity grid reinforcements (throughout Scotland).

In Wales, *Technical Advice Note (TAN) 8: Planning for Renewable Energy* (WAG, 2005) acknowledges that energy policy is a reserved function that is not devolved to the Welsh Assembly Government (WAG). It notes the importance of onshore wind generation in view of its potential to increase the generation of electricity from renewable energy in the short to medium term, and indicates that large-scale (over 25MW) onshore wind developments should be concentrated in seven Strategic Search Areas (SSAs). The TAN also covers other technologies such as biomass and combined heat and power, together with relevant design considerations.

In Northern Ireland, *Draft Planning Policy Statement (PPS) 18: Renewable Energy* (DoENI, 2007) acknowledges the wider policy context in relation to renewable development, including the Northern Ireland Renewables Obligation. It encourages the provision of renewable energy, indicating that applications for renewable energy development will be permitted unless they result in unacceptable adverse impacts.

## Legal and regulatory context

The Electricity Act 1989 requires consent from the Secretary of State for Trade and Industry (now Business, Enterprise and Regulatory Reform) for the building and operation of power stations with a capacity of over 50 megawatts in England and Wales. The Town and Country Planning Act 1990 was substantially amended by the Planning and Compensation Act 1991, which introduced a 'plan-led' system in England. The Planning and Compulsory Purchase Act 2004 identified a new statutory purpose for planning: to contribute to the achievement of sustainable development.



## Legal and regulatory context (continued)

The Act does not apply in Scotland or Northern Ireland. The Planning Act 2008 makes provision for the creation of an independent planning commission, and the development of national policy statements in relation to national infrastructure, together with other proposals to streamline the existing planning system in England (with implications for other parts of the UK). The Climate Change Act 2008 includes the commitment to reduce greenhouse gas emissions by 80% by 2050. In addition, the Planning and Energy Act 2008 (for England and Wales) enables local planning authorities to set requirements in development plans for energy use (from renewable sources and in relation to low carbon energy) and energy efficiency in local plans.

The Planning etc. (Scotland) Act 2006 amends the Town and Country Planning (Scotland) Act 1997 to make the *National Planning Framework* a statutory planning document. The 2006 Act also requires the *Framework* to set out a statement of priorities for Scotland's spatial development, and it enables the *Framework* to designate 'national developments' for strategic infrastructure.

The Planning (Northern Ireland) Order 1991 sets out the functions of the Planning Service in Northern Ireland.

### Looking forward

In England and Wales (with implications for Scotland), The Planning Act 2008 establishes provisions for the creation of an infrastructure planning commission (IPC), members of which are expected to be appointed in 2009 and 2010. Appropriate regulations and policy/guidance (including national policy statements) are to be developed from 2009 to enable the provisions of the Act to be implemented.

In Scotland, the *National Planning Framework for Scotland 2: Proposed Framework* (Scottish Government) was published in 2008 following an initial period of consultation on a discussion draft. The final version of the *Framework* is to be published in 2009. The Climate Change (Scotland) Bill 2008 sets out a range of proposals in connection with mitigation of and adaptation to climate change, including reducing greenhouse gas emissions by 80% by 2050.



### Related Action Lists or Knowledge Builders

*Renewable Energy*

*Biomass Energy*

*Energy Efficiency*  
*Waste Incineration*



## References and further reading

### Books, journals and magazines:

BERR (2008a) *Energy Trends*. London: BERR. This sets out a range of statistical information with respect to all aspects of trends for energy production and use.

BERR (2008b) *Meeting the Energy Challenge: A White Paper on Nuclear Power*. London: BERR. This sets out how the government will encourage the development of nuclear generation capacity in the UK.



## References and further reading (continued)

### Books, journals and magazines:

DEFRA (2004) *The Government's Strategy for Combined Heat and Power to 2010*. London: DEFRA. This sets out how the government's target of ensuring delivery of 10GW of CHP capacity by 2010 can be achieved.

DEFRA (2007) *Biomass Strategy*. London: DEFRA. This sets out the UK strategy for use of biomass resources including in relation to energy generation.

DCLG (2006) *Planning Policy Statement (PPS) 3: Housing*. London: DCLG. This sets out national planning policy in relation to housing.

DCLG (2007) *Planning for a Sustainable Future. White Paper*. London: DCLG. This sets out comprehensive proposals for planning reform, including in relation to the facilitation of large scale infrastructure (including energy supply-related development).

DoENI (2007) *Draft Planning Policy Statement (PPS) 18: Renewable Energy*. Belfast: DoENI. This sets out proposed planning policy for development that generates electricity from renewable resources, as well as in relation to the application of passive solar design principles in new development.

DTI (2007) *Meeting the Energy Challenge. A White Paper on Energy*. London: The Stationery Office. This sets out the Government's energy policy, including in relation to renewable energy.

Fells I and Whitmill C (2008) *A Pragmatic Energy Policy for the UK*. London: Fells Associates. This sets out a range of proposals for UK energy policy.

Macdonald K (2007) 'Working with devolution', in *Scottish Planner*, July 2007, p.10. This article considers the impact of the 2007 White Paper in England, for Scotland.

ODPM (2004a) *Planning Policy Statement (PPS) 22: Renewable Energy*. London: ODPM. This provides guidance on all aspects of developments in relation to renewable energy.

ODPM (2004b) *Planning for Renewable Energy. A Companion Guide to PPS22*. London: ODPM. This guide supports PPS22 by discussing the practicalities of the planning and development of renewable energy schemes in England.

ODPM (2005) *Planning Policy Statement (PPS) 1: Delivering Sustainable Development*. London, ODPM. This sets out in broad terms how the planning system can contribute to sustainable development, with implications for use of natural resources and energy supply.

Welsh Assembly Government (WAG) (2005) *Technical Advice Note (TAN) 8: Planning for Renewable Energy*. Cardiff: WAG. This provides technical advice in relation to renewable energy development in Wales.

Scottish Government (2008) *National Planning Framework for Scotland 2: Proposed Framework*. Edinburgh: Scottish Government. This is an indicative national planning framework for Scotland which sets out a strategy for Scotland's long term spatial development and includes a list of national infrastructure projects including energy-related projects.

## Websites and online databases

[The Department for Communities and Local Government](#) This is the website of the Department for Communities and Local Government (DCLG), and sets out the work of the DCLG, which is responsible for the planning system at central government level in England.

[Scottish Government Planning Function](#) This is the website of the Planning Directorate of the Scottish Government (formerly the Scottish Executive), and lists all aspects of this function.

[Welsh Assembly Government Planning Function](#) This is the website of the planning function of the Welsh Assembly which details all aspects of this function.

[Northern Ireland Planning Service](#) This is the Northern Ireland Planning Service website which covers all aspects of the planning function in Northern Ireland.