SOUTH EAST ENGLAND REGIONAL ASSEMBLY
REGIONAL PLANNING COMMITTEE

Date: 25 July2007

Subject: **Energy White Paper - Consultation Response**

Report of: Planning Manager
South East England Regional Assembly

Recommendations:

That the Committee notes the Energy White Paper and agrees the following comments on the associated consultations:

1. While the Assembly recognises that new nuclear capacity may be required over the next two decades to assist in reducing carbon emissions and security of supply, it withholds any views at this time as to suitability of locations within the South East.
2. The proposals for National Policy Statements on specific types of energy infrastructure as proposed in the Planning White Paper. Please refer to Agenda Item 6.
3. The amendments to the Renewables Obligation, including extending it beyond 2016 to provide continued headroom, and banding to provide additional support for particular technologies.
4. The proposed replacement of the Energy Efficiency Commitment with a Carbon Emissions Reduction Target (CERT) is supported. This will double the obligation on energy suppliers to deliver savings through encouraging households to make energy efficiency improvements and investment in micro-generation and behaviour change. A more radical programme of refurbishment, through provision of substantial and accessible grants and tax breaks, is required, however, to provide real incentives to all householders to improve the performance of, and reduce emissions from, their homes.

Purpose of Report:

To provide an overview of the Energy White Paper and associated consultations.

Key Issues:

The Energy White Paper sets out a broad programme to meet the challenges of :
1. improving energy security.
2. reducing carbon emissions through an accelerated transition to a low carbon economy.

Therefore the strategy aims to:

- save energy
- develop cleaner energy supplies; and
- secure reliable energy supplies at prices set in competitive markets

The White Paper sets out a very wide range of measures to achieve this. It also includes a number of consultations, including on:

- The Future of Nuclear Power
- Amending the Renewables Obligation; and
- Replacing the Energy Efficiency Commitment with a new Carbon Emissions Reduction Target

Many of the measures proposed will assist in the implementation of the objectives and policies of the South East Plan, particularly with regard to climate change mitigation (Policy CC2) and those for energy efficiency and renewable energy (EN1-6).

The most significant issue for the region may be the Government's view on the need for new nuclear electricity generation capacity, which may include provision in the South East. In addition, the proposals for the reform of the planning system proposed in the Planning White Paper (see Agenda Item 6) will also have implications given that there are likely to be energy National Policy Statements, and major energy schemes would be considered by the Infrastructure Planning Commission.

1. Introduction

1.1 The Energy White Paper - Meeting the Energy Challenge - was published on 23 May 2007 and addresses two long-term energy challenges:

- tackling climate change by reducing carbon dioxide emissions both within the UK and abroad.
- ensuring secure, clean and affordable energy as we become increasingly dependent on imported fuel.

1.2 It sets out the Government's international and domestic energy strategy to respond to these changing circumstances, address the long term energy challenges and deliver four energy policy goals which are:

- to put the UK on a path to cutting CO_2 emissions by some 60% by about 2050, with real progress by 2020.
- to maintain the reliability of energy supplies.
- to promote competitive markets in the UK and beyond.
- to ensure that every home is adequately and affordably heated.

1.3 A number of related consultation documents were also published alongside the White Paper including:

- The Future of Nuclear Power - whether the private sector should be allowed to build new nuclear power stations.
- The Renewables Obligation (Banding) - to provide differentiated support levels to different renewables technologies and give additional certainty on long-term Renewable Obligation Certificate prices.
- Guidance on the Gas Act 1965 - in parallel with proposals in the Planning White Paper proposing streamlining the onshore gas infrastructure consents regime in light of the UK's increasing gas import dependence and our need therefore for additional gas supply infrastructure.
- The Carbon Emissions Reductions Target 2008-11 (CERT) - the obligation on energy suppliers (previously the Energy Efficiency Commitment) for which the Government proposes a CERT obligation at around double the level of activity of the current EEC 2005-08, with a continuing focus on low-income consumers but an extended scope to include, in addition to energy efficiency measures, micro-generation and behavioural measures.
- Sustainable Products Policy Brief - how manufacturers, retailers and service providers of consumer electronic goods can help reduce energy consumption and emissions.

2. The Energy White Paper - Summary of Proposals

2.1 Saving Energy

2.1.1 A range of measures are proposed to encourage various sectors - business, households, transport and public sector - to improve energy efficiency performance.

Business

2.1.2 The government will be introducing a mandatory cap and trade scheme, after consultation, in the form of a Carbon Reduction Commitment. This will apply to the largest (in terms of energy consumption) public and private sector organisations that are not energy-intensive industries including hotel chains, supermarkets and banks. Such companies generate the large majority of emissions from this sector.

2.1.3 The government also wants all business premises to have an Energy Performance Certificate, when they are built, sold or rented out.

Households

2.1.4 Government wants new homes to be zero carbon as soon as practically possible. Members will recall the recent consultation on improving the Building Regulations to require such standards by 2016 (RPC 31 January 2007).

2.1.5 A DEFRA consultation is underway until 15 August 2007, in parallel to the White Paper, on a Carbon Emission Reduction Target (CERT) 2008-2011 that will replace the Energy Efficiency Commitment and be used to require energy suppliers to work with householders to make savings. The proposals seek to reduce emissions by half over the period and in the long term the objective is for energy suppliers to shift their focus to the provision of energy services rather than units of energy.

2.1.6 Trials on online CO_2 calculators and smart meters giving real-time information to inform people of their energy use in their homes are also planned. Subject to the trials it is proposed that from 2008 smart meters are installed in every new house and household having a meter replaced, and free of charge to anyone requesting one by 2010.

Transport

2.1.7 Mandatory car fuel efficiency targets are being developed. The Government is also working with the industry to implement a Low Carbon Transport Innovation Strategy. The aim of the strategy is to promote cleaner, more fuel efficient vehicles and stimulate innovation.

2.1.8 The Government has also been pushing in Europe for inclusion of aviation in the EU Emissions Trading Scheme (EU ETS) and is supporting Commission proposals for this.

2.1.9 In March 2007 a climate change communications campaign was launched to raise awareness amongst drivers of what they can do to help reduce emissions.

Public Sector

2.1.10 By 2012, the central Government office estate will be carbon neutral. The government will bring forward plans for funding of energy efficient new social housing and public sector buildings and procurement of cars and energy using products. This includes making it a condition of Government funding that all new social housing built by registered social landlords and other developers and all new homes developed by English Partnerships comply with level 3 of the Code for Sustainable Homes;

2.2 Cleaner Energy Supplies

Heat and Distributed Energy

2.2.1 In the short to medium term carbon reductions are most likely to be delivered through the development of heat and electricity at a local level.

2.2.2 Microgeneration, district heating schemes, combined heat and power and biomass fuelled heating at community and industry scale will be encouraged through measures including:

- More flexible market and licensing arrangements for distributed, low carbon electricity supply, to be implemented by the end of 2008.
- Greater clarity on the terms offered by energy suppliers to reward microgenerators for the excess electricity they produce and want to export back to the grid.
- Provision of information and advice to those individuals, communities and developers considering distributed energy solutions, alongside advice on energy saving.
- Incentivising Distributed Network Operators to ensure more efficient and speedy connection to networks.

2.2.3 A Biomass Strategy to expand supply and use of energy from this source has been published alongside the White Paper.

Cleaner Large Scale Electricity Generation

2.2.4 Even with substantial growth in technologies this will not be able to keep pace with the need for new electricity generation capacity, as existing coal and nuclear power stations close. Therefore there also needs to be investment in cleaner large-scale generation capacity and technologies.

2.2.5 The EU ETS will encourage investment by power companies in cleaner technologies and low carbon technologies such as renewables and carbon capture and storage.

2.2.6 Consultation on whether new nuclear power stations should be an option is currently underway.

Renewable Electricity

2.2.7 The Renewables Obligation provides a financial incentive to invest in renewables by requiring energy suppliers to provide an increasing amount of electricity from renewables or pay a penalty buy-out fee. The level of the Obligation is set to increase from 7.9% in 2007 to 15.4% in 2015. Proposals to modify the Renewables Obligation are anticipated to triple electricity supplies from renewable sources between now and 2015 to around 15% of the total electricity supplied. The Government propose to increase the Obligation from 15.4% in 2015 to 20% if growth in renewables justifies it - so that there is headroom and a continued incentive for developers to invest.

2.2.8 Large scale renewable projects will also benefit immediately from planning inquiry rules introduced from the beginning of April 2007. Longer term, the proposals in the Planning White Paper 2007 would apply to all large scale energy infrastructure, including large scale offshore and onshore renewable electricity projects.

2.2.9 In addition measures to remove key barriers to connecting renewables projects to the transmission grid will be addressed.

2.2.10 The parallel consultation on the Renewables Obligation extends until 6 September 2007. It proposes to introduce differential banding to provide higher levels of support through Renewable Energy Certificates (ROCs) to less established and emerging technologies, or those where costs have constrained commercial development and deployment. This is intended to incentivise investment in these (such as wave, tidal, advanced waste technologies, photovoltaics, offshore wind, dedicated biomass) while also supporting investment in more established and competitive renewable energy technologies (land based wind, landfill gas, hydro, co-firing of biomass).

Fossil Fuel Electricity Generation and Carbon Capture Storage

2.2.11 Fossil fuels will continue to be required as part of a diverse energy mix for some time to come. Carbon capture and storage (CCS) with electricity generation has not yet been proven on a commercial basis, although some key elements of the process have been demonstrated. The government has launched a competition to demonstrate commercial scale CCS.

Nuclear Power

2.2.12 A separate but linked consultation on The Future of Nuclear Power extends until 10 October 2007. It includes consultation on the overall case for building new power stations and whether this is in the public interest, and consultation on Justification and a proposed process for Strategic Siting Assessment (SSA) for new nuclear plants.

2.2.13 Nuclear power currently generates 18% of the electricity used in the UK and 7.5% of UK energy supplies. One third of CO_2 emissions are attributed to electricity generation. There is a need for 35GW of new electricity generation capacity over the next 20 years as fossil fuel (approximately 20-25GW) and nuclear stations (10GW) close, with the majority needed by 2020. Long lead times for new nuclear stations means that it is unlikely to be operational before 2020, but beyond this date could provide a lower-carbon option than fossil fuel generation and contribute to security of supply.

2.2.14 Government claims that it has made significant progress in finding solutions to waste management and in ensuring the private sector, rather than the taxpayer, bears the whole life costs of nuclear generation. It states that energy companies have expressed strong interest in investing in new nuclear capacity as a low carbon option to diversify their portfolio, particularly given potential cost of carbon and gas in the future. If current nuclear capacity was replaced by fossil fuels, carbon emissions would be 8-16 million tonnes per annum higher.

2.2.15 The Government's preliminary view is therefore that nuclear power stations could make a significant contribution to reducing carbon emissions and should make an important contribution as part of a balanced energy policy. It is seeking views on its conclusions through this consultation.

2.2.16 The Justification assessment is a generic and high level process to determine whether the benefits of a particular type of nuclear generation outweigh potential detriments, including emissions of radiation.

2.2.17 The SSA would determine the suitability of sites for nuclear power station and inform a National Policy Statement on nuclear generation (in line with proposals in the Planning White Paper). This will include a range of criteria, including environmental and infrastructure issues, indicate areas of the UK not ruled out through applying criteria, and list sites that do meet criteria which have been proposed by potential developers. Local planning inquiries would then consider local and site specific issues rather than rationale for site selection.

2.2.18 The SSA process would also incorporate strategic environmental assessment. The SSA process will be launched only if Government confirms its view that nuclear power should form part of the UK energy mix, following the current consultation.

Low Carbon Transport

2.2.19 A Renewable Transport Fuel Obligation will be introduced in 2008/09 that will require suppliers of transport fuel to ensure that a proportion of the fuel used in vehicles is from renewable sources. By 2010-11 this will be 5%.

2.3 Security of Supply

2.3.1 The UK faces two main security of supply challenges:

- increasing reliance on imports of oil and gas in a world where energy demand is rising and energy is becoming more politicised.

- the requirement for substantial and timely private sector investment over the next two decades in gas infrastructure, power stations and electricity networks.

2.3.2 Current projections of gas demand imply that the UK will need to increase its gas import capacity by 15-30% by 2020. Much of the investment we need to achieve this is already in train.

2.3.3 In electricity markets the UK needs investment in new generation capacity of around 30-35 Giga Watts (GW) over the next two decades to replace power station retirements and meet rising electricity demand as the economy grows. The timeliness of this new investment will be key to ensuring security of electricity supplies.

2.3.4 However saving energy will reduce the level of new investment needed in large scale electricity generation, as will an increase in renewables and decentralised energy, including microgeneration. Finally, by increasing the number of low carbon generation investment options available to the private sector, the diversity of our energy supplies will increase, reducing electricity security of supply risks. To assist in the development of electricity generation projects, such as CHP, the government has prepared guidance.

Energy Investment Framework

2.3.5 The Government wants to create the right domestic investment framework so that companies can make sufficient timely investments in infrastructure to transport energy from overseas markets to the UK and then on to the final consumer; and in new power stations, as existing stations close.

Fuel Poverty

2.3.6 The governments aim is to ensure that every home is adequately and affordably heated. The policies set out in the White Paper will assist in delivering this goal and coupled with the measures announced in the 2006 pre budget report, a further 200,000 households in the UK should be taken out of fuel poverty. The government will be working with energy companies to encourage all companies to put in place an effective programme of assistance for vulnerable customers.

2.4 Impact on the Economy

2.4.1 It is estimated that the measures proposed in the White Paper will deliver annual savings of between 23 and 33 million tonnes of carbon in 2020. If the higher level of savings is achieved then the UK will be on track by 2020 progress to deliver the 2050 goal and the carbon emission reduction target set out in the Climate Change Bill of 26-32% below 1990 levels.

2.4.2 Electricity consumption could be up to 15% lower in 2020 and gas consumption up to 13% lower than if the measures in the White Paper were not introduced. It is estimated the overall energy efficiency of the UK economy would improve by 10% by 2020. Costs of electricity and gas are estimated to rise by 4% and 3% respectively by 2020 as a result of the proposals.

2.4.3 In line with the Stern Review, modelling shows that the costs of achieving a 60% reduction in CO_2 emissions would equate to a 0.3% to 1.5% decline in the UK's GDP in 2050. Achieving a 30% reduction by 2020 is estimated to result in a 1.3% to 2% decline in the UK's GDP. Given that the economy is set to grow by 40% between now and 2020 these costs are seen as marginal.

2.5 Delivery

2.5.1 Some measures proposed in the White Paper can be implemented without legislation, some will be subject to further consultation, and some will need new legislation.

2.6 Planning

2.6.1 Chapter 9 of the White Paper deals specifically with planning for energy infrastructure. Criticisms of the current process, which are based on the pre-2004 system, are that it is:

- taking too long.
- creating uncertainty.
- costly and difficult o participate in.
- having knock-on effects on the UK energy market.

2.6.2 Reference is made to the proposals in the Planning White Paper to establish an independent infrastructure planning commission to consider nationally important schemes and those designated by national policy statements (NPS). It is envisaged that a number of NPSs will be developed for energy (over-arching and sectoral/technology specific) and be in place by 2009. These may be spatially specific and apply to the whole of the UK.

2.6.3 As set out in the Planning White Paper, RSSs and local development documents should have regard to NPSs.

2.6.4 Major energy schemes (over 50MW) are determined by the Secretary of State rather than local planning authorities. The proposed reforms include giving ministers the power to direct that smaller projects with cumulative impacts should be determined by the Infrastructure Planning Commission.

3. Comments

3.1 Energy White Paper

3.1.2 The very wide range of measures proposed in the White Paper pursue a twin-track approach of reducing energy use and carbon emissions, and improving security of supply.

3.1.3 The continued emphasis on reducing demand, improving efficiency, and development of renewable and de-centralised/distributed energy sources is welcomed and is essential in helping to achieve the policies for energy efficiency and renewable energy (EN1-EN6) of the draft South East Plan.

3.1.4 Some measures, such as proposals for 'smart' metering will be important in helping to raise awareness of consumers and influence behaviour. Other measures, such as addressing barriers to distributed electricity and heat generation and encouragement of combined heat and power (CHP) systems, will also help to achieve the objectives of the draft South East Plan and assist in delivering against trajectories for reducing carbon emissions attributable to the Regional Spatial Strategy, as required by draft supplement to PPS1.

3.1.5 However, it is evident that there is a need for further investment in new large-scale generation capacity in order to meet demand and achieve security of supply. The focus on lower-carbon and so-called 'cleaner' technologies is therefore welcome.

3.1.6 Despite the many positive measures in the White Paper for energy supply and new buildings (reflecting the recent consultation on improving Building Regulations to require zero carbon homes by 2016), there is little on measures to improve energy efficiency of existing buildings over and above proposals for the CERT, Energy Performance Certificates and smart metering. A more radical commitment to providing incentives to all householders for improvements in the performance of existing homes to higher standards of energy efficiency, such as those in the Code for Sustainable Homes, and for installation of renewables would be a significant step forward.

3.2 The Future of Nuclear Power

3.2.1 The government's view is that new nuclear power capacity is required to help deliver cuts in carbon emissions, help meet future needs, and achieve security and diversity of supply.

3.2.2 Given the evidence presented, it is unlikely that renewables will deliver the base load generation capacity to replace decommissioned fossil fuel and nuclear capacity over the next 20-50 years, and that replacing such capacity with fossil fuel plants will not help to reduce emissions to keep the UK on track to deliver its commitments.

3.2.3 Publicity at the time of the launch of the White Paper indicated areas suitable in principle for new nuclear power stations. This included a number of areas in the South East. Therefore if the government's preliminary view is confirmed it is likely that there would be applications in the South East, and through the SA process, may be identified as being suitable in a National Policy Statement. Views on whether there are suitable locations within the South East will be given at that stage in the process.

3.3 Renewables Obligation

3.3.1 The proposed banding of the Renewables Obligation, that encourages investment in proven and established technologies while also providing greater incentive for diversification and investment in technologies that have not come forward to the same extent, due to costs or other issues, should be supported, as should the increase in its level to 20% on a guaranteed headroom basis (i.e. to keep ahead of levels of generation if growth in renewables appears to justify this).

3.3.2 The banding approach should be supported as it will provide further incentives for development and deployment of technologies that are proving to be difficult to develop commercially or technically, while also providing a level of support for better established and market-ready technologies. This diversity is envisaged in evidence base underpinning the targets and policies set out in the draft South East Plan and RPG9, in particular with assumed growth in deployment of photovoltaics, dedicated biomass combustion (as opposed to co-firing with fossil fuels or waste), offshore wind and potentially wave and tidal stream power the latter parts of the Plan period.

3.3.3 The extension of the Obligation to 20% beyond 2016 is also welcomed as it is necessary to provide incentive for renewables in the longer-term and provide more certainty that such support will be available beyond 2016.
It reflects Government's target to achieve 10% of electricity generation from renewables by 2010, with the aspiration that this will double to 20% by 2020. It also ties in with the EU target for the share of energy used (including electricity, heat and transport fuels) from renewables to increase to 20% by 2020. However, a firmer commitment to this, rather than only extending it when evidence of deployment of renewables shows it is needed, should be made to provide the necessary certainty for investors.

3.4 Carbon Emissions Reduction Target

3.4.1 The proposed increase (doubling) in the obligation on electricity and gas suppliers to provide domestic customers with carbon abatement products and services is welcomed.

3.4.2 In particular, extending the obligation to include, as well as energy efficiency measures such as improving insulation, those to increase micro-generation uptake and behavioural measures, should be supported. However, this should also be complemented by more financial incentives to householders and other building owners and managers to invest in energy efficiency and renewables.

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