



Other Elected Members

Councillor K Browne  
Councillor Mrs E Goode } for information  
Councillor Mrs J Lea

Cabinet Member

(Reports to The Cabinet, to be cleared with appropriate Cabinet Member)

Councillor M Heatley

Chief Executive

.....

Legal

Ian Marriott - agreed

Finance

.....

Other Chief Officers

.....

District Councils

.....

Health Authority

.....

Police

.....

Other Bodies/Individuals

.....

**FINAL DECISION**

**YES/NO**

(If 'No' complete Suggested Next Steps)

**SUGGESTED NEXT STEPS :**

*Details to be specified*

Further consideration by this Committee

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To Council

.....

To Cabinet

.....

To an O & S Committee

.....

To an Area Committee

.....

Further Consultation

.....

**Cabinet - 6th April 2006**

**Warwickshire County Council  
Submission to the DTI Energy Review**

**Report of the Strategic Director of  
Environment and Economy**

**Recommendation**

That Cabinet agrees the response to the Department of Trade and Industry (DTI) Energy Review attached as **Appendix B**.

**1. Introduction**

- 1.1 In January 2006, the DTI opened the public phase of the Government's Energy Review "Our Energy Challenge (securing clean, affordable energy for the long term)". This looks at the UK's progress against the medium and long-term Energy White Paper goals.
- 1.2 The Government is expected to produce an Energy White Paper in July 2006.
- 1.3 The Government's Consultation Document takes a national and strategic perspective, as well as inviting comments on more local issues. These national and strategic perspectives include issues such as security of supply, long term gas contracts, the future of nuclear energy and global warming.
- 1.4 This response focuses on issues which local government has a contribution to make (the Consultation Document makes no reference to the role of local government) and on issues with a specifically Warwickshire dimension such as the implications of its central location in the UK. It does not try to address issues which are solely the preserve of national government policy making.
- 1.5 Nevertheless, local government has an important role to play in implementing government commitments such as the Kyoto Treaty which commits the UK to a 60% cut in CO<sup>2</sup> emissions by 2050 at the local level. The Council has its own Carbon Reduction Action Plan, developed with support from the Carbon Trust and adopted in 2004. This is being extended into a climate change strategy which will come before Members in the next couple of months. A number of the elements of this draft response reflect policy directions which the Council would like to see implemented nationally to assist in achieving our own carbon reduction targets, and to alleviate fuel poverty. This response highlights what contributions a local authority can make.

- 1.6 A paper that summarises the Consultation Document is attached as **Appendix A.**
- 1.7 A draft response to the Consultation Document is attached as **Appendix B.**

JOHN DEEGAN  
Strategic Director of Environment and Economy  
Shire Hall  
Warwick

23rd March 2006

Cabinet – 6th April 2006

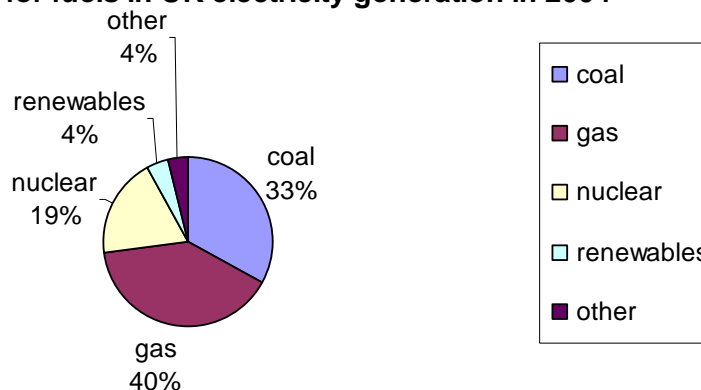
Warwickshire County Council Submission to the  
DTI Energy Review

Report of the Strategic Director of  
Environment and Economy

Summary of the Consultation Document

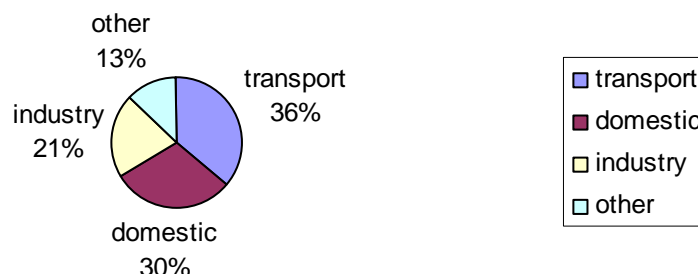
Energy is essential to nearly everything we do. We use it in transport, to generate the heat we use in our homes and businesses and to power our lights and appliances. 90% of this energy is from fossil fuel sources (coal, oil, gas), 8% is from nuclear power and a small but growing proportion (around 2%) is from renewable sources such as wind and hydroelectric power. Around one third of our energy is used to generate electricity. Therefore, focusing on electricity generation alone will not allow us to meet our energy goals.

Mix for fuels in UK electricity generation in 2004



We use almost 50 per cent more energy in transport and over 20 per cent more energy in heating our homes and powering appliances than we did thirty years ago.

End use of energy by sector of the economy in  
2004



The Energy Review was announced by the Prime Minister at the end of 2005 to follow up the 2003 White Paper – citing challenges that have recently been thrown into sharper relief.

- The adverse impact of climate change and the need for action to cut emissions.
- The speed at which UK has become a net gas importer/security of supply concerns; (Gas production from the North Sea has declined and we now import around 10% of our annual needs of gas. By 2020, we could be importing as much as 90% of our gas).
- Recent sharp rises in energy prices.

The government sees a range of options as the answer – but explicitly includes looking again at nuclear, as well as other technologies (while not pulling back from encouraging renewables and energy efficiency).

Nuclear provides nearly 20% of electricity needs now – but most plant is due to close within 20 years. Economics in 2003 made new nuclear build “unattractive” although the White Paper recognised it might be needed to meet carbon targets. The Review is re-examining the economics in view of energy price rises. But the big issue to consider in relation to nuclear power is how we will deal with the nuclear waste.

The energy review is about more than whether we need more renewable energy or whether new nuclear stations might be part of our future energy mix. We need to look at the way we source and use all of our energy, including electricity, heat and transport.

In January 2006 the DTI launched a full public consultation on the review which closes mid April.

The Review sets out to examine progress against the 4 goals set out in the Energy White Paper:

- (1) To put ourselves on a path to cut CO<sub>2</sub> emissions by 60% by 2050 with real progress by 2020.
- (2) To maintain the reliability of energy supplies.
- (3) To promote competitive markets in the UK and beyond, helping to raise the rate of sustainable economic growth and to improve our productivity;
- (4) To ensure every home adequately and affordably heated.

Goals 1 and 4 have the most direct relevance to Local Authorities, although goals 2) and 3) are also relevant.

The focus of the first goal is tackling climate change. When burnt, fossil fuels release harmful greenhouse gases. Scientific evidence showing that the climate is changing continues to strengthen and that carbon dioxide from the use of fossil fuels is the primary cause of man-made (anthropogenic) climate change.

## Key points on goal 1 (emissions)

UK is one of a few EU countries on track to meet Kyoto targets on greenhouse gas emissions (but there are concerns about CO2 emissions rising leading to only a slight decrease only by 2020).

There has been a leap forward in renewables (eg wind power has doubled from 2004 levels to 500 MW).

Energy efficiency is a key public policy goal but the pace of efficiency improvements has been slower than needed.

Our economy has become substantially more energy efficient, with overall energy use increasing by just 2% since 1997 even though the economy has grown by 21%.

The UK's is committed to cutting carbon dioxide emissions by some 60% by about 2050. From 160 million tonnes per annum in 1990 to between 60 and 70 million tonnes per annum by 2050.

UK emissions are just 2% of the world total. So, although we can try to encourage others through our actions, we can't tackle this problem on our own.

Global energy use is projected to grow substantially over the next 25 years (by more than 50% between 2003 and 2030).

## Key Points on Goal 4 (Fuel Poverty)

- There has been a decrease in the number of households in fuel poverty (ie those spending greater than 10% of net income on heating/lighting) from 6.5 million in 1996 to 2 million in 2003.
- To meet fuel poverty targets 1 million households need to be removed from fuel poverty through a policy intervention between 2003 and 2010.

There are no single solutions to the challenges we face. The issues are complex and inter-linked, and cannot be considered in isolation. For example, actions to make further progress on reducing our carbon dioxide emissions could lead to higher energy costs and, in turn, higher prices for companies and consumers.

## Glossary of Terms

**Carbon dioxide** - A gas that is produced as a by-product of burning carbon based fuels like gas or coal.

**Climate change** - The phrase used to describe how the earth's temperature and climate is changing. The effects of recent warming are already evident, such as an increased incidence of heat waves and the retreat of mountain glaciers. Evidence points to the fact that the primary cause of climate change is increased levels of greenhouse gases due to human activity, with carbon dioxide having the major impact.

**Fossil fuels** - A phrase used to describe the reserves of coal, oil and gas. These are all formed from fossilised vegetation (forests etc) compressed over millions of years. All vegetation contains large amounts of carbon, and some of this is released in the form of carbon dioxide when fossil fuels are burnt.

**Nuclear power** - A form of electricity generated by the nuclear reaction of the metal uranium. Nuclear power produces low levels of carbon dioxide emissions but the waste material that is left after the energy has been made remains radioactive for thousands of years and needs to be safely stored or reprocessed.

**Renewables** - A phrase used to describe ways of generating electricity from sources that are constantly replenished and will never run out, such as wind, wave or hydropower. Many of these forms of energy produce low levels of carbon dioxide emissions.



**Cabinet – 6th April 2006**

**Warwickshire County Council Submission to the  
DTI Energy Review**

**Report of the Strategic Director of  
Environment and Economy**

1. **Introduction** - Warwickshire County Council (WCC) represents some 516,000 citizens and spends around £650 million a year on providing local services. WCC signalled its commitment to taking action on climate change when it signed the Nottingham Declaration on Climate Change in 2004. WCC is improving its own environmental performance by seeking accreditation through the ISO14001 process and currently 90% of the electricity procured for use in its own buildings is from climate change levy exempt renewable electricity. WCC owns the largest photovoltaic (PV – electricity from light) installation in the West Midlands. Secure, affordable and sustainable energy supplies are considered essential for the social, economic and environmental well-being of the communities it serves. Energy consumption across the County of Warwickshire is currently responsible for emissions of around 4.6 million tonnes (Mt) per annum (excluding air transport). To meet the target of a 60% reduction in carbon dioxide means that annual emissions need to reduce to 1.9 Mt by 2050.

2. **Warwickshire County Statistics**

**Carbon Dioxide emissions (Thousand Tonnes)**

	<b>Gas</b>	<b>Oil</b>	<b>Electricity</b>	<b>Coal</b>	<b>Total kt CO<sub>2</sub></b>
<b>Industry &amp; Commerce</b>	466	188	679	53	<b>1,387</b>
<b>Domestic</b>	732	90	494	33	<b>1,348</b>
<b>Transport</b>	0	1,864	0	0	<b>1,864</b>
<b>Total kt CO<sub>2</sub></b>	<b>1,198</b>	<b>2,142</b>	<b>1,173</b>	<b>86</b>	<b>4,599</b>

3. WCC see the transport sector as the biggest challenge for reducing emissions, especially air travel. The road transport sector is the largest emitter of CO<sub>2</sub> in Warwickshire, accounting for 40.5 % of all emissions. Oil emits the largest proportion of CO<sub>2</sub> in Warwickshire with 48.8% of the total.
4. National Energy Policy needs to cover electricity supply, heat supply, transport fuels (including aviation) and reducing demand. The review must exploit the massive potential for reducing the amount of energy wasted, take steps to ensure that fossil fuels are used more efficiently, encourage greater investment in existing solutions and support further Research and Development on all technologies, but especially micro-generation and renewable sources of energy.

5. Local authorities have great potential to help turn national energy policy into reality now, and could have even more potential in future through the services they provide. They have direct social, economic and environmental influence on infrastructure through transport, planning and housing. They can take action, not only in their own estate but work within the community to help raise awareness, to encourage behavioural change, to tackle fuel poverty and also to promote small-scale renewable generation. LA's are in a position to convince their citizens that global warming and climate change are very serious problems i.e. – make them aware of the local and global environmental impacts of their 4x4 gas guzzler, of travelling abroad, of leaving their appliances on stand-by etc.

## **6. Energy Policy Goals – Key Questions**

### **Q1. What more could the government do on the demand or supply side for energy to ensure that the UK's long term goal of reducing carbon emissions is met ?**

- (i) WCC would welcome practical support to help roll out best practice further. WCC considers the use of whole life costing as a first step in looking at reducing energy demand. Funding could be targetted at developing local generation through establishing centres of energy excellence (to be mini power stations) to improve training, improve general skills and employment opportunities.
- (ii) To make the most of the variety of opportunities, it is essential that the voice of Local Authorities and the communities they represent is fully heard within the decision making system on locations for any new types of generating plant, from renewables to nuclear.
- (iii) There should be a review on the effectiveness of delivering energy resource planning matters and how the planning system should deliver these objectives. There should be a review of powers that would streamline the delivery mechanism to the bodies best placed to deliver these strategic matters. It is the view of the County Council that energy resource planning matters would be complementary to the current strategic planning functions of County Councils because there is link to the strategic planning support the County Council provides for the Regional Planning Bodies and links to waste planning. The energy review should also address policies for different types of technologies for energy resource planning in the Local Development Framework.
- (iv) WCC welcomes the use of the planning system, such as PPS 22, to help LA's to set higher standards and to allow for renewables to be integrated into new developments.
- (v) WCC believes the skills shortage should be addressed from school level up to professional level. Training opportunities should be provided for both Local Authority officers and members. Schools have a role to play, both in terms of learning about climate change and the importance of resource efficiency but also in relation to providing the scientific

foundations to ensure we know how to develop and exploit energy technologies.

- (vi) The design & construction methods of new buildings and the use of materials can be influenced by Government policies through building regulations.
- (vii) There should be additional guidance on how best to assess the trade off between environmental impacts and to the need for renewable energy to assist planning authorities.
- (viii) There is a case for the government to be more pro-active in terms of demand management, by setting higher minimum standards for energy efficiency in buildings and their construction, vehicle fuel consumption, and home electrical appliances.

**Q2. What further steps should the government take to develop our market framework for delivering reliable energy supplies ?**

- (i) WCC faces total cost increases across the estate this financial year of around £353,000 for electricity and £478,000 for gas. These costs look likely to continue to increase and will impact on our ability to keep within spending limits. Therefore it is in our interests to adopt the highest standards of energy efficiency, increase the use micro-generation and to explore the use of renewable energy to keep our costs down.
- (ii) Increased investment in micro-generation will decrease the need for investment in distribution networks and improve security of supply.
- (iii) The energy economy of the UK is going to be 'mixed' - embracing all options. It follows that there are going to have to be some major energy infrastructure developments happening over the next 5 -10 years that will effect Warwickshire in its central UK location to enable that mixed economy to be created. There will have to be major power grids & transfer stations to gas pipelines from the continental interconnectors coming in from the East Coast. Inevitably the impacts of such developments will be highly adverse in the immediate localities and only beneficial in a wider geographic and economic perspective. This is a strong argument for planning control of energy projects to reside with the bigger local authorities than the small ones. The context of the current and future development of energy markets across Europe will determine the pressures we will need to address.

**Q3. Are there particular considerations that should apply to nuclear as the government re-examines the issues bearing on new build, including long-term liabilities and waste management ? If so what are these , and how should the government address them?**

- (i) As well as considering issues of safety, WCC believes that whole life costing should be used to choose from the variety of options in a sustainable energy system. It is also essential that the voice of local

authorities and the communities they represent is fully heard within the decision making system on locations for any new types of generating plant, from renewables to nuclear. A particular issue to consider is cost. It is widely believed that greater investment in energy efficiency should come before investment in any new generating plant.

**Q4 What issues apply to the different types of carbon abatement/low carbon technologies**

- (i) WCC welcomes the business opportunities that there could be in Warwickshire as industries develop around these technologies. It is important to bring more private investment to meeting the targets.
- (ii) Renewable energy could be increased for overseas aid – in water pumping, water purification, cooking, improving community communication systems and for transport. Increase in the numbers of UK sustainable energy businesses would reduce the over reliance on imported energy products in the future.

**Q5 What further steps should be taken to ensure that every home is adequately and affordably heated ?**

- (i) WCC is concerned that recent increases in fuel prices will lead to increased numbers of people in fuel poverty. Fuel poverty cuts across a range of policy and service delivery areas and its solution requires national standard approaches to monitoring, evaluation and reporting to track progress and a local joined up approach across a number of agencies. Home Energy Conservation Act work (HECA) targetting vulnerable households, requires continued financial support at a level that will not exclude the most needy. Improved access to SAP data and Home Condition Report data would enable LA's to target work more effectively. Assessing LA's within the performance framework of the CPA would enable LA's to develop voluntary indicators.