



Economy, Energy and Tourism Committee Inquiry  
'Determining and delivering Scotland's energy future'

**Unite – the Union (Scotland) Response**

**AUGUST 2008**

## **INTRODUCTION**

Unite - the Union represents around 200,000 working people and their families throughout Scotland. We are the UK and Ireland's largest trade union with 2 million members in a range of industries including transport, construction, financial services, manufacturing, print and media, the voluntary and non-profit sectors, local government and the NHS.

As a Union with a significant membership in the energy sector - including workers in electricity, gas and nuclear power stations, offshore oil and gas production and opencast coal sites - we have a wide-ranging stake in the energy debate. Unite has continually articulated our belief that more needs to be done in a number of areas including renewable energy, energy efficiency and the key role that our members can perform in the transition to a low carbon economy.

We also believe that existing low carbon-emitting energy sources including clean coal, nuclear power and carbon capture have a vital role to play in sustaining our energy demands and meeting our carbon emissions targets.

## **UNITE – THE UNION (SCOTLAND) RESPONSE**

Unite believes a *balanced energy strategy* (incorporating clean coal, nuclear, oil, gas, and renewable sources) is vital to security of supply, greater price stability and the transition towards a low carbon economy. Without a balanced, diverse and secure electricity supply, the ability to tackle rising oil and energy commodity prices will continue to rise and have a negative impact on fuel poverty.

While Scotland exports 20% of the electricity it generates the Department of Business, Enterprise, and Regulatory Reform highlights that in 2006 overall primary fuel consumption in the UK was not met by indigenous production. This continues the trend since 2004 when the UK became a net importer of fuel. The indigenous production of energy in 2007 was 5.7 per cent lower than 2006 continuing a year on year decline for each year since 2000. A paper by the former Department of Trade and Industry titled '*The Energy Challenge*' also speculated that the UK could be importing as much as 90% of our gas needs by 2020 compared with around 10% now.

The UK must continue to have access to reliable sources of energy as issues regarding the reliability of supply are not exclusive to imported energy. However, Unite is clear that we must become less dependent on energy from abroad. The security of supply and price stability is becoming increasingly important in a volatile political world particularly as the largest global reserves of oil and gas are concentrated in Russia, Central Asia, the Middle East, and African countries. If we are to address these challenges then it must entail an integrated and interdependent strategy for all potential indigenous sources in the UK. This must be at the heart of the transition to a low carbon economy.

## **NUCLEAR**

Unite believes that nuclear power has a key role to play in the delivery of a low carbon economy and achieving our carbon emission targets. The UK Nuclear Industry is an important sector in manufacturing and in science and technology. Nuclear energy helps Scotland, and the UK, to achieve both energy diversity and security of supply.

Nuclear energy currently supplies a quarter of the UK's electricity without producing greenhouse gases. In Scotland, between 2000 and 2006 electricity generated from nuclear power ranged between 26% and 38%. In 2006, nuclear power contributed 26.4% of electricity generated according to the Scottish Government.<sup>1</sup> This is in contrast to the 5.1% contributed by renewables (i.e. wind, wave, solar power and thermal renewables) and the 9.1% (7.9% hydro natural flow and 2.2% pumped storage) contribution to total generated electricity in 2006 by hydro-power.<sup>2</sup>

Renewables do have an increasingly important role to play in providing clean electricity and combating climate change but they cannot in the foreseeable future replace nuclear as the largest source of low carbon emitting energy. Without nuclear energy Scotland, and the UK, would find it exceptionally difficult to meet its emissions targets as part of the Kyoto agreement.

## **RENEWABLES**

Unite believes that if the Scottish Government's new targets for renewable energy (50% by 2020 with an interim target of 31 per cent by 2011) and carbon emission cuts (80% by 2050) are to be met then it is essential that more support is directed towards established and emerging renewable technologies. However, this support must include incentivising companies and also in skills, training and retaining people in the sector.

A report by the Carbon Trust (2006), for example, illustrates the massive potential for tidal and wave power for supplying a significant amount of power to the electricity grid. The Trust estimate that marine energy could provide up to 20% of the UK's current electricity needs and become cost competitive with conventional and other renewables in the long term.

Marine energy has massive potential but there is still little operational capacity currently installed. At present there are two wave power devices in the UK – the Limpet unit of Islay and Pelamis on Orkney. Therefore, if Scotland, and the UK, is to realise the potential of marine technology then this will be dependent upon the right level of investment and support.

In relation to wind power, which we view to be a potential major contributor to the energy sector, Unite has welcomed in principle the steps be taken to speed up

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<sup>1</sup> <http://www.scotland.gov.uk/Topics/Statistics/Browse/Environment/seso/sesoSubSearch/Q/SID/98>

<sup>2</sup> <http://www.scotland.gov.uk/Topics/Statistics/Browse/Environment/seso/sesoSubSearch/Q/SID/98>

the planning process, i.e. setting a target of nine months for new energy applications to be determined where there is no public inquiry. We are aware that the Scottish Government's Energy Consents Unit as of May 2008 had a significant number of renewable project applications to consider with the majority of them being wind power - 27 wind farm and eight hydro projects.

However, Unite retains concerns about the inconsistency in approach towards planning applications in this sector. We note in particular the consent given to the wind farm proposals in Dumfries and Galloway and in Perthshire in contrast with the decision to refuse consent to Lewis Windpower for a wind farm at Barvas Moor in Lewis. Consequently, we do not share the certainty of the Energy Minister, Jim Mather, when he stated that: "*Even allowing for refusals we are well on the way to meeting our ambitious target to generate 50 per cent of Scotland's electricity demand from renewables by 2020*".<sup>3</sup>

## **LOW CARBON EMISSION TECHNOLOGIES**

Unite wishes to reaffirm our support for a number of low carbon emitting technologies which have a significant role to perform in the transition to a low carbon economy.

Clean coal technology can offer a way forward that will enhance the reduction of CO<sub>2</sub> emissions by the use of capture and storage technologies. By improving the efficiency of coal-fired generation for example, emissions can be reduced by up to 40%, and if biomass co-firing, and the capture and storage technologies are factored into the equation this would trap 90% of CO<sub>2</sub> emissions.<sup>4</sup>

Unite welcomed the announcement which detailed the refitting of Longannet and Cockerhills power stations with clean coal technology in 2007. There is a need for Government at all levels to give clear support for the development of clean coal and to provide incentives for investment in this industry. Without these commitments the opencast industry will not be able to take its place in a meaningful way in a balanced and integrated UK energy plan.

Carbon capture and sequestration can also perform a major role in mitigating the impact of fossil fuels with the industry predicted to have the potential to reduce emissions by 85%. Given the availability of these either within or surrounding the UK – Unite believes that we are ideally placed to take this technology forward.

## **EMPLOYMENT AND SKILLS**

Unite believes that more government support is necessary because while the UK has a history of developing prototypes the manufacture of these take place

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<sup>3</sup> Scottish Government Press Release, 'Decision on Lewis Windfarm' (21/04/08)  
<http://www.scotland.gov.uk/News/Releases/2008/04/21102611>

<sup>4</sup> BBC article by Mike Farley, director of Technology Policy Liaison at the energy services company Mitsui Babcock, and chairman of the TUC/DTI/Defra Clean Coal Task Group, '*Clean Coal can plug UK's energy gap*' (10 August 2006)  
<http://news.bbc.co.uk/1/hi/sci/tech/4781257.stm>

elsewhere due to greater government support overseas. We are keen to see the Scottish Government, UK Government and enterprise agencies adopting a strategy that integrates the need for domestic production and provides support for this. Without this, it is already clear that production will just move elsewhere where greater support will be provided.

We want government support for *green manufacturing* champions in order to help secure the future security of our nation's energy supply. Countries that have invested and led the way in 'green manufacturing' have also created jobs. In Denmark, 29,000 people work in the renewables sector. A DTI study has shown that with the right level of investment up to 35,000 jobs could be created by 2020 in the renewables sector (*DTI Renewable Supply Chain Gap Analysis, 2004*).

We are also clear that if we are to meet the Scottish Government's, UK Government and EU carbon emissions targets, it will be critical to attract and retain high quality staff in the energy sector. With a shortfall in the number of newly qualified entrants to disciplines of importance to the energy sectors, it is essential that strategies are adopted to ensure the success of these new technologies if we are to realise potential job growth. The Bank of Scotland Labour Market Report continually highlights that Engineering & Construction workers are one of the most sought-after groups of workers in both the permanent and temporary sectors.

Therefore, Unite remains concerned by the fact that in the Scottish Government's recently published '*Skills for Scotland: A Lifelong Skills Strategy*' (September 2007) the necessity of supplying skilled workers in the energy sector is referred to only once.

## **TRANSPORT**

As a union which represents thousands of transport workers, we recognise the need to promote the use of public transport to alleviate congestion, reduce air pollution and energy consumption. The Department of Business, Enterprise and Regulatory Reform's *Energy Trends Brief* (March 2008) highlights that the transport sector accounted for 24% of CO2 emissions in 2007 - 92% was from road transport. Transport emissions are 11.5% higher than during 1990.

The total number of vehicles licensed in Scotland was almost 2.6 million in 2006 which is 32% higher than in 1996 with road traffic forecasted to grow by between 22% and 34% over the period 2002-2011 according to Scottish Transport Statistics (no.26 -2007 edition). Therefore, encouraging a shift from the private car to bus and rail services will play a central part in reducing carbon emissions and energy consumption.

## **ENERGY EFFICIENCY**

Across the UK Unite members have worked with employers on energy efficiency projects. Unite drivers at Wincanton for example have been trained to use their

vehicles to reduce fuel consumption and demonstrated that this could be done in a way that also made a significant financial saving for the company. The pilot involved detailed training of drivers without which fuel reduction would not have been achieved despite the introduction of sophisticated technology.

Other examples of Unite members' role in improving energy efficiency include:

- **CUMMINS** - Workers at this company have helped to establish an environmental committee to reflect the eco-credentials of the employer. The company manufactures wind turbines and aims to recycle all waste produced in the manufacturing process.
- **PANASONIC** - Unite members have argued the case for flexible working as a means of reducing the environmental impact of their workplace. A petition was submitted to the company to make starting and finishing times flexible in order to reduce traffic congestion.
- **FUJITSU** - At Fujitsu, our members participate in the company's 'Green Team' initiative and have introduced environmental training for employees. Unite has also campaigned for CRT monitors to be replaced by flat screens to reduce electricity consumption, and, increasing video/teleconferencing usage.

The Energy Saving Trust for example predicts that by 2020, 45% of domestic electricity will be consumed by IT and electronics products. In Unite's recently published report '*How Green is Your Workplace*', a number of measures and technologies are highlighted which, if adopted, could improve energy efficiency.

Briefly, here are some examples:

- Smart buildings technologies, which monitor and adjust lighting, heating and energy use.
- Broadband, which facilitates communications through email, video and teleconferencing, and VOIP (Voice over internet protocol).
- Multifunctional devices such as the i-phone, all in one printers with inbuilt fax and scanner and blackberries help reduce the proliferation of electronic devices and can cut the use of paper.

Unite is optimistic about what workers can contribute to the preservation of the environment and to reducing energy consumption. Incremental and, in some cases, innovative and dynamic changes in workplaces are occurring because our members are raising awareness of climate change and energy issues.

## **FUEL POVERTY**

Unite recognises that significant strides have been made to reduce fuel poverty through a number of initiatives including the Winter Fuel Allowance. However, we are deeply concerned as we move into the autumn and winter months that these efforts will be substantially undermined by increasing energy prices.

There is a clear link with poverty, cold living conditions and premature deaths. Fuel poverty, which is described as 10% of income being spent on energy costs to warm a home, is a major factor in this cycle. Energy Watch highlights that as a result of continual price rises, which have outstripped rises in incomes, there were around 4 million UK households living in fuel poverty in 2007.<sup>5</sup>

These significant price increases in electricity and gas bills are highlighted below:

- Average gas bill has more than doubled from £310 in 2003 to £646 in 2008.
- Average electricity bill has risen from £244 in 2003 to £412 to present.
- UK Domestic price increases between 2003 and 2008 - Gas 109% and Electricity 70%<sup>6</sup>.
- Oil prices have also hit record highs reaching above \$145 a barrel and have more than doubled in less than a year.

These massive rises in energy costs come at a time when energy production companies have released massive profit increases. Unite - once again – repeats its call for a windfall tax to ameliorate the cost of living for pensioners and indeed all working families, and, help end the scourge of fuel poverty. A windfall tax would be equitable, just and affordable given the massive recent profits of BP - £37 million a day and Shell - £2 million per hour, both as of July 2008, and, the recent 35% price rise levied by British Gas parent company Centrica.

## **CONCLUSION**

Unite – the Union retains a number of major concerns relating to the ability of Scotland to deliver its future energy needs including: the inconsistency in approach to renewables applications in particular wind-power projects; the rejection of the future role of the nuclear industry by the current Scottish Government, the lack of current investment in skills and training in key energy sectors, and, the present low levels of operation capacity in renewables industries in particular marine technology.

Addressing these issues will be vital if Scotland is to fulfill its ambitious renewables and carbon emission targets. If required, we would be happy to substantiate or expand upon any comments in this document with the appropriate civil servants, Ministers or Parliamentary Committees.

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<sup>5</sup> Energy watch Press Release (6 December, 2007)

[http://www.energywatch.org.uk/media/news/show\\_release.asp?article\\_id=1073&display\\_type=archive](http://www.energywatch.org.uk/media/news/show_release.asp?article_id=1073&display_type=archive)

<sup>6</sup> Energy watch Press Release (19 June, 2008)

[http://www.energywatch.org.uk/media/news/show\\_release.asp?article\\_id=1111](http://www.energywatch.org.uk/media/news/show_release.asp?article_id=1111)

*For further information, please contact:*

*Andrew Brady or Peter Welsh  
Campaigns, Policy & Research Unit  
Unite – the Union Scotland  
John Smith House, 145 – 165 West Regent Street  
Glasgow  
G2 4RZ*

*Tel: 0141 248 7131 (Ext: 331 or 332)*

*E-mail: peter.welsh@unitetheunion.com  
andrew.brady@unitetheunion.com*