

ENERGY WHITE PAPER¹

1. Introduction

- 1.1 This response to the May 2007 Energy White Paper⁽¹⁾ and consultation on the nuclear power generation⁽²⁾ by the Furness Enterprise Partnership outlines why Furness is an energy hub of NW England. It refers to the proposed Britain's Energy Coast concept and sets out our views on energy priorities. It highlights the synergies between civil and defence nuclear industries and sets out our recommendations.

2. Furness Enterprise

- 2.1 Furness Enterprise is a public/private sector partnership set up in 1991.
- 2.2 Furness Enterprise's Mission is as follows, ***'To drive the development of Furness towards a stronger more balanced economic structure, where it generates wealth from a broad spectrum of industrial, business, agricultural and tourism activities and provides stable employment. In order to achieve this, its current dependence upon defence contracts will be reduced and alternative products, services and activities will be sought'***
- 2.3 Our Remit is to deliver 4 key strategies:
- Co-ordination - To co-ordinate the efforts of the various agencies involved in the regeneration of the Furness Economy.
- Persuasion - To head all initiatives seeking UK Government and EC assistance for the Furness area.
- Business Support - To develop and implement a total support package for existing, new and incoming businesses.
- Contribution - To contribute to agreed regeneration strategies led by other agencies.
- 2.4 Since 1992 we have delivered help to businesses of all sizes. This has led to the creation of 7,464.5 jobs in Furness. We have been involved in assisting a wide range of companies in the energy sector to grow and develop.
- 2.5 Partners include three local authorities and major companies such as BAE SYSTEMS, James Fisher (nuclear sector), Centrica Energy (energy), Kimberly-Clark (large energy user) and the Northwest Regional Development Agency. Furness Enterprise was established to deal with the consequences of major redundancies from the naval shipbuilding facility (in 1991) currently owned by BAE SYSTEMS. It was these

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redundancies, which continued into the 21st century, along with others which has caused the local authority area of Barrow in Furness to have a Rank of Average Scores of Deprivation of 29 and the major challenge of concentrated worklessness recognised specifically in the current North West Regional Economic Strategy⁽³⁾. Recent work by Sheffield Hallam University has demonstrated that the Incapacity Claimant rate of Barrow at 13.6% is the 9th worse in Great Britain, giving a real unemployment rate of 13.4%, the 10th worse in Great Britain. As might be anticipated in an established manufacturing area traditionally dependant on a few large employers, Barrow has 50% of the capita VAT registered business stock compared with the England average, with a business density of 148 businesses per 10,000 capita and is the most business deprived district in NW England⁽⁴⁾.

- 2.6 Extensive Business Support embracing inward investment, organic growth, new start support and job access is provided in the area by Furness Enterprise in partnership with Business Link, with the specific objective of influencing companies to create/safeguard jobs and improve job access, thereby reducing worklessness in the Furness area.
- 2.7 Furness Enterprise has been involved in promoting energy related investment in Furness. Since its inception specifically, the area has been promoted as an “energy hub of the north west” since 2002 (coinciding with the start of development of the first Irish Sea offshore wind farms and Burlington Resources Inc's Rivers gas processing development.
- 2.8 Our views have been formed by discussions with key companies involved in the energy sector including BAESYSTEMS, James Fisher plc, Acrastyle and Centrica Energy and by our extensive experience in working with businesses and individuals in a deprived area.
- 2.9 We welcome the opportunity to respond to the Energy White Paper and its terms of reference. We note the main intentions of the review are to consider:
 - Options both on supply and demand side for Energy
 - More aggressive uptake of energy efficiency measures.
 - Prospects for existing and new low carbon technologies
 - The role of nuclear electricity generation, (which provides 20% of UK's electricity needs).

3. The Furness Energy Hub and Britain's energy coast

- 3.1 "Nowhere within the UK is there a more strategically important area than the West Coast of England, and in particular for energy generation, the Furness peninsula and its offshore coastline west of Barrow -in-Furness.
- 3.2 Barrow has the largest and most complex gas processing facility in the UK with capacity to harvest any natural gas yet undiscovered in and around the East Irish Sea as well as complete the depletion of existing gas fields.

- 3.3 In addition LNG import or offshore gas storage projects could be developed in line with the Governments white paper on investing in additional natural gas storage. Combined with fossil fuel production is a unique coastline known to be highly suitable for capturing wind energy from offshore turbines and tidal conditions highly suitable to harness power from tide and wave technology.
- 3.4 Onshore power generation from both nuclear, Heysham station and several fossil fuel power stations is a well established industry along with a huge body of expertise to support the increasing diverse energy sector.
- 3.5 The town of Barrow and others in and around Cumbria are renowned for producing the high calibre of engineering skills so complimentary to the energy sector, particularly the nuclear industry.
- 3.6 Furness Enterprise in collaboration with Furness College has a proven track record of training and placing engineering skills within the existing industries all of which have shown to have an appetite to adapt and grow within new and existing markets. To ensure the continued economic growth of the area the continued focus on Furness as the Energy Hub is vital to the long term social and economic stability of Cumbria...."

The Energy Resources in Furness

- 3.7 The coastal Furness area of NW England experiences strong winds, a 10metre tidal range, has extensive natural gas reserves present in the East Irish Sea, and processed gas onshore at Rampside near Barrow where there is also a 229MW power station (gas fired). Hydro-electric power generation occurs at Haverthwaite and Coniston. Onshore and offshore wind power electricity generation occurs at sites including Millom, Askam, Ulverston and offshore Walney Island. Three further offshore windfarms are planned.
- 3.8 The "Energy Hub" in Furness embraces the following energy resources:
 - Nuclear Power Generation – design, development, test, commissioning of nuclear reactors at BAESYSTEMS.
 - Electricity generation – gas fired Roosecote 229MW power station.
 - Electricity generation – onshore wind farms at Kirkby, Millom, Harlock , Ireleth, BAE SYSTEMS, Tesco Barrow.
 - Electricity generation – East Irish Sea offshore wind farms at Barrow, and 3 more planned by Eclipse Energy, Dong and Scottish Power.
 - Electricity generation – hydro-electric power at Haverthwaite and Coniston.
 - Offshore gas fields Morecambe Bay and Rivers complex and associated onshore processing.
 - There are also local several firms involved in nuclear decommissioning at Sellafield and other sites in UK.
 - Between 300 and 500 people from Furness commute daily to work at Sellafield.

4. Our Broad views on energy investment and priorities

- 4.1 **Natural Gas** –We support further exploration and development for gas in the Irish Sea arising from DBERR's February 2007 round of licencing. These will help reduce UK's reliance on overseas imports and maximise the life of the gas processing assets at Barrow's Rampside Terminals. New proposals for subsea storage facilities in Irish Sea salt cavities by Stag Energy and Centrica Energy could help safeguard strategic energy supplies for the UK.
- 4.2 **Nuclear** – we support development of new proposals for nuclear generating capacity within the UK and, where possible, utilisation of the skills and expertise that exists in Cumbria to design, test commission, build and operate nuclear powered electricity generating equipment. We also support transfer of skills and expertise in design build and operation of defence related nuclear steam raising plant to the civil nuclear power industry. Rolls Royce and BAE SYSTEMS' naval nuclear reactor expertise at Derby and Barrow is particularly important in this respect. Regional Development agencies should be required to identify opportunities for nuclear generation sites in their regional strategies.
- 4.3 **Grid Networks** – we support reinforcement of grid networks where it will help realise new sources of energy generation. In particular we would support new initiatives such as reinforcement of the South Cumbria onshore power line and an offshore cross Morecambe Bay link. In 2001 the Lake District National Park Authority indicated to support for an up-rated, overhead line in Cumbria to accommodate new generation locations.
- 4.4 **Renewable Energy** – we recognise this intermittent energy only favours offshore wave/wind energy where it contributes to economic regeneration and energy needs in the locality of such developments. By this we mean there should be active policies to require developers and their contractors to contribute to the socio-economic benefit of the area in which they operate, perhaps building on the principles enshrined in the way the nuclear decommissioning agency are required to operate.

In the offshore renewable wind energy sector it is still difficult for UK firms to break into manufacture and design, as much equipment is sourced overseas. DTI's own study into the industry highlighted the threat that *"the growing UK wind market being served by non UK wind turbine suppliers that locate sales offices only in the UK utilising their own manufacturing facilities"* and of *"overseas and manufacturers choosing to import turbines from existing factories to use spare capacity before investing in new facilities in the UK."* (DTI Renewables Supply Chain Gap Analysis, January 2004). In other countries there are examples of regions requiring developers to set up maintenance or production facilities and to benefit local economies. We believe the UK should look at acquiring large scale wind farm developments to deliver potential economic benefits to the areas they are situated in.

- 4.5 **Coal** – we support development of clean coal technologies.

- 4.6 **Skills for the energy industry** - it is vitally important that the UK sustains its energy sector skills base and looks to build up its nuclear energy generation plant skills base.

The Energy Challenge is as much about skills retention and development as securing energy supplies. We therefore support proposals for developing an indigenous industrial base in renewable energy and proposals for a national nuclear skills academy. We drew attention earlier to the fact that Barrow has the only nuclear reactor assembly test and commissioning capability in the UK. Locally we are actively involved in supporting initiatives aimed at influencing young people in the 13-18 age group to consider career opportunities including apprenticeships in the energy sector. We have helped Walney School secure major sponsorship by Centrica Energy for the school's planned Engineering Status bid to the Department of Education.

- 4.7 **Energy related employment** - is important in the Furness Assisted Area sustaining many jobs. We support measures designed to exploit the energy resources of the sub region and its coastline such as the gas processing assets at Barrow and in the Irish Sea.

- 4.8 **Manufacturing Industry, servicing the energy sector: maintaining its competitiveness** – from an industry standpoint we consider the overriding priority should be to ensure security of energy supplies. Jobs and the standard of living are important issues along with climate change. We have already lost substantial numbers of manufacturing jobs; if we do not have competitive energy costs then we may continue to lose many more jobs in manufacturing.

Whilst we appreciate that in a liberal energy market there are limits to government influence on energy prices, we feel discretion could be exercised to limit any additional burdens that might damage the competitiveness of British Industry.

We therefore urge the Government to adopt energy policies that do not disadvantage UK manufacturing against EU based competitors and includes flexible support for industry to enable it to compete effectively. As a solution we believe Government could look at the level at which Climate Change Tax levy is set as well as being flexible on the EU emissions trading scheme.

It is hard to see European nations adopting more open markets for energy in the same way as the UK has done and in a quick timescale. There is a risk manufacturers who operate in several countries choose to transfer manufacturing from UK to European states where energy costs are lower. This is already happening in some local instances.

The rapid rise of gas prices in autumn 2005 in the UK continues to have a dramatic impact on some of the large scale manufacturing operations in Furness, including paper tissue, pharmaceuticals and detergent manufacturing and shipbuilding. In the years 2000-2004 energy costs were generally competitive with the average price paid by European sister plants, but from 2005 and especially in 2006 the UK's costs are not competitive; in some cases energy costs having more than doubled. One company cited a 80% increase between 2004 and 2006. Such increases are having a serious impact on the cost base and viability of operations in Furness which is a UK Assisted

Area. Local managements of the companies concerned have detailed the impact and these fuel price rises are having on their operations. Energy costs are often reviewed in terms of energy cost per tonne of product. Figures show that between 1997 and 2003 there was relative stability, prices only rose 3.68% over the 7 year period. The increase in 2004 alone was 42%, and a further 47% in 2005 or 77% over 2003's price.

One parent company HQ of a branch plant in Furness has already taken decisions to transfer some work out of the UK.

We also support the CBI's lobby to seek flexibility on issues such as the Climate Change Levy which the British Government can do something about.

5. Our General Views on the Energy White Paper

- 5.1 Climate change and energy security are major challenges for the UK that need urgent and sustained action, using a wide range of measures.
- 5.2 The UK is moving from a period of energy self-sufficiency to one in which security of supply is no longer assured.
- 5.3 The UK should aim for a diverse fuel mix, and allow energy companies to invest in the widest possible range of generating technologies including nuclear.
- 5.4 The closure of older coal and nuclear plants as they reach the end of their lives over the next two decades means that there is a need for decisions now on significant investment in new baseload generating capacity in the UK.
- 5.5 Nuclear power currently plays a key role in the UK's efforts to address the challenges of climate change and energy security. We believe that it is in the UK's interest for nuclear to continue to contribute to the UK fuel mix for electricity generation.

6. Abolishment of the Petroleum Revenue Tax

- 6.1 The other big issue for the Oil & Gas Industry is the abolishment of the Petroleum Revenue Tax which for older fields such as South Morecambe means we are paying 75% in tax on profits. This is not helping late life investment

7. Nuclear Industry Synergies Civil and Defence

8. Nuclear New Build

- Independent accredited studies of the complete life cycle for nuclear power have confirmed that it is a low carbon energy source, comparable in this respect with renewable, with the potential to assist in combating climate change.
- **Nuclear is cost competitive without subsidy**, provided the fossil fuel alternatives carry the cost of the carbon emissions associated with their use.
- **Civil nuclear power has operated safely and securely in the UK for 50 years.** There is a very robust regulatory regime for all aspects of safety, security, health protection and non-proliferation which would also apply to any new build.
- **Transport of nuclear fuel and radioactive waste** is carried out routinely and safety within a robust regulatory regime.
- **Management and disposal of radioactive waste** is an important issue. It is vital that government provides definition and builds both expert and public acceptance for the Managing Radioactive Waste Safely process.
- **The UK can put in place the necessary manufacturing construction and operation skills.** However, there is high demand in a worldwide market for specialist skills in nuclear constructions, and for key components. The UK needs to be an attractive place for employment and investment in the nuclear industry if we are to compete.
- **It would be in the public interest to give private companies the option of investing in new nuclear power stations.**
- **No restrictions should be placed on the amount of capacity that might be built.**
- **We fully support the actions being taken to facilitate the regulatory and planning process for new build.**

Appendix A The Furness energy hub An Energy Action Plan for Furness guides the activities of Furness Enterprise–

<p><u>Marketing Themes:</u></p>	<p>“Energy Hub of the North West” focus on Furness, including promotion of Furness as possible Energy Park both to attract energy using industry and as a linkup to existing tourist attractions e.g. South Lakes Wild Animal Park.</p> <p>Encouraging exploitation of the “energy mix” in order to create/protect jobs, make most of investment opportunities.</p>
<p><u>Natural Gas:</u></p>	<p>Maximise potential of Barrow Onshore Terminals as hub for gas imports, treatment for East Irish Sea gas fields.</p> <p>Support to companies involved in exploration and development of East Irish Sea resources. Supporting Centrica’s development of multi-user shore-based support systems in East Irish Sea.</p>
<p><u>Electricity:</u></p>	<p>Support British Gas Roosecote power station in marketing Roosecote 132kv grid substation for flexible use e.g. wind power generation.</p> <p>Ensure utilities/developers service / provide industrial sites with right electricity supplies to secure new investment.</p> <p>Encourage mix of nuclear, gas, renewables based energy generation.</p>
<p><u>Renewables:</u></p>	<p>Pyrolysis - promote as energy from waste option – seek funding to develop pilot plant at Barrow as solution to area’s waste disposal needs.</p> <p>Offshore wind developments: attraction of job creating activity through:</p> <ul style="list-style-type: none"> • Assembly /support base (short term). • Manufacturing facilities. • Supplier links, e.g. BAE SYSTEMS Submarines, Genasys. • Through life maintenance, building on logistics expertise of firms like James Fisher and Centrica. <p>Onshore wind developments: assist ABP/ Baywind / Centrica /others to identify and realise inshore/onshore site opportunities</p> <p>Tidal or wave – pursue as long term possibility</p> <ul style="list-style-type: none"> • support Bay bridge concept <p>Fuel cells and Photovoltaics are lower priority.</p>
<p><u>Supplier Opportunities:</u></p>	<p>Continue to support Furness companies operating in electronics, system integration and subsea oil and gas market segments. Working with them on their key issues and development of opportunities, maximising access to “money and markets”.</p> <p>URF Renewable energy” scheme helping local firms assess renewables opportunities, including collaboration by engineering companies and working with Renewables UK and Renewables NW to raise awareness of market.</p>
<p><u>Nuclear:</u></p>	<ul style="list-style-type: none"> • Retention and marketing of Barrow based submarine power plant assembly & manufacturing technology skill base. • Maximising decommissioning opportunities by helping firms gear up as NDA develops.
<p><u>Hydropower:</u></p>	<ul style="list-style-type: none"> • Gilbert Gilkes - linkup with opportunities in ship construction. • Identifying new sites or repowering existing sites opportunities.
<p><u>Exports:</u></p>	<p>Assisting companies to develop key overseas markets - via Trade Partners UK, e.g. Russia, Brazil, North America.</p>

