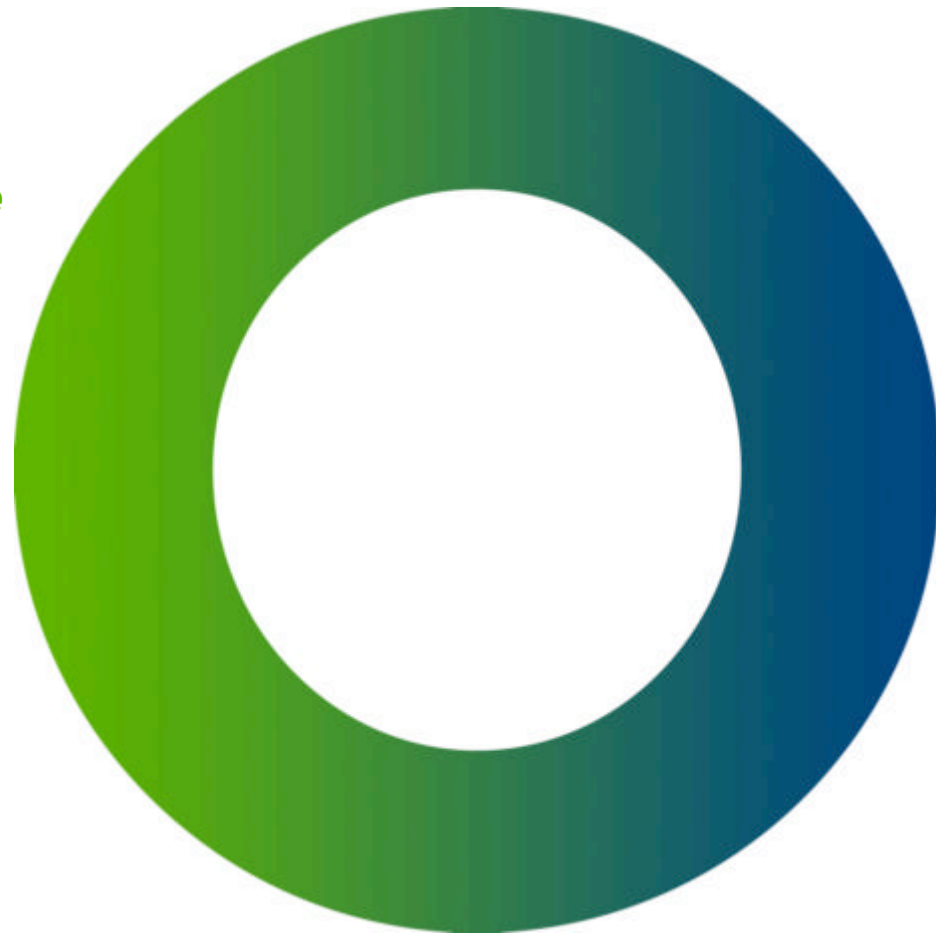


*Supporting the wind of change:
Supply chain opportunities for the
energy industries in North East
England*

BWEA30

22nd October 2008



Contents

- Overview of North East England
- Value of energy sector to the regional economy
- Regions energy priorities
- Developing North East England as a hub for the wind industry
- Conclusions



Passionate people. Passionate places.



Business facts for the North East of England

- High growth
- Energetic growth
- High productivity
- Research and development
- A magnet for talent
- Attractive to business
- Inward investment
- Connected for business
- Export links
- Excellent quality of life



Exploiting the regions research and technology base to transform the regions economic prospects

Through:

- Entrepreneurship
- Technology transfer
- Maximise investment

Investment priorities:

- Energy and low carbon technologies
- Healthcare and life science
- Process industries and chemicals
- Advance manufacturing and automotive
- Digital, media and animation



Energy sector in North East England

- Currently estimated to be worth around £900m per year, employing around 8,000 people and creating GVA per employee in excess of £100,000
- A major proportion are employed in engineering
- The region has core strengths in its existing **businesses, physical infrastructure, skills** and its developing **technological capacity**
- In 2005/06, the EEC, Warm Zones and Warm Front programmes spent a total of £13,718,000 regionally
- This supported an estimated £11,260,000 of economic activity (GVA) and 369 jobs within the North East's economy
- The regions Energy Leadership Council is provide strategic guidance and advice to facilitate the development of the energy economy in North East England
- Triple helix approach to ensure that all the economic, social and environmental agendas are considered and opportunities exploited.

Energy priorities moving forward

- To further develop the region as a recognised world centre for the application of low carbon energy technologies
- Specific Priorities
 - Oil and Gas
 - Carbon Capture and Storage
 - Marine Renewables
 - Distributed Energy
 - Next Generation Bio Energy
 - Next Generation Photovoltaics
 - Nuclear
 - Innovative Fuel Systems
 - Off-shore wind
- Large Scale Demonstrations and Developments
- Skills



Scale of opportunity for the Wind Industry in North East England

- Onshore targets and predictions to 2020

Operational	33 MW
Building/consented	151 MW
Planning	187 MW
Pre-planning/ scoping	400MW +

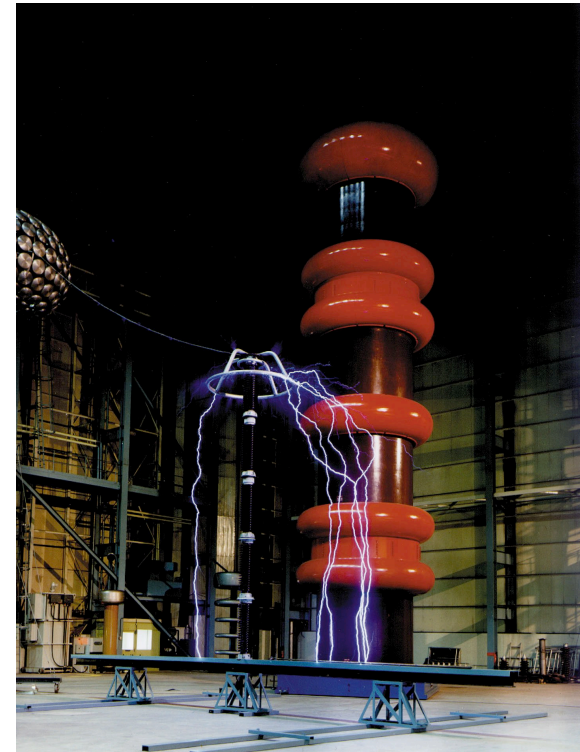
Developing North East England as a hub for the wind industry

- Skills of the regions workforce
- Infrastructure
- Research, development, demonstration and deployment
- Inward investment
- Existing engineering industry
- Existing marine industry



Regions skill base

- Strong engineering heritage from the regions industrial past
 - ❖ Project managers
 - ❖ Grid connection engineers
 - ❖ Technicians
- Supplemented with a new skills set
 - ❖ Environmental management
- 5 Universities in the region
- Further education colleges
 - ❖ Windskills course at Northumberland college
 - ❖ Offshore engineering course at South Tyneside college



Infrastructure in the North East of England

- Availability of large development sites
- Strong, experienced supply chain partnerships
- Network of deep water ports to support the off-shore wind industry
- Quayside space for final assembly
- Proximity to markets
- World leading universities with respected research base
- Two energy focussed centres of excellences providing world class testing facilities and technical expertise
 - New and Renewable Energy Centre (NaREC)
 - Centre for Process Innovation (CPI)

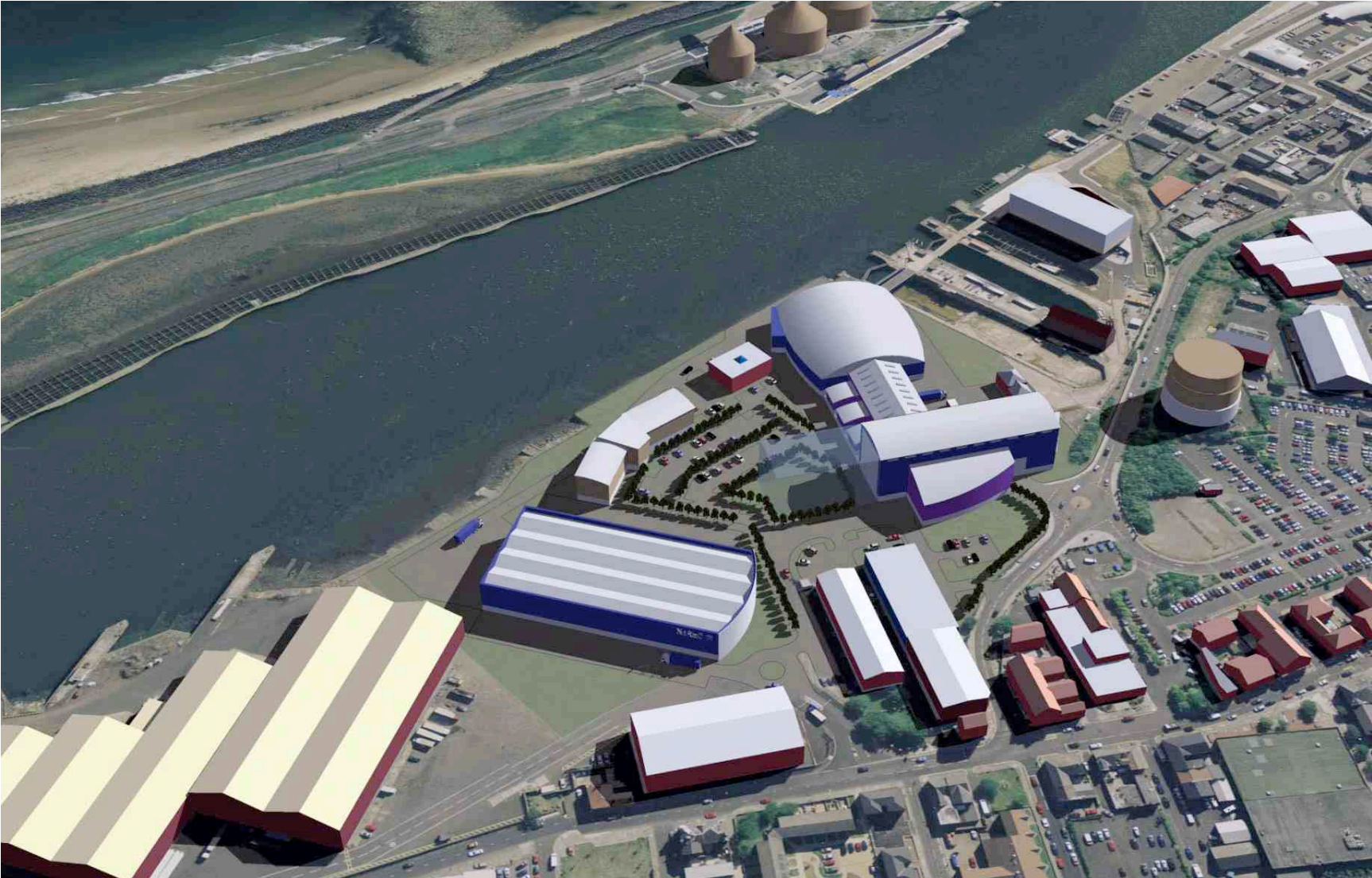


Research, development, demonstration and deployment

NaREC: The Route to Realisation



New NaREC R&D campus at Blyth

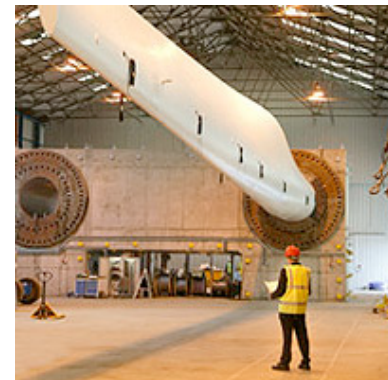


Inward investment – Project Britannia

- Clipper Windpower has been carrying out R&D at NaREC in Blyth since 2007
- The 7.5 MW turbine under development is the worlds largest planned commercial turbine
- This will be 10 times taller than the ‘Angel of the North’
- Initial investment is expected to create 25 new jobs in the region in 2009
- Region is a pioneer in offshore wind
- It is estimated that 3000 extra offshore wind turbines will be needed to help the UK towards meeting its proposed EU target of 15% of total energy being generated from renewable sources by 2020.



Region top choice for
next generation turbines



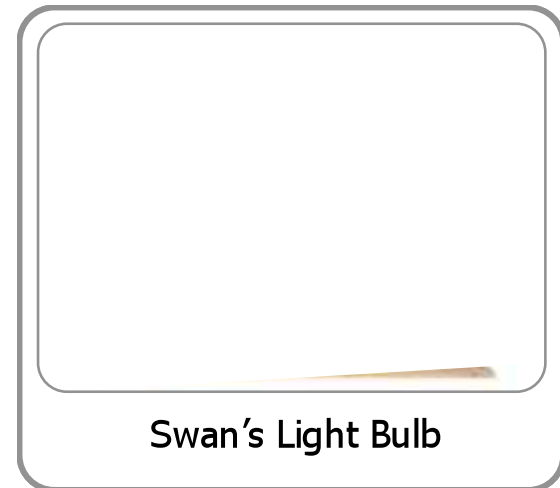
Existing engineering capacity

- Power engineering industry
- Engineering design
- Mechanical engineering
- Marine engineering
- Strong higher education and further education support



Catalysing the opportunity

- Developing innovative capacity
- Ensuring infrastructure
- Northern Way supply chain animation office
- Inward investment
- Skills development



Conclusions

- This is a hugely exciting time for the North East of England
- The infrastructure for developing the energy sector is in place
- Regional, National and International Policy Drivers
- Now we need the focus on delivery working in strong partnerships
- “The region had the facilities, skills and commitment” – Makoto Yasuda, Yanmar



Contact details

Kate Hatton
Leadership Council Senior Specialist
One NorthEast
Stella House
Goldcrest Way
Newburn Riverside
Newcastle-upon-Tyne
NE15 8NY

Tel: 0191 229 6323

Email: kate.hatton@onenortheast.co.uk