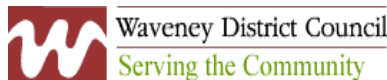




The East of England Hub for Offshore Renewables

Michael Moll
POWER Project Manager (UK),
Suffolk County Council



UK Government policy



Energy Review 2006

Renewed commitment for renewable energy, in particular offshore wind

Renewables Obligation

- Licensed suppliers must source an increasing amount of electricity from renewables – e.g. in 2010 10% (worth £1bn / DKK 11bn)
- Renewables Obligation is secured until 2027
- Review proposes to further strengthen RO, including: Extending obligation levels to up to 20%, amending RO to remove oversupply of ROCs, consultation on possible adjustments to “band” the RO



SLP Yard, Lowestoft , UK



Ness Point Wind Turbine



Offshore Wind Farms in the East – Round 1



Photo: ODE/E.ON



Photo: Elsam



Map: BWEA

Lynn & Inner Dowsing

54 x 3.6MW; Construction in 2007/2008

Scroby Sands Offshore Wind Farm

30 x 2 MW turbines; £80m (DKK 900m)

Commercially complete 12/2004

Formally opened 05/2005

Gunfleet Sands

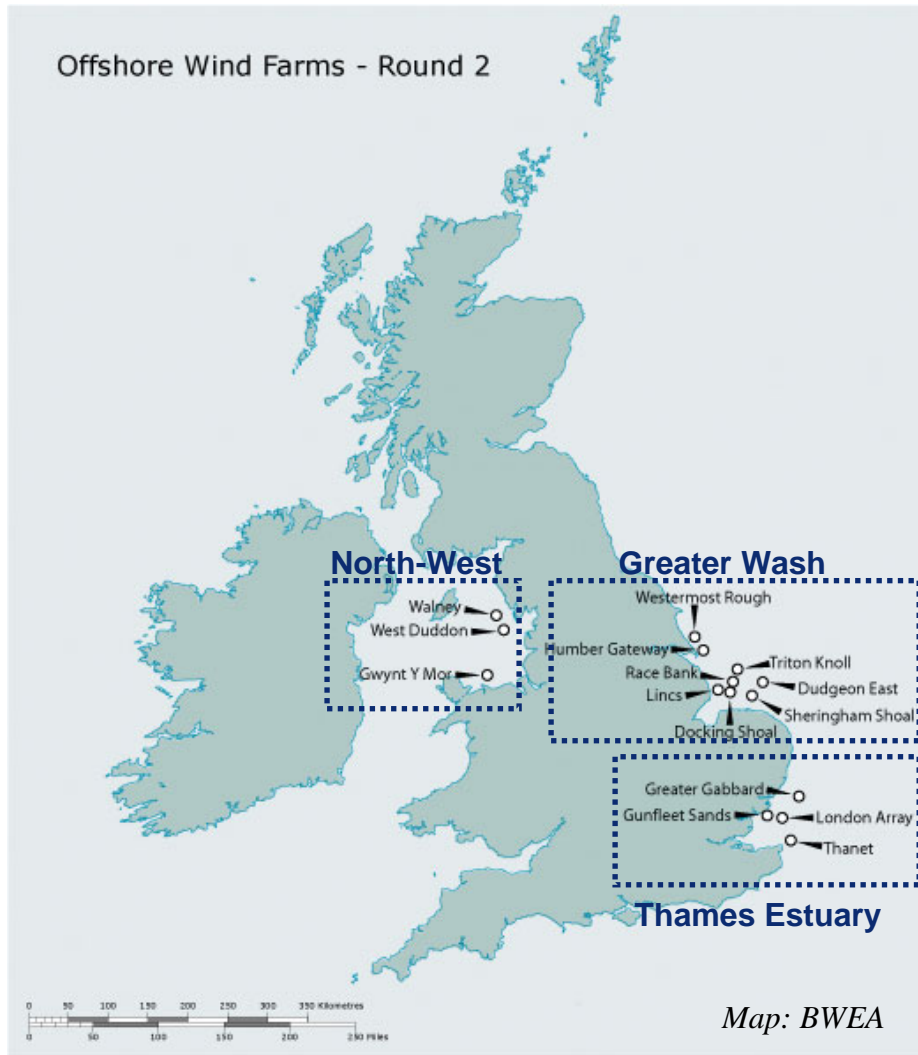
30 x 3.6MW; Construction in 2007

Kentish Flats Offshore Wind Farm

30 x 3 MW turbines; £105m (DKK 1.16bn)

Commercially complete 12/2005

Offshore Wind Farms in the East – Round 2

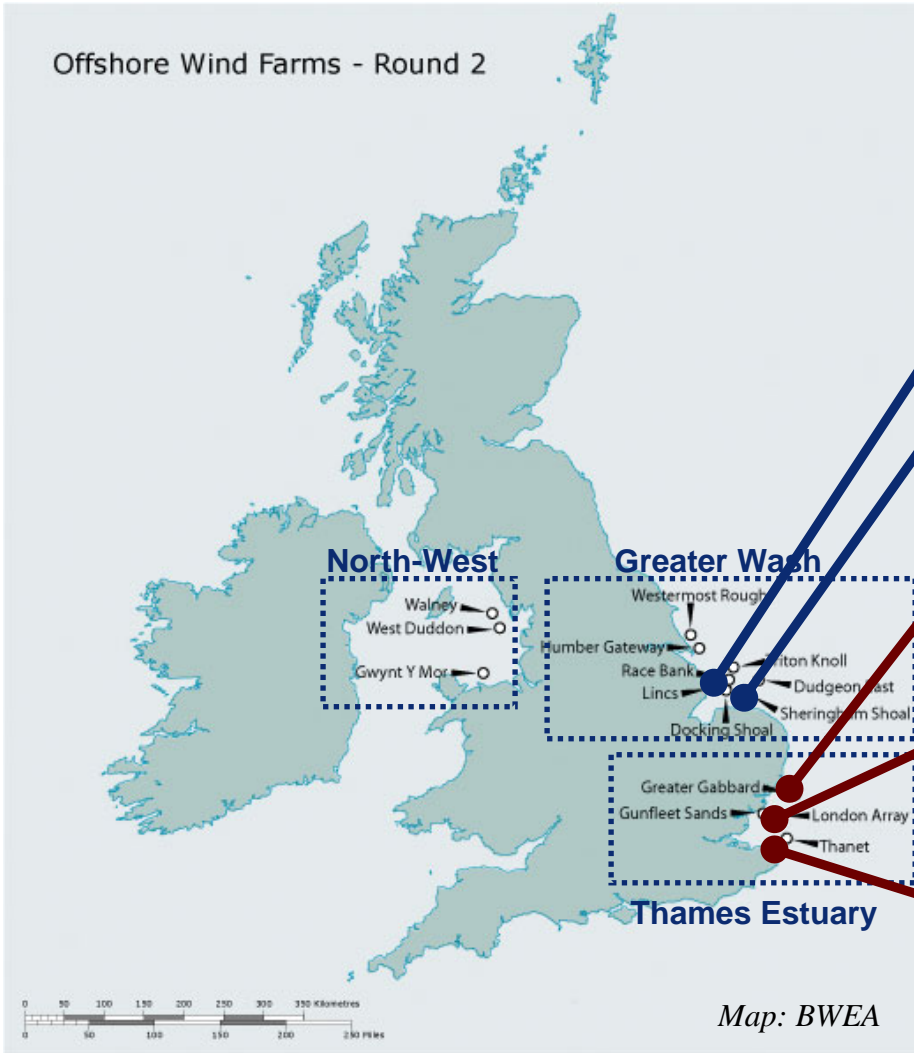


Prospects:

Total planned UK offshore wind capacity:
10 GW by 2015

2 of 3 strategic development areas around East of England
- 6000 MW, > 1000 turbines;
ca. 2000km cables

Offshore Wind Farms in the East – Round 2



Consent application submitted:

Lincs, 250 MW

Sheringham Shoal, 315 MW

Greater Gabbard

500 MW, consented in 2/2007
Construction ca. 2009-2011

London Array

1000 MW, consented in 12/2006
£1.5billion (DKK 16.5bn)
Construction ca. 2009-2012

Thanet

300 MW, consented in 12/2006
£0.5 billion (DKK 5.5bn)
Construction ca. 2008

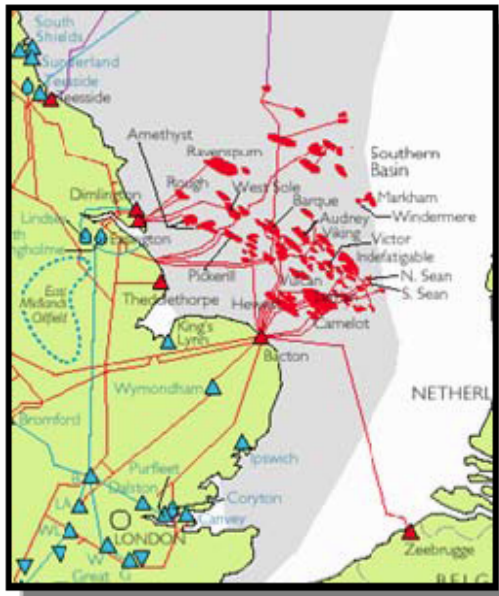
East of England The Energy Region



> 500 companies in the energy supply chain

UK's second largest energy manufacturing and service base

UK's "Gas Capital" – 40 years of innovation & opportunity



Strategic location for
UK "Round 2" offshore
wind developments



The Offshore Wind Industry in the East of England



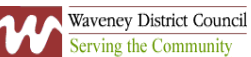
- Region has core skills, experience and capabilities to serve a significant part of offshore wind supply chain, gained from offshore oil and gas experience
- Proven strengths from construction of Scroby Sands offshore wind farm
- Specific strengths also in operations and maintenance
- Interest also in wave & tidal – not ideal in terms of local wave & tidal resource, but potential as R&D Zone



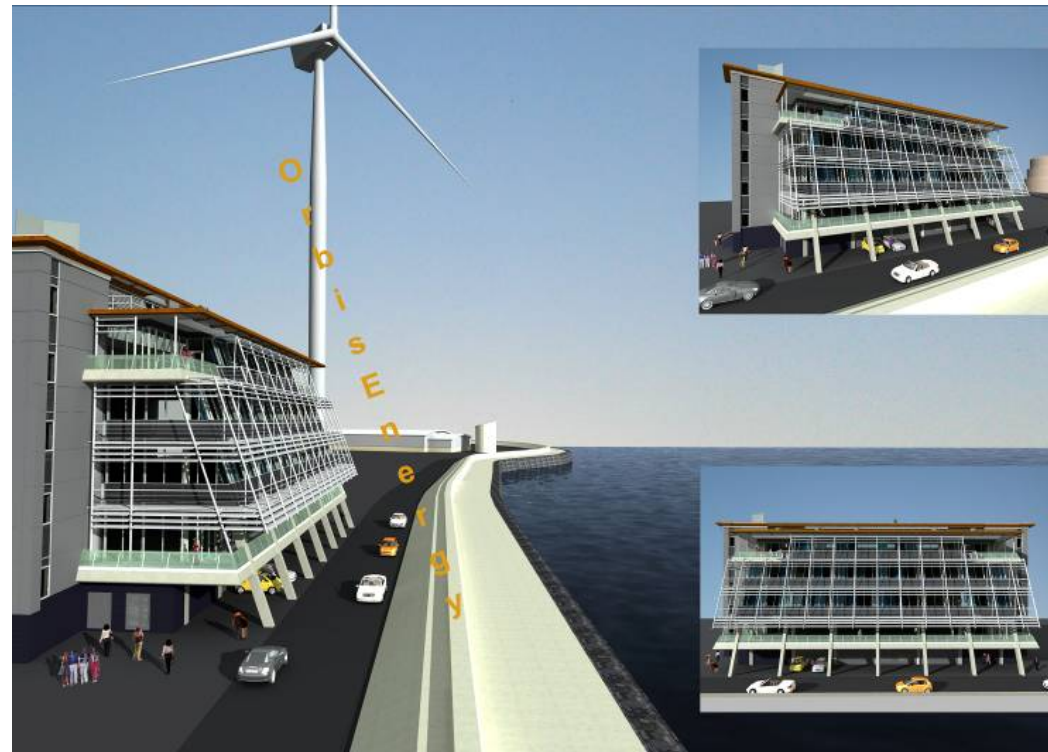
Pushing Offshore Wind Energy Regions (POWER)



A major hub for the evolving offshore renewables industry, linking businesses with research, fostering creation of SMEs and stimulating investment



Championing
Offshore Renewables
(Wind, Wave & Tidal)



Pushing Offshore Wind Energy Regions (POWER)

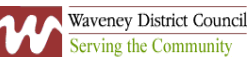


A central point for businesses of the renewables industry
Fosters greater collaboration amongst businesses
Supports the creation of new and developing SMEs
Links businesses with research and academic institutions

In Lowestoft, the most easterly point in the UK
A £9m (DKK 100m) investment
A “landmark building” as an icon for regeneration
Flexible Open Plan Office
Accommodation over 3 storeys
Exhibition and Conferencing



Completion due mid 2008



Lowestoft & Great Yarmouth

Key location for offshore renewables



Offshore Renewables Hub



Urban Regeneration Company:
Energy Cluster development in the “Power
Park” adjacent to OrbisEnergy in Lowestoft



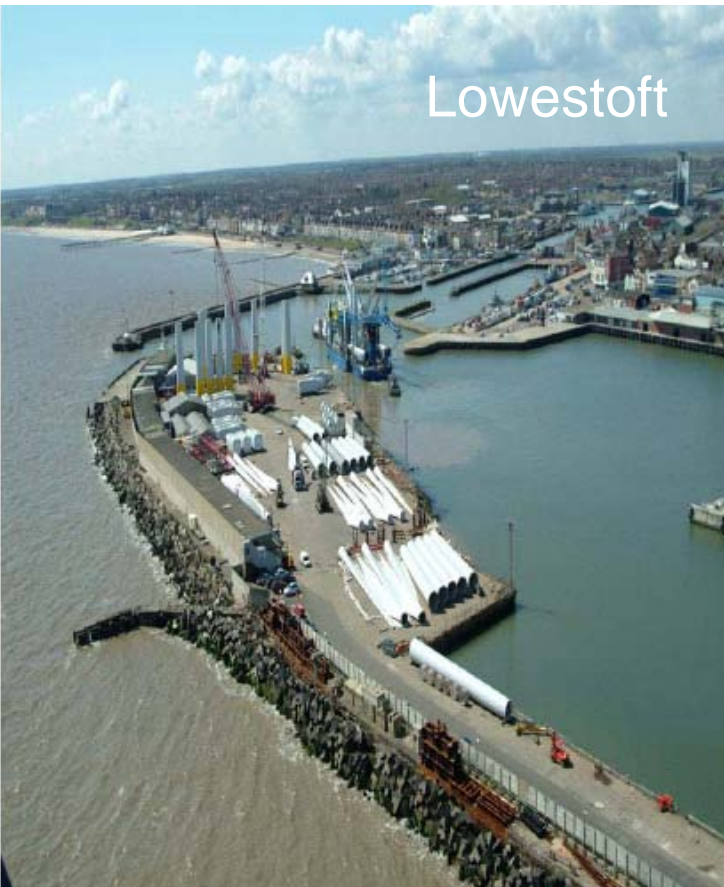
Part of the POWER North Sea Competence
Network for offshore wind energy



Pushing Offshore Wind Energy Regions (POWER)

Lowestoft & Great Yarmouth – the twin ports

Key location for offshore renewables



Great Yarmouth
Port today...

... and with its
EastPort in the
future





EEEGr (East of England Energy Group)

Regional energy industry association
- business led, business driven

EEEGr's vision is:

“the sustainable production and wise use of energy”

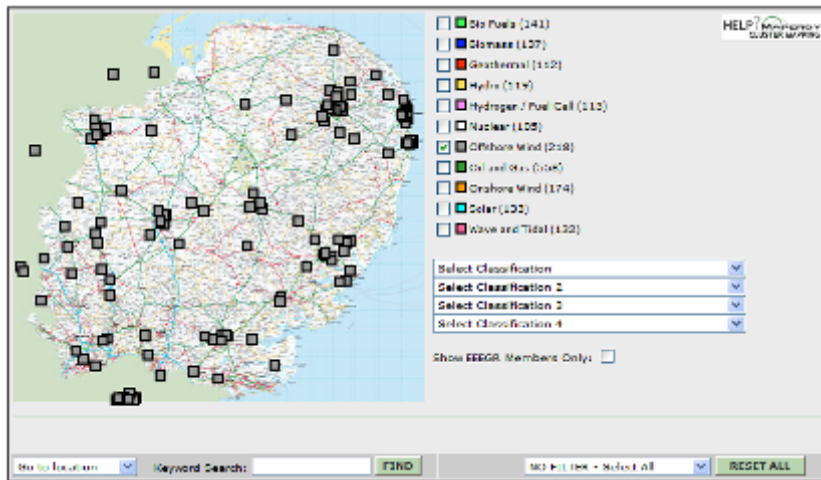
Representing over 260 member companies.



- Profile raising
- Industry Events
- Annual EEEGr Summer Conference
- Networking breakfasts
- SNS Conference
- Inward and outward business missions



Mapergy – Geographic Cluster Mapping



ORGANISATION INFORMATION

Andrews Survey
Salmon Road
Great Yarmouth
Norfolk NR30 3QS

Independent marine survey contractors to the energy, engineering and marine construction industries

TEL: 01493 332111
FAX: 01493 332265
EMAIL: richardparkinson@andrews.co.uk
WEB: www.andrews.co.uk

Material Sector(s):
Offshore Wind
Oil and Gas

Role:
Service

Classifications:
Seismic
Survey and Positioning





Renewables East

The Agency for Renewable Energy in the East of England
Private Company – not for profit

Three main company objectives:

- Reduce climate change (regional)
- Capture regional economic benefit
- Establish skills and awareness



Three core activities:

- Offshore Renewable Energy
- Grown Fuels (Biomass & Biofuels)
- Mass Market Renewables



Academic & research excellence in Energy

➤ Lowestoft College

Centre of Vocational Excellence (CoVE)
for Offshore Technology and Energy



➤ CEFAS in Lowestoft

internationally renowned aquatic scientific research centre



➤ i10 – the regional academic network

University Campus Suffolk (UCS), Cranfield University



➤ Skills for Energy - Business led partnership

Sector Attraction / Employer Interface

Training Provision

Competence and Training

Labour Market Intelligence



Case Study SLP Energy, Lowestoft

Design, engineering, fabrication, installation;

leading provider of MFP (minimum facility platforms)

Transfer of knowledge and skills from 40 year experience in the offshore oil & gas industry to offshore renewables



Key involvement in wind energy projects:

- Scroby Sands Offshore Wind Farm
- SCIRA Joint Venture:
Sheringham Shoal Offshore Wind Farm
- Thanet: Contract to supply 100 monopiles
(in novel cost effective design)



Case Study ODE, Great Yarmouth

Engineering support and technical services of complete project life cycle for oil and gas industry

Diversification into offshore renewable energy

- currently 15% of ode business



Scroby Sands, E.On



Ormonde; Eclipse Energy

Key involvement in wind energy projects:

- Scroby Sands OWF: Project Management
- Ormonde Integrate Offshore Gas and Wind Power Generation: All pre development engineering
- Involvement in many more Round 1 & 2 wind farms

ode





Further information at

www.eeeegr.com

www.renewableseast.co.uk

www.offshore-power.net

