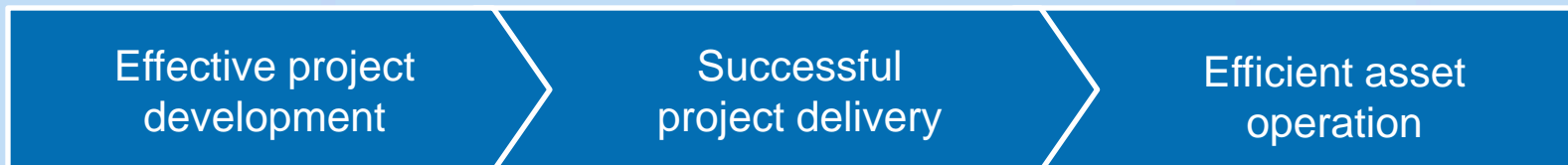


Power: Offshore Wind


Andy Bevington and Sarwjit Sambhi



Our business model is driven by our distinctive capabilities across the value chain



- Access to advantaged sites
- Sophisticated approach to site optimisation and planning
- Effective stakeholder and community relations
- LID delivered on time and on budget
- Lincs demonstrates our advanced technical capability
- Competitive advantage from increasing scale
- Best-in-class operational management
- Excellent track record on availability and generation

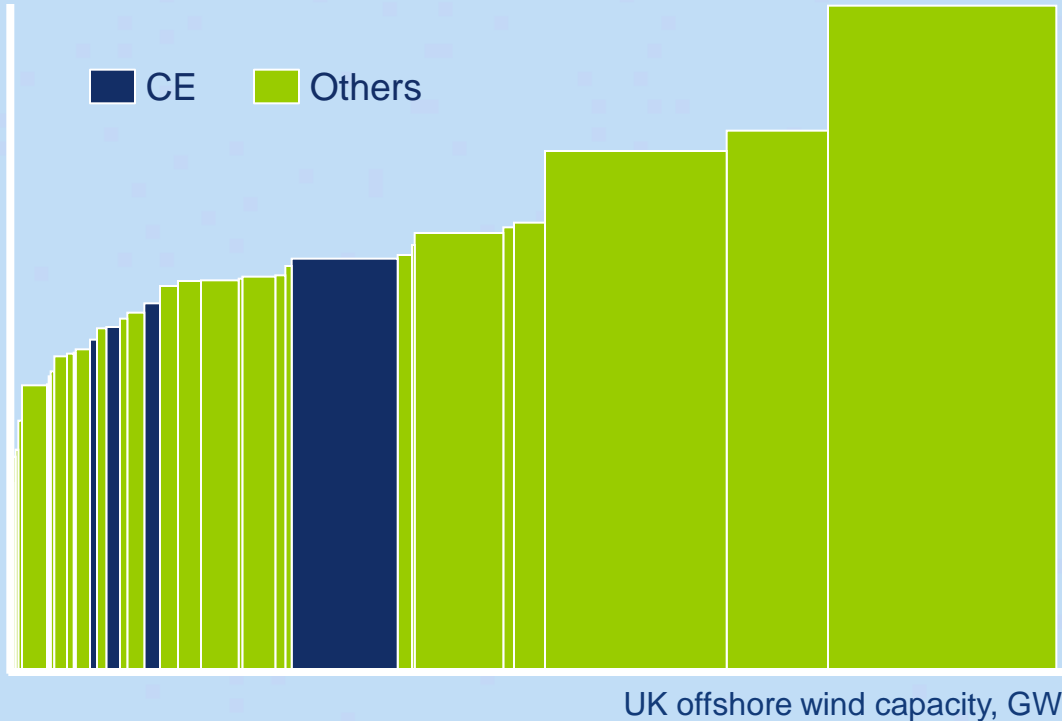


Distinctive capabilities allow us to generate above-average returns from our wind investments

Effective project development

We have secured some of the best R2 and R3 sites in the UK

Levelised cost,
£/MWh



- Our sites are among the best in the UK
 - Higher wind speeds
 - Shallow water
 - Better grid access
- We have a 100% success rate in consenting/winning sites through Rounds 1, 2, 2.5 and 3
 - LID consented 2003
 - Lincs consented 2008
 - R3 won 2010

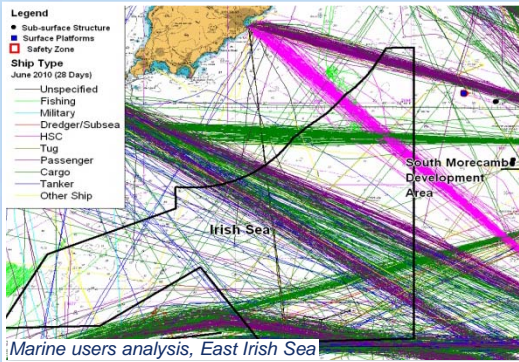
Advantaged sites allow more value creation per kWh of power generated

Source: Centrica Energy analysis

Effective project development

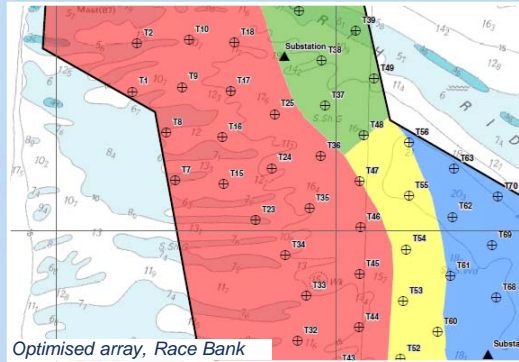
We employ a sophisticated approach to site optimisation

Ensuring project delivery



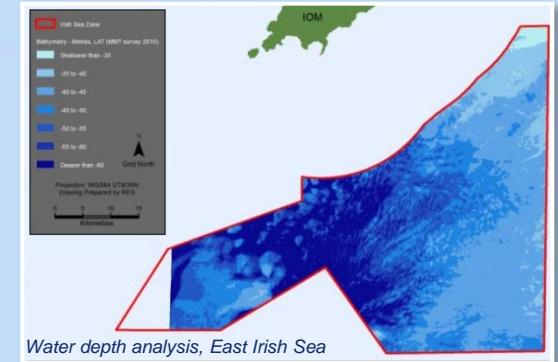
- Sites chosen in order to minimise stakeholders issues
 - Onshore cabling and substation planning sensitivities
 - Land and marine ecology protection
 - Other marine users (MOD, shipping), seabed obstacles (cables, pipelines)

Yield maximisation



- Turbine arrays designed for optimal yields
 - Detailed anemometry of site
 - Turbines positioned for maximum wind speed and to avoid wind shade

Construction cost minimisation



- Turbines positioned to minimise construction cost
 - Foundations (water depth, geology)
 - Grid connection (minimising distance of wind farm to shore)

Site optimisation is a key driver of capital productivity

Effective project development

Stakeholder and community relations are effectively managed

Strong relationships with key external stakeholders



- Committed to responsible project development and environmental management
- Strong relationships with key stakeholders such as Natural England, JNCC, Environment Agency

Proactive approach to community relations



- Work closely with local communities to minimise impact
- Provide financial support to local educational initiatives and projects in Lincolnshire

Strong stakeholder relations protect our reputation and viability of project pipeline

Successful project delivery

Lynn and Inner Dowsing was delivered on time and on budget



Project delivered on time in December 2008

- Employed a multi-contract, multi-disciplinary approach to project and contract management, without compromising HSE

Project was on budget

- Employed rigorous cost control that integrates risk, schedule, economic return and other key attributes

Project financing created additional return

- Secured £340m of debt and equity financing for LID (and Glens of Foudland) in a challenging environment
- Voted PFI Offshore Wind Deal of the Year for 2009

Successful project delivery

Lincs is progressing well



2008

- Consent granted

2009

- FID
- JV announced with Siemens PV and DONG

2010

- Onshore construction activity commenced

2011

- Offshore construction activity commenced

2012

- Turbine installation scheduled to commence
- First power

2013

- Wind farm completion

Successful project delivery

Lincs is our most technically ambitious project to date

Turbines



- 75 of the latest 3.6MW Siemens wind turbines
- 120m rotor diameter, up from 107m rotor used on LID, improves yield
- Turbines installed in a wider range of water depths

Substations



- Designed and built 2000 tonne offshore substation topside and 800 tonne supporting jacket, one of only a handful worldwide
- Constructed a 400/132kV onshore substation at Walpole. UK's first 400kV offshore wind farm substation to be energised

Cabling



- 77 x 1km array and collector cables link the turbines to the substation buried at 2m depth
- Deep and shallow water jointing managed directly by Centrica to save time and money and ensure results
- 22km of onshore cable laid over 12 land titles, with directional drilling to avoid obstacles

Successful project delivery

Lincs highlights our strengths in innovation and project delivery

Nessie chain trencher



- SSSI¹ designation led to significant operational restrictions
- Main contractor unable to meet requirements, so CE took over
- Challenging stakeholder management for revised approach
- Successfully implemented

MV Resolution crane upgrade



- New 600 tonne crane installed on the vessel Resolution in a technically challenging, world-first project
- Complex commercial deal involving 13 supply contracts and agreements
- Managed directly by CE
- Delivered on time and on budget

Transformer rebuild



- Major piece of electrical equipment did not satisfy project team
- Equipment returned to factory
- Non-conformances identified and rectified
- Supplier met the costs

Our track record on project delivery proves our ability to create value from our pipeline of new projects

1. Site of Special Scientific Interest

Successful project delivery

LID and Lincs construction (video)



Successful project delivery

Our increasing scale brings a number of competitive advantages

Team



- Growth of core team from 8 to more than 150 brings wide range of expertise in house

Key partners



- Strong relationship with key suppliers gives us preferential treatment, turnkey capability, and lower costs

Strategic relationships



- Long term relationships with specialist contractors
- Charter of vessel MV Resolution

We are seen as one of the leading players in UK offshore wind

Efficient asset operation

We are delivering outstanding results on opex and availability

Cost efficiency

- Use of strategic relationships to maximise value across operational portfolio without compromising HSE

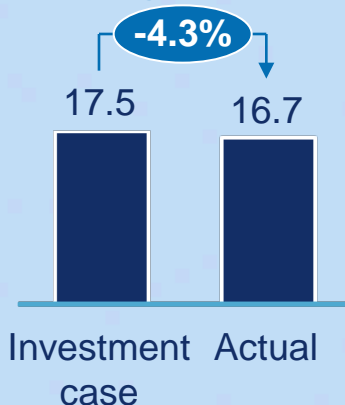
Availability

- Effective work packaging and scheduling to minimise downtime
- Condition-based maintenance strategy

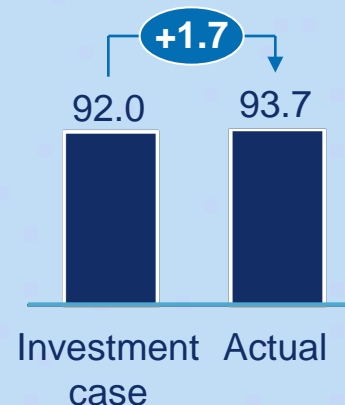
Long term asset integrity

- Reliability-centred maintenance approach
- Use of latest engineering practices to detect failures in early stages

GLID operating cost 2010, £m



GLID portfolio availability¹ 2010, %



We are delivering even higher operating performance than anticipated at FID

1. Percentage of time that the site is available to generate and export power onto the grid

Our offshore wind strategy builds on our established business model

CE's five year offshore wind strategy

Maximising returns from existing assets

- Continuous improvement for reliability and cost minimisation

Deploying distinctive capabilities

- Effective business development
- Successful project delivery
- Efficient asset operation

Further investment for growth and value

- Grow offshore wind capacity by 300% to 560MW¹ by 2016 while delivering superior returns
 - Lincs
 - Race Bank
 - Docking Shoal or most attractive R3 site

Deploying capital to drive earnings growth and value

1. Centrica share assuming 50% equity

Q&A

