



# The INTERREG IV(a) Fostering Long Term Initiatives in Ports project Newhaven Port and Properties Ltd cross border workshop

“PORT PLANNING AND DEVELOPMENT FOR A SUSTAINABLE FUTURE  
“PLANIFICATION, GESTION PORTUAIRE ET DÉVELOPPEMENT DURABLE”

- progress and results lessons learned from consultation approaches with master planning studies

Wednesday 10<sup>th</sup> December, 2014– Thistle Brighton Hotel



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# Sean Matthews Logistics and Construction Engineer Rampion Offshore Windfarm, E.ON

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# Rampion Offshore Wind Farm

## Project Update



Sean Matthews  
Offshore Logistics and Installation Engineer

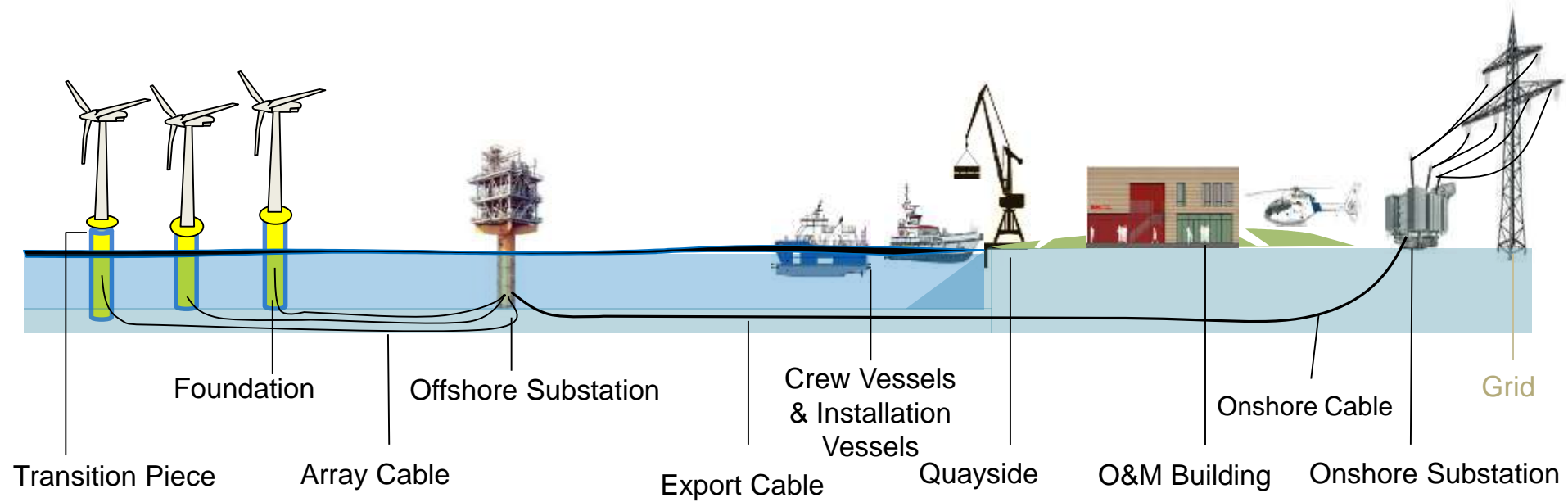
# Presentation Overview :

1. Project scope overview
2. Key milestones to date
3. Final project design
4. Indicative Project timetable
5. Construction
6. Operations & Maintenance
7. Opportunities



# Rampion Project Scope Overview

## Wind Turbine Generators



# Key project milestones to date

- 2010-11: Formulating draft proposals**

- Engineering & environmental surveys and environmental impact assessment inform early draft proposals for statutory and community consultation

- 2012: Consultation**

- Combined total of 20 weeks, 14 public exhibitions, 4,700 people, 1,500 responses

- 2013: DCO submission and examination**

- Onshore and offshore design changes following consultation responses

- March: DCO submission

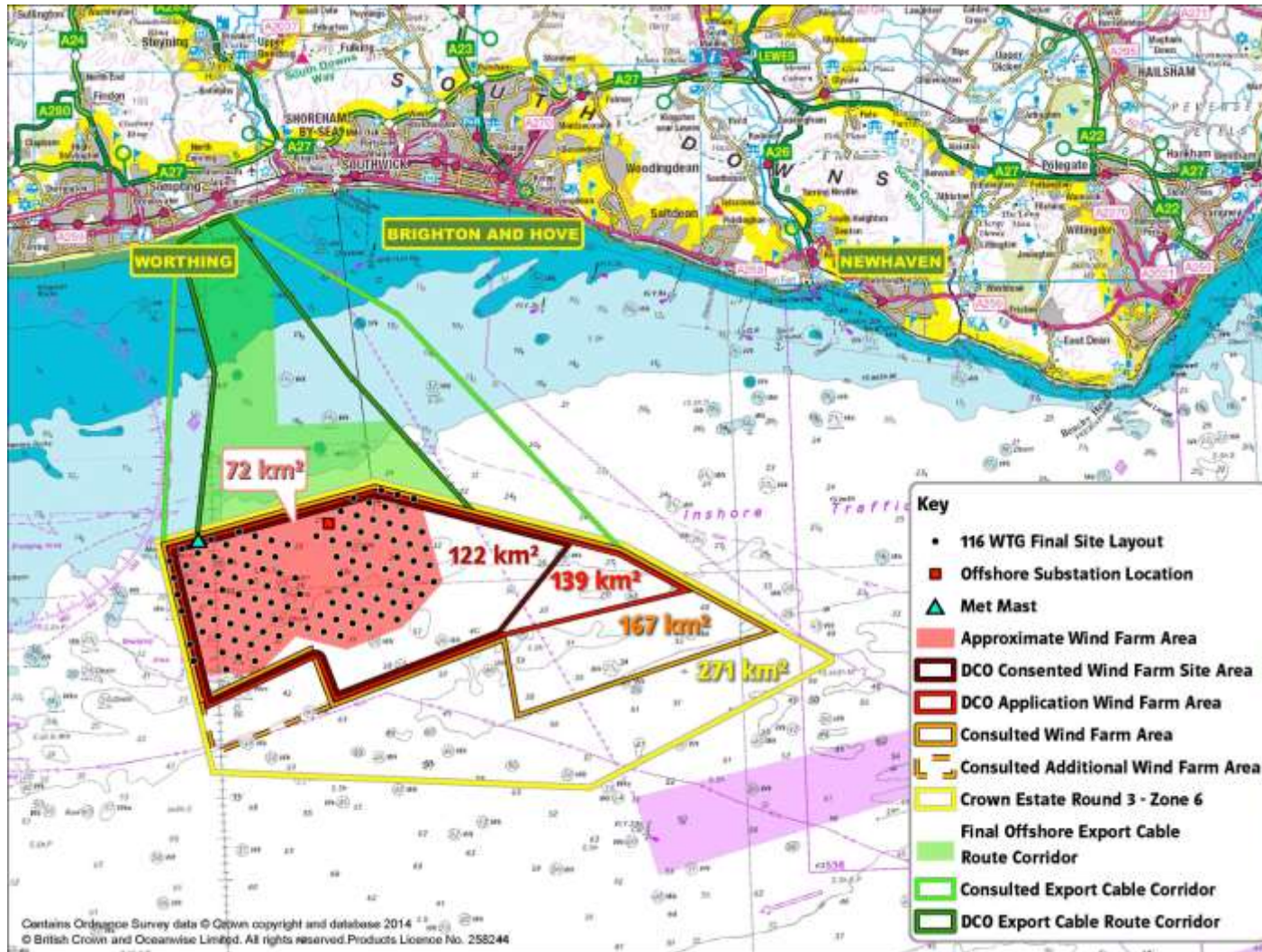
- July 2013 - January 2014: DCO Examination including 14 public hearings

- 2014: Consent granted**

- The Secretary of State for Energy & Climate Change granted consent for Rampion, the first wind farm of the south coast of England, 16<sup>th</sup> July 2014**



# Evolution of project design

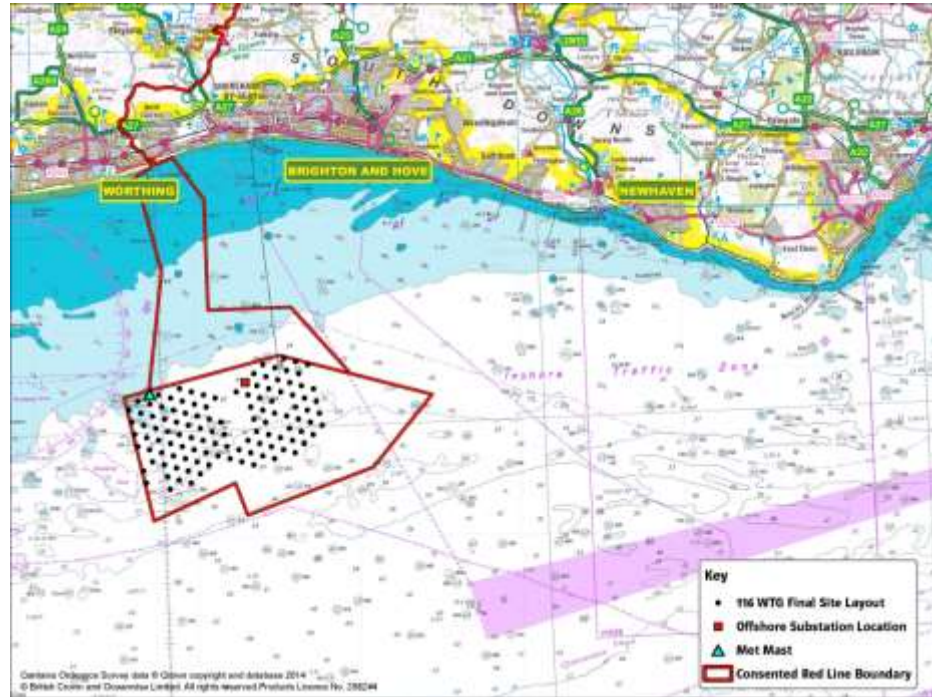


# Final offshore project design

- Up to 116 turbines
- Hub height 84.29m above LAT
- Tip height 140.2m above LAT
- 400MW installed electrical capacity
- 72km<sup>2</sup> wind farm site area
- One offshore substation
- Export cable route being
  - finalised within reduced corridor

## •Each year in numbers:

- Generate 1,366GWh power output
- Offset almost 600,000 tonnes of CO<sub>2</sub>
- Supply equivalent of over 290,000 homes, equivalent to more than 4 in 10 homes in East and West Sussex, Brighton and Hove





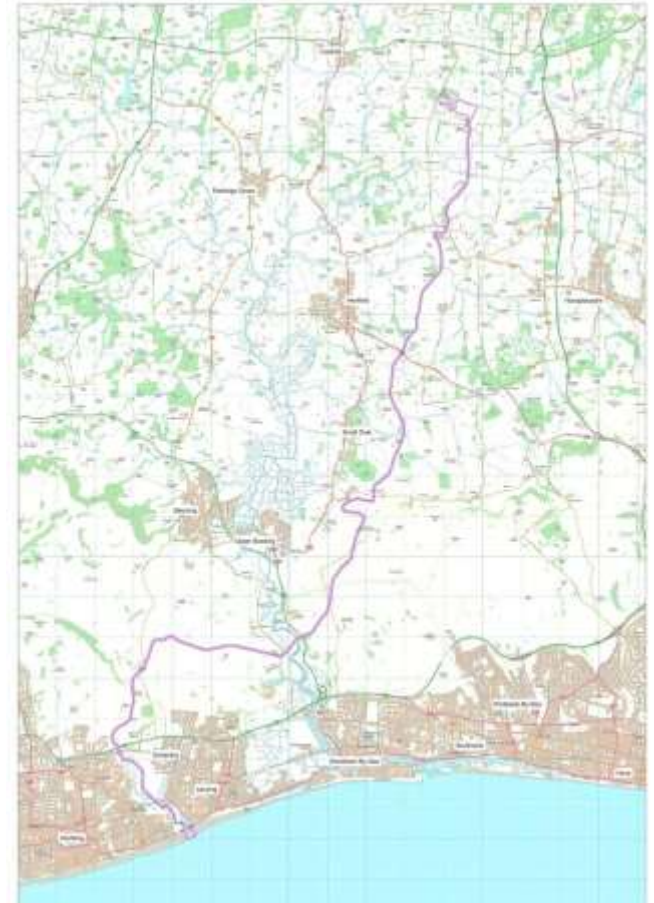
# Final onshore design

- Cable route

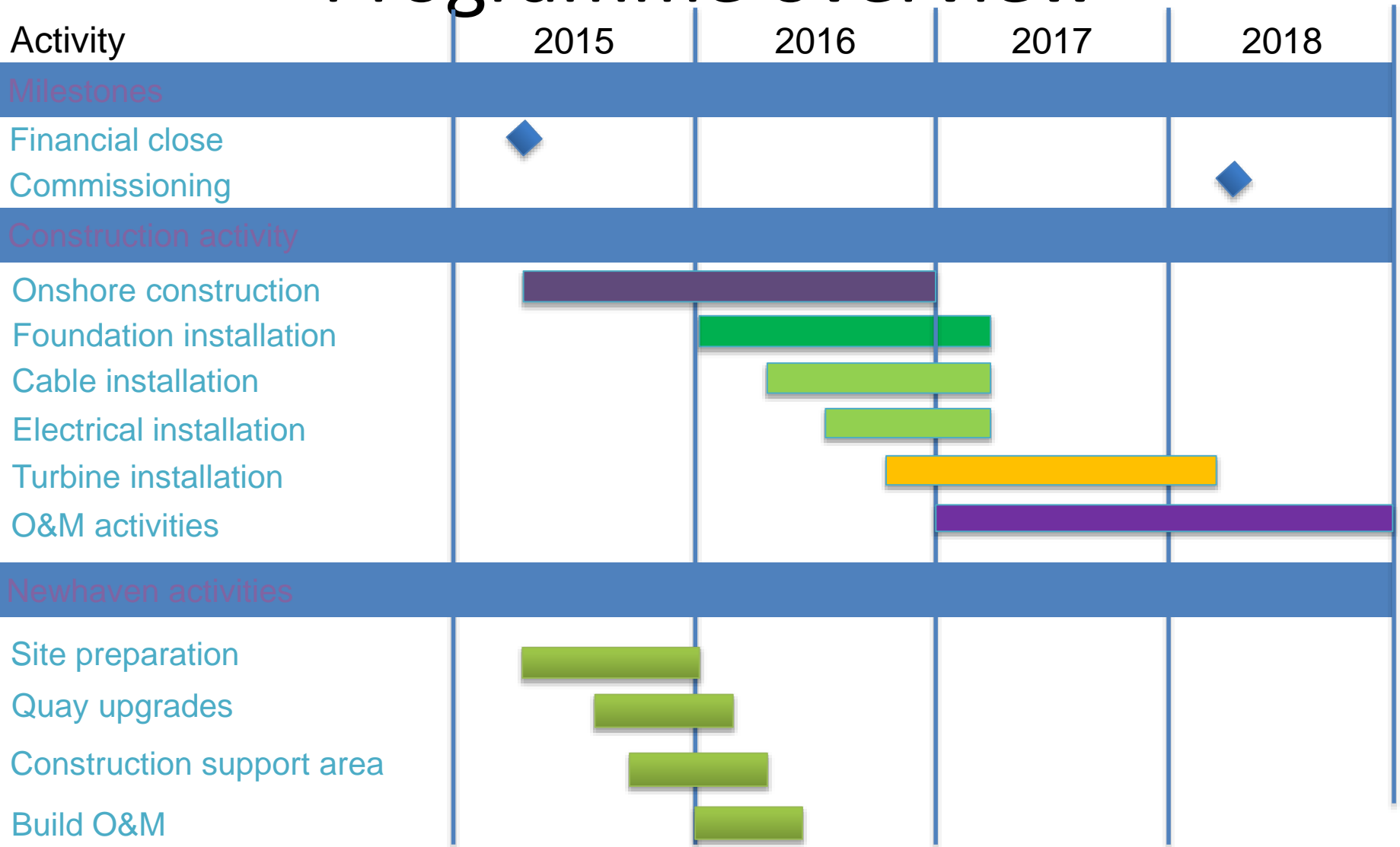
- Landfall at Brooklands, East Worthing
- 27km long underground cable route
- Change from 4 to 2 132/150kV circuits
- 30m working width / 15m easement
- 400kV connection at new substation

- Substation

- Active engagement with Local Liaison Group on final layout design, seeking to:
  - reduce overall area and size buildings and components, where possible
  - protect hedgerows and trees



# Programme overview



# Construction - offshore

- Up to 3 year construction period commencing Q4 2015 / Q1 2016
- 250-300 jobs in the workforce during offshore construction
- Project Management Facility for construction located at Newhaven Port:
  - Provides portside availability, flexibility of space and ease of access to site
  - Offers continuity throughout construction into operation
  - Temporary portakabins until O&M base is complete
  - Newhaven hub of activity creating up to 40 jobs and utilising local vessels



# Construction - onshore

## Cable route

- 2 year construction commencing Q2 2015
- 60-100 in workforce during onshore construction
- Ducting installation method
- Horizontal Directional Drill (HDD) roads & railway
- Tailored construction methodology for Tottington Mt



## Onshore substation

- 2 year construction commencing spring 2015
- 40-60 in workforce during construction
- Civil/enabling, electrical build & commissioning
- Transforms power up to 400kV and conditions power prior to entry into transmission system
- Max height (transformers) 10.5m tall



# Operations & Maintenance

- Operations Base located at Newhaven Port, to include control room, office, warehouse and quayside infrastructure, benefiting the local economy by:
- Triggering regeneration plans for NPP (already encouraged new tenants)
- Creating opportunities for indirect local employment in the form of up to 30 support service contracts and other local expenditure
- Creating up to 65 full time, permanent jobs

## Operation Base development process:

2014 - in discussions with Lewes District Council regarding the planning process

2015 - design proposals

2016 - construction commences

2017 - O&M base complete (used for PM)



# Opportunities

- Steering Group partnership with local authorities
- Identified 600 local businesses with capability to supply products/services
- Meet the Buyer Event, Amex, Feb 2014, attracted almost 300 suppliers
- Potential contractors encouraged to identify proposed UK & local suppliers
- [www.sussexwindenergy.org.uk](http://www.sussexwindenergy.org.uk) launched September 2013
- Local suppliers encouraged to register details on Suppliers Database
- Contracts already placed with local suppliers (met mast, geotech, survey and guard vessels, FIR, OFLO, PR, ecology, development manager)
- Employment Workforce Training Plan identifying skills gaps / develop courses
- Wind Turbine Maintenance Technician Apprenticeship Programme
- Support for Newhaven University Technical College
- Exhibited at Worldskills Careers Fair, Brighton to 1,685 students



# Thank you for listening



Sean Matthews [sean.matthews@eon.com](mailto:sean.matthews@eon.com) / 07903 335155