NAVITUS BAY WIND PARK

SUPPLY CHAIN ENGAGEMENT

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28 November 2014

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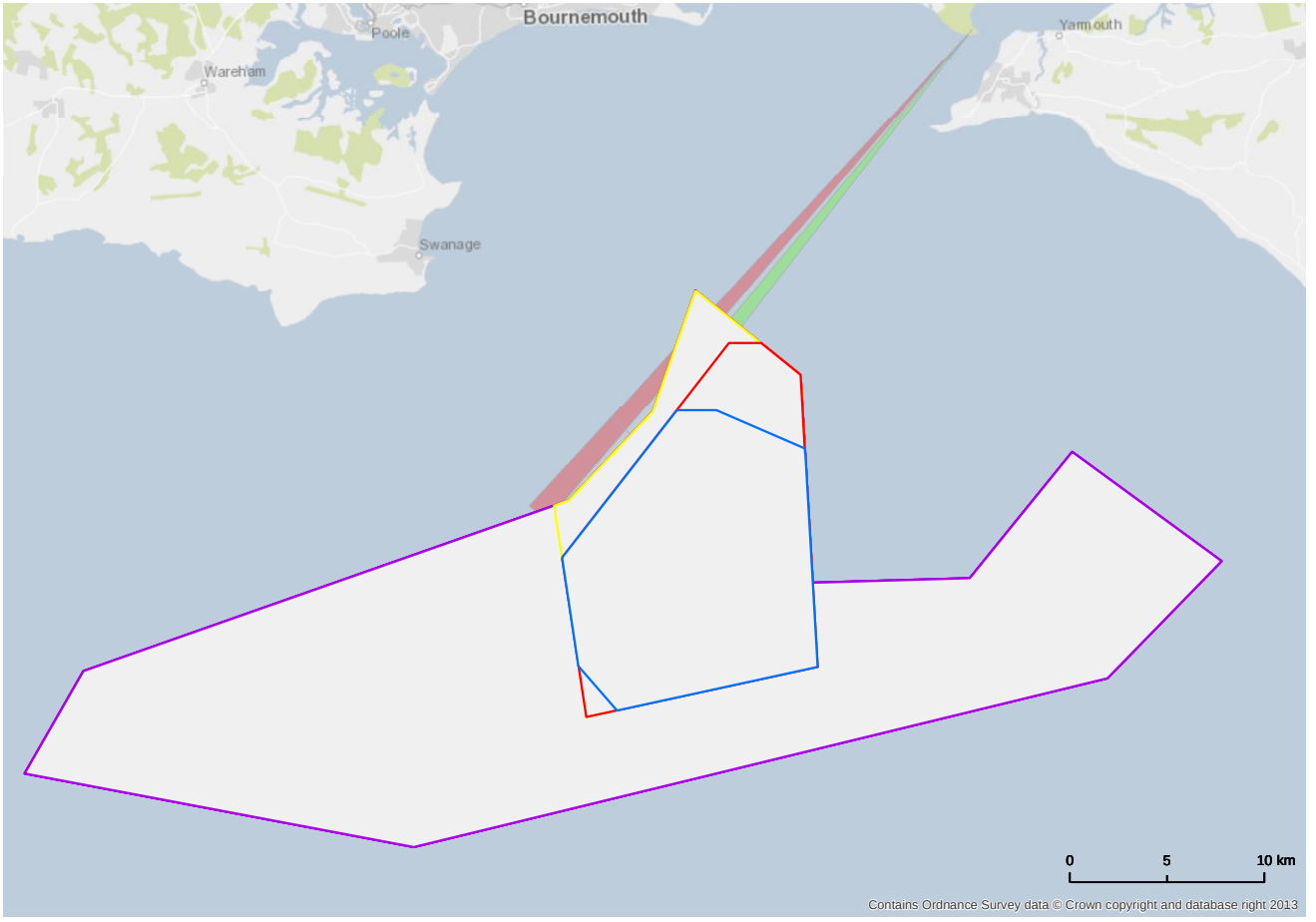
PROJECT EVOLUTION



➢ **2010 (Purple Line)**

- Zone awarded by The Crown Estate. Identified least constrained area / optimum development area

➢ **2011 (Yellow Line)**

- Finalise Site Area
- Max. Target Capacity **1200MW**

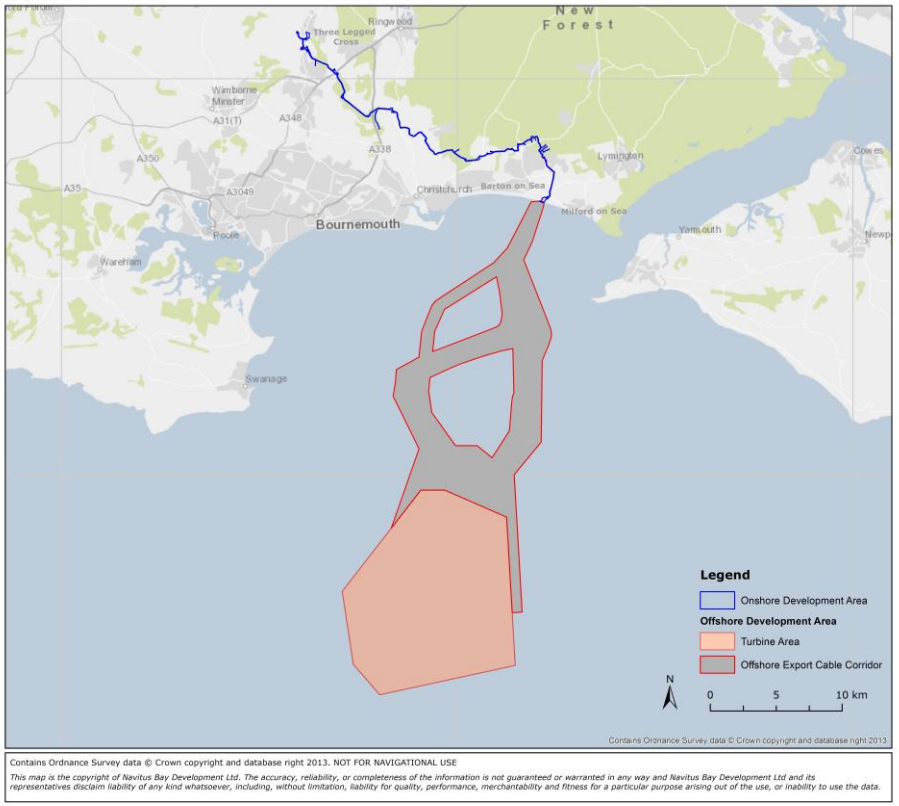
➢ **2012 (Red Line)**

- Boundary Change in Dec 2012 to accommodate shipping & navigational constraints & mitigate visual impact
- Max. Target Capacity reduced to **1100MW**

➢ **2014 (Blue Line)**

- Boundary Change in Feb 2014 to mitigate visual impact
- Max. Target Capacity reduced to **970MW**

CONSENT PARAMETERS



- Maximum Installed Capacity of **970MW**
- Between **121** (8MW) and **194** (5MW) wind turbines
- Maximum Tip Height **200m** / Rotor Dia. **176m**
- Open Foundation Concept **but** a Monopile exclusion area
- Seasonal Piling restrictions
- Up to **3** Offshore Substations / **6** Export Cables
- Export Cable Voltage **132kV to 275kV**

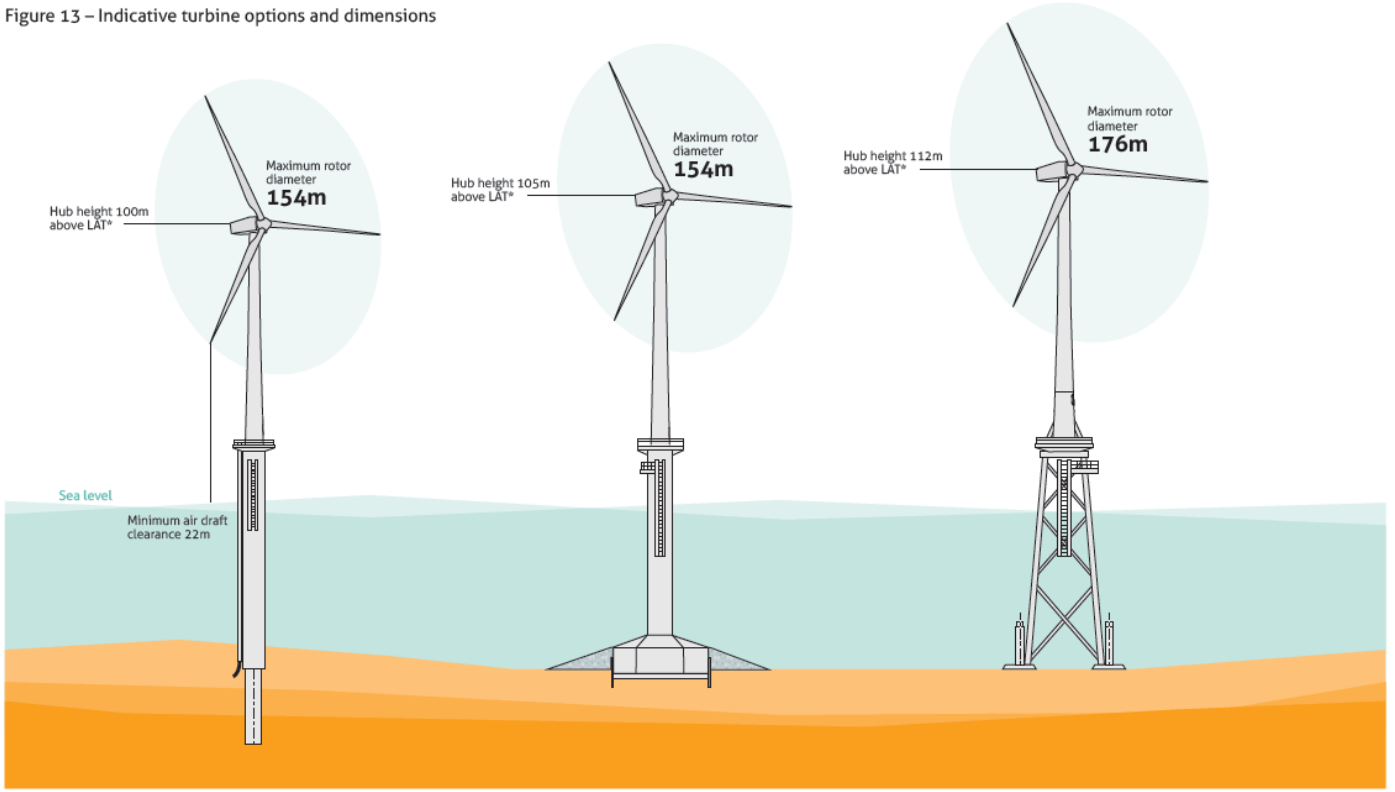
- Enough power to generate electricity for around **710,000** homes
- Offset approximately **1,290,000** tonnes of CO_2 emissions each year

CONSENT UPDATE

- Application for DCO submitted 10 April 2014
- Application accepted by PINS for Examination 8 May 2014
- Formal Examination of our Consent Application commenced 11 September 2014 and runs until March 2015
- UK Government Consent decision 11 September 2015

WIND TURBINES

Figure 13 – Indicative turbine options and dimensions



5MW-class wind turbine

Max blade to tip height 177m

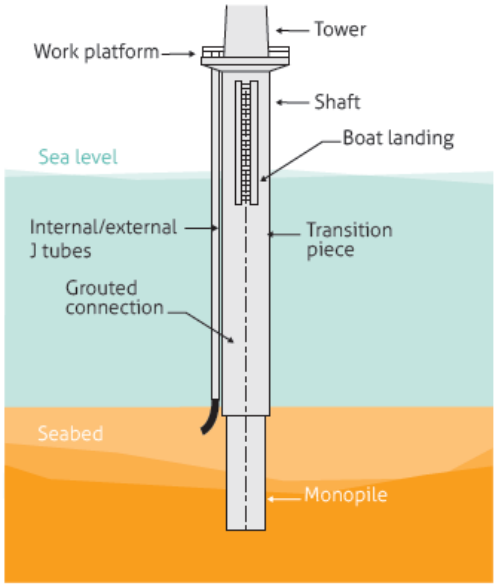
6MW-class wind turbine

Max blade to tip height 182m

8MW-class wind turbine

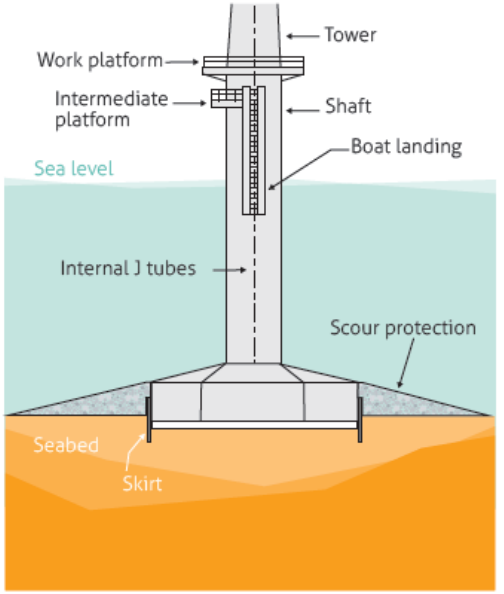
Max blade to tip height 200m

FOUNDATIONS



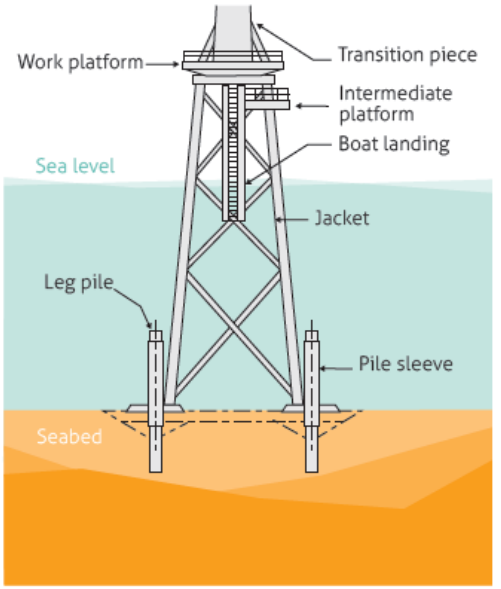
Monopile

Monopile foundations are long steel tubes driven into the seabed using a hydraulic piling hammer, sometimes assisted by drilling where ground conditions are more difficult.



Gravity base structure

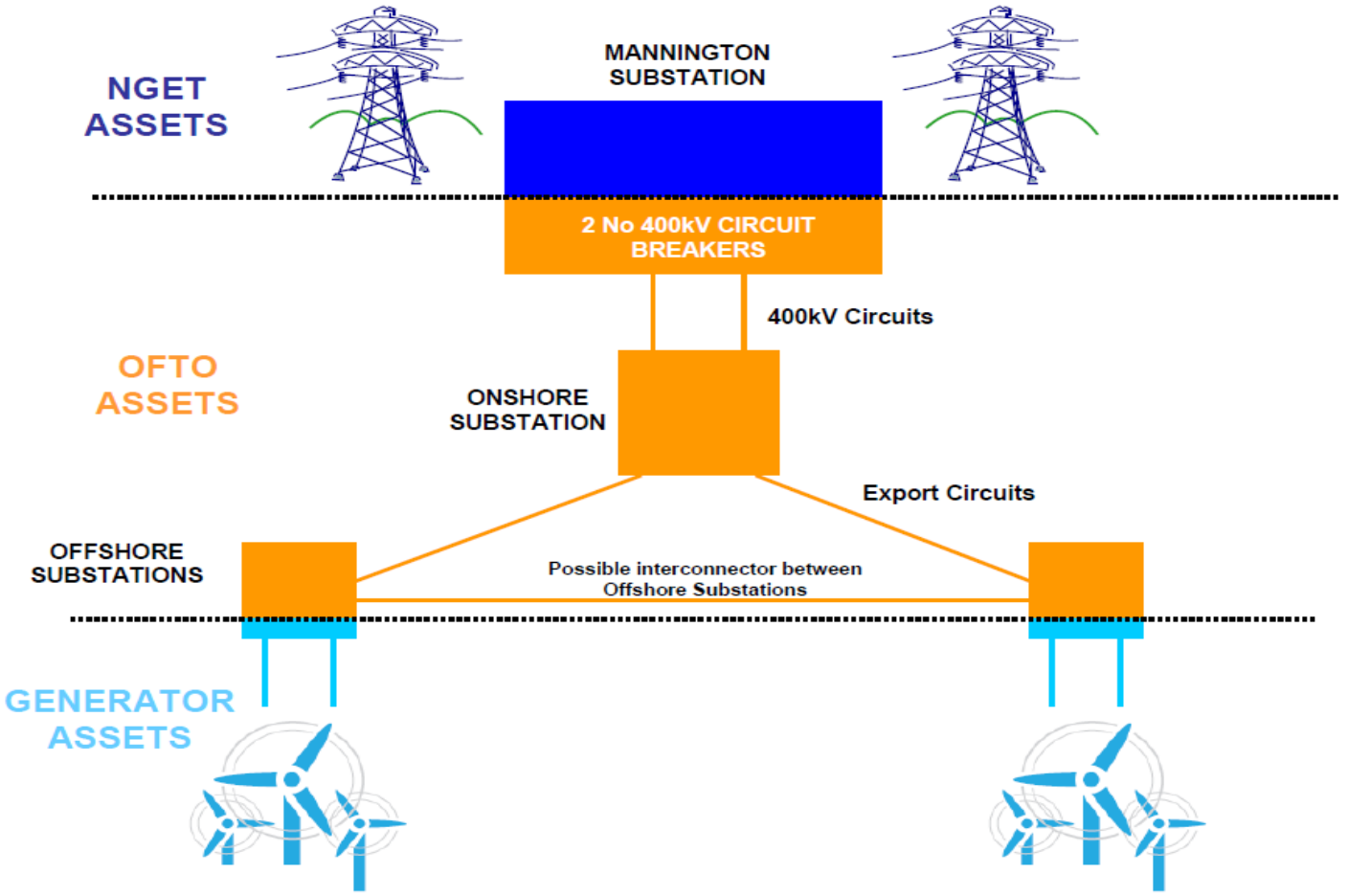
Gravity base foundations are large diameter concrete and/or steel structures. They are often internally ballasted to create a large stable mass after they are placed on to the seabed.



Space frame foundation

Space frame foundations consist of three or four legged steel lattice structures, secured to the seabed with piles at each leg position. This foundation type is very common in the oil and gas sector and a number of variations are available.

Windfarm Transmission System Scope

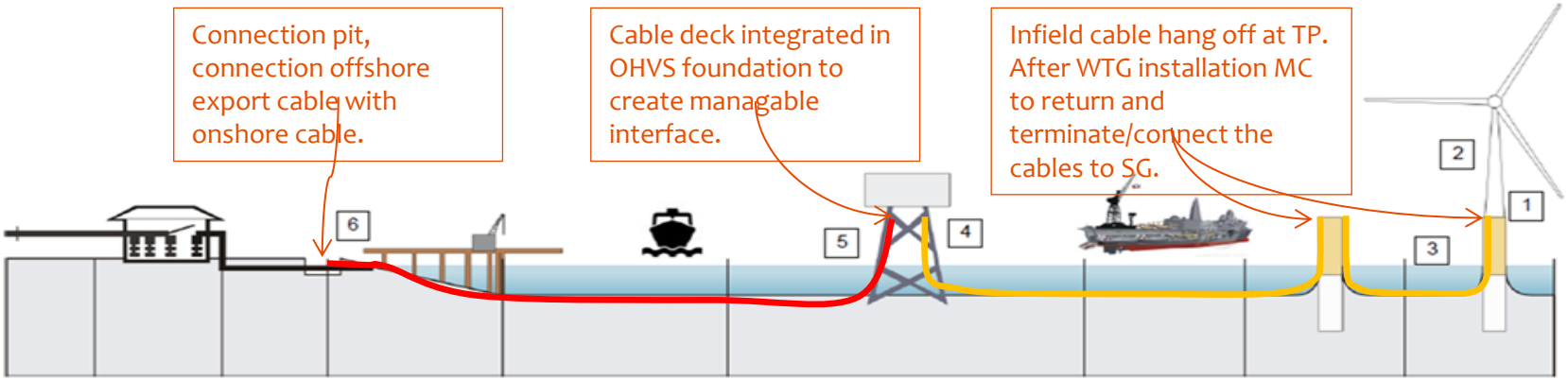


TURBINE PROCUREMENT UPDATE

- Tenders received from WTG suppliers
- Tender evaluation is progressing. TQs have been issued and Tender Clarification Meetings have been conducted
- Seeking to short-list and ultimately select a preferred bidder in 2015
- Supply Chain Plan for UK and local content – part of evaluation criteria

BALANCE OF PLANT PROCUREMENT UPDATE

- BOP includes WTG Foundations & In-field Array Cables EPCI. Electrical works includes all Onshore & Offshore Transmission Assets EPCI
- We have pre-qualified BOP Tenderers
- Budget designs and quotes have been requested



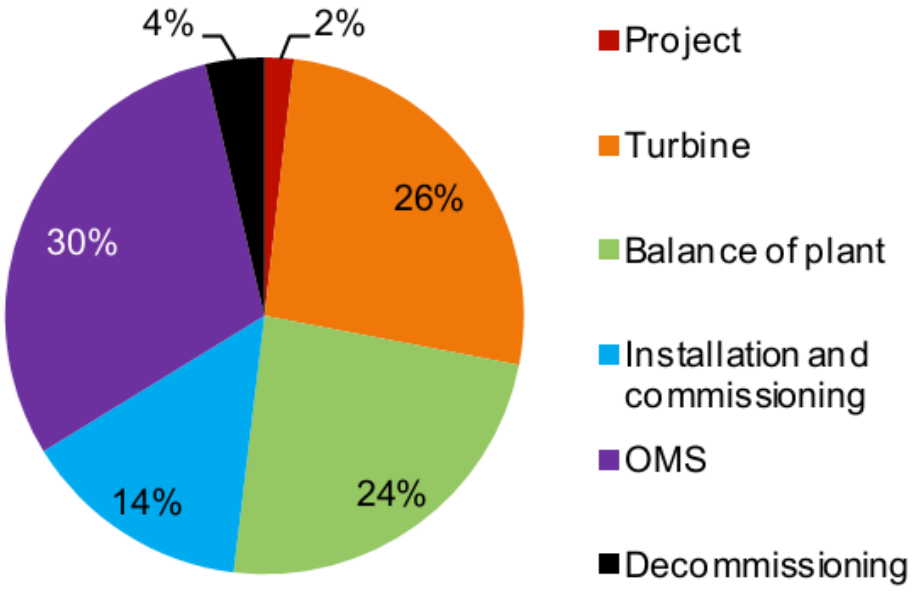
Project Works	Onshore Substation	Onshore Cable	Port Logistics	Offshore Cables	Offshore Cable Installation	Offshore Substation Foundation	Substation Electrical Equipment	Offshore Installation	Foundation	Wind Turbine
Typical Contrac-tors	Electrical Suppliers	Electrical Suppliers	Port Operators	Offshore cable suppliers	Cable Installation Contractors	Foundation Suppliers	Electrical Suppliers	Marine Contractors for Vessels and Offshore Installation	Foundation Suppliers	Wind Turbine Suppliers

PLANNING UPDATE

- Supplier short-list/preferred-bidder status 2015
- Consent Decision 11 September 2015
- Supply Chain Plan August 2015
- CfD Application mid-October 2015
- CfD Decision Q4 2015
- FID Q4 2016
- Target Commissioning Date of 31 March 2019

ECONOMIC BENEFITS - HEADLINES

- **£2.9 billion** to construct
- **£2.1 billion** to operate & maintain
- **£0.4 billion** to decommission



Total forecast discounted expenditure on the proposed Navitus Bay Wind Park

REGIONAL ECONOMIC BENEFITS

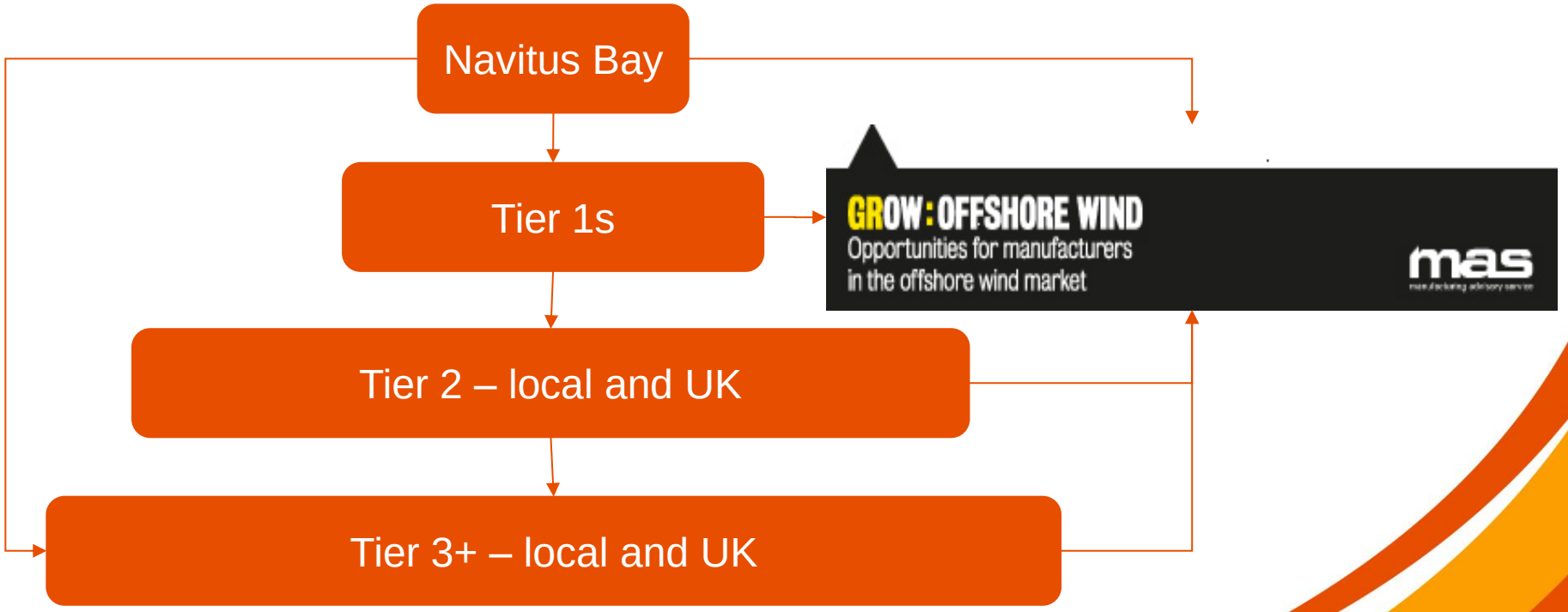
- Potential economic value to the **region** of up to **£1.62 billion** over the project lifetime (25 years)
- **1,700 jobs** during peak construction
- Local O&M base – potential economic value to the **region** of up to **£590 million** over the project lifetime, as well as **140 permanent jobs** (Poole, Portland or Yarmouth)
- Navitus Bay has **already spent £6m in the local area** since the project began
- Navitus Bay is **committed to a local and regional supply chain** for all stages of the project's life cycle from development, through construction and into operations and maintenance

SUPPLY CHAIN – TIER 1

- Engagement with Tier 1s
  - UK and local content is a selection criteria
  - Supply Chain Plans submitted with tenders
    - direct and indirect component and services supply
    - Dedicated procurement initiatives – supporting new entrants
    - Skills development initiatives – links to education / pre-employment training
    - Local employment opportunities - installation, logistics, operation and maintenance teams, management and support functions
    - Local apprenticeships/ work experience

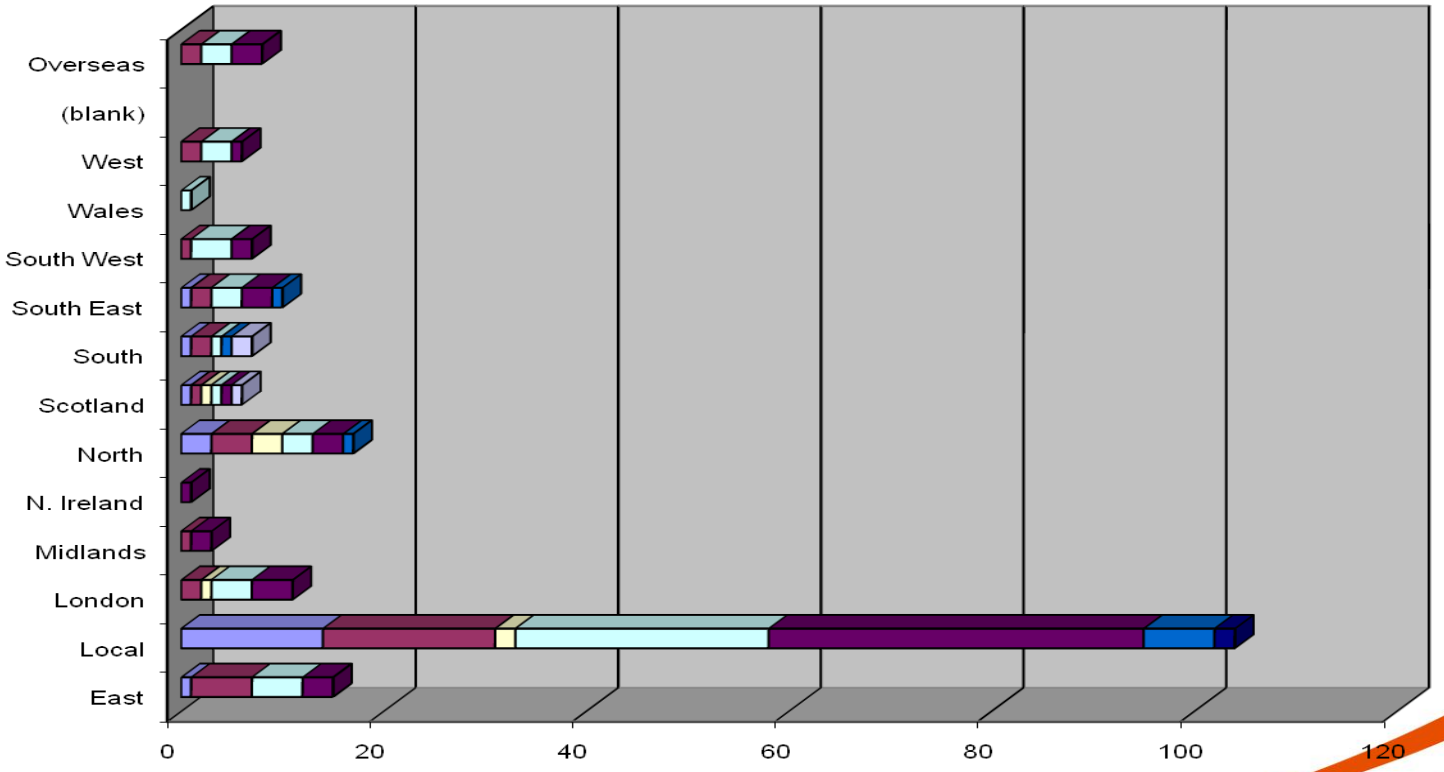
SUPPLY CHAIN – TIER 1

- Working with GROW Offshore Wind to connect Tier 1s with the SME supply chain to improve awareness of opportunities and market entry
- Provides 'readiness' support: training, QA/QC, Sales/Marketing, Operational efficiency – funding available.



SUPPLY CHAIN ENGAGEMENT

- 196 suppliers registered expressions of interest with Navitus Bay
- 103 local suppliers
- Range of goods and services:



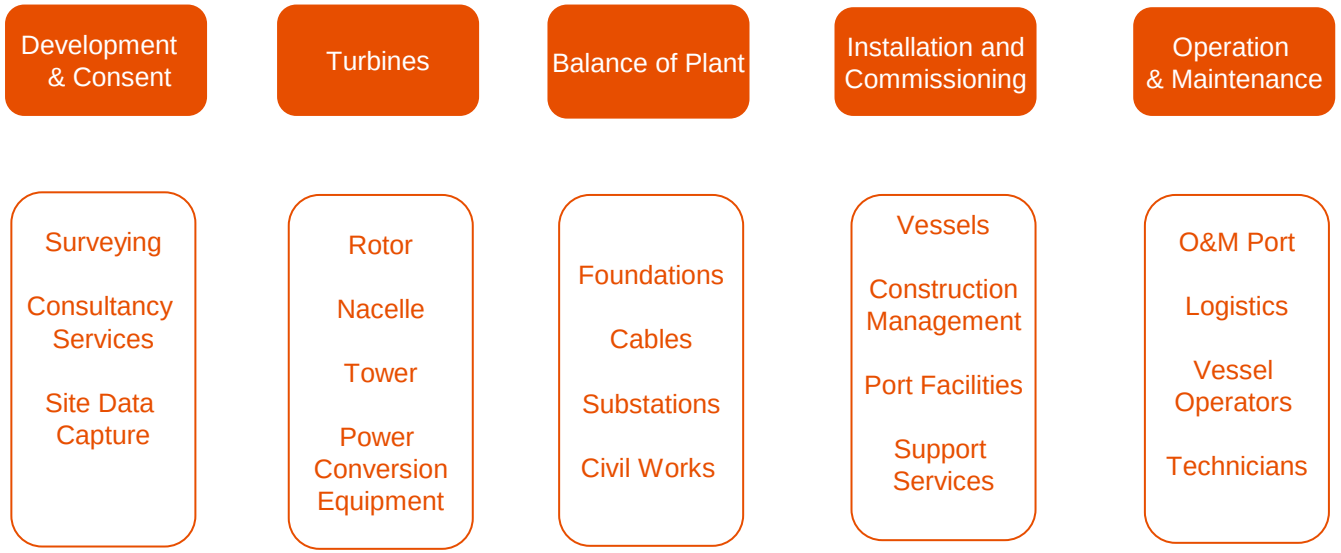
LOCAL PORTS

- Poole, Portland and Yarmouth
  - Port facilities required for construction activities
  - A long term O&M base
- Feasibility studies carried out
- Engaged with ports and Tier 1s to ensure readiness

SUPPLY CHAIN – NEXT STEPS

- Short-list Tier 1 suppliers
- Roll out opportunities in Tier 1 supply chain plans
- Promote awareness
  - Supply Chain Events
  - Publication of direct requirements
  - 'Shopping Lists'
  - Tier 1 procurement teams
- Encourage further participation and new entrants

SUPPLY CHAIN – OPPORTUNITIES



- **Each category level has a multitude of sub-components**
- **Where do you fit?**
- **Register with us:** www.navitusbaywindpark.co.uk

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THANK YOU