

# Inch Cape Offshore Wind Farm

# Supply Chain Opportunities

July 2021



**Inch Cape**  
OFFSHORE LIMITED

[www.inchcapewind.com](http://www.inchcapewind.com)

**SDIC**   
Red Rock Power Limited

 **ESB** Energy for generations

# About Inch Cape Offshore Wind Farm

Inch Cape Offshore Wind Farm is owned by Inch Cape Offshore Limited, an equal joint venture between Edinburgh-based renewable and sustainable energy company Red Rock Power Limited and Ireland's leading energy company, ESB.



**Inch Cape**  
OFFSHORE LIMITED



**Red Rock Power Limited**



Energy for  
generations

# Inch Cape Offshore Wind Farm

- » **15km off Angus coast, East of Scotland.**
- » **Water depth 45–55m.**
- » **85km cable route to shore.**
- » **Grid connection at Cockenzie, East Lothian.**
- » **150km<sup>2</sup> footprint, equivalent in size to the Isle of Hoy.**
- » **± 1,000MW – up to 72 wind turbines.**
- » **4TWh generation p/a, able to generate the equivalent of the annual needs of more than 1.2 million homes\*.**

\*Based on a project capacity of 1GW; a load factor of 51% as per Electricity Generation Costs 2020 (Department for Business, Energy and Industrial Strategy, 2020); and an average household consumption of 3,578kWh as per the Subnational Electricity and Gas Consumption Statistics: Regional and Local Authority, Great Britain, 2019 (BEIS, 2020)



# Inch Cape Development to date

**Throughout the development of Inch Cape, we have been:**

- » Assessing multiple advances in technologies
- » Working together with the supply chain
- » Driving cost optimisation
- » Adapting our procurement strategy

**And the results so far:**

- » Increased capacity by 50%
- » Improved efficiency by >30%
- » Reduced LCoE by 20%

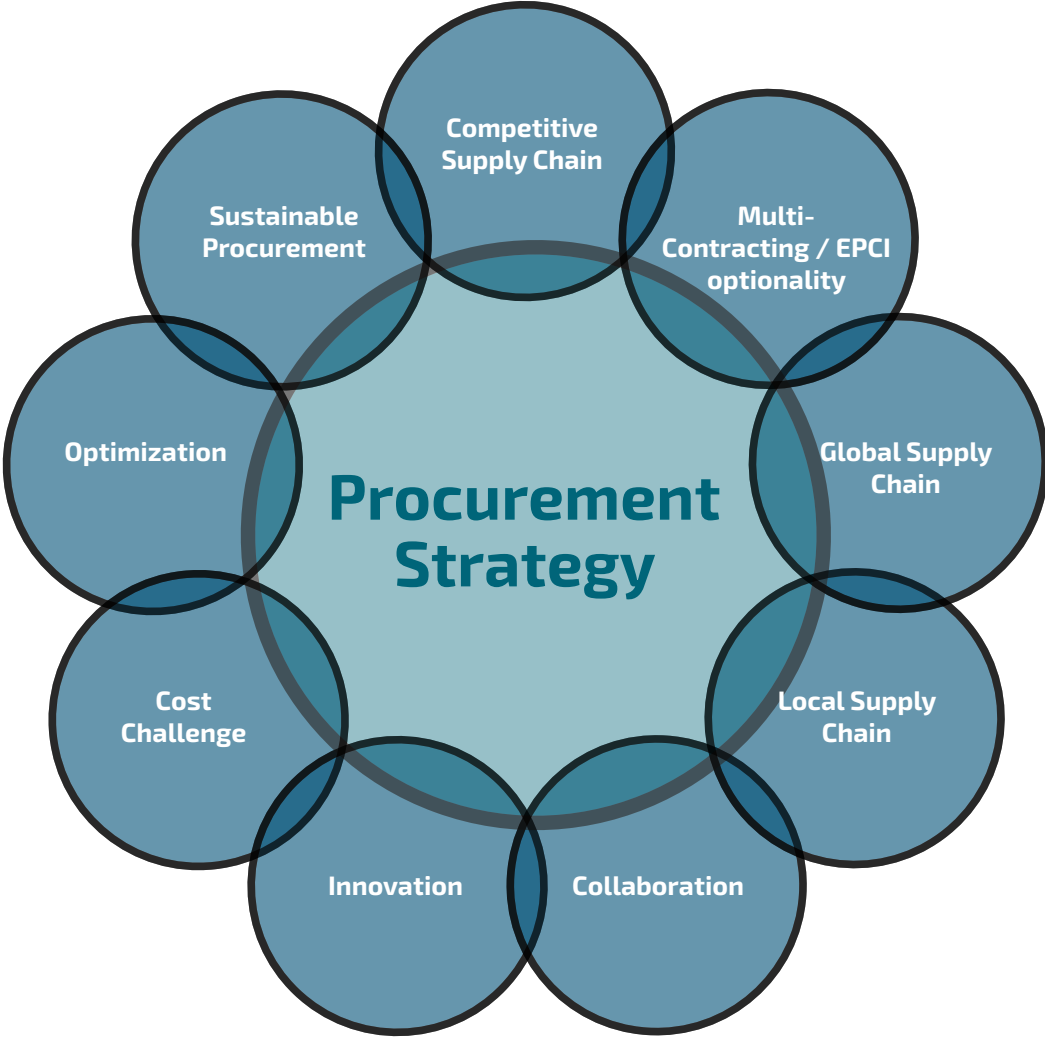
**We want to continue this story**



**Our mission is to create  
the UK's most efficient  
offshore wind farm.**



# Procurement Strategy



# Inch Cape - Delivering the vision

**Find the balance  
between quality,  
innovation and cost**

**Implement a cost  
efficiency focus  
on all supply and  
services agreements**

**Safe and efficient  
construction  
methodology**

**Minimise and offset  
our carbon footprint  
wherever possible**

**A lean and flexible  
organisation**

**Partner with our  
suppliers to deliver  
new and innovative  
solutions**



# Inch Cape Supply Chain Opportunities

The proposed Inch Cape Offshore Wind Farm 15 km off the Angus Coast in the East of Scotland will bring substantial investment opportunities to the Scottish economy and utilise the country's wealth of natural resources to create affordable clean energy.

Inch Cape Offshore Limited is currently re-examining its supply chain and working with suppliers to identify areas where we can optimise the project and improve cost efficiencies. We expect to begin onshore construction in early 2023, and offshore in late 2024.

Inch Cape continues to be committed to maximising opportunities for local and UK business where possible. We would encourage suppliers to sign up to the Scottish Offshore Wind Clusters – Forth & Tay Offshore and Deep Wind – and register on their supply chain databases to facilitate greater engagement with the Inch Cape and other local projects.

**There are considerable opportunities across the project – key packages are:**

- » Wind Turbine package
- » Electrical Transmissions System and Cable packages
- » Foundations package
- » Operations and Maintenance





# Wind Turbine Package

The wind turbine package includes the design, supply, installation and commissioning of up to 72 turbines. The Tier 1 supplier will also provide operations and maintenance services for the turbines for a prescribed period.

**Opportunities for local suppliers to support the Tier 1 Wind Turbine contractor may include the following:**

- » Fabrication of turbine towers
- » Transportation of blades and nacelles from the place of manufacture to the pre-assembly port
- » Davit Cranes
- » Power Curve Testing Services

**Onshore Construction – Turbine Pre-Assembly Area (services required may vary and will depend on chosen location)**

- » Lease of land for turbine pre-assembly area adjacent to port quayside
- » Onshore infrastructure development and construction services
- » Site Offices, warehousing, canteen/ kitchen and welfare facilities
- » Heavy lift equipment for turbine component transportation and pre-assembly e.g. cranes, SPMTs
- » Perimeter fencing and security services (24hr, 7 day week coverage including control of access/ egress from the site and 24hr surveillance)
- » Electrical Distribution Systems – infrastructure to support construction activities and for site offices
- » Site lighting to applicable standards and to enable 24hr working
- » Fire-fighting equipment



# Electrical Transmission System and Cable Packages

The wind farm's offshore transmission works package encompasses:

- » the design, supply and installation of inter-array cabling;
- » the design, supply and installation of the high voltage equipment, with the T1 supplier(s) delivering the proposed onshore substation in East Lothian and offshore high voltage substation platform;
- » the electrical system design and the manufacture and supply of components for the primary equipment, including the main transformers; and
- » the design, supply and installation of the 85km dual export cable route, as well as route engineering works and the horizontal direction drilling of the landfall at Cockenzie.

Opportunities for local businesses to support the Tier 1 suppliers may include the following:

## Transmission Works and Export Cables

- » Fabrication of the Offshore substation foundation
- » Supply of lifting tools and rigging
- » Supply of offshore survey equipment
- » Provision of personnel transport to offshore locations
- » Provision of export cable protection system
- » Design and installation of HDD
- » Provision of materials and labour for onshore substation
- » Onshore substation Civil works and cable installation
- » SCADA, telecommunications, fire and intruder alarms and site security
- » DC and UPS systems
- » Fibre Optic works
- » Site supervision and traffic management
- » Fabrication of Offshore Substation Topside Structure

## Inter Array Cables

The project will be procuring a number of packages for the manufacture, transport and installation of inter array cables, including:

- » Engineering to design the inter array cables
- » Manufacture of array cables to the project
- » Installation
- » Supply or termination and testing services
- » Provision of protection system



# Foundations Package

**Inch Cape will also be issuing an invitation to tender for multiple foundations and substructures contracts for the project. There will be opportunities for potential suppliers to tender for these packages including the following:** (services required may vary and will depend on chosen location)

## **Foundation and Substructure Design and Fabrication**

- » A number of independent packages will be procured for the design and supply of the project foundation structures:
- » Design of the foundations and substructures
- » Fabrication of monopile transition pieces
- » Fabrication of wind turbine jackets
- » Fabrication of wind turbine jacket piles
- » Fabrication of monopiles
- » Supply of grout material

## **Transport and installation of foundations**

The project will procure a number of packages relating to the offshore installation of foundation structures and support activities:

- » Transport of fabricated structures from fabricator to the wind farm location
- » Installation of wind turbine generator foundations
- » Installation of wind turbine generator substructures
- » Transport and installation of offshore substation foundation and substructure
- » Grouting of foundations
- » UXO survey
- » Supply of offshore survey equipment
- » Provision of port and harbour services
- » Provision of personnel transport to offshore locations
- » Supply of lifting tools and rigging
- » Contingency drilling services



# Operations and Maintenance

Inch Cape is yet to announce its preferred Operations and Maintenance (O&M) port location, however there will be substantial opportunities available to local business.

**These include:** *(services required may vary and will depend on chosen location, and defined logistical strategy)*

- » O&M building and onshore infrastructure development and construction services
- » Site & Asset Management services
- » Site technicians and third-party support
- » Onshore infrastructure services
- » Spare parts, tooling and consumables
- » Crew transfers vessels and logistics
- » Turbine corrective and preventative maintenance
- » Foundations, Substructure & Met Mast corrective and preventative maintenance
- » Offshore Substation and Electrical Infrastructure corrective and preventative maintenance
- » Access systems, communications, fall arrest and PPE
- » Personnel training and education
- » Data Acquisition & Management
- » Facilities Management
- » BoP Third-Party Service Contractor(s) and OFTO Third-Party Service Contractor(s)
- » Offshore Marine Service Provider (marine consultancy, client representatives, vessel inspections, Marine Coordination Services etc)



# The ideal Inch Cape supplier

**Suppliers that are specialists in their own area.**

**Suppliers who continuously push boundaries to improve efficiency.**

**Suppliers that are committed to continuously develop and optimize their processes and products.**

**Suppliers who share our values, who are passionate about renewable energy and tackling climate change.**

**Suppliers who place Health & Safety at the forefront of their business.**



# Working together with Inch Cape



**We are easily accessible and have short decision processes**



**We will ask you to bring ideas, products and insights to deliver competitive solutions**



**Together we will drive continuous improvements and to be ready to overcome any challenges ahead**



**We will challenge each other on all existing processes, solutions and attitudes**

**We are committed to achieving positive outcomes for the project and all its stakeholders**

**We will respect your intellectual property and support the realisation of your ideas**

**The project, supplier and market can all benefit from the realisation of new ideas and innovation**

**Together we can deliver low carbon energy generation**



# Join us on our journey

Please contact us on our website  
[www.inchcapewind.com](http://www.inchcapewind.com)

- to indicate interest in learning about forthcoming opportunities; and
- for the possibility of participating in a 1-2-1



15 minutes 1-2-1  
session



Meet the relevant  
technical and  
commercial people



Briefly present your  
company and ideas



Evaluated against the  
same criteria





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