

WELCOME TO TRITON KNOLL OFFSHORE WIND FARM

– SUPPLY CHAIN OPPORTUNITIES



INTRODUCING TRITON KNOLL OFFSHORE WIND FARM

James Cotter, Triton Knoll Project Director



I'd like to introduce Triton Knoll Offshore Wind Farm.

At Triton Knoll we aim to be one of the most cost-competitive offshore wind farms in Europe by seeking best value in all aspects of its delivery.

We want Triton Knoll to be a catalyst for supply chain, skills & economic growth in the Humber, Greater Lincolnshire and East Coast regions, and we believe the construction and operation of the wind farm could represent an important opportunity for the supply chain across the project's lifecycle.

We're already working hard to make sure those opportunities are visible, working closely with the Local Enterprise Partnerships in the Greater Lincolnshire and Humber regions, and joining the likes of Team Humber Marine Alliance, Grimsby Renewables Partnership and Renewable UK at their industry events to help bring our supply chain opportunities to life.

This brochure offers an overview of the supply chain activity which we, in our experience, believe could support the construction and operation of Triton Knoll.

Triton Knoll expects to work with the most competitive suppliers, who can help us deliver the lowest cost of energy to consumers.

Maybe you're a smaller company, and working within the offshore sector might be a new avenue for you. Through our partnerships, we would be looking to offer support to smaller tenderers, who are perhaps unfamiliar with the utility scale procurement processes, to improve their opportunities and competitiveness.

I therefore invite you to take some time to consider the potential opportunities this brochure identifies and think about how your business could potentially work with us. Come and talk to us about your ideas and aspirations. We can't do it alone and we expect some of the best innovations will come from you, the experts in your field!

We firmly believe that Triton Knoll is a great opportunity for the UK and local supply chain and I hope to be able to welcome you on-board Triton Knoll Offshore Wind Farm.



FINDING YOUR **OPPORTUNITY**

Offshore wind farms like Triton Knoll are typically developed through the stages of development, and preconstruction, construction, and operations and maintenance.

The **DEVELOPMENT stage** of Triton Knoll is almost complete. The offshore array was granted consent in July 2013 and a decision on the Electrical Systems is due in September 2016.

OPPORTUNITIES IN **PRE CONSTRUCTION**

Pre-construction follows on from the conclusion of a consent decision up to the start of construction. It includes the provision of more detailed studies to inform the construction process, as well as fulfilling any consent conditions and applying for any additional consents. This includes:

- Further environmental survey work offshore and onshore – ecology, archaeology, environmental monitoring
- Site investigation works offshore and onshore
- Topographic surveys
- Environmental auditing and inspection.



OPPORTUNITIES IN **CONSTRUCTION**

Triton Knoll has onshore opportunities associated with it, surrounding the cable route, substation, grid connection and associated infrastructure. In addition, there would be significant opportunities offshore.

Onshore Enabling Works

- Road and track works, including metalling, bridging and upgrading
- Full site and compound works, from building, brick-laying, fencing, signage and security
- Extensive landscaping works, including land clearance, borrow pits and excavations, ditching, drainage and landscaping
- Forestry and habitat works, from felling and timber removal, to hedgerow management and habitat restoration
- Transportation of materials and staff
- Environmental monitoring and survey works
- Cabling works, including excavation, jointing pits, concreting, and reinstatement works

Grid Connection Work

- Subcontracts to National Grid
- Transport of components and plant/equipment.

Offshore installation activities

Turbine supply and installation is often contracted to a Tier 1 supplier, which would then typically look to establish its own supply chain, both locally and further afield, and often expecting to use highly-skilled, established offshore installation teams, familiar with the technology. However, potential opportunities remain to support the following offshore installation activities:

- Construction and installation vessels – cable laying, scour protection, substation, turbine and foundations
- Construction port and full service provision
- Sea-based support, crew transfer vessels, accommodation, diving services
- Plant and equipment – turbine, cable, substation installations
- Commissioning.

Balance of Plant

We anticipate there could be significant potential for the supply chain to engage with the project within the area of ‘Balance of Plant’, which covers both Civil works and Electrical works.

Often, we would expect to appoint a main contractor, who would typically subcontract many of the roles in this area. We will encourage the appointment of local companies to these roles wherever possible, and where skills are appropriate:

Civil works

- Supply of materials, including concrete, general materials, sand, paints
- Detailed Civil Design/ Studies
- Hire services, including equipment, plant, vehicles, fuel
- Office and site accommodation, security, welfare and support

Electrical Balance of Plant

- Detailed Electrical Design/Studies
- Skilled labour
- Offshore and onshore substation, across the full spectrum of the electrical system
- Onshore and offshore cabling, including trenching, installation and protection
- Transformers



OPPORTUNITIES IN **OPERATIONS & MAINTENANCE**

This activity will generally be ongoing for the operational life-cycle of the project which is typically between 20-25 years.

Onshore

- Onshore Habitat Management Works, including managing ecology, tree regrowth to meet conservation objectives, maintenance
- Building Maintenance Works
- Fencing
- Landscaping
- Ecological Surveys
- Land Management Consultancy
- Civil Works Maintenance
- Security
- Statutory Inspections (Fire, Security, Electrical, Mechanical Plant)
- General Supplies (Hardware, IT, Materials).

Offshore

- Operations & Maintenance port – administration facilities and operations room, lifting equipment e.g. forklifts (600kg) and small cranes (1 tonne) to move components from the harbour to the service vessel, clamping equipment, workbench areas and tool storage, provision of wet and dry rooms , fuel bunker.
- Technician and equipment transfer
- Large component refurbishment, replacement and repair.



OPPORTUNITIES IN **SUPPORT SERVICES**

While many opportunities are related to a wind farm phase, there are also significant opportunities providing support services to the project across all phases, you just need to find where you fit in.

- Resident engineers
- Ecological Clerk of Works
- Environmentalists
- Archaeologists
- Ornithologists
- Technical specialists
- Snagging and reinstatement works
- Hotels and other local accommodation
- Restaurants
- Vessels
- Catering Services
- Hardware Suppliers and Shops eg. Fuels and lubes, paints, bespoke fabrication
- Parts, supplies, miscellaneous services needed for the construction
- Building Merchants
- Vehicle Hire/Taxi services.

Potential Supplier?

Register your interest in working with Triton Knoll and its contractors.
Email us for an electronic copy of our Registration of Interest form.

Contact us

e: info@tritonknoll.co.uk

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