



Forthwind

Supply Chain Development Information

Forthwind Project Description

Forthwind is a single turbine test & demonstration site 1.5 kilometres off the northern shore of the Firth of Forth at Methil, Scotland being developed by Cierco, a Scottish offshore wind development company. Cierco is leveraging more than 125 years combined experience, across more than 30 offshore wind energy projects to realise the Forthwind project.

The project site was granted seabed lease rights from the Crown Estate back in August 2014 and subsequently granted development consent from Scottish Ministers under section 36 of the Electricity Act 1989 in December 2016.

The site is intended to be used to validate the technical and operational abilities of a new offshore wind turbine technology on a fixed foundation. CIERCO has partnered with a turbine original equipment manufacturer to develop the project utilising a next generation wind turbine.

Supply Chain Ambition

Forthwind's expected expenditure is set out in Table 1. This outlines the level and the location of supply chain expenditure anticipated from Forthwind disaggregated by development stage and geographic area.

The project will generate investment of more than £60million during the construction phase of which £20m is expected to be spent within Scotland. If this is achieved, it equates to a 33% regional content.

During the operating phase, more than 40% of the annual £2million operating cost is expected to be spent within Scotland, with a further 30% elsewhere in the UK.

There is potential for the entire project supply chain, excluding the turbine and specialised heavy lift vessels, being procured in and supplied by local UK and Scottish companies.

To this end, Cierco has engaged with cable manufacturers & installers, foundation designers, foundation manufacturers & transportation and logistics companies, onshore electrical infrastructure companies and contractors all based in the UK. Excluding the wind turbine supply & specialised heavy lift vessel & craneage operators, Forthwind has the potential to realise 36% total UK & Scottish supply chain during construction.

It is estimated that the construction phase of the Proposed Development will create six local jobs in project management and development, in addition to generating opportunities for up to 60 local workers to establish site facilities and grid connection cabling during the six-month construction, as well as supporting existing UK national and local jobs.

Table 1: Expenditure Ambition

Stage		Scotland	Rest of UK	Rest of Europe	Elsewhere
Development	£million	1.4	-	-	-
Manufacture and Fabrication	£million	18.2	0.9	19.0	-
Installation	£million	2.9	0.8	19.8	-
Operation	£million	0.9	0.6	0.5	-
Total	£million	23.4	2.4	39.3	-

ii. Supply Chain Expenditure Outlook

The project is in the design phase. Expenditures estimated in Table 1 are still likely to change as the project moves towards the construction phase. Estimates have been made based on supply chain engagement specific to the Forthwind project, alongside wider industry cost analysis.

- The Forthwind project consists of a single, jacket-mounted turbine in relatively shallow waters, with cabling to shore representative of typical offshore wind farms, and brings the opportunity for Scottish companies to undertake activities that they may not be able to take on for a commercial scale project.
- Forthwind offers an opportunity for local companies currently unable to compete against international supply chains on large-scale offshore wind farms both in the UK and internationally, to develop practical experience and establish track record in the deployment of next generation offshore wind technology, preparing them for the upcoming opportunities in Scotland & UK beyond 2030. A large proportion of the volume of contracts expected to be placed on this project, could be placed with local supply chain.
- The next-generation demonstration turbine will push the boundaries of turbine generating capacity, proving innovative new technologies and reduce the cost of energy for future commercial scale projects
- A supply chain portal is under development to enable local suppliers to register their interests, while a series of direct supply chain engagement exercises are already underway.