



AYRE OFFSHORE WIND FARM

OUTLOOK STATEMENT - SUPPLY CHAIN DEVELOPMENT

April 2023

Overview

The Ayre Offshore Wind Farm will be located in the NE2 leasing zone, which lies 33km off the east coast of Orkney.

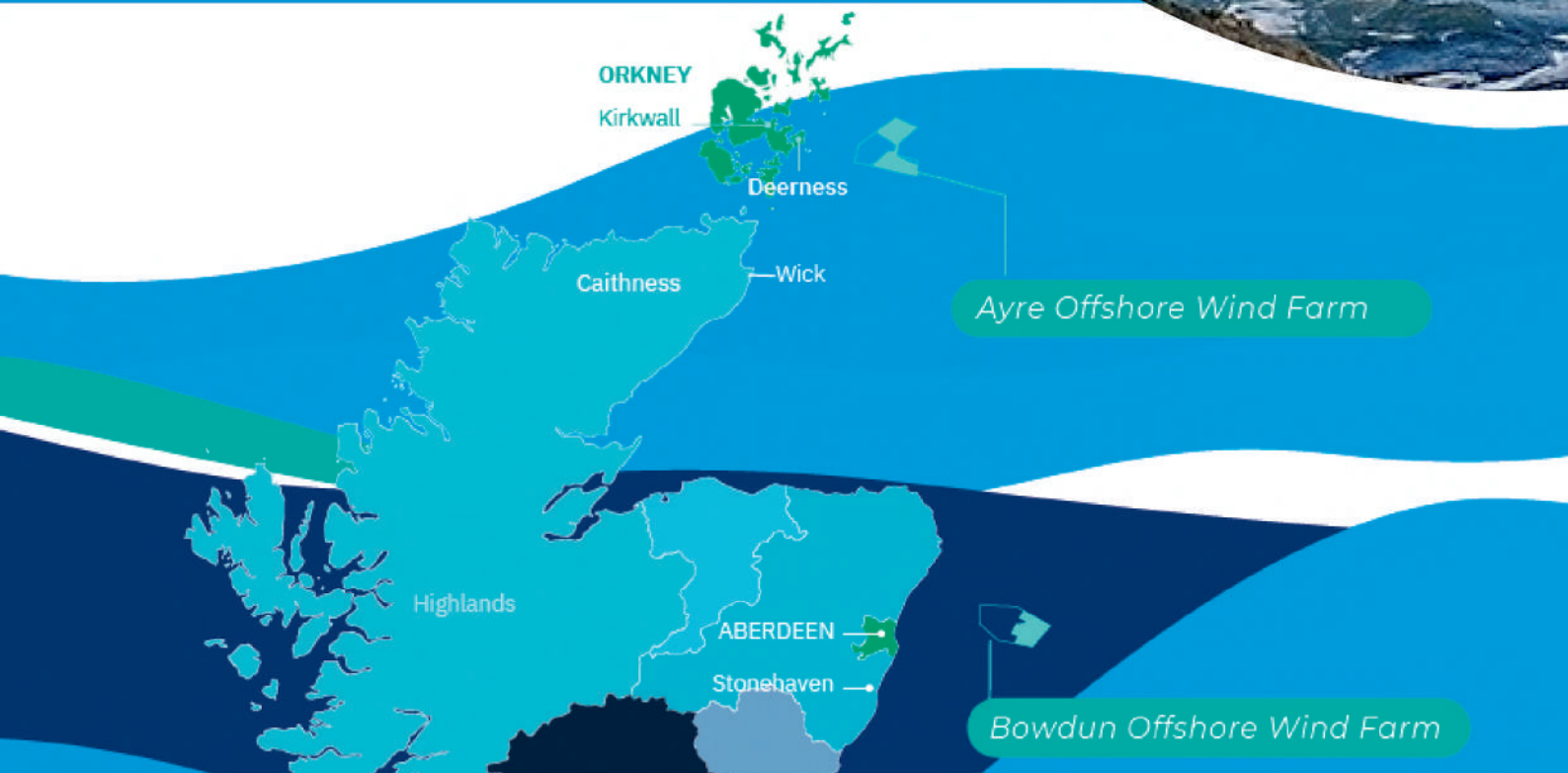
The leasing zone, awarded to TWP under the ScotWind leasing round in January 2022, covers an area of 200km².

With water depths in excess of 70m, it is considered to be a deep-water site, most suitable for floating foundation technologies.

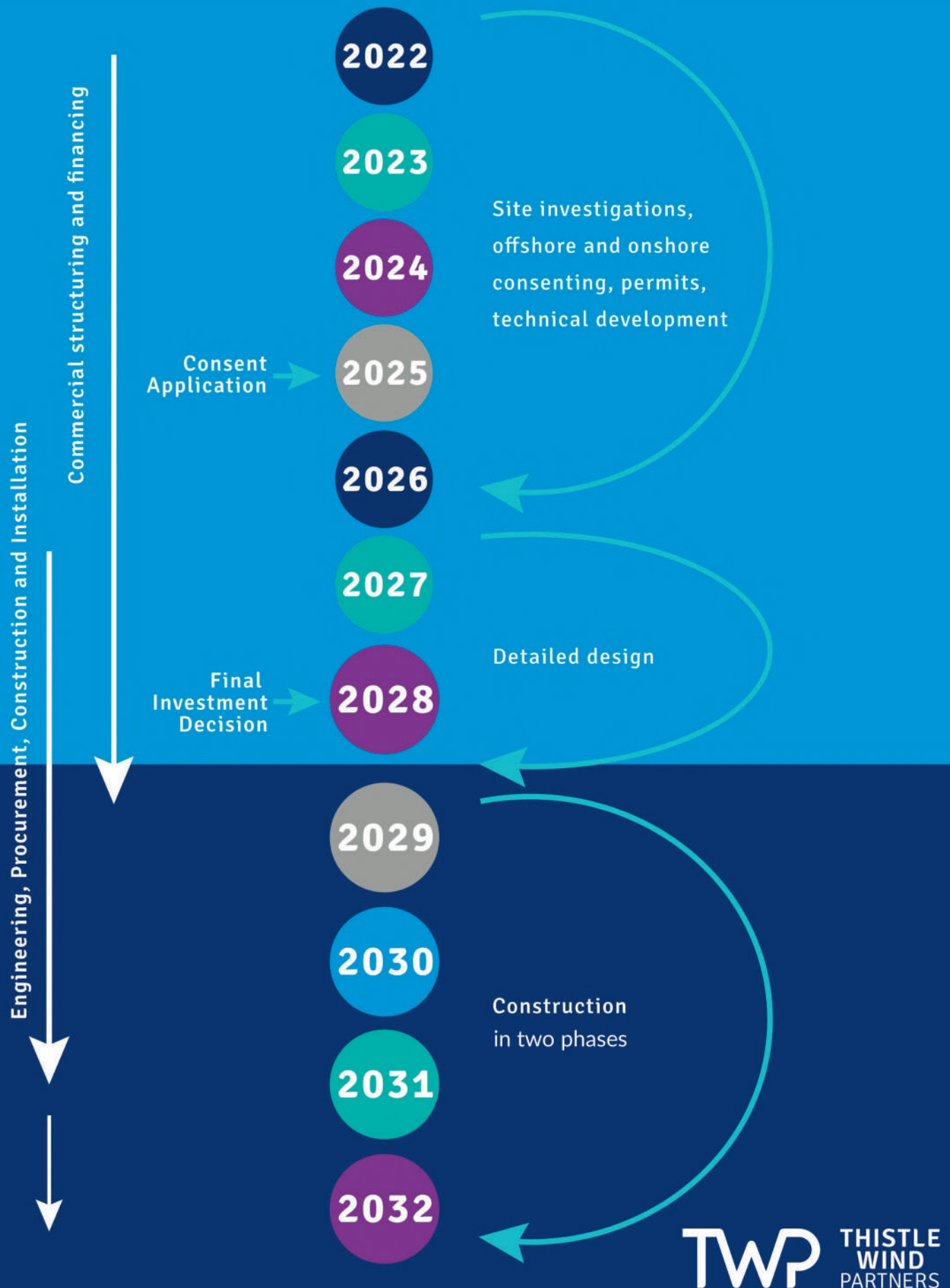
TWP plans to develop a 1GW offshore wind farm at the site. The base case is that the farm will number between 40-60 turbines, using 'next-generation' models with a capacity between 18MW and 25MW, seated upon either semi-submersible or tension-leg foundations. It is anticipated that construction will be in two phases.

This project base case will evolve as we gain knowledge from our site investigations and conduct technology research.

Photo Credit: Gerry Cannon



Timeline



Consortium

Thistle Wind Partners (TWP) is a consortium of experienced players with a history of delivering major marine infrastructure and renewables projects across the world.



DEME Concessions

DEME Concessions brings together all the investments of the DEME Group in offshore wind and other renewables projects, infrastructure, and marine resources. It provides equity, project finance structuring and specific technical knowledge with the support of the various activity lines of the DEME Group. DEME Concessions has experience in developing over 1.5GW of offshore wind projects in Europe with an increasing focus on the UK.



Qair

Qair is a renewable energy producer with expertise in floating wind technologies, operating 860MW of power generation assets exclusively from renewable sources. Globally, the group is in the construction and financing phase for 800MW and is also developing 16GW of assets for future deployment across more than 20 territories.



Aspiravi

Aspiravi develops, implements, and operates renewable energy projects with a total installed capacity of 1.6GW. These projects primarily pertain to wind energy, but it also owns and operates biomass installations, biogas engines, and some smaller-scale hydroelectric installations.

TWP is committed to maximising engagement with the local supply chains in Scotland and the wider UK. We will develop our two ScotWind projects, the Bowdun and Ayre offshore wind farms, in a way which will support Scotland's net-zero targets and economic development goals, as well as supporting the wider UK target to reach 60% local content in offshore wind by 2030.

Calculating expenditure

TWP has not changed its original supply chain development targets for the Ayre Offshore Wind Farm since it provided its initial estimates in April 2019. TWP retains confidence in its assumptions about the future growth of the Scottish and UK supply chain.

These estimates of supply chain expenditure were prepared using baseline figures from the study 'Crown Estate - Guide to an Offshore Wind Farm' (2019). The benchmark costs for each task were prorated from the 1GW study case.

The reason for this approach is that we are still in the process of evaluating offerings on the market, engaging with ports and supply chains, and conducting various site investigations, which will drive our final designs.

Commitments / Ambitions

In the estimates of expenditure on the following pages, we have divided projections into 'commitments' and 'ambitions'.

Commitments are targets that we believe the local supply chain in each region would be capable of meeting.

Ambitions are based upon the higher targets that tally with the UK's ambition to achieve 60% local content in offshore wind farms off its shores by 2030.

Key Challenges

Delivering a successful offshore wind project requires a robust, competitive, and reliable supply chain.

Only with a clear, strategic roadmap backed by policy and support can the supply chain of Scotland and the wider UK achieve the necessary port infrastructure, manufacturing,

offshore construction, and cost competitiveness, needed for the large-scale offshore wind plans in Scotland.

Key Opportunities

The rapid expansion of offshore wind in Europe will challenge the existing European supply chain. This provides an opportunity for Scottish and UK suppliers.

Accelerating the innovation of products and services for the offshore wind industry will open up global export markets. Scotland has a particularly exciting opportunity when it comes to emerging floating wind technologies as they move to the forefront of the global energy transition story.

Key Requirements

While TWP is actively engaging with local supply chains and targeting ambitious scenarios for expenditure in local content and services, much depends upon the wider policy environment in which we operate.

There are some prerequisites that Scotland and the UK need to meet in order to maximise economic benefit from offshore wind.

A key requirement, in our view, is that Scottish and UK governmental policy must evolve in a way which offers greater support to educational establishments, adult education centres for retraining and career transition, as well as support for port and supply chain development.

TWP pledges to work with governments, trade bodies, policy-makers, industry and the education sector in order to support this evolution.

Targets - Phase 1

It is anticipated that the Ayre Offshore Wind Farm will be built in two phases. Phase 1 will commence in 2029 and will comprise installation of turbines over an area of 97km² with commissioning expected in 2031. Phase 2 begins in 2031, covering an area of 103km². Below, you can see our current targets for local Scottish, UK and EU supply chain expenditure over each phase of the project. **These targets remain unchanged since the first iteration of this Plan in April 2022.**

PHASE 1: 2029 - 2031 - COMMITMENTS

500MW	SCOTLAND	REST OF UK	EU	REST OF WORLD
DEVELOPMENT	£30 mln	£17 mln	£13 mln	£0
MANUFACTURING / FABRICATION	£200 mln	£56 mln	£424 mln	£120 mln
INSTALLATION	£91 mln	£0	£195 mln	£39 mln
O&M	£180 mln	£0	£45 mln	£0

PHASE 1: 2029 - 2031 - AMBITIONS

500MW	SCOTLAND	REST OF UK	EU	REST OF WORLD
DEVELOPMENT	£30 mln	£17 mln	£13 mln	£0
MANUFACTURING / FABRICATION	£392 mln	£48 mln	£272 mln	£88 mln
INSTALLATION	£91 mln	£0	£195 mln	£39 mln
O&M	£180 mln	£22.5 mln	£22.5 mln	£0

Targets - Phase 2

PHASE 2: 2031 - 2032/3 - COMMITMENTS

500MW	SCOTLAND	REST OF UK	EU	REST OF WORLD
DEVELOPMENT	£30 mln	£17 mln	£13 mln	£0
MANUFACTURING / FABRICATION	£200 mln	£56 mln	£424 mln	£120 mln
INSTALLATION	£91 mln	£0	£195 mln	£39 mln
O&M	£180 mln	£0	£45 mln	£0

PHASE 2: 2031 - 2032/3 - AMBITIONS

500MW	SCOTLAND	REST OF UK	EU	REST OF WORLD
DEVELOPMENT	£30 mln	£17 mln	£13 mln	£0
MANUFACTURING / FABRICATION	£392 mln	£48 mln	£272 mln	£88 mln
INSTALLATION	£91 mln	£0	£195 mln	£39 mln
O&M	£180 mln	£22.5 mln	£22.5 mln	£0

Supply Chain Strategy

TWP is a new developer on the UK offshore wind market: the Ayre and Bowdun offshore wind farms will be TWP's first projects here. This offers an opportunity to bring fresh thinking and approaches to procurement as well as to the efficient provision of energy for consumers.

TWP does not use predetermined supply chain lists, but engages with all local supply chain players at the appropriate stage of project development. We invite supply chain companies to register at www.twp.scot/suppliers, where they can provide information on their products and services

Energy Pathfinder

In order to create visibility, transparency and create the conditions for Scottish & UK companies to support us with our projects, TWP has become an early adopter of Energy Pathfinder, which is run by the North Sea Transition Authority. The contract advertising platform will ensure that there is complete visibility of our forward work programme and an opportunity to bid for work.

Our founder companies

We also bring the global experience of our founder companies in building local supply chains, such as through the SEMOP – single-purpose public private partnership – managed by TWP founders DEME and Qair at the port of Port La-Nouvelle in France.

TWP has pledged to adopt a technology-agnostic approach to procurement for its ScotWind projects. This means that we consider offerings from local businesses and market entrants as well as from established UK businesses.

DEME Offshore

The Tier 1 contractor for both TWP's ScotWind projects is DEME Offshore. Engaging DEME for

the projects' major infrastructural work greatly derisks the construction phase, as we expect to see availability of industrial-scale vessels greatly squeezed as offshore wind development accelerates in the UK, and Europe more widely.

The supply chain targets that we have set in this document are shared by DEME Offshore in their procurement for Tier 2 and 3 contractors in Scotland. TWP and DEME Offshore teams will work together to ensure that procurement is focussed upon meeting the targets outlined in this document for local economic benefit.

From the perspective of supply chain, our projects represent a valuable opportunity to engage with DEME Offshore and gain a foothold on their procurement frameworks. The pipeline of work with DEME Offshore will be far more extensive than TWP's projects, thus opening up greater opportunity in the long term for Scottish and UK supply chain.

In early 2024, we will publish our Environmental Impact Assessment Scoping Report for both the Ayre and Bowdun offshore wind farms. This report will provide a greater level of detail on our plans and requirements, and we will publicise it widely among our supply chain networks.

Strategic Investment Model (SIM)

As a member of the Collaborative Framework Working Group (CFWG), TWP has supported the development of SIM, a mechanism set up by the industry to support investment in major manufacturing and to enable infrastructure projects in Scotland.

TWP is keen to see the SIM working closely with other developers, the Government and key stakeholders in order to assist in the delivery of the first few mission-critical projects which will minimise bottlenecks in the supply chain.

Contact Us



Capital Building, 12-13 St Andrew Square,
Edinburgh, EH2 2AF
contact@twp.scot



Thistle Wind Partners



@TWPScot



Ayre Offshore Wind Farm