CALEDONIA
Offshore Wind Farm

Caledonia Offshore Wind Farm (OWF)

Supplying Scotland with local low-cost, low-carbon energy

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www.caledoniaoffshorewind.com

Key points

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Ambition is to deliver **low-cost, low-carbon energy** in the quickest time possible.

Caledonia OWF is one of the few sites remaining which offers **optimum conditions** for fast, low-cost construction.

Total capacity is expected to be 2GW, enough green electricity to power around two million homes.

Caledonia OWF will be Ocean Winds' third site in the Moray Firth, marking over a decade of **investment in the region.**

Ocean Winds has **extensive experience of the region**, a unique position to construct a high-quality, low-risk wind farm quickly.

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Overview of the site

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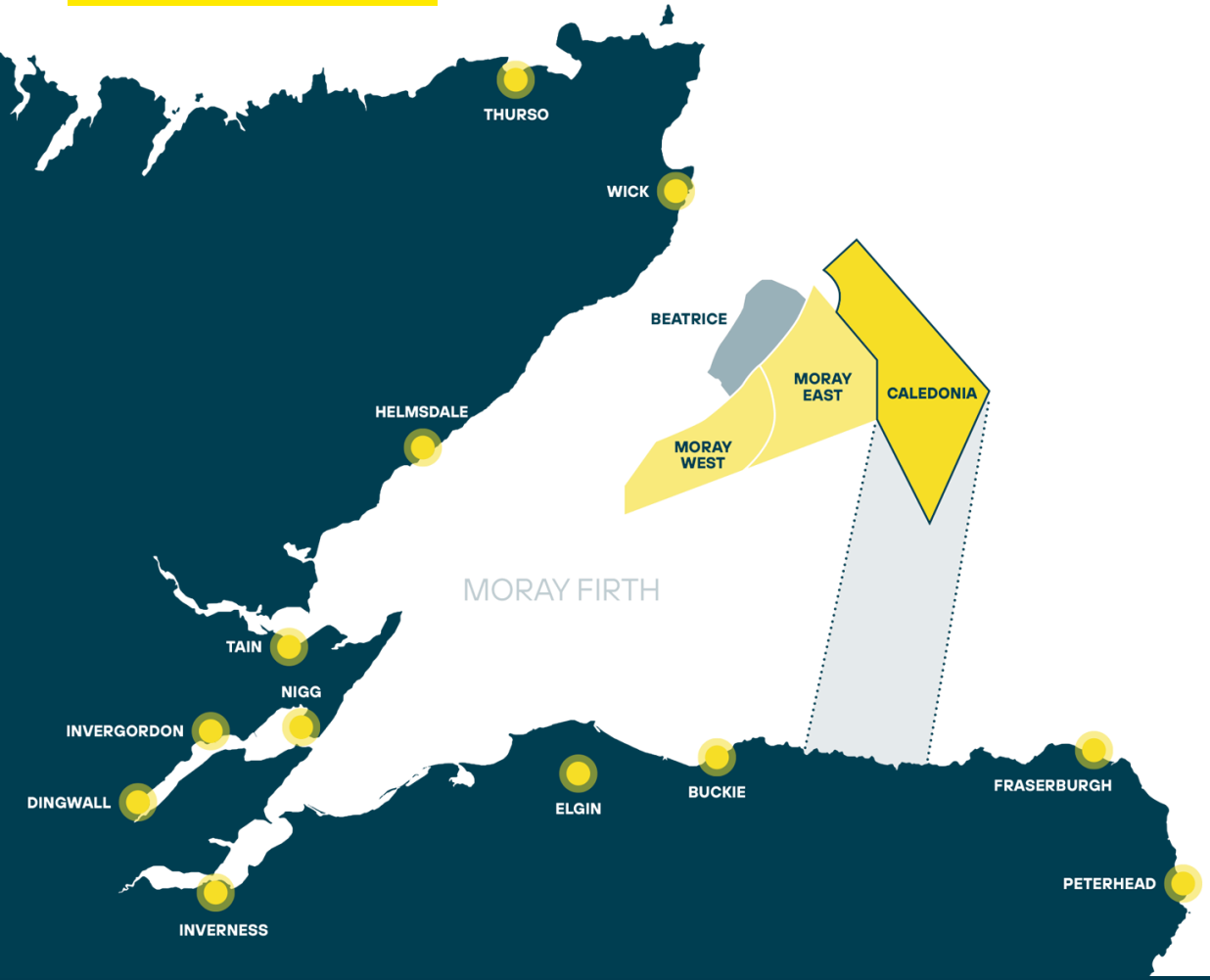

- **Offshore site:** Outer Moray Firth, immediately east of Ocean Winds' Moray East offshore wind farm
- **Project capacity**: Target of 2GW – enough to power two million homes
- **Distance from shore:** approx. 25km from Wick; approx. 42km to Fraserburgh
- **Area:** 429km^2
- **Water depth:** 40 - 101m (average is approx. 59m)
- **Landfall point:** Process to refine this is ongoing
- **Grid connection:** 2GW grid connection in Aberdeenshire. 1.5GW connection offered near New Deer (pre-2030), with a further 500GW likely to be confirmed in the same area.

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Key infrastructure

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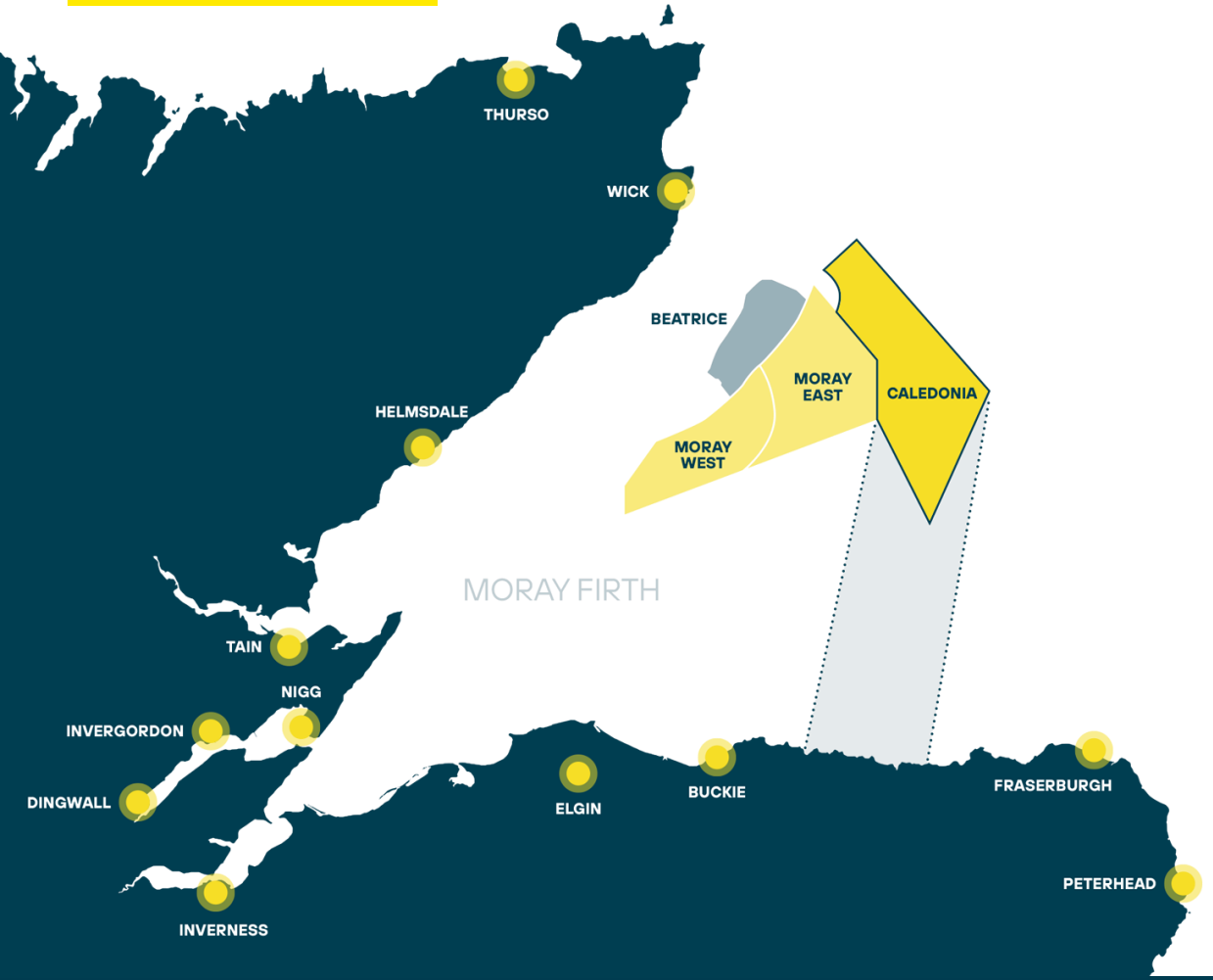

- **Turbines:** Up to 150 wind turbine generators with capacities ranging from 14-25 MW
- **Max blade tip height:** 350m above mean sea level; min blade clearance of 35m above mean sea level
- **Foundations:** Fixed, although deeper water to south of the site could support floating
- **Substations:** Up to six offshore substation platforms (OSPs)
- **Export cables:** Up to six export cables connecting OSPs to landfall point

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Early development activities

- In January 2022**, exclusive rights to develop an offshore wind farm were awarded** as part of the ScotWind bidding round, within the NE4 Plan Option located within the Moray Firth.
- **Offshore Scoping Report** submitted on 30 September 2022 and consultations held in Wick, Buckie and Fraserburgh throughout November 2022.
- **Environment Impact Assessment** consultant appointed.
- **Technical geophysical site investigations** are underway.
- **Onshore Scoping Report** due to be submitted in November 2022.
- **Cable route geophysical, geotechnical and benthic surveys** are scheduled from March 2023.

Key milestones

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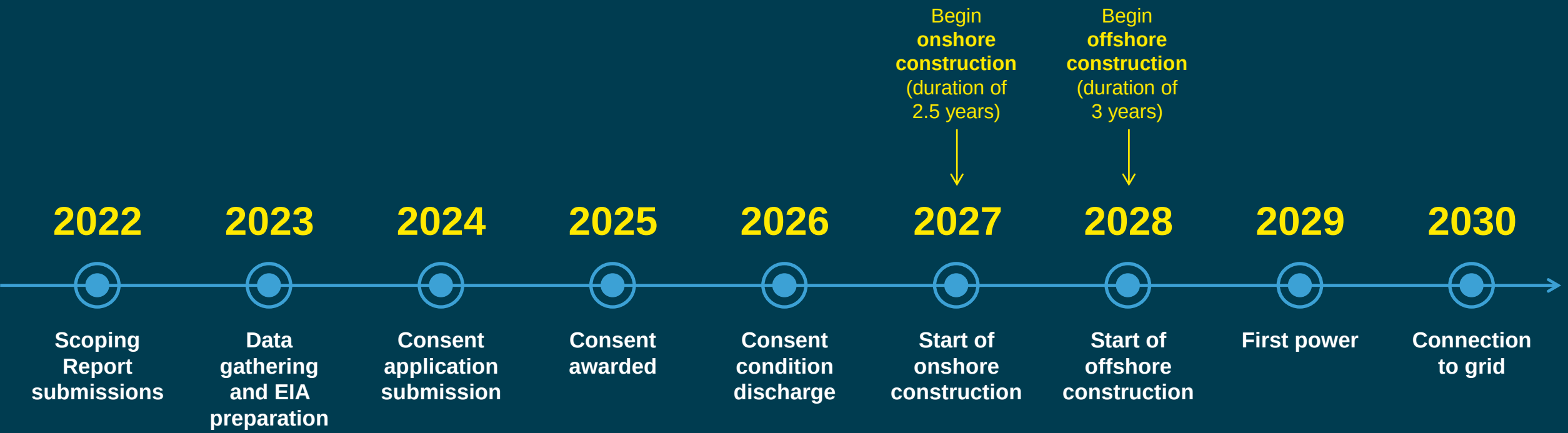

At the current scoping stage, the timescales and durations are indicative. Project phasing could be considered as part of the EIA. Precise information on the construction process will become available once the final design of the proposed development has been defined.

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Proven site

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Excellent wind resource

In comparison with many UK wind farms built to date, the wind blows stronger and for longer in the Moray Firth, meaning **more electricity can be produced at lower cost.**

Water depths

Three-quarters of Caledonia OWF is shallow so will use fixed foundations – technology Ocean Winds optimised through Moray East and Moray West. One-quarter of Caledonia is deeper which may require floating foundations.

Caledonia OWF offers a **progressive steppingstone** to commercial scale deployment of floating wind.

Distance from shore

Caledonia OWF is one of a few ScotWind projects close enough to shore to use AC transmission.

DC transmission is needed for sites further than 70km from shore, so requiring AC-DC converters offshore and DC-AC converters onshore which adds cost, time and risk.

For Caledonia these additional converters aren't needed.

Data-rich development

Our extensive experience of project development in the area means we have a wealth of data to inform Caledonia OWF.

The Moray Firth is our home in Scotland.

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Proven developer

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Proven reputation

- We’re a trusted global company with **over 12 years’ experience** of delivering and operating offshore wind farms in the Moray Firth.

Committed to Scotland

- We’ve been part of the Scottish offshore wind industry since the outset.
- 6.1 GW of our global 14.6 GW portfolio is in the UK **– all of it in Scotland.**

Efficient consenting

- We’re experienced in consenting large-scale offshore wind projects in the Moray Firth.
- Moray West was **awarded consent within 11 months** of application.

Proven technology

Reducing cost

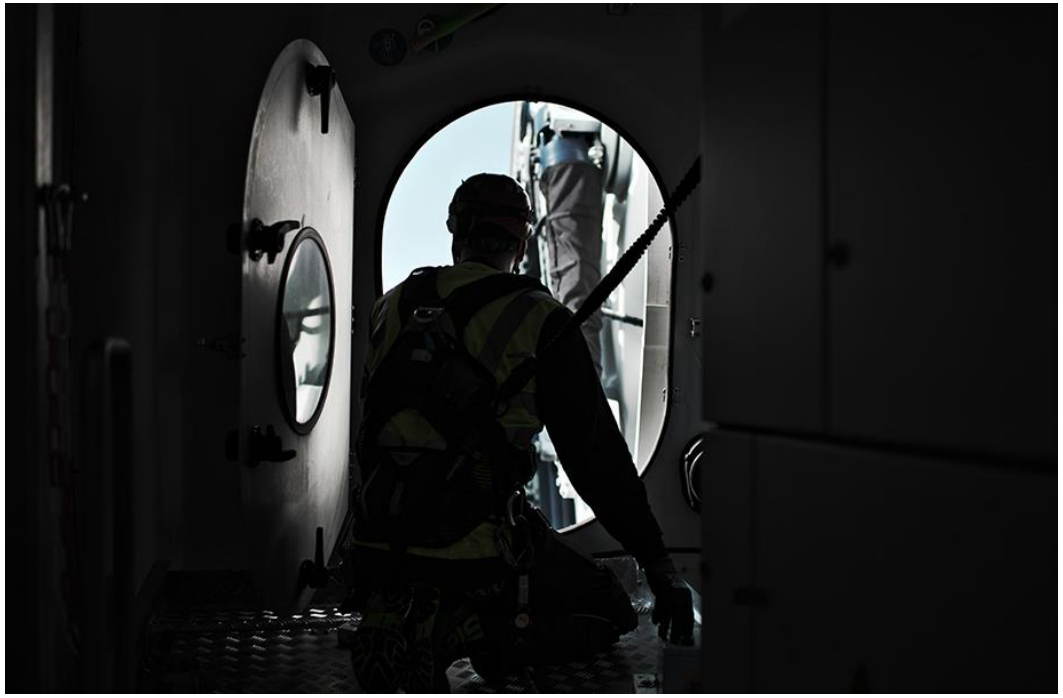
- Our previous experience developing Moray East and Moray West offers many valuable lessons for Caledonia OWF.
- When it comes to the fixed foundations which will form three quarters of the Caledonia OWF site, this technology has been proven and costs have been reduced. **Now we're focused on optimisation.**

Investing for the future

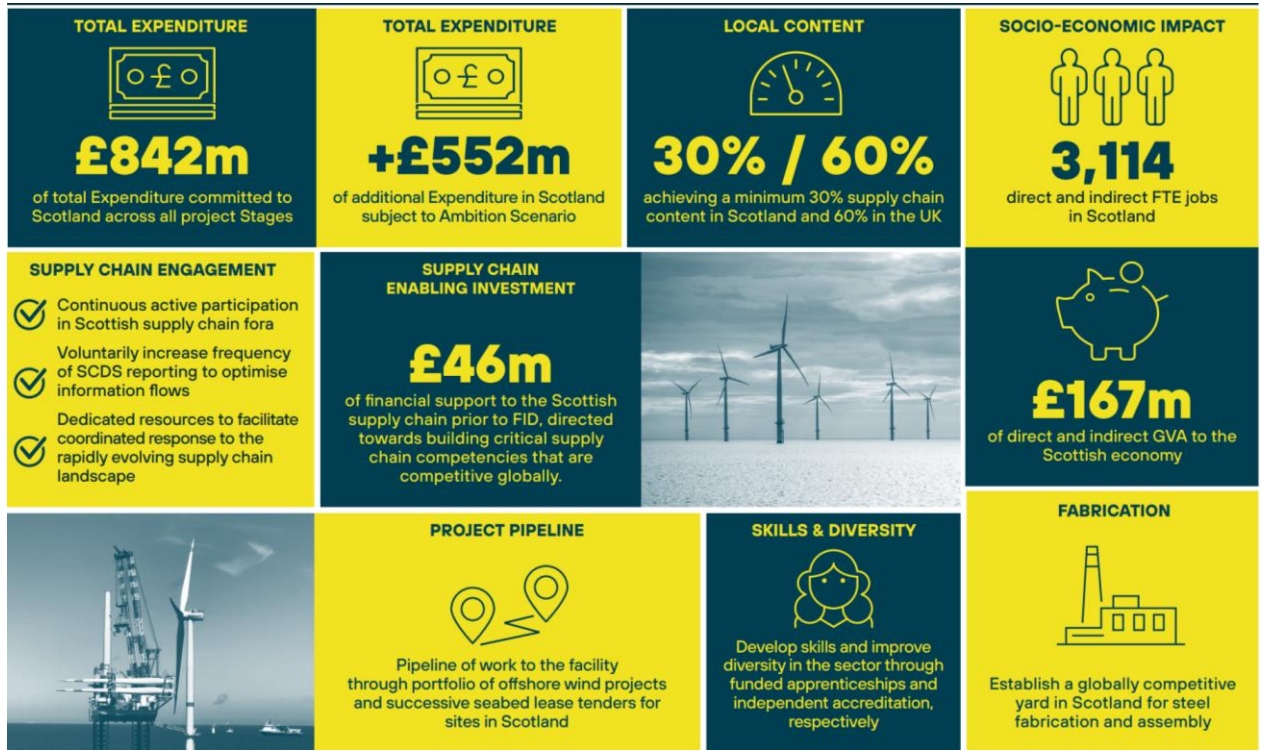
- We pioneered the use of floating foundation technology. Our WindFloat Atlantic project in waters 100m off the coast of Portugal was the first floating offshore wind farm in continental Europe.
- Alongside Mainstream Renewable Power, we invested in Principle Power, leaders in floating offshore wind technology. **Together, we aim to globalise floating offshore wind development.**

Proven relationships

- **Local economic opportunities:** We've always worked closely with local suppliers and ports, enabling them to diversify into this new market by investing in people and facilities. This investment depends on a pipeline of market opportunities and **Caledonia OWF extends this pipeline into the next decade.**
- **Working in collaboration:** Over the last 12 years, we've built strong and trustworthy relationships with key statutory and non-statutory consenting stakeholders. **We listen actively to regulator and stakeholder concerns** – for us, stakeholders are partners on this journey, and we aim to work collaboratively and responsively.



Supply Chain Development Statement



Type	Indicative financial support	Identified activities to date
Studies to support manufacturing and port facility upgrades in Scotland and wider supply chain initiatives	£15m	• Volume production implementation study for steel-based foundation fabrication in Scotland. • Techno-economic studies for port adaptations to enhance capacity, capability, and commercial attractiveness of Scottish facilities being used for construction and O&M activities.
Support research, development, and innovation in Scotland	£6m	• Innovation study in digital automated fabrication solutions (methods, tools, robotics, automation) for Scottish facilities. • Innovation study in robotic welding for Scottish facilities.
Increase Applicant's presence nationally through establishing centre of excellence in Scotland	£5.4m	• Ocean Winds industrialisation office in Scotland focused on delivery of optimised and cost-effective manufacture and assembly of steel sub-structures. • Ocean Winds' European operational asset control centre in Scotland.
Development of Scottish workforce (incl. diversity initiatives)	£3.6m	• Launch a fabrication apprenticeship programme. • Support curriculum development, career/employability development, and research agenda development at Scottish HEIs.
Capital investment contributions	£16m	• Capital investment contributions with selected fabricators covering costs towards front-end engineering, permitting process, equipment, infra-structure, and logistics etc. at Scottish facilities. • Capital investment contributions for port facility upgrades (incl. dredging of channels, quay reinforcements, lifting equipment, etc.).

Activities may be replaced with alternatives that may add more value; however, the Applicant remains committed to the same total level of support.

We are in the planning stage

1. Dedicated Supply Chain Associate Starting in December to focus on SCDS delivery;
2. Involved in SOWEC Strategic Investment Model to identify strategic opportunities;
3. Register interest on Caledonia Website
4. Opportunities will be available through NSTA Energy Pathfinder