

Offshore Wind Asset Profile

1. Context

Crown Estate Scotland manages property – including buildings, land, coastline and seabed – on behalf of the Scottish people.

We work in a way that:

- Generates prosperity and value for all of Scotland;
- Supports the growth of sustainable business and industry in Scottish seas and on the coast;
- Makes places better for those who live, work and visit there;
- Promotes sustainable ways of producing energy, food, and other products; and
- Creates opportunities for people to use and benefit from the Scottish Crown Estate.

The Scottish Crown Estate Act 2019 requires us to manage the assets in a way that is likely to contribute to the promotion of improvement of economic development, regeneration, social wellbeing and environmental wellbeing. To do this, we need to understand the wider value delivered by the assets and our management activities.



Asset profiles have been developed for the Estate's 21 asset classes. The profiles include information on financial returns, the public benefits delivered through our management activities, and our view of the opportunities for wider value creation.

The analysis has been undertaken in-house, using qualitative assessment and expert judgment.

2. Asset summary

Crown Estate Scotland plays a critical role in the development of offshore wind, primarily by awarding and managing leases, and working with developers and stakeholders to support the wider sector to progress and to build investor confidence.

As of October 2022, there are 37 offshore wind projects, eight of which are fully operational with 265 turbines and total installed capacity of 1,898MW.

- The operating projects have annual energy production of approximately 6,700GWh; and
- The two sites currently under construction will add a further 168 turbines with total installed capacity 1,588MW.
- 20 projects with a combined intended installed capacity of 27.6GW have now entered option agreements via the [ScotWind](#) leasing process, resulting in option fees of £755m. Full seabed leases come at a later stage after consents, offtake agreements and financing are in place.

ScotWind represents a major step toward achieving the Scottish Government's target of net zero emissions by 2045. There are an additional 6.6GW of pre-ScotWind sites including Test and Demonstration, Scottish Territorial Waters and Round 3 projects at various stages of development.

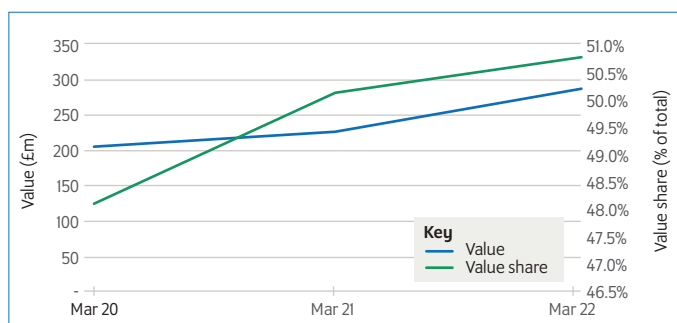
Asset information

No of agreements	32
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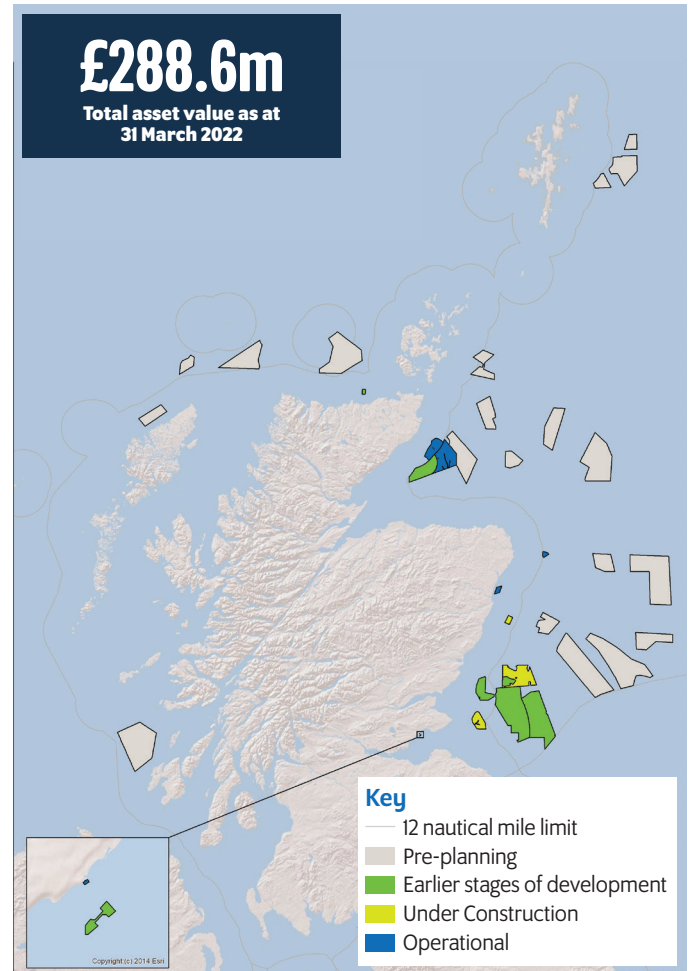
Financial information

Asset value (March 2022)	£288.6m
Value share (% of total Estate value, March 2022)	51

Offshore Wind – change in value and value share over time

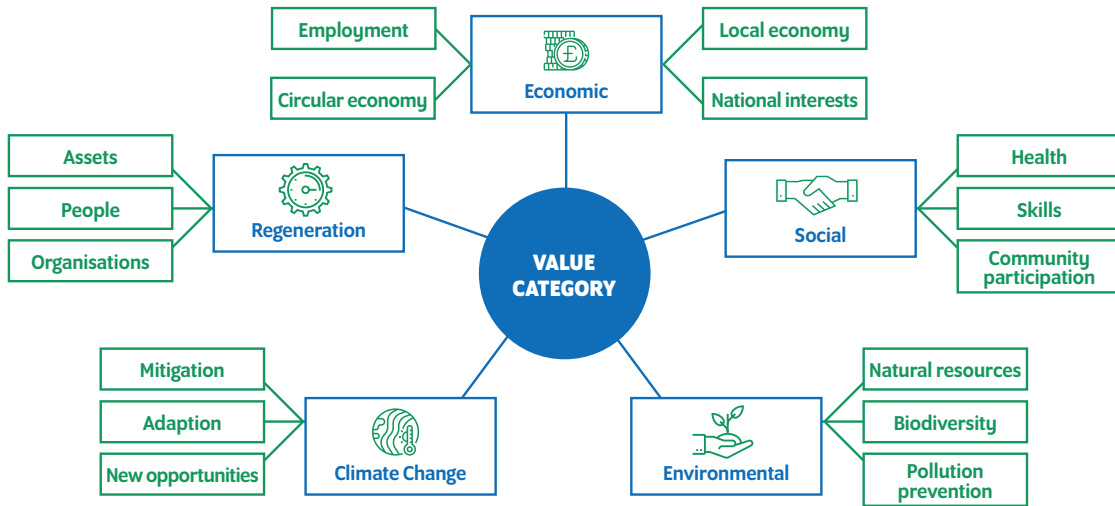


Offshore wind asset map



Map correct as at November 2022. Under the Open Government Licence, we give free access to our open datasets and map which can be found on our [Spatial Data Hub](#) which gives access to view and download spatial data, PDF maps for download, and our

3. Understanding Value



Five value categories have been identified:

- Economic;
- Social;
- Environmental;
- Climate Change; and
- Regeneration.

Each value category has a set of three or four indicators. The indicators are relevant for all Scottish Crown Estate asset classes and also align with Scotland’s National Performance Framework and the UN Sustainable Development Goals.

Measures of success

Economic

- Employment** – jobs created or safeguarded
- Local economy** – local businesses are active in the supply chain and provide local employment
- National interests** – benefiting Scotland’s national economy / showing leadership
- Circular economy** – increasing efficiency / reducing waste in processes and products

Social

- Health** – reflects / promotes good health at local or national level
- Skills** – stakeholders gain valuable skills
- Community participation** – community is an active stakeholder and participant

Environmental

- Natural resources** – resources used / maintained in a sustainable way
- Biodiversity** – biodiversity is protected/strengthened
- Pollution prevention** – pollution is decreased / not increased

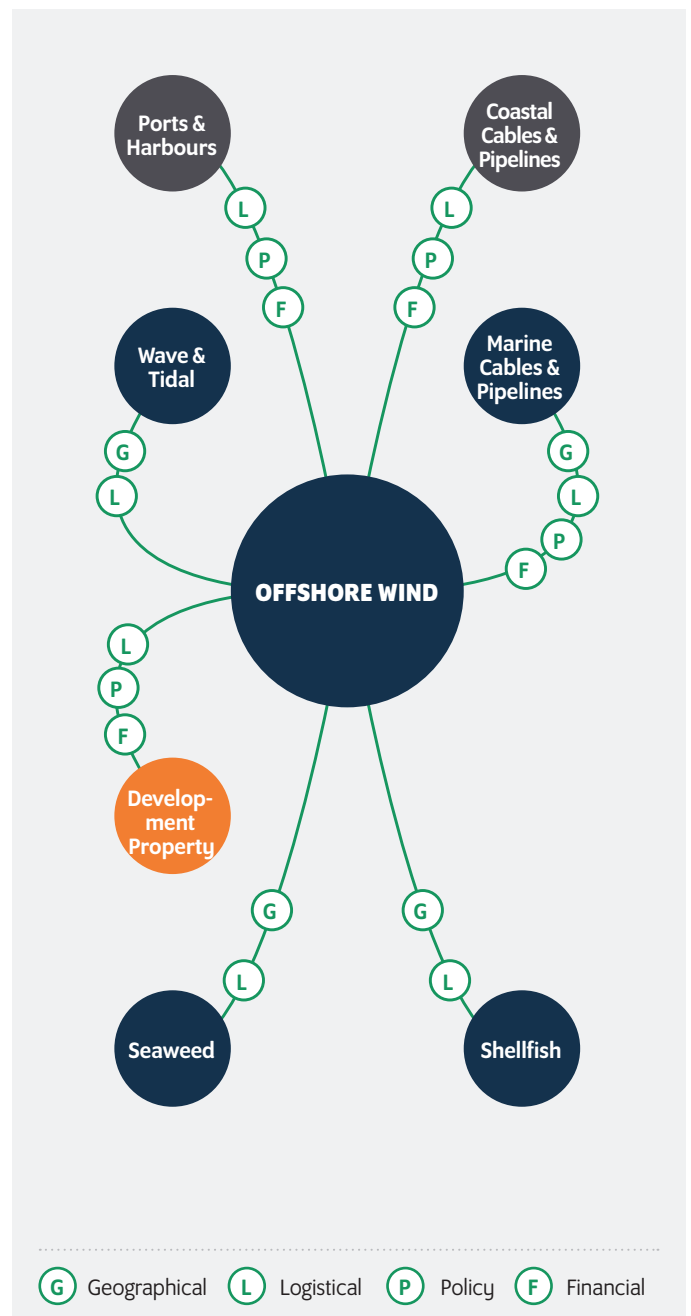
Climate change

- Mitigation** – low or zero emissions
- Adaptation** – actions increase resilience / reduce risk
- New opportunities** – new, low or net zero emissions activities/ businesses/products pursued

Regeneration

- Assets** – positive impacts on associated assets
- People** – people are enabled or empowered
- Organisations** – activities involve collaboration with other organisations

Connected assets



4. Potential for Wider Value

The diagrams below demonstrate the wider value currently generated by the asset class as a whole and indicate where we consider there is potential to deliver increased wider value. This is influenced by a range of factors including the inherent value of the assets, tenant activity, regulator activity and other external factors. For offshore wind, key areas identified with potential for increased wider value include:

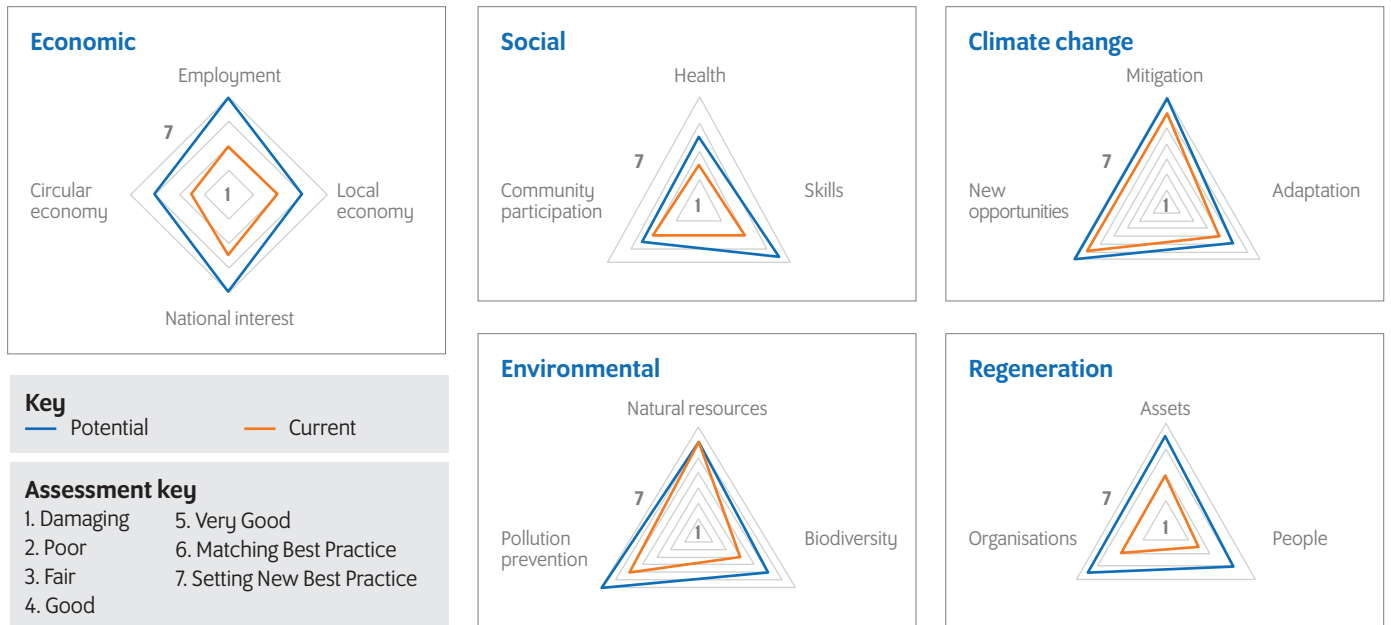
- **Environment** – increased use of local supply chain could reduce carbon emissions relating to transportation of turbine and substation components.
- **Social** – significant numbers of jobs are expected to be created as offshore wind deployment increases; UK government has established a Green Jobs Taskforce to address the skills gap.
- **Climate change** – production of green hydrogen using electricity from offshore wind for the electrolysis process. Potential for Scotland to be a focus for floating wind technology.

Opportunities

- Supports Scotland's transition to a net zero economy;
- Contributes to Scotland's climate change targets;
- Economic development in communities across Scotland ; and
- Creates a competitive, commercially attractive offshore wind sector in Scotland which can deliver both domestically and in the global offshore wind market, with a focus on project development, deeper water capability and innovative technology solutions.

Threats

- Potential cumulative effects with environmental receptors and other sea users;
- Cost of energy transmission to points of consumption;
- Lead-times of availability of energy transmission infrastructure; and
- Need to achieve cost reduction in technologies required to access Scottish resource.
- Availability of skilled workforce and supply chain capacity.



This full value potential is indicated by the blue line. The actual average performance of the assets as currently managed is shown by the orange line. The opportunity for delivering enhanced value is the stretch between the orange line and the blue line.

Where potential and actual performance are the same the orange line will hide the blue line beneath it. No weighting has been applied to any indicator.

5. Benefits delivered by Crown Estate Scotland

Our latest Corporate Plan sets out our four roles:

Investor

Investing in, for example, property development, as well as building external partnerships and supporting staff.

Asset Manager

Careful management of leases and agreements, as well as direct management of forestry.

Co-ordinator

Supporting other Scottish Crown Estate managers by, for example, coordinating spatial information.

Enabler

Empowering others by supporting local plans and projects, providing access to property and helping address barriers to sector growth.

For offshore wind, some examples of our activities include:

Asset Manager

- Requirement for developers to prepare [Supply Chain Development Statements](#) as part of ScotWind to support a sustainable offshore wind sector in Scotland.
- Supply chain commitments made by applicants show an average initial commitment of investment in Scotland of £1.4bn per project built and £1bn per gigawatt of capacity leased

Enabler

- Funding for projects to support the rapid development of floating wind and green hydrogen technologies, plus other priorities identified by the Scottish Offshore Wind Energy Council.
- Funding for environmental research to improve the evidence base and support more robust decision making.
- We engaged with the energy sector on proposed details of our Innovation and Targeted Oil & Gas ([INTOG](#)) offshore wind leasing programme to support the decarbonisation of oil and gas production.

The table below presents our assessment of the significance of the benefits that we currently deliver through these four roles. Our Corporate Plan sets out actions against these four roles. Over time, we expect the significance of benefits to increase as considerations regarding wider value are embedded into decision making.

OFFSHORE WIND	Investor	Asset manager	Enabler	Coordinator
Economic				
Employment		Medium	Medium	
Local economy			High	
National interests			High	
Circular economy		Low	Low	
Social				
Health		Low	Low	
Skills		Medium	Medium	
Community participation		Low	Low	
Environmental				
Natural resources		Medium	High	
Biodiversity			High	
Pollution prevention			Low	
Climate change				
Mitigation		High	High	
Adaptation		Low	Medium	
New opportunities		High	High	
Regeneration				
Assets		High	High	
People		High	High	
Organisations		Low	Medium	

Key

- Inactive
- Low
- Medium
- High

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Financial info as of March 2022, other information as of October 2022. Some figures in this profile have been rounded.

The valuation does not reflect ScotWind option agreements as they were entered into in 2022-23.

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