

Offshore wind: sector profile May 2025





Introduction

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

We play a central role in the development of offshore wind, primarily by awarding and managing seabed leases. We also work with developers and a wide range of industry stakeholders to enable a sustainable and successful offshore wind sector in Scotland.

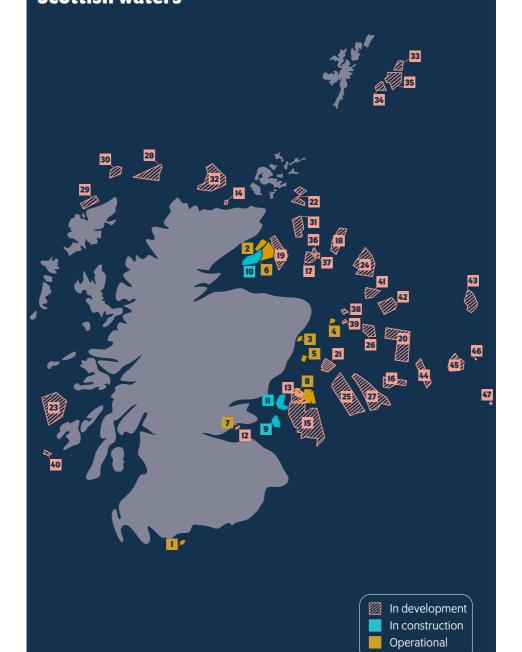
Offshore wind is already Scotland's second largest source of renewable energy, and this capacity is set to increase dramatically over the coming decade.

There are currently four commercial fixed bottom (Robin Rigg, Beatrice, Moray East and Seagreen) and four

Test and Demonstration (T&D) offshore wind farms in full operation, two of which are floating (Hywind Scotland and Kincardine). These are generating significant amounts of clean electricity and creating lasting jobs around our coastline.

Moray West and Neart na Gaoithe (NnG) are now fully installed and will soon become fully operational. The Inch Cape project off the Angus coast in the Firth of Forth has recently entered their lease and began construction.

Offshore wind in Scottish waters



Project details

Pre-ScotWind

Map no	Project name	Capacity (MW)	Foundation	No of turbines	Project owner(s)			
Operational 50								
1	Robin Rigg (East and West)	174	Monopile	58	RWE			
2	Beatrice	588	Jacket	84	SSE Renewables, Red Rock Power Ltd, TRIG, Equitix			
3	European Offshore Wind Deployment Centre (Aberdeen)	96.8	Jacket	11	Vattenfall			
4	Hywind Scotland	30	Floating – Spar	5	Equinor, Masdar			
5	Kincardine	49.5	Floating – semi- submersible	6	Cobra, Pilot Renewables			
6	Moray East	952.5	Jacket	100	Ocean Winds, Diamond Generating Europe, China Three Gorges			
7	Levenmouth Demonstration	7	Jacket	1	ORE Catapult			
8	Seagreen Phase 1	1,075	Jacket	114	SSE Renewables, TotalEnergies			
		ln c	onstruction					
9	Neart na Gaoithe*	450	Jacket	54	EDF, ESB			
10	Moray West*	882	Monopile	60	Ocean Winds, Ignitis			
11	Inch Cape	1,080	Monopile	72	Red Rock Power Ltd, ESB			
*now fu	lly installed.	882 Monopile 60 Ocean Winds, Ignitis 1,080 Monopile 72 Red Rock Power Ltd, ESB						
In development								

in development

	Project name	Capacity (MW)	Foundation	Project owner(s)	
12	Forthwind	20	Jacket	Cierco Ltd	
13	Seagreen Phase 1a	500	Jacket	SSE Renewables, TotalEnergies	
14	Pentland	100	Floating	Copenhagen Infrastructure Partners, Hexicon AB, Eurus Energy	
15	Berwick Bank	4,100	Jacket	SSE Renewables	
ScotWind					
16	Bellrock	1,200	Floating	BlueFloat Energy, Nadara	
17	Broadshore	500 (900)**	Floating	BlueFloat Energy, Nadara	
18	Buchan	960	Floating	BayWa, Ideol, Elicio	
19	Caledonia	2,000	Mixed	Ocean Winds	
20	CampionWind	2,000 (3,000)**	Floating	ScottishPower Renewables, Shell UK	
21	Bowdun	1,008	Fixed	Thistle Wind Partners	
22	Ayre	1,008	Floating	Thistle Wind Partners	

23	MachairWind	2,000	Fixed	ScottishPower Renewables	
24	MarramWind	3,000	Floating	ScottishPower Renewables, Shell UK	
25	Morven	2,907	Fixed	BP, EnBW	
26	Muir Mhor	798 (1,000)**	Floating	Fred. Olsen Seawind, Vattenfall	
27	Ossian	3,528	Floating	SSE Renewables, Marubeni, Copenhagen Infrastructure Partners	
28	Havbredey	1,500	Floating	Northland Power, ESB	
29	Spiorad na Mara	840 (900)**	Fixed	Northland Power, ESB	
30	Talisk	495	Floating	Magnora, TechnipFMC	
31	Stromar	1,000 (1,500)**	Floating	Orsted, BlueFloat Energy, Renantis	
32	West of Orkney Windfarm	2,000	Fixed	RIDG, Total Energies, Corio, Maxio Development Partners	
33	Stoura	500	Floating	ESB	
34	Arven South	500	Floating	Mainstream Renewable Power, Ocean Winds	
35	Arven	1,800	Floating	Mainstream Renewable Power, Ocean Winds	
Innov	ration (IN)				
36	Sinclair	99.45	Floating	BlueFloat Energy, Nadara	
37	Scaraben	99.45	Floating	BlueFloat Energy, Nadara	
38	Salamander	100	Floating	Orsted, Simply Blue Group, Subsea 7	
39	Flora	50	Floating	BP Alternative Energy Investments	
40	Malin Sea Wind	100	Floating	ESB	
Targe	ted Oil & Gas (TOG)				
41	Green Volt	560	Floating	Flotation Energy, Vårgrønn	
42	Aspen	1,008	Floating	Cerulean Winds, Frontier Power International	
43	Beech	1,008	Floating	Cerulean Winds, Frontier Power International	
44	Cedar	1,008	Floating	Cerulean Winds, Frontier Power International	
45	Cenos	1,350	Floating	Flotation Energy, Vårgrønn	
46	Culzean Floating Wind	3	Floating	TotalEnergies	
47	Judy	15	Floating	Harbour Energy	

 $[\]hbox{**} \hbox{Currently planning to develop the higher capacity}.$

Our role in offshore wind

As well as awarding and managing seabed leases, we contribute to the success of offshore wind in Scotland by:

- Supporting developers through the various stages of projects.
- Collaborating on efforts to address environmental and technical challenges.
- Working with industry to reduce costs and build investor confidence.
- Supporting supply chain development and industry collaboration.

Marine Salar Data Exchange

Learn more about our plans for data around Scotland's seas:



Crown Estate
Scotland
collates marine
survey data
gathered by the
offshore wind
projects around
Scotland's seas.

Data is collated in Marine Data Exchange, a world leading digital platform of more than 400Tb of marine survey data, research and evidence. This includes data from the rest of the UK.

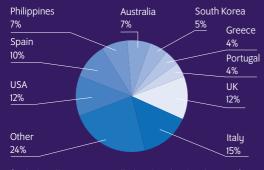
The inclusion of data around Scotland creates a single, UK-wide database for marine

environmental data.

Feedback from offshore wind developers states that access to existing data can contribute to de-risking the development of projects and accelerate development.

Scotland is at the forefront of floating offshore wind:

Global floating offshore wind pipeline in 2025.



Rest of the UK 17%

Scotland 83%

(includes all projects, installed and under development)

Global data source: RenewableUK, EnergyPulse, February 2025. UK data source: The Crown Estate.

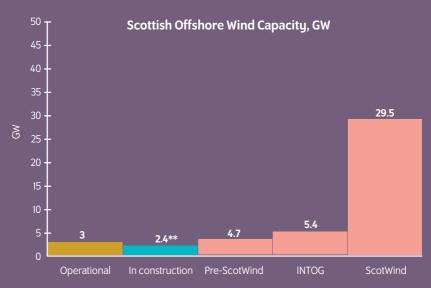
Scottish Offshore Wind Profile

There are currently eight* offshore wind projects in Scottish waters, which are fully operational with 379 turbines and total installed capacity of almost 3GW. A further 1.3GW is now fully installed and around 1GW is in construction. Both Moray West and NnG projects are working towards full operation by summer 2025. 2024 saw the Scottish fleet generate in excess of 7.5 GWh electricity.

20 projects with a combined intended installed capacity of around 30GW hold option agreements awarded

via the ScotWind leasing process. A key part of ScotWind was the supply chain commitments made by applicants which show an average current commitment of £1.5bn per project of investment in Scotland. Full seabed leases come at a later stage after consents, offtake agreements and financing are in place.

The remaining 4.7GW of pre-ScotWind sites include Test and Demonstration and Round 3 projects at various stages of development.



NB: the graph is not a linear timeline.

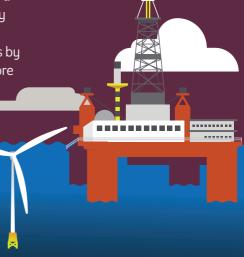
^{*}includes Robin Rigg (East and West)

^{**}Includes 1.3GW now fully installed.

INTOG

- Innovation and Targeted Oil and Gas (INTOG) was a structured leasing round for offshore wind launched in August 2022 to help maximise value from commercial scale deployment and to reduce the carbon emissions associated with North Sea oil and gas production.
- It will help stimulate Scotland's offshore renewables innovation and associated supply chain, help new companies enter the renewable energy sector and progress the 'just transition'.
- It has two distinct elements
 - Innovation (IN) which is for small scale innovation projects of 100MW or less which will demonstrate new technologies and processes, and
 - Targeted Oil and Gas (TOG)
 specifically designed to offer a
 practical and meaningful way
 for oil and gas producers to
 decarbonise their operations by
 maximising the role of offshore
 wind to provide renewable
 electricity to oil and gas
 installations.

- Five IN and five TOG projects are currently in the exclusivity stage which enables them to progress development work while the Sectoral Marine Plan for Offshore Wind Energy (SMP-OWE) is completed.
- Those projects which are part of the adopted SMP-OWE or consented in advance of its adoption, will be offered Option Agreements. Two TOG projects have already reached this stage.
- The proposed projects are for up to 449 MW of capacity for IN and just under 5GW for TOG projects, representing a total seabed area of around 1.665km².
- All 12 projects will utilise floating offshore wind technology.



Supply Chain Development

- The Supply Chain Development Statement (SCDS) is an ongoing process throughout the development phase for ScotWind and INTOG.
- Through detailed engagement with industry and stakeholders, we support the development of the supply chain required to ensure the timely delivery of the projects.
- We support the strategic infrastructural planning and socio-economic development necessary to enable Scotland to maximise the benefits of offshore wind development.
- The collaborative and partnership approach to supply chain investment is evidenced by our role in the Strategic Investment Model (SIM) and wider industry and government engagement. Our investment priorities in energy ports remain a key focus.

Further information can be found on our website, alongside the most recent SCDS' for each project:



Enabling the Offshore Wind Sector

- Crown Estate Scotland works across the sector and its many stakeholders to enable successful projects and a thriving industry in Scotland.
- We provide core support and funding to Scottish Offshore Wind Energy Council (SOWEC).
- Our top priorities for the years ahead have been identified as:
 - Working to exploit/address the most significant opportunities and challenges facing the sector.
 - Supporting the delivery of floating wind at gigawatt scale.
 - Solutions for the busy blue economy.

- Building on the success of new models for supply chain collaboration.
- Supporting Scotland's projects to be world-leading examples.



Contact us

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