



European Regional Development Fund

EUROPEAN UNION

OFFSHORE wind energy



UNITED KINGDOM

OFFSHORE WIND FARMS

UNITED KINGDOM



No.	Name	MW	Turbines
1	Beatrice	588	84
2	Moray East	950	100
3	Moray West	950	72 - 85
4	Hywind Scotland Pilot Park	30	5
5	Aberdeen Offshore Wind Farm	93.2	11
6	Kincardine - Phase 2	48	5
7	Seagreen - Phase One	1,075	114
8	Inch Cape	1,000	40-72
9	Neart na Gaoithe	448	54
10	Seagreen phase 2	1,400-2,300	
11	Seagreen phase 3	900-1,850	
12	ForthWind Demonstration Project Phase 1	12	2
13	Hornsea Project Four	1,000	180
14	Hornsea Project Two	1,386	165
15	Hornsea Project One	1,218	174
16	Hornsea Project Three	2,400	160-300
17	Westermost Rough	210	35
18	Humber Gateway	219	73
19	Inner Dowsing	97.2	27
20	Lincs	270	75
21	Race Bank	573.3	91
22	Dudgeon	402	67
23	Sheringham Shoal	316.8	88
24	Norfolk Boreas	1,800	90-200
25	Norfolk Vanguard	1,800	90-180
26	East Anglia Hub three	1,400	100-172
27	East Anglia one	714	102
28	Galloper	353	56
29	Greater Gabbard	504	140
30	London Array	630	175
31	Gunfleet Sands	184.8	50
32	Kentish Flats	139.5	45
33	Thanet	300	100
34	Rampion	400.2	116
35	Rhyl Flats	90	25
36	Gwynt y Môr	576	160
37	North Hoyle	60	30
38	Burbo Bank	344.2	57
39	Barrow	90	30
40	West of Duddon Sands	389	108
41	Walney phase 1	183.6	51
42	Walney extension	659	87
43	Walney phase 2	183.6	51
44	Ormonde	150	30
45	Robin Rigg	174	58





Status

	2018
Wind farms connected	39
Cumulative capacity (MW)	8,183
Turbines connected	1,975
Net capacity connected in 2018 (MW)	1,312
Turbines connected in 2018	222
Total investments (€ BN)	5.4
New capacity financed (MW)	1,858
Number of projects	3



FACTS & FIGURES

OFFSHORE wind energy



Capacity 2018 7 GW 2019 8.18 GW = 10% of UK electricity 2030 **30 GW**

Future

 CO_2

emissions

48% Since 2010 the UK has attracted of new investments, worth EA

orth €40 bn

market over the last nine years. Germany follows with **34%** or **€ 28 bn** invested over the same period.

2030	Capacity installed	40,000 MW	
2030	Electricity produced	120,362 GWh	



Ecological impact

38% lower than they were in **1990**. The largest driver has been a cleaner electricity mix based on gas and renewables instead of coal. This was responsible for **369%** of the emissions reduction in **2017**.

Social impact

2013 2.7 million homes
2016 4.1 million homes
2018 6.9 million homes



2016 ► 42,000 jobs 2020 ► 55,000 = growth with 13,000 jobs



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By 2030 a third of our electricity will come from offshore wind, generating thousands of high-quality jobs across the UK, a strong UK supply chain and a fivefold increase in exports. This is our modern Industrial Strategy in action.

Energy and Clean Growth Minister Claire Perry

In absolute numbers, wind farm deployment in the UK's coastal waters represents by far the biggest capacity in the North Sea Region, both in terms of actual numbers as in development potential. With over 8.4 GW capacity deployed, a further 3.7 GW under construction, offshore wind production represents more than 14% of the domestic demand for electricity. At present, the offshore wind farms cater for the equivalent of 7 million homes.

The growth potential is still considerable and installed capacity will more than quadruple to 40 GW by 2030. In an ambition to meet its green energy targets, a fast deployment is needed. To keep up with this pace, tens of thousands of new jobs will be created in this sector over the next decade; many of them technical, service, or engineering related.

With an ambition to increase offshore wind capacity to provide 30% of domestic demand, policies are put into place to support further development.

Inn2POWER partners

- Kent County Council
- Opergy





Inn2POWER started in October 2016 and runs for 4 years. 50% of the budget is subsidized by the EU and the other half comes from public and private financing. More information about Inn2POWER: visit northsearegion.eu/inn2power



Sources

www.windeurope.org www.carbonbrief.org www.gov.uk www.thecrownestate.co.uk www.4coffshore.com/offshorewind www.carbonbrief.org/analysis-why-the-uks-co2-emissions-have-fallen-38-since-1990 www.cleanenergywire.org Central scenario EWEA (Aug 2015)



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