Interreg
North Sea Region
Inn2POWER
European Regional Development Fund

EUROPEAN UNION

OFFSHORE wind energy

GERMANY

OFFSHORE WIND FARMS

Fully commissioned

Concept/planning

Development zone

No.	Name	MW	Turbines
1	Sandbank	288	72
2	DanTysk	288	80
3	Butendiek	288	80
4	Amrumbank West	302	80
5	Nordsee Ost	295.2	48
6	Meerwind Süd/Ost	288	80
7	Nordergründe	110.7	18
8	Gode Wind 3	241.75	22
9	Gode Wind 1 and 2	582	97
10	Nordsee One	332.1	54
11	Borkum Riffgrund 1	312	78
12	Riffgat	108	30
13	Borkum Riffgrund 2	450	56
14	Alpha Ventus	60	12
15	Merkur	396	66
16	Trianel Windpark Borkum 2	203	32

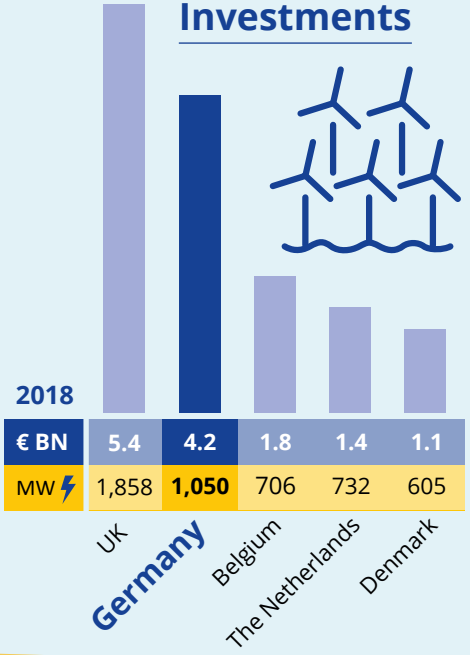
No.	Name	MW	Turbines
17	Trianel Windpark Borkum 1	200	40
18	Borkum Riffgrund 3	900	81
19	Deutsche Bucht	252	31
20	Veja Mate	402	67
21	Bard Offshore 1	400	80
22	EnBW He Dreiht	900	tbd
23	Albatros	112	16
24	Global Tech 1	400	80
25	Hohe See	497	71
26	Kakasi	342	38
27	EnBW Baltic 1	48.3	21
28	EnBW Baltic 2	288	80
29	Wikinger	350	70
30	Arkona	385	60
31	Arcadis Ost 1	247	26
32	Baltic Eagle	476,25	tbd
33	Wikinger Süd	10	tbd

OFFSHORE wind energy

Status

	2020
Wind farms connected	25
Cumulative capacity (MW)	7,770
Turbines connected	1,501
Net capacity connected in 2020 (MW)	219
Turbines connected in 2020	32
Total investments (€ BN)	4.4
New capacity financed (MW)	658
Number of projects	7

Investments



Future

Scenarios projecting near climate neutrality in Germany by 2050 assume an installed capacity of up to more than **70 GW** of offshore wind, generating up to more than 280 TWh of electricity per year.*

2050	Capacity installed	up to 70+ GW
2050	Electricity produced	up to 280+ TWh

** Less need for storage and curtailment can reduce energy costs. These scenarios do not include green hydrogen.*

Ecological impact

CO_2 saving

17.6 million tons in 2019

Capacity

2020	7,770 MW
2025	10,800 MW
2030	20,000 MW

Social impact

The industry offers

24,350 full-time jobs*

**as of late 2018*

> We welcome the fact that the Federal Ministry for Economic Affairs and Energy has recognised the importance of long-term planning for the offshore wind industry. The new 40-gigawatt target for 2040 can bring back investment security.
>
> *WAB Managing Director Heike Winkler*

New long-term targets for offshore wind were introduced by the German government in 2020: 20 GW until 2030 and 40 GW until 2040, revising an earlier cut of the earlier 2030 goal from 25 GW to 15 GW. This previous cut has led to a recent lack of wind energy expansion in the German North and Baltic Seas, negatively impacting the value chain and its workforce. The new targets and a new hydrogen strategy, also unveiled in 2020, now provide more planning and investment security for the sector.

WAB provided input for the Inn2POWER stakeholder analysis. The German government and its policies were identified as the most influential factor for the development of the supply chain. To support the continuous development of offshore wind energy, WAB has intensified its public affairs and media relations efforts.

WAB supported a study conducted by the Bremen-based wind:research institute, which analysed in depth the regional distribution of value creation and emploment created by offshore wind across the country, followed by a more detailed analysis on the states of Baden-Württemberg. The study results served as basis for the ongoing German Inland Campaign (GIC), developed and initiated by WAB as part of the Inn2POWER project. GIC's main target is to present SME's as innovators along German wind industry supply chains. The campaign articulates and bundles the interests and competencies of the supply chain vis-à-vis relevant stakeholders to use their influence for the benefit of SMEs. It aims to promote the value creation potential as well as acceptance of the technology and convince politicians of the economic benefits and future prospects of the domestic wind industry. GIC gained considerable attention in relevant media and within the wind industry branch, especially in the south of Germany. WAB has further organised an offshore wind industry supply chain round table with the Federal Ministry for Economic Affairs and Energy.

Inn2POWER partners

- WAB e.V.
- Hochschule Bremerhaven

wab
It's only possible with wind

Hochschule Bremerhaven

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.renews.biz/55432/german-green-light-for-20gw-offshore-by-2030
www.cleanenergywire.org/factsheets/german-offshore-wind-power-output-business-and-perspectives
www.4coffshore.com/offshorewind
Central scenario EWEA (Aug 2015)

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Partners

POM West-Vlaanderen
Port Oostende energy port
BLAUWE CLUSTER
provincie groningen
NOM
wab
Hochschule Bremerhaven
opergy
energy CLUSTER DENMARK
BUSINESS ACADEMY SOUTHWEST
Kent County Council kent.gov.uk

Provides co-funding for

NORTHERN NETHERLANDS OFFSHORE WIND NNOW — NOM

west-vlaanderen de gedreven provincie — POM & Blauwe Cluster

Region of Southern Denmark — AESV & OEDK

northsearegion.eu/inn2power