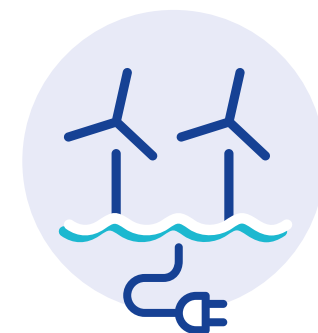




OFFSHORE wind energy



THE NETHERLANDS

OFFSHORE WIND FARMS

-  Fully commissioned
-  Under construction
-  Concept/planning
-  Development zone

No.	Name	MW	Turbines
1	Borssele 1 and 2	752	94
2	Borssele 3 and 4	731.5	77
3	Borssele 5	19	2
4	Hollandse Kust Zuid Holland I and II	700	70
5	Hollandse Kust Zuid Holland III and IV	700	70
6	Eneco Luchterduinen	129	43
7	Hollandse Kust Noord	700	58-126
8	Egmond aan Zee	108	36
9	Prinses Amalia	120	60
10	Gemini	600	150





FACTS & FIGURES

Status

	2018
Wind farms connected	6
Cumulative capacity (MW)	1,118
Turbines connected	365
Net capacity connected in 2018 (MW)	0
Turbines connected in 2018	1
Total investments (€ BN)	1.4
New capacity financed (MW)	732
Number of projects	1

OFFSHORE wind energy



Future



2030	Capacity installed	12,567 MW
2030	Electricity produced	36,670 GWh

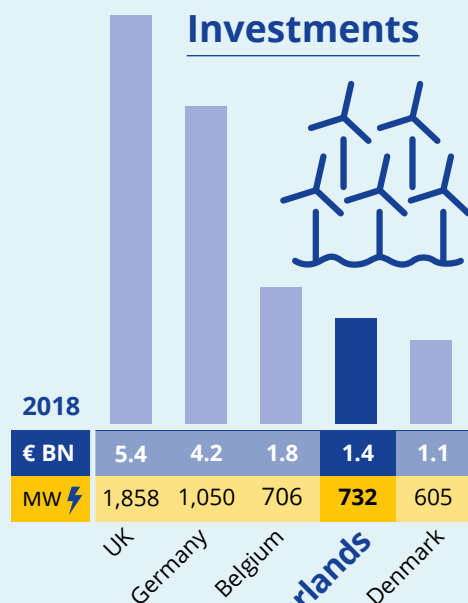
Factor 5 increase expected between 2020 and 2030

Ecological impact



12%
compared with
gas and coal

Investments



Capacity



2019	1,657 MW
2023	4,465 MW
2030	11,500 MW = 8.5% of the total electricity demand (40% of the current electricity usage)

Social impact

2019	2020	2018 - 2030
Electricity consumption generated		Economic contribution x5
>1.9 million households	>2.7 million households	>12,500 jobs



The Dutch North Sea offers opportunities for the energy transition due to its relatively low water depth, favorable wind climate and the proximity of good ports and (industrial) energy consumers.

Minister Wiebes (in Vervolgroutekaart wind op zee 2024-2030)

Compared to local (domestic) demand, the Netherlands have a relatively vast area with potential for offshore wind development. The current installed capacity accounts for 1.7 GW, catering for approximately 1.9 million households' consumption.

Future development will be targeting export as well, for which further enhancement of the onshore grid will be necessary. To increase the pace of development over the coming years, some policy updates may be desirable, reducing the number of 'exclusion zones' that cover areas with a potential to produce at a very low Levelized Cost of Energy.

Over the past years, several Dutch coastal areas have developed strong activities in the offshore wind service industry, and dedicated port hubs are by now well established at Flushing, Den Helder, and Eemshaven, where offshore wind industry has become one of the primary drivers of the local economy. Years of experience and fully developed nautical facilities for storage, service and maintenance make these harbours play a pivotal role in the offshore wind operations and maintenance for the next few decades. These areas attract enterprises, leveraging local know-how to innovate processes and practices, and constitute a unique ecosystem.

Traditionally, some Dutch companies were strong in the dredging and marine contracting industries and have adapted well to the changing demand in sea-bed preparation and offshore wind farm construction, installation and servicing worldwide.

Inn2POWER partners

- Province of Groningen
- NOM, Investment and Development agency for the Northern Netherlands



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



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Central scenario EWEA (Aug 2015)



Interreg

North Sea Region

Inn2POWER

European Regional Development Fund



EUROPEAN UNION

Partners



Provides co-funding for

NORTHERN NETHERLANDS
OFFSHORE WIND



NOM



POM & Blauwe Cluster



AESV & OEDK

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