

Building Offshore Wind in Asia Pacific



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Ørsted develops energy systems that are green, independent and economically viable



- Revenue (2018): DKK 76.9 bn
- EBITDA (2018): DKK 30.0 bn
- 6,000 employees
- Active in Scandinavia, United Kingdom, Germany, The Netherlands, USA, Taiwan and Japan

Major Shareholders (voting share %)

- Danish State 50%
- Seas NVE 10%
- Capital Group 5-10%

Offshore



- Global leader in offshore wind with 5.6 GW operational capacity
- Develop, construct, own and operate offshore wind farms
- Significant and attractive build-out plan of 3.4 GW towards 2022
- Ambition of 15 GW installed offshore wind capacity by 2025

Onshore



- US onshore wind portfolio with 813 MW operational capacity
- Develop, construct, own and operate onshore wind farms
- 184 MW under construction and a pipeline of more than 1.5 GW
- Energy storage solutions with the first 20 MW battery storage project in operation
- Solar: first large-scale solar PV project Permian Solar 250 MW

Bioenergy



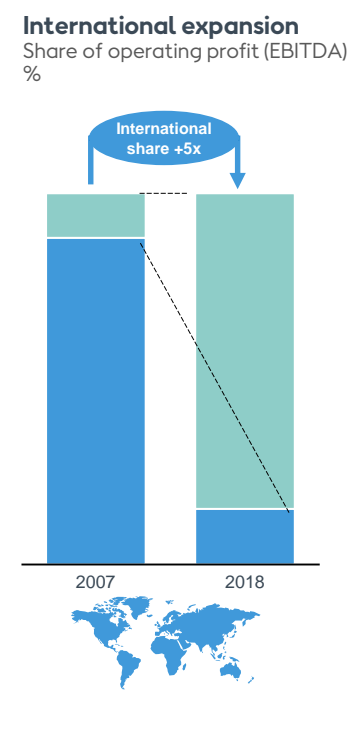
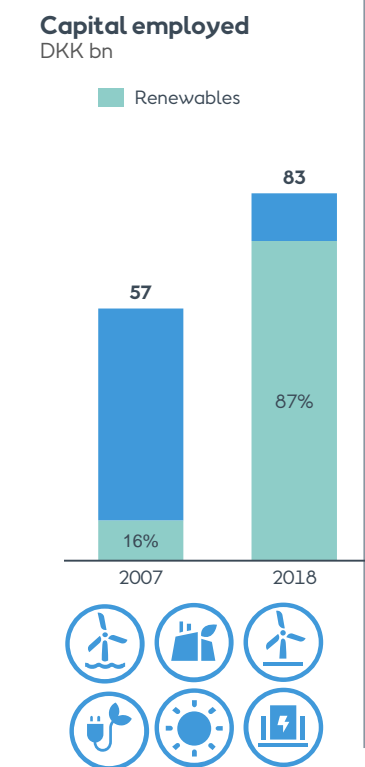
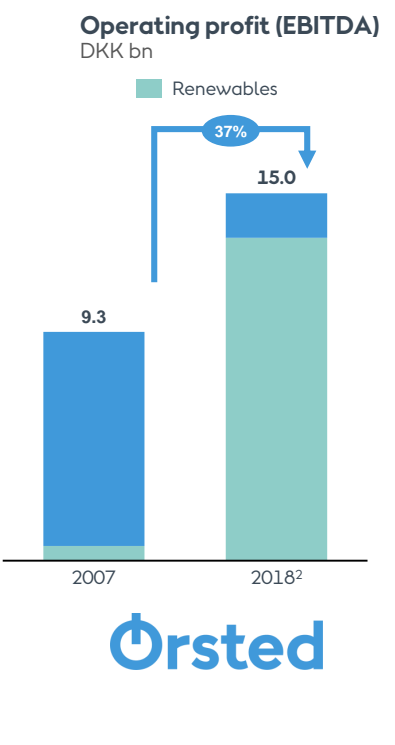
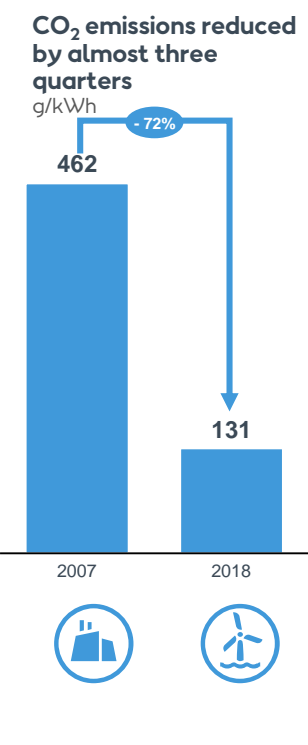
- #1 in Danish heat and power generation with 25% of market
- Converting heat and power plants from coal and gas to biomass
- Innovative waste-to-energy technology (Renescience)

Customer Solutions



- Develop green, innovative and cost efficient solutions for our B2B customers
- Provide competitive route-to-market for own and customers' generation portfolio
- Optimize activities within natural gas
- Market trading operations to optimize hedging contracts

Significant transformation of Ørsted over the past decade

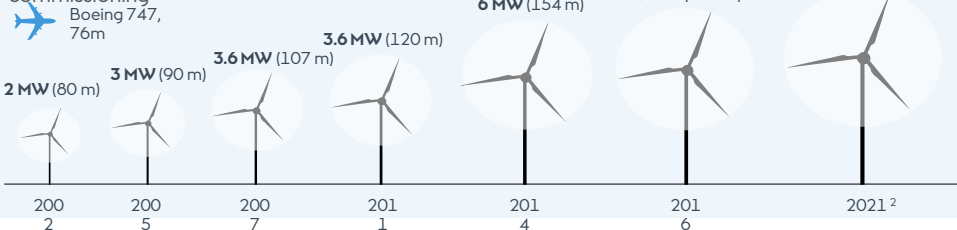


Note 1: figures taken from Ørsted's Annual Report 2018 and Capital Markets Day 2018
 Note 2: excludes EBITDA contribution from new partnerships

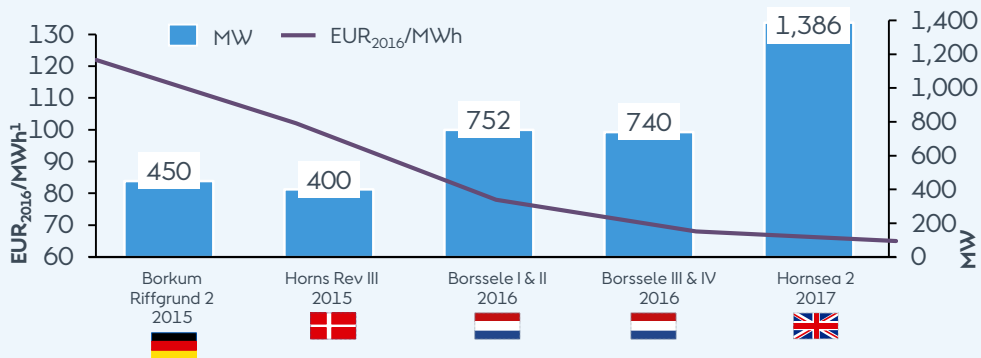
Offshore Wind Technology and Installed Scale continuously drive down the cost

Rapid technological development

Wind turbine capacity and rotor diameter, year of commissioning



Installed capacity and levelized costs for society of electricity



- Rapid increase in wind turbine capacity has contributed to larger wind farms
- With a minimum of around 80 turbines to ensure economics of scale and offshore substations designed for blocks of 450-500 MW, optimal farm size was in 2011 min 450-500 MW and in 2021 min 1 GW
- Between 2015 and 2017 costs fell by 45% driven in large part by greater scale
- In the recent NL and US (MA) auctions there was freedom to choose project size, the larger sizes won in both places, being significantly cheaper

Sources: BEIS; Danish Energy Agency; Energinet.dk; NEV (Dutch Energy Scenarios); Bundesnetzagentur

1. Levelised revenue (price) of electricity over the lifetime of the project used as proxy for the levelised cost to society. It consists of a subsidy element for the first years and a market income for the whole lifetime. Discount rate of 3.5% used to reflect society's discount rate. Market income based on country specific public wholesale market price projections at the time of contracting where available else an average of 5 analytics is used. For comparability across projects and because there is no transparency round the TSO costs of transmission a generic scope adjustment (incl. transmission and extra project development costs) have been applied. Due to the specific DC transmission set up in Germany cost estimates from the Offshore Netzentwicklungsplan 2017 have been applied.
2. In Mar. 2018 GE unveiled a 12 MW turbine. Each Haliade-X unit, will be capable of powering 16,000 homes and producing 67 GWh per year, based on wind conditions on a typical German North Sea site