

Ørsted in offshore wind

Energy & Transport summit III

The Ørsted logo is positioned in the bottom left corner. It features a white stylized 'Ø' symbol followed by the word 'rsted' in a white, lowercase, sans-serif font. The background of the entire slide is a photograph of an offshore wind farm with numerous turbines in a blue sea under a blue sky with light clouds.

Ørsted

Thomas Thune Andersen
Chairman, Board of Directors

Ørsted develops green energy systems



- Revenue (2017): DKK 59.5bn
- EBITDA (2017): DKK 22.5bn
- 5,638 employees
- Active in Scandinavia, United Kingdom, Germany, The Netherlands, USA and Taiwan

Offshore



Onshore



Bioenergy



Customer Solutions



Our vision

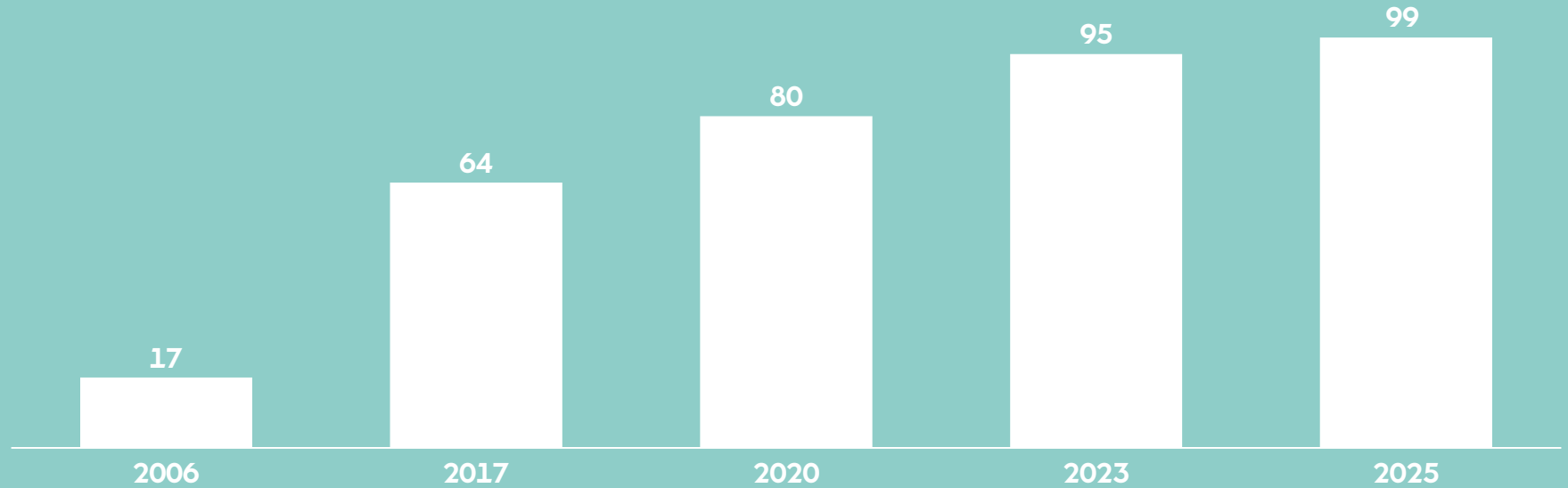
**Let's create a
world that
runs entirely on
green energy**



We are transforming the company from black to green energy

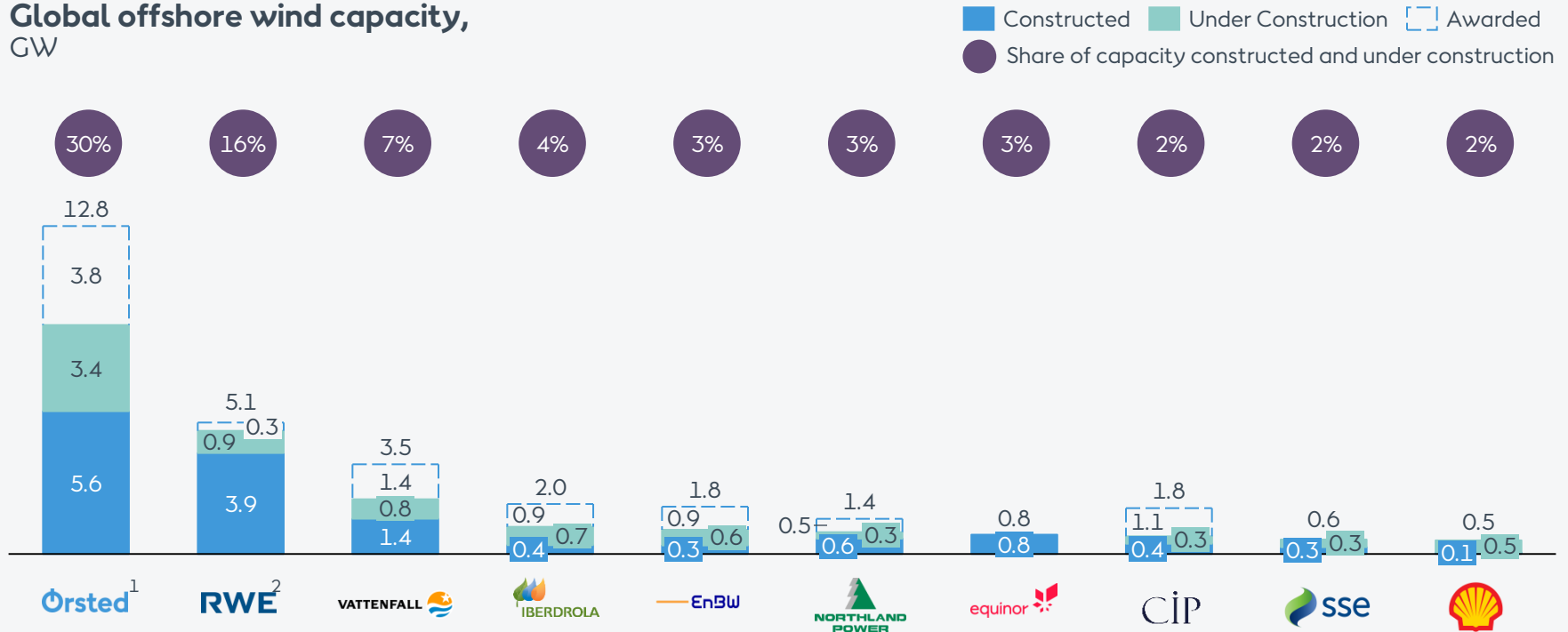
Share of green power

%



Ørsted is uniquely positioned in offshore wind

Global offshore wind capacity, GW



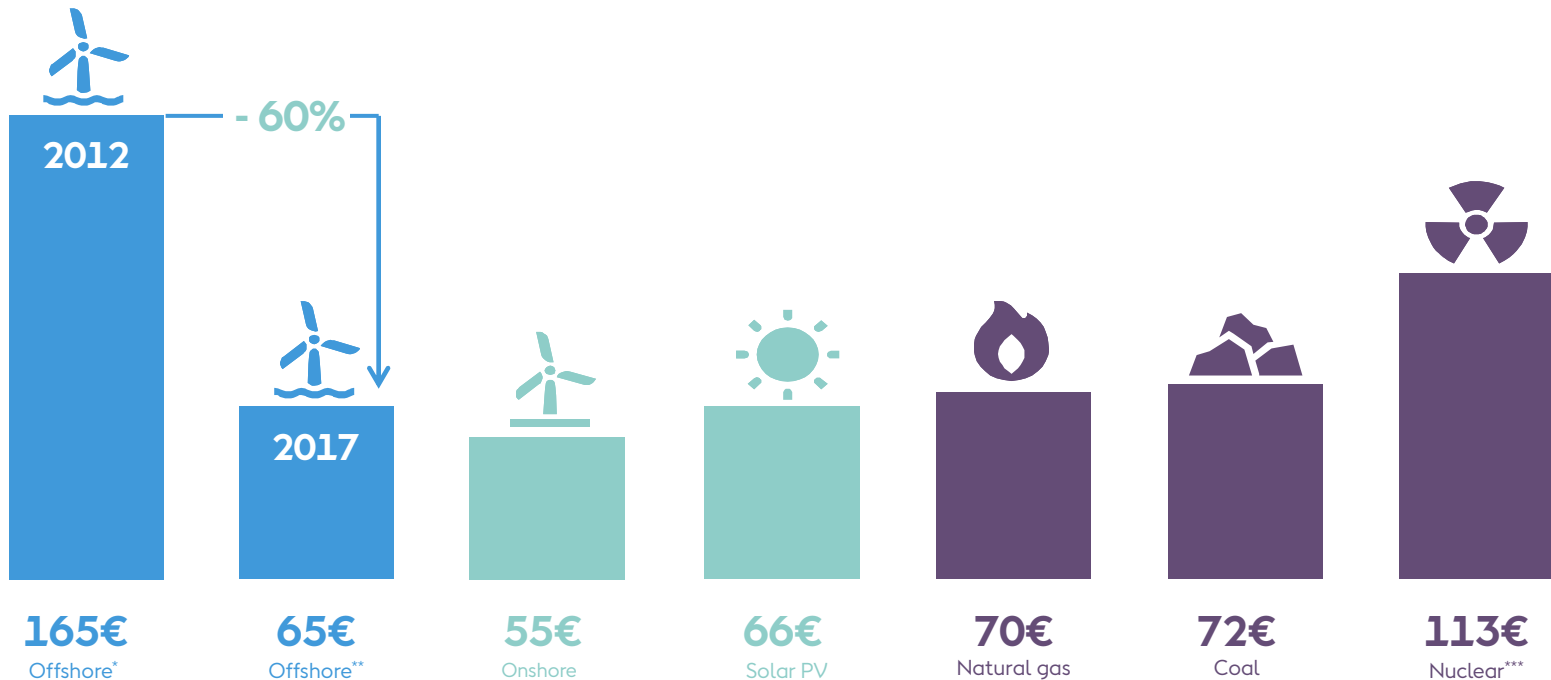
Note: Awarded includes project capacity secured through auctions and beauty contests since 2015, where FID has not yet been taken

1. Includes Deepwater Wind

2. RWE capacity based on combined Innogy and E.ON offshore wind portfolio

We have brought the cost of offshore wind down below conventional power plants

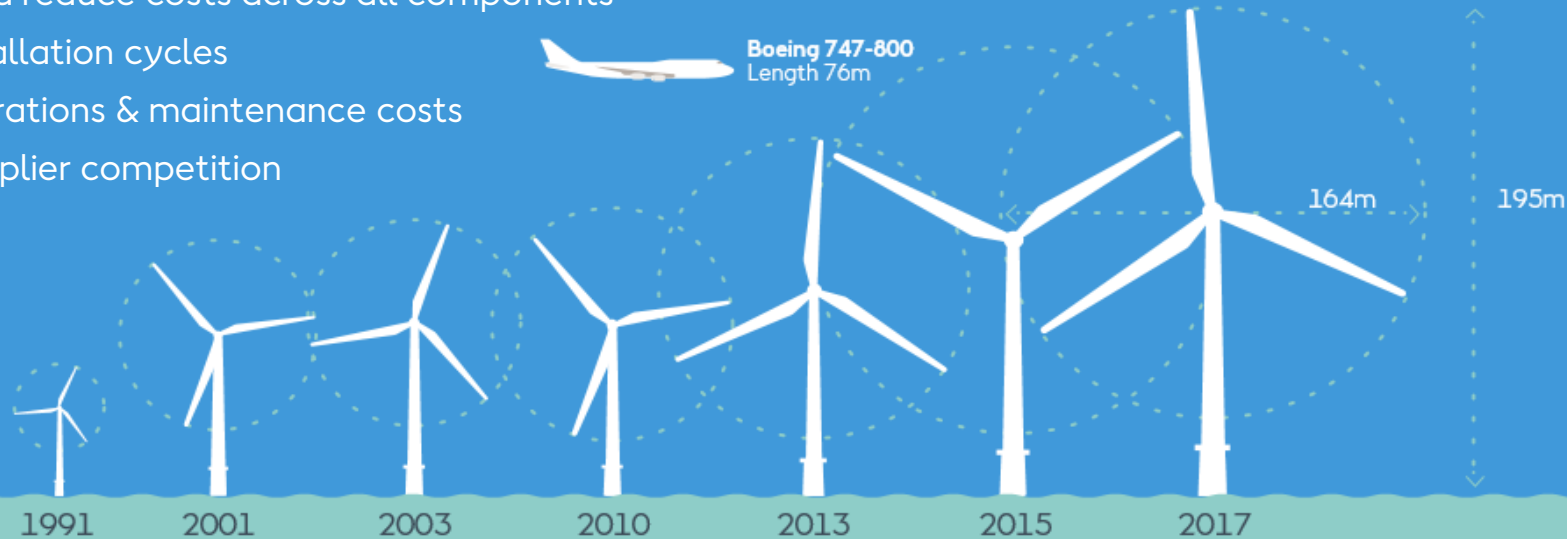
Levelized Cost of Electricity, EUR/MWh¹. 2016 prices



Source: Bloomberg New Energy Finance (BNEF) for CCGT and Coal plants for Northwest Europe, Danish Energy Agency and BNEF for Offshore Wind. For offshore wind: Including cost of transmission – Calculated as Levelized revenue (subsidy and market price) of electricity over 25yrs lifetime as a proxy for the levelized cost of society. 3,5% real discount rate used. *Generic Offshore Wind, Northwest Europe, FID 2012. In 2012 our goal was to reduce offshore wind costs to 100 Euro/MWh in 2020, ** Hornsea 2, UK, *** Hinkley Point, UK. Same approach as for Offshore Wind. Strike price of 92,5 £/MWh in 2012 real prices. Lifetime of 60yrs, 91% capacity factor.

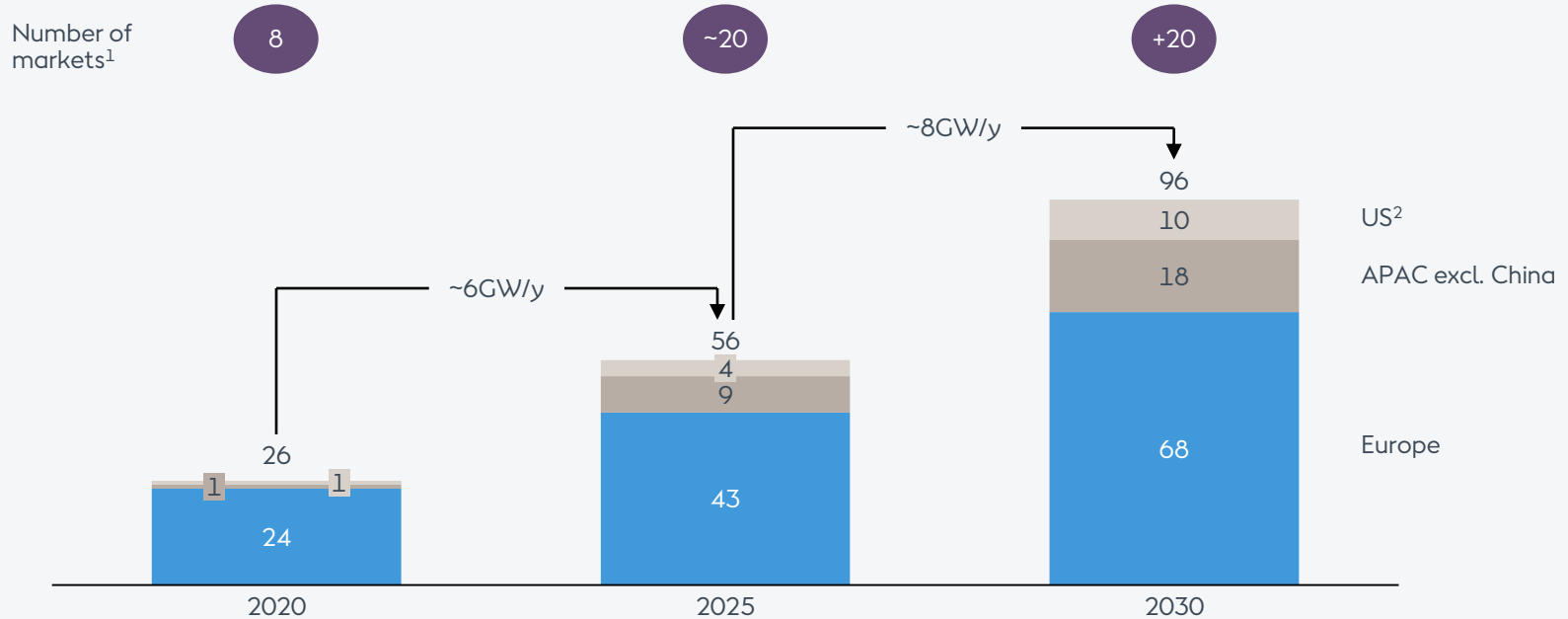
Key cost reduction levers in offshore wind

- Develop larger sites
- Install larger turbines
- Innovate and reduce costs across all components
- Reduce installation cycles
- Reduce operations & maintenance costs
- Increase supplier competition



Global growth in offshore wind will accelerate towards 2030

Offshore wind installed capacity forecast, excl. China GW

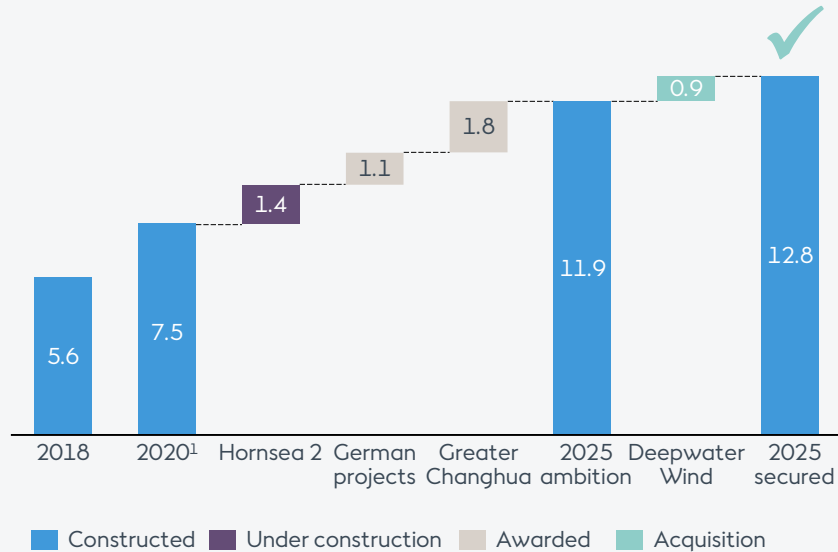


1. Number of markets with installed capacity by BNEF above 200MW with US States treated as separate markets

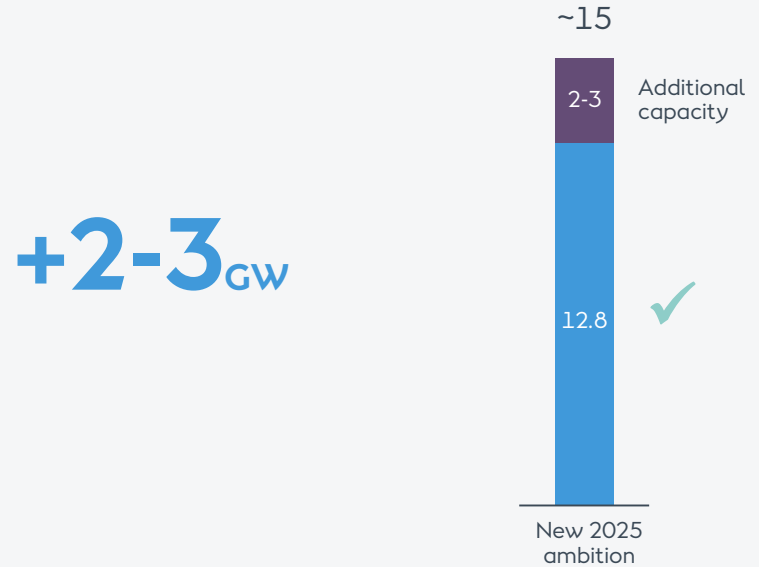
2. US includes the latest BNEF US offshore wind forecast from September 2018. This forecast is 3GW higher than H1 2018 Offshore Wind Outlook from July 2018

We have set a higher offshore wind ambition for 2025

Ørsted Offshore capacity (gross)
GW



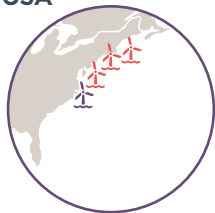
Ørsted Offshore capacity – updated ambition
GW



Ørsted is the largest offshore wind O&M owner/operator globally

	Operated by Ørsted			Operations FTEs Total
	Capacity ¹	Turbines ¹	Sites ²	
2018	4.9GW	~1,100	21	~850
2016	3.2GW	~860	18	~720

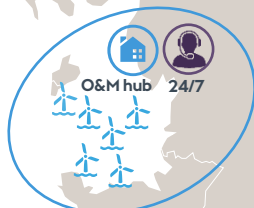
USA



Taiwan



UK West O&M hub
(Barrow) ~1.9GW



UK East O&M hub
(Grimsby) ~1.2GW



German O&M hub
(Nordeich) ~0.9GW



Global Engineering & Commercial Support



Symbols

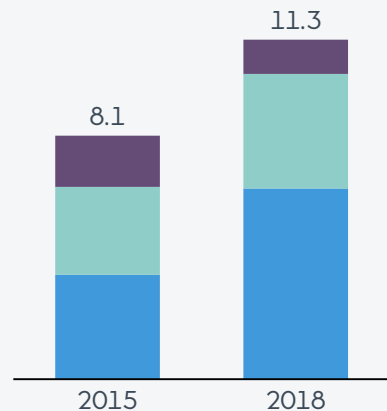
- In operation
- Under construction
- Under development
- (GW) Total wind farm 2018 operated capacity
- Hub O&M base
- Global Support Functions
- 24/7 Control & Monitoring Centre

1. Turbine capacity operated not equal to capacity constructed by Ørsted (among other due to operation of third party constructed assets such as Lincs Offshore Wind Farm in the UK).
2. Excludes test/demonstration sites.

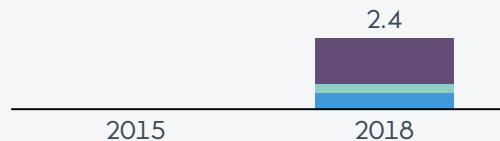
Offshore wind is globalizing – which poses new challenges for the supply chain

■ Installed ■ Under construction ■ Awarded

Europe
Ørsted renewables, GW¹



US
Ørsted renewables, GW¹



Taiwan
Ørsted renewables, GW¹



How do we ensure continued innovation in the supply chain?

How do we maintain a high health & safety performance?

A satellite view of Earth showing the Americas, with the text "Love your home" overlaid in white. The image features a blue background with a central circular inset showing a satellite view of Earth. The continents of North and South America are visible, surrounded by blue oceans and white clouds. The text "Love your home" is written in a bold, white, sans-serif font across the center of the Earth image.

Love your home