# Our green transformation



**Dr. Doris Schiedek** Regional Head of Permitting, Asia Pacific アジア太平洋地域許可承認業務部 部長 7<sup>th</sup> October 2019

## Ørsted overview and business units

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

## Orsted

- Revenue (2018): DKK 76.9 bn (YEN 1,281 tn)
- EBITDA (2018): DKK 30.0 bn (YEN 500 bn)
- Credit Rating: Moody's Baal (stable), S&P BBB+ (stable)
- 6,300 employees

#### Major Shareholders (voting share %)

<ul> <li>Danish State</li> </ul>	50%
• Seas NVE	10%
• Capital Group	5-10%

• Active in Scandinavia, United Kingdom, Germany, The Netherlands, France, USA, Taiwan and Japan



- Global market leader in offshore wind
- Develops, constructs, owns and operates offshore wind farms
- 5.6 GW operational capacity
- 4.3 GW build-out plan towards 2022
- Ambition of 15 GW installed offshore wind capacity by 2025



- Develops, constructs, owns and operate onshore wind, solar and energy storage projects
- 813 MW onshore wind operational capacity in the US
- 625 MW under construction and pipeline of 1.5 GW
- Energy storage solutions with a first 20MW battery storage project in operation
- 400MW Permian Solar PV plus 85MW of projects under development with PPAs secured



- Heat and power plants converted from coal and gas to biomass and waste-toenergy
- #1 in Danish heat and power generation with 25% of market
- Energy supply solutions for B2B customers
- Provides route-to-market for own and customers' generation portfolio
- Market trading operations to optimize hedging contracts



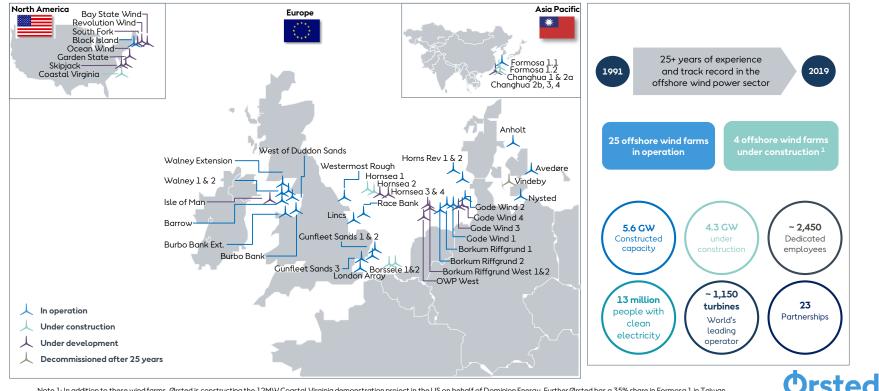
## Ørsted Offshore overview

#### Global market leader in offshore wind with 25+ years of experience

#### Ørsted offshore wind global footprint

Unparalleled experience and track record

オーステッド



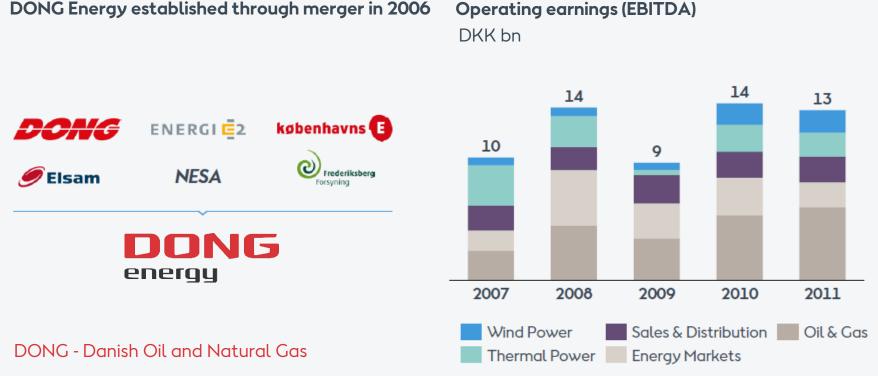
Note 1: In addition to these wind farms. Ørsted is constructing the 12MW Coastal Virginia demonstration project in the US on behalf of Dominion Energy. Further Ørsted has a 35% share in Formosa 1 in Taiwan



Our transformation from black to green energy

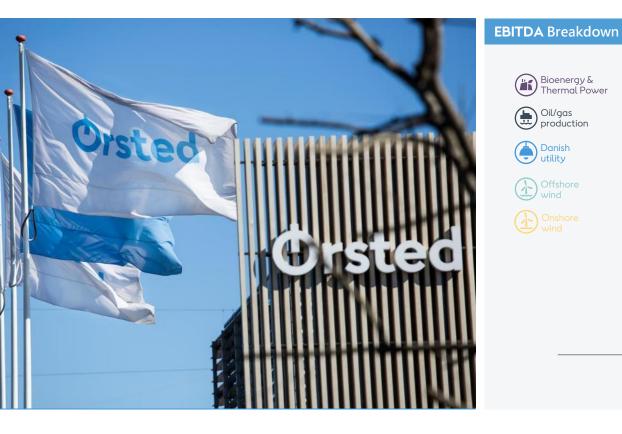


## We started out as a traditional energy company





## Today, we have transformed our business



#### 1% 41% 7% Bioenergy & Thermal Power (FR) Oil/gas production ) Danish utility ( 个 92% 46% 13% 2011 2018 DONG Orsted energy



6

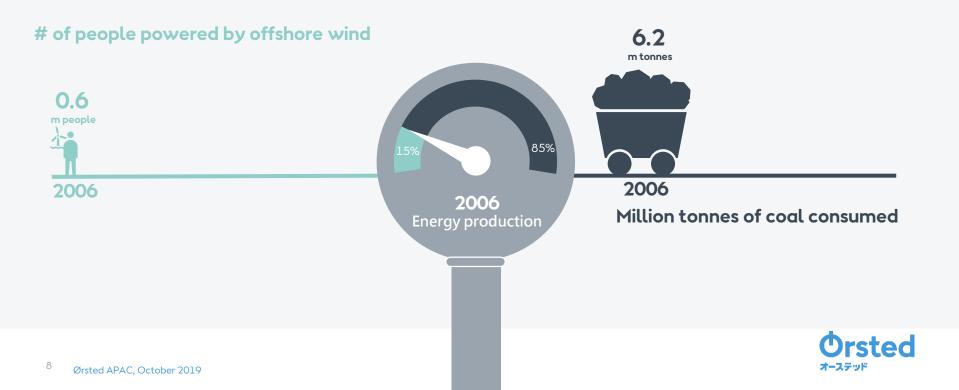
Our vision is clear

## A world that runs entirely on green energy



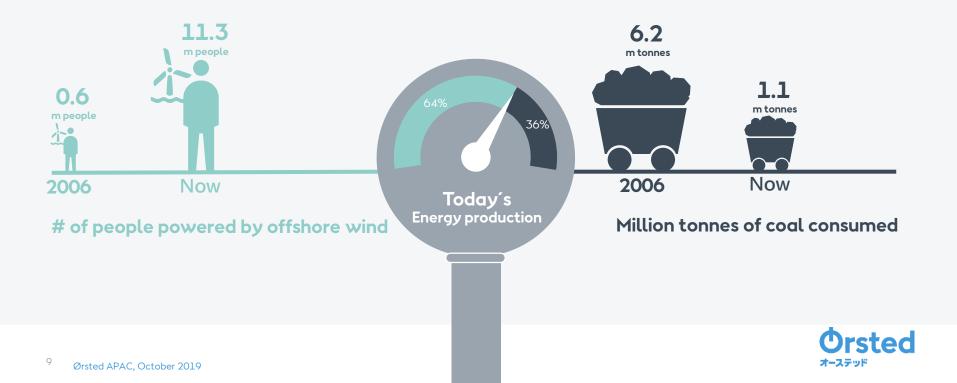
### **Our transformation:**

In 2006 our power and heat production was 85% fossil fuel, only 15% renewables based



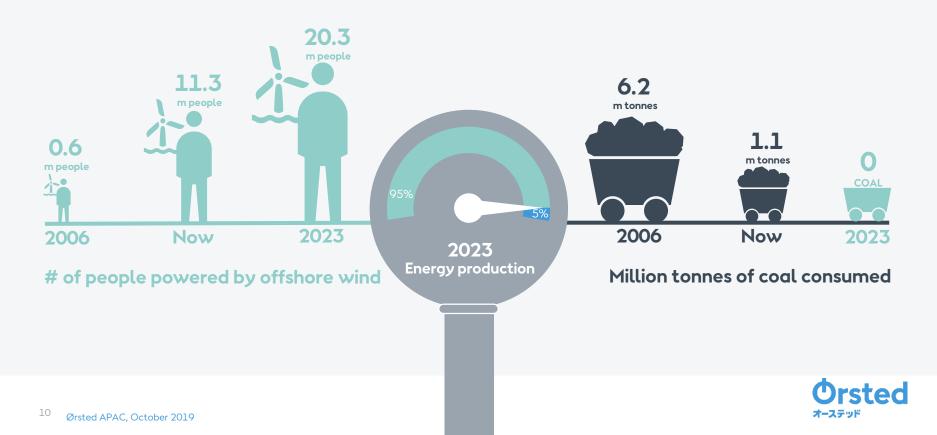
### **Our transformation:**

Today we can supply 11.3 million people from offshore wind



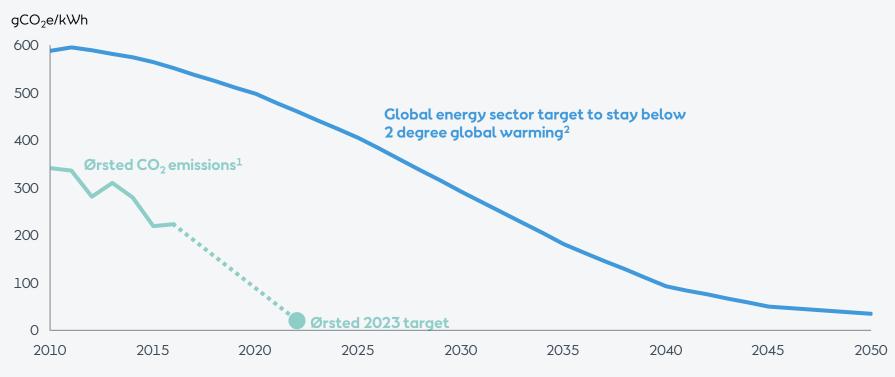
### **Our transformation:**

By 2023 we will be close to full green energy



## Our CO<sub>2</sub> reduction is 27 years ahead

of the overall target for the energy sector



1. Danish Energy Agency and Ørsted calculations

2. Based on International Energy Agency's 2°C scenario for carbon emissions reductions in the energy sector; in line with Paris Agreement on Climate Change

### Ørsted not just a name

As part of our transformation we also have changed the company name to Ørsted, after the Danish scientist Hans Christian Ørsted.

Almost 200 years ago, Hans Christian Ørsted discovered electromagnetism, effectively establishing the foundations for the way we produce power today.

Hans Christian Ørsted's ground-breaking discovery was driven by his curiosity, dedication and interest in nature.

We share these qualities and find them essential in order to continue our journey from black to green energy.





## Ørsted Offshore R&D Programme



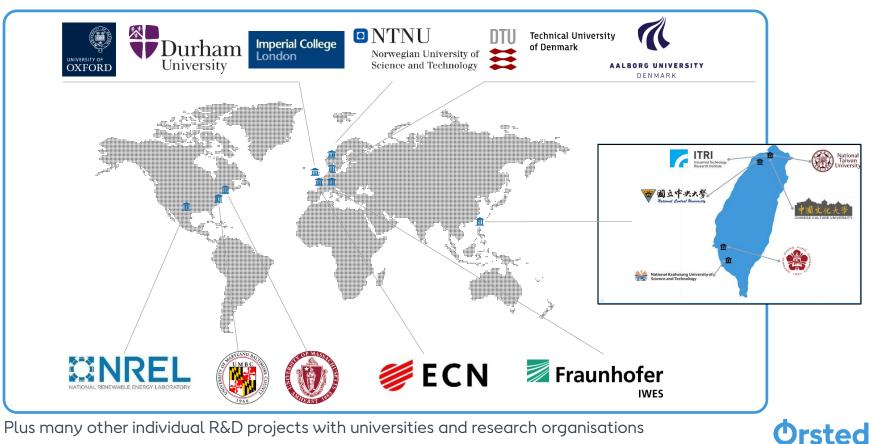
#### Organised into six roadmaps



• Enable the Pipeline • CoE Reduction • HSE Performance • Design Standard Improvements • Risk Reduction • Competence Development •



### Key University and Research Organisation Collaborations



オーステッド

Ørsted APAC, October 2019

14



#### Green energy scholarship program

motivating and supporting student offshore wind related researches





#### Graduate program

transforming master students into young global talents

#### **Guest lecture**

sharing offshore wind related topics in multiple local universities





## ご清聴いただきありがとうございました Thank you for your time

