


# Offshore Wind: challenges and opportunities ahead

An aerial photograph of a vast offshore wind farm. Numerous white wind turbines are spaced out across a deep blue sea. The sky is a clear, pale blue with some light, wispy clouds near the horizon. The perspective is from a high angle, looking down at the turbines as they recede into the distance.

# Our footprint in the UK

- **1,400 employees**
- Ørsted has already **invested over £15bn** in the last decade
- Ørsted plans to invest **at least another £16bn in the next few years**
- Completed the world's largest offshore wind farm, Hornsea Project Two, at **1.4GW**
- Constructing what will be the next largest offshore wind farm, Hornsea Project Three, at **2.9GW**;  
Hornsea 4 to follow at **2.9GW**.
- Our offshore wind projects are **generating over 7% of all electricity demand** in the UK



# Constructing 7.6GW of offshore wind in 2024

We have 7.6 GW of offshore wind and 1.6 GW of onshore renewables under construction in 2024.

## Offshore



### USA

South Fork Wind  
Revolution Wind  
Sunrise Wind



### Taiwan

Greater Changhua  
1&2a  
Greater Changhua 2b  
and 4



### Germany

Borkum Riffgrund 3  
Gode Wind 3



### UK

Hornsea 3

## Onshore



### USA

Old 300  
Helena Energy  
Center  
Eleven Mile  
Mockingbird



### Germany

Bahren West 1  
St. Wendel  
Amberg Sud



### Ireland

Farranrory  
Garreenleen

# State of Play

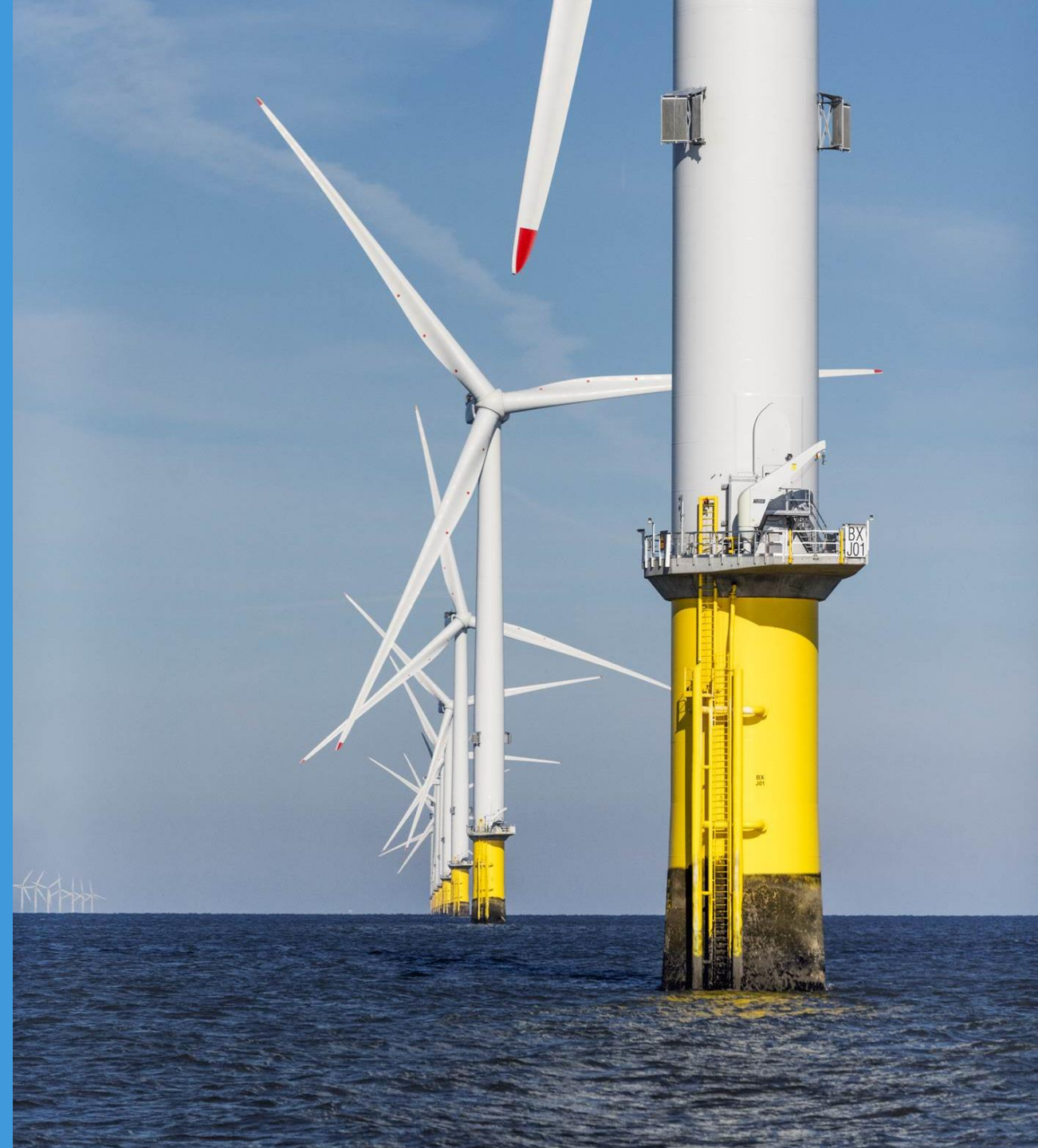
## Strong UK pipeline (fixed and floating):

- Operating: ~15 GW
- Constructing/ with CfD: ~13 GW
- Consented: ~10 GW
- With seabed lease: ~40/50 GW ?

## Recent Annual Capacity increase:

- 2022: 7 GW (5.6 GW)
- 2023: 0 GW
- 2024: 3.4 GW

**Required rate to 50 GW by 2030 (last viable auction 2027) :** 12 GW pa





# Accelerating deployment:



- 1 **Capacity:** driven by Allocation Rounds
- 2 **Accelerating pipeline:** driven by planning reform, grid and connections
- 3 **Community acceptance:** driven by community benefit / compensation

Changes must be made in flight and continue to attract investments to new projects.



# Global Supply Chain will have to double or triple its capacity to meet the demand by 2030:

## Current offshore supply chain capacity vs. capacity needed

Category	Current capacity		Capacity needed to meet 2030 targets
 Turbines	<b>725</b> units/year	↗	Up to <b>1.450</b> units/year ( <b>x2</b> )
 Monopiles	Up to <b>450</b> units/year	↗	Up to <b>1.350</b> units/year ( <b>x3</b> )
 <b>Vessels</b> Turbine and foundation installation vessels	<b>24</b> vessels in operation	↗	Up to <b>50</b> vessels in operation ( <b>x2</b> )

# UK Government policy: growing the supply chain and job creation

## Growing the Supply Chain:

- 1 National Wealth Fund/ GB Energy
- 2 Clean Industry Bonus
- 3 Traditional industrial strategy levers

## Role of industry:

- Industrial Growth Plan (IGP)
- Helping to expand a skilled workforce



# Enabling a sustainable renewable energy build-out





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

