



OFFSHORE WIND: TODAY, TOMORROW

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EWEA is now WindEurope



Wind•
EUROPE

Market Leaders



Leading Members



EUROPEAN OFFSHORE WIND

The industry today

Offshore Wind

The industry today

11,027 MW
3,230 Turbines
82 Sites
€46.5bn Financed
40.6 TWh

in new assets 2010-2015

Offshore wind in 2015

3,019 MW

754 Turbines

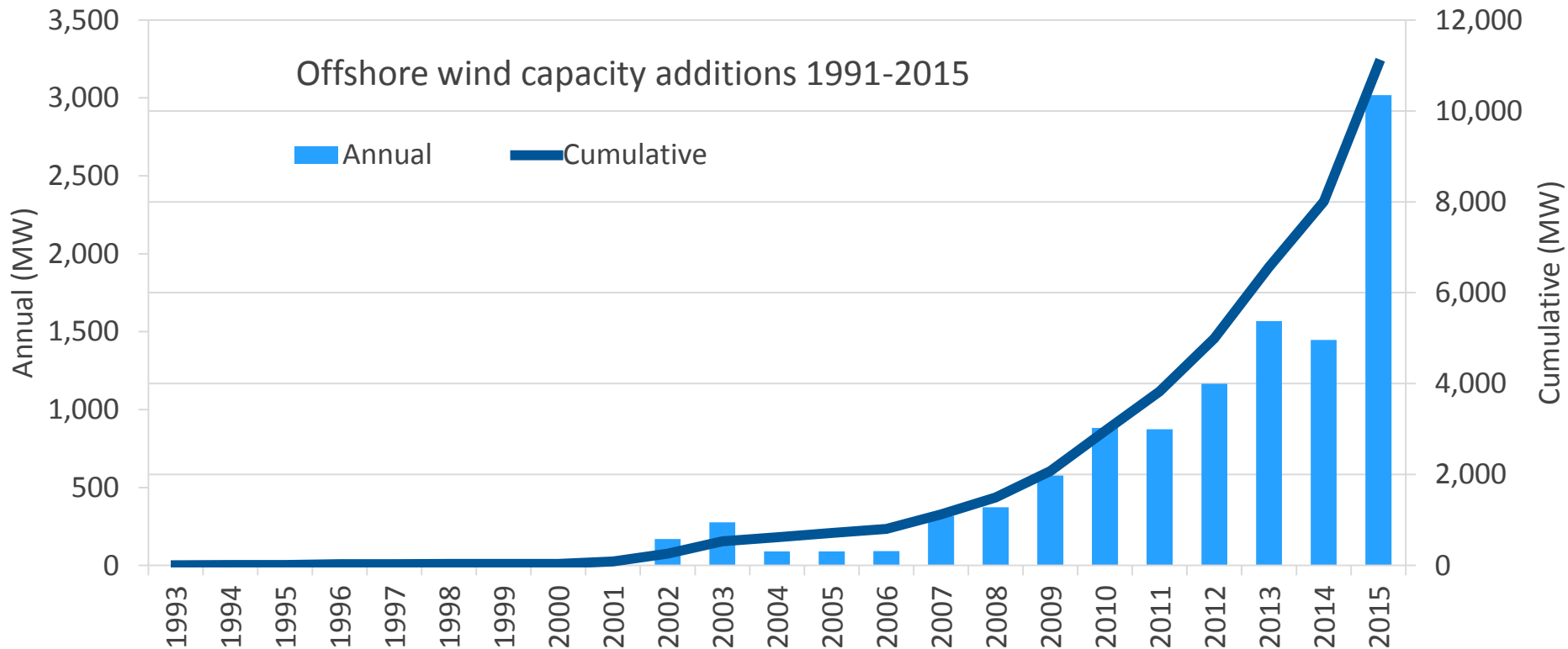
22 Sites

€13.3bn Financed
in new assets

2015 in offshore wind

A record year in grid-connected capacity

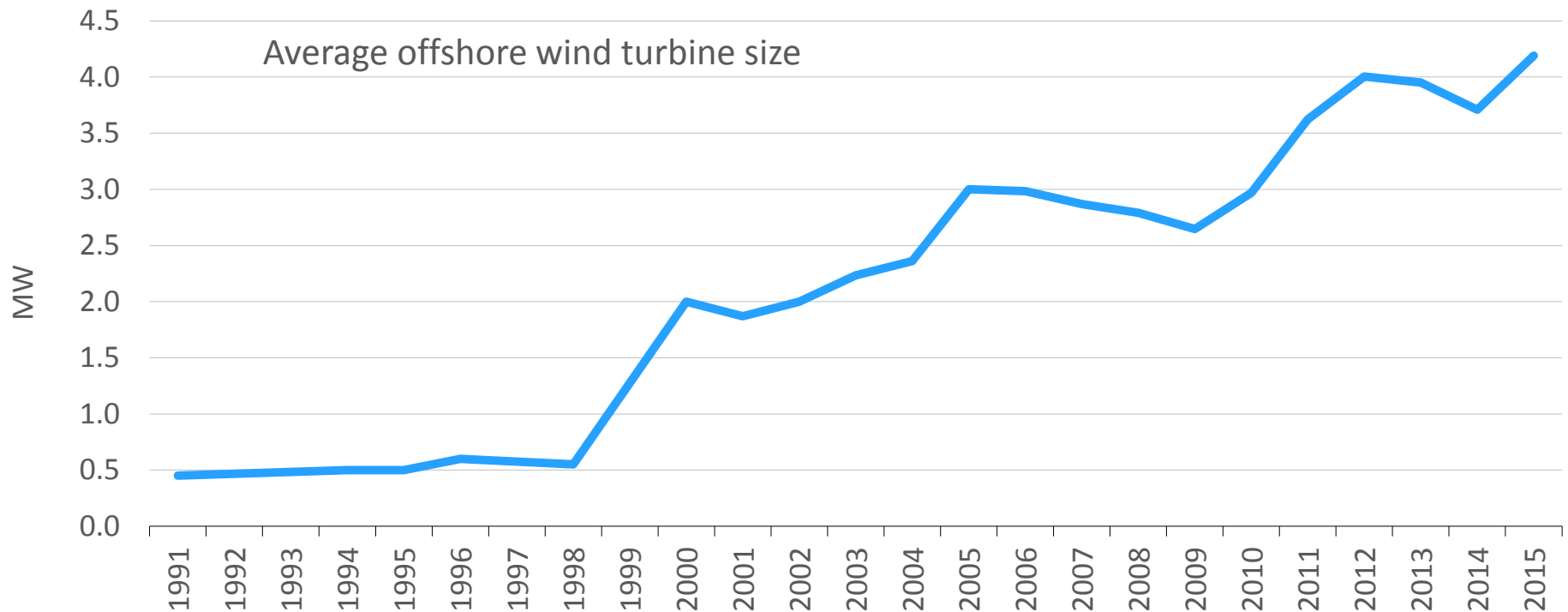
- 3,019MW – a doubling vs 2014 (+108.8%)
- 754 grid-connected turbines (+40.9%)



2015 in offshore wind

Turbines are becoming more powerful

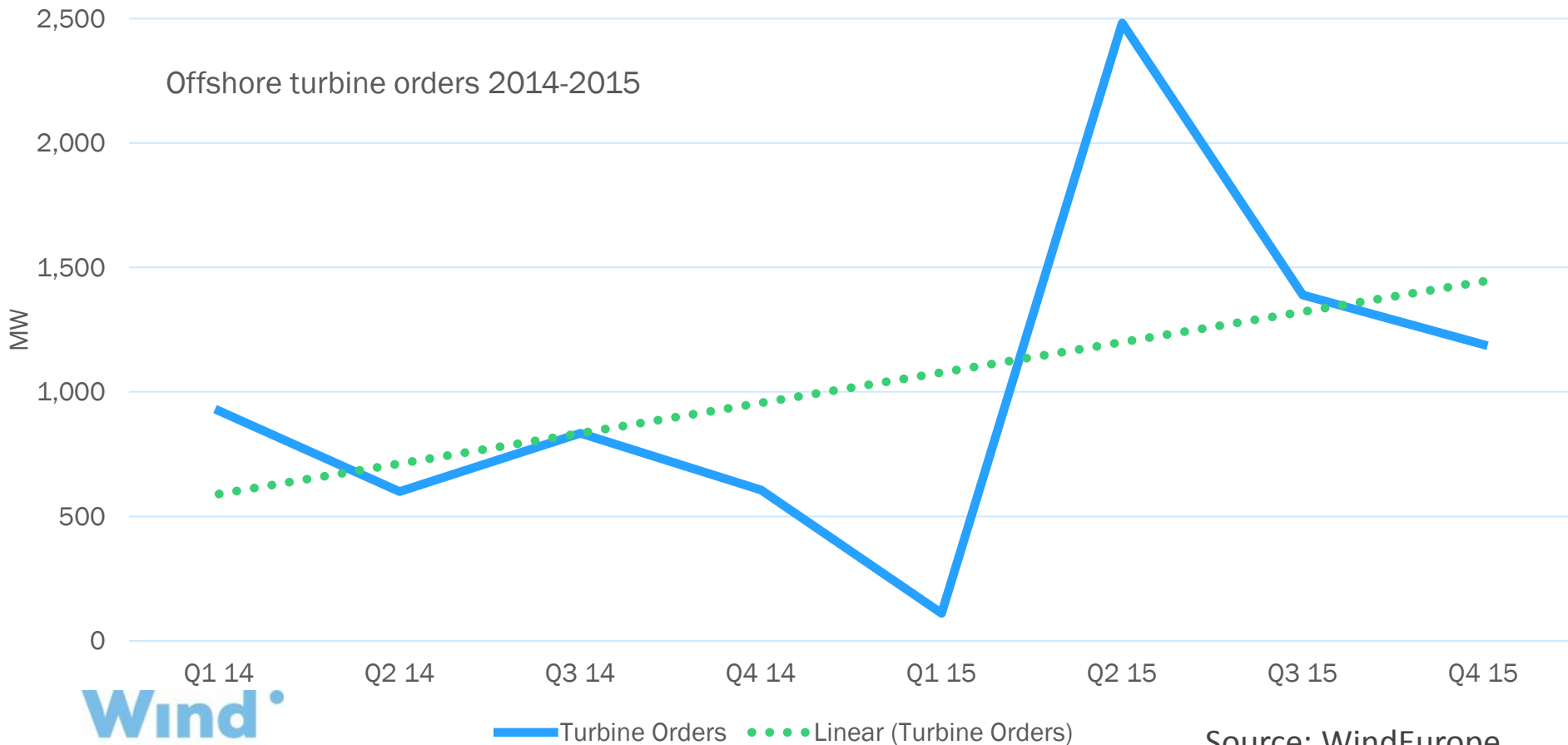
- Average capacity: 4.2MW – **13% larger** than in 2014
- 4-6MW turbine installations on the increase



2015 in offshore wind

Order books are strong

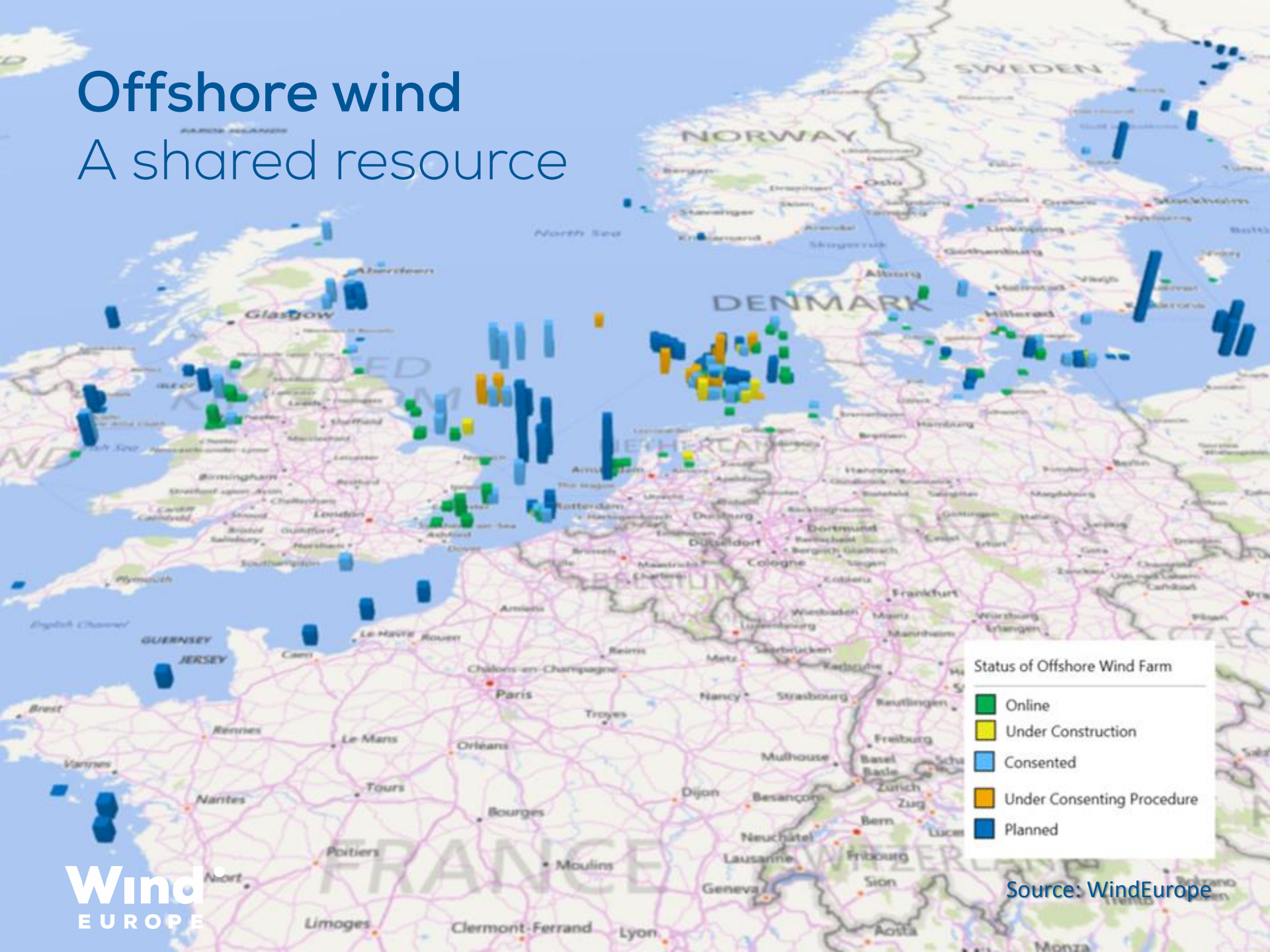
- 5.1GW of firm or conditional orders in 2015
- 75% higher than 2014



Source: WindEurope

Offshore wind

A shared resource



EUROPEAN OFFSHORE WIND

The industry tomorrow

Scenario for 2020

Due to project lead-times, the pipeline of offshore wind farms to be constructed by 2020 is largely understood, and is close to WindEurope's Central Scenario:

Installed Capacity

23.5 GW

Electricity Generated

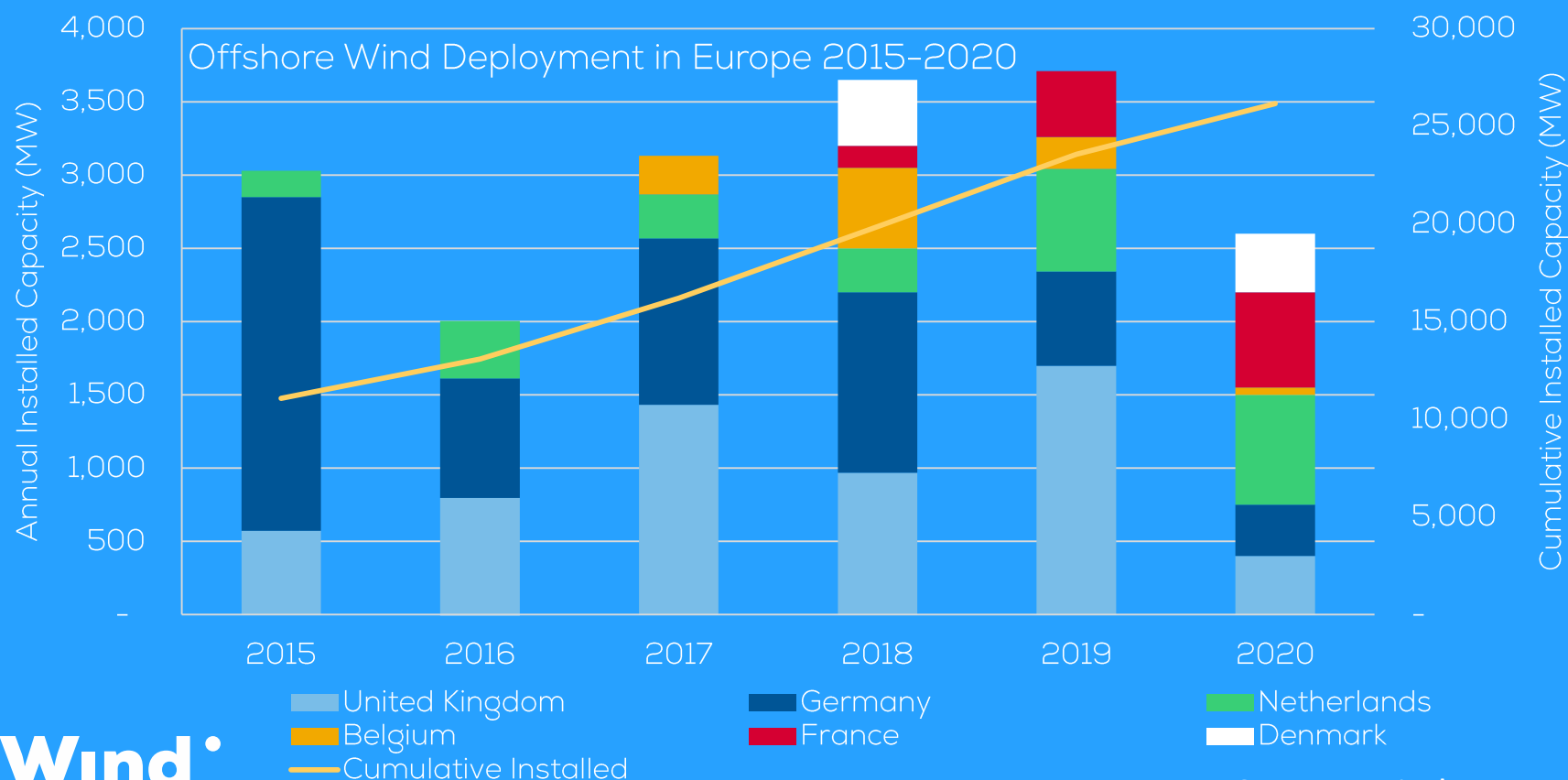
86.4 TWh

A doubling of the installed capacity today

Scenario for 2020

WindEurope analysis shows uneven buildout, with shortfalls in the years 2016 and 2020

- Policy on coordination of tenders can mitigate this



Scenarios for 2030

Central

67 GW

245 TWh

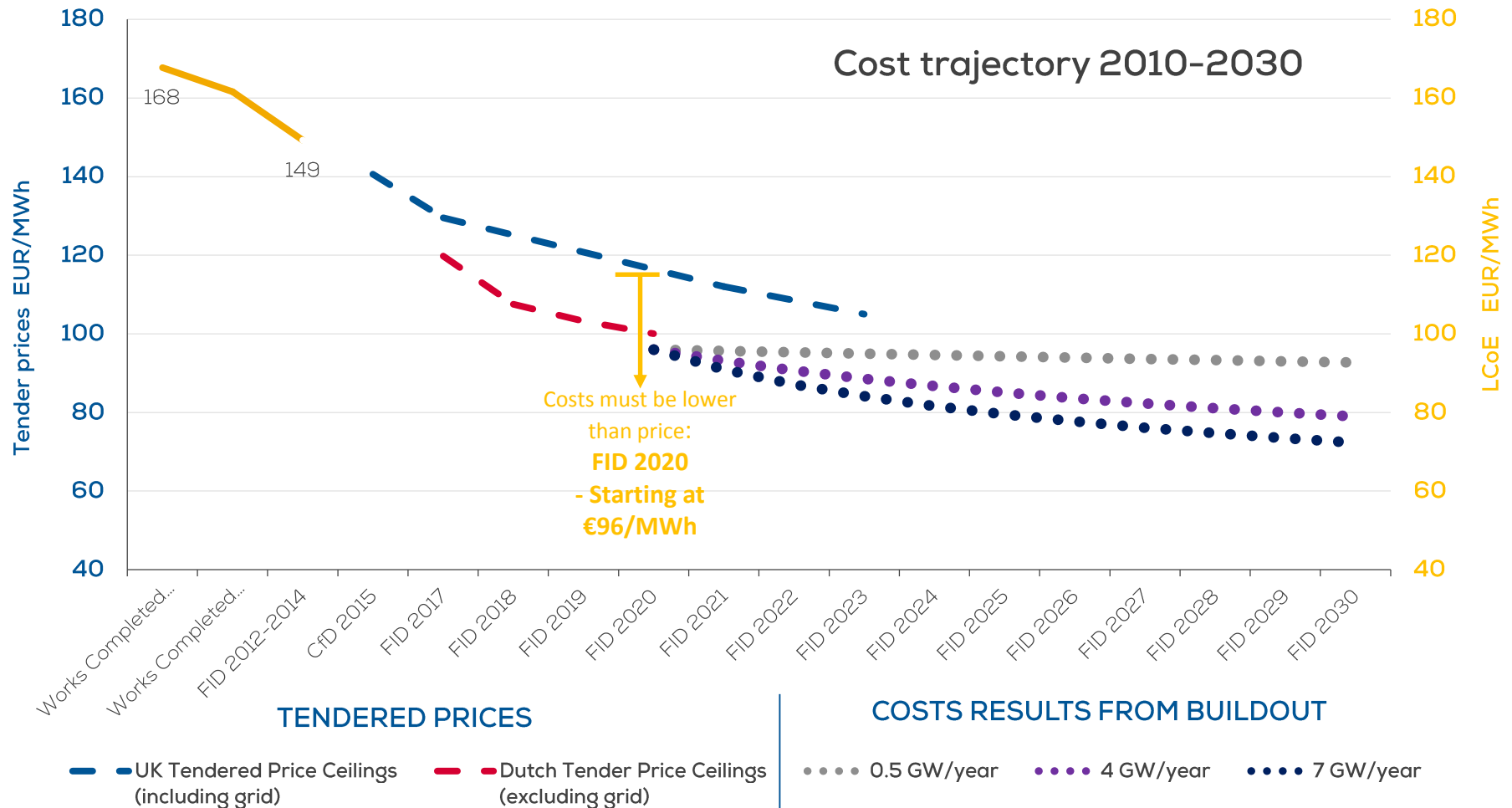
High

98 GW

361 TWh

Cost reduction pathway

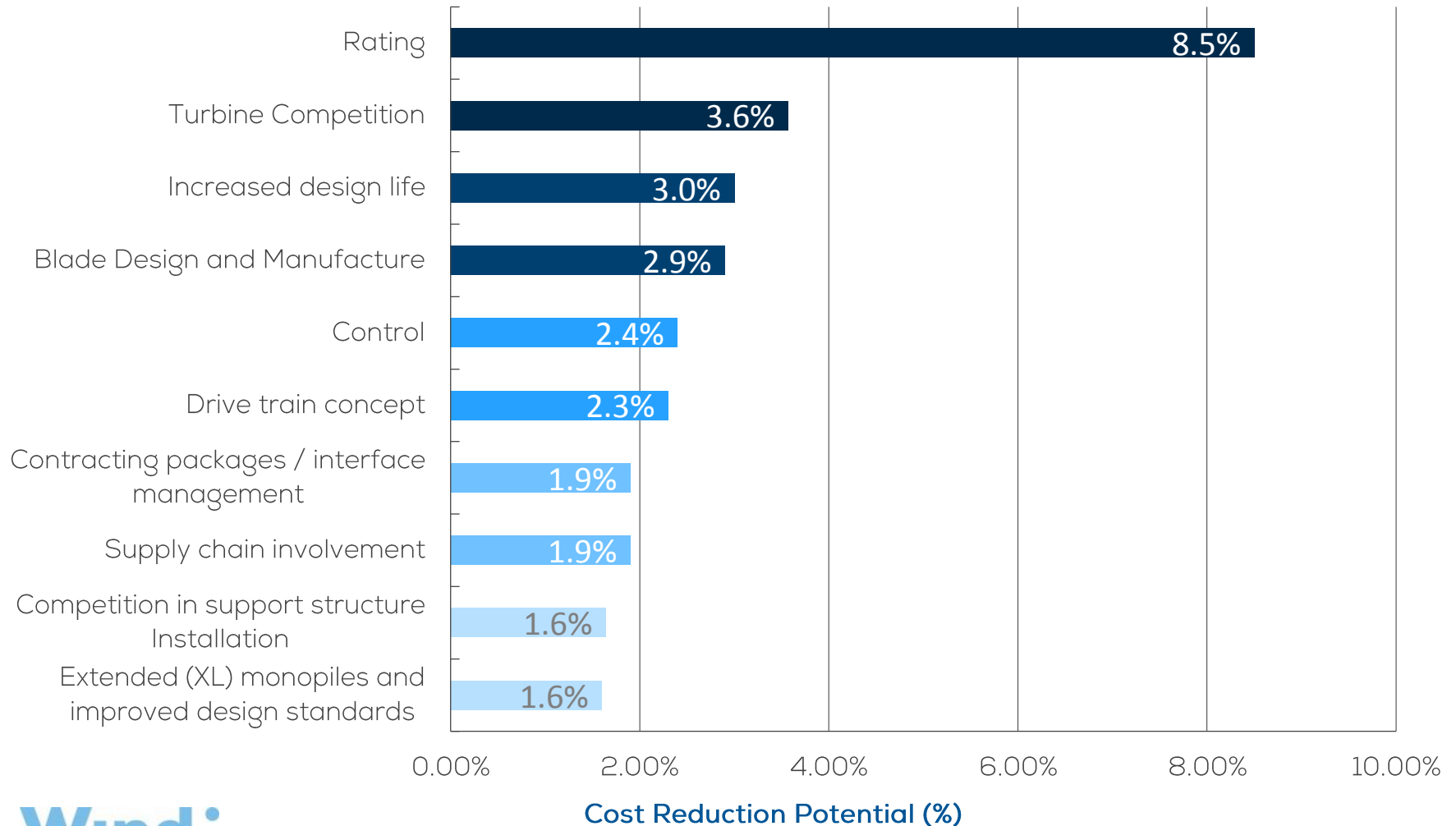
With a buildout of at least 4GW/yr, costs can fall below €80/MWh, by FID 2025, including grid costs



Source: WindEurope

Cost reduction areas

Top ten areas where industry can reduce costs:



Offshore Wind – Post 2020

Offshore wind energy is an essential part of the RES toolkit to ensure 27% RES target and stable growth.

Policy actions that will set out the right pathway:

- Sharing best practice (Regulatory Practices)
- Coordination of timing and sizing of tenders across Member States – **including demonstrators**
- Setting up joint projects of common interest that builds on top of Member State plans
 - Regional projects
 - Increasing interconnection

Kriegers Flak

SWEDEN

DENMARK



Kriegers
Flak

GERMANY

Kriegers Flak

SWEDEN

DENMARK

Kriegers
Flak

EnBW
Baltic 2

CAN THIS BE
APPLIED TO
OTHER REGIONS?

GERMANY



THANK YOU

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