OFFSHORE WIND ENERGY IN THE BALTIC SEA

Diletta Zeni, Public Affairs Advisor, WindEurope
WindEurope: representing the entire supply chain

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<td>TU Delft, CATAPULT, DTU, Fraunhofer IWES</td>
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+ National wind associations
Wind power across Europe

169 GW
Of which: 16 GW offshore
12% of 2017 EU power demand

GW installed
Penetration

Wind EUROPE
Wind power across Europe

169 GW
Of which: 16 GW offshore
1.5% of 2017 EU power demand

GW installed
Penetration

Wind Europe
2010 – 2017: EU offshore wind tripled
2017 Record year

3,148 MW installed & grid-connected
Share by Sea Basin
Cumulative

European cumulative installed capacity: 15.8 GW

- North Sea: 71%
- Irish Sea: 16%
- Baltic Sea: 12%
- Atlantic Sea: 1%
Price reduction: Offshore wind

Levelised revenue of electricity, incl. transmission costs
EUR/MWh, 2016-prices
On- and offshore contribution to other sectors

- Electrical equipment: €52
- Machinery and equipment: €38
- Basic metals: €36
- Construction: €31
- Engineering services: €17
- Rubber and plastic products: €15
- Other sectors: €61

€250 for other sectors

€1000 earned by wind

Source: Deloitte for WindEurope
Baltic Sea

Strong & stable winds

Less extreme sea conditions

Shallow water depths

Short distances to shore
2016 and 2030 offshore wind installations per sea basin
Economically attractive resource potential – end of 2030 by sea basin

Source: BVG Associates for WindEurope
Baltic Sea Declaration
June & September 2017
Continuous, visible & sufficient pipeline of projects to 2030

Optimal target of 6 GW/yr

Wind Europe

BELGIUM
IRELAND
NETHERLANDS
POLAND
GERMANY
UNITED KINGDOM
Here is where the CEP comes in

Clean energy for all Europeans

Electricity Regulation
Electricity Directive
Renewable Energy Directive
Energy Union Governance Regulation
Boosting offshore in the Baltic

- 35% 2030 RES target
  - Cost of non-ambition: EUR 92 Bn missed investments & 132,000 jobs non-created

- 3-year visibility

- Allow technology-specific auctions

- Ambitious NECPs
Join the Global Wind Summit
Hamburg, 25 – 28 September 2018

Experience the world’s largest gathering for the wind industry:
• 35,000 visitors from 48 nations
• 1,400 exhibitors from 34 countries
• More than 500 presentations from top experts from all around the globe

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globalwindsummit.com
Daily wind power numbers

17.8% of European electricity demand was met by wind energy

COUNTRIES WITH THE HIGHEST SHARES OF WIND IN THEIR ELECTRICITY DEMAND

Wind power share and generation in each country's demand

1. Ireland: 58% = 69 GWh
2. Denmark: 44% = 48 GWh
3. Germany: 43% = 695 GWh
4. Spain: 31% = 247 GWh
5. Lithuania: 28% = 11 GWh
6. United Kingdom: 23% = 215 GWh
7. Portugal: 22% = 37 GWh
8. Netherlands: 20% = 72 GWh
9. Sweden: 19% = 95 GWh
10. Estonia: 18% = 5 GWh

Onshore Wind (GWh) 1,608
Offshore Wind (GWh) 235

Find out more facts about wind power in Europe:
windEurope.org/dailywind
THANK YOU

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