

The Global Market for Offshore Wind Energy

Status Ouo and Market Potentials until 2030

The growing offshore wind energy (OWE) market is in a new phase of development. Firstly, installed capacity increased by over 10 % (1.7 GW) only in the first half of 2017 to over 16 GW installed (worldwide). Secondly recent tenders have resulted in low prices, down to zero bids. The auction for German offshore wind farms which ended in spring 2017 resulted in 0.0 ct/kWh for 3 parks with 1,380 MW - out of 4 parks being tendered.

Offshore wind parks not needing any subsidies (only grid connection) any more are expected to speed up the international market in an impressive and enormous manner. Many countries will now be able to realise a bigger share of renewable energy in their energy mix. This study analyses the future market development until 2030, expecting about 220 GW installed OWE worldwide (best case scenario).

The whole industry will therefore benefit, if it handles the opportunities in the right manner:

Cost reduction potentials

Russia, Vietnam etc.)

- Sector coupling: use of electricity in the heating and transport sectors, using e.g. Power-to-gas
- Storage: storing the electricity produced in offshore wind farms will be a main driver for integration
- Enhanced or new technologies, e.g.
 - New turbine sizes up to 15 MW
 - New foundation structures and technologies
 - New concepts for installation and logistics
 - Leading to new production facilities, enabling serial produc-
- New markets in the latter part of the value chain: operations and maintenance up to repowering or dismantling are fastly

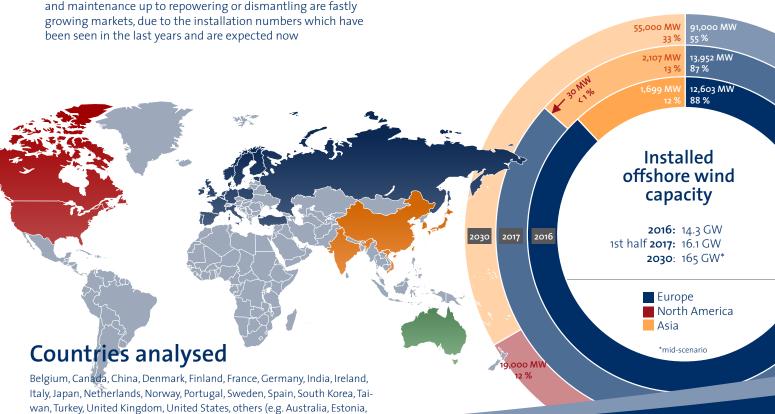
• Emerging or new markets in terms of countries, e.g. Taiwan, Japan, South Korea, USA, but also some European, South American or African countries heading to this form of electricity genera-

Nevertheless there still are a bunch of important challenges and

- Political support framework conditions, especially for
 - Grid connection
 - Integration in the national energy system
 - Further implementation of the "Energiewende"/energy transition – fossil fuel phase-out
- Consolidation and concentration in the industry lead to a rising level of competition
- Rising water depths and distances from the shore will increase costs (capex and opex)
- Rising electricity and energy prices, among others due to CO₃price increase, ETS (emission trading scheme)
- Increasing interest rates
- Delays in technical developments/achievements

The **new** and **now available** edition of "**The Global** Market for Offshore Wind Energy until 2030" analyses on almost 200 pages the rapid pace of the developments in the industry. It provides a current overview and outlook on the market potential in the relevant countries worldwide until 2030.





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