

SUBSIDY FREE RENEWABLES: HOPES, TALES AND THE TRUTH

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Statkraft's New Strategy: Powering A Green Future

MARKET CENTRIC APPROACH:

Finding the best opportunities in renewable energy within each country, across technologies.

OPTIMISE HYDRO-POWER PORTFOLIO



RAMP UP AS WIND AND SOLAR DEVELOPER



GROW THE CUSTOMER BUSINESS



DEVELOP NEW BUSINESS INITIATIVES

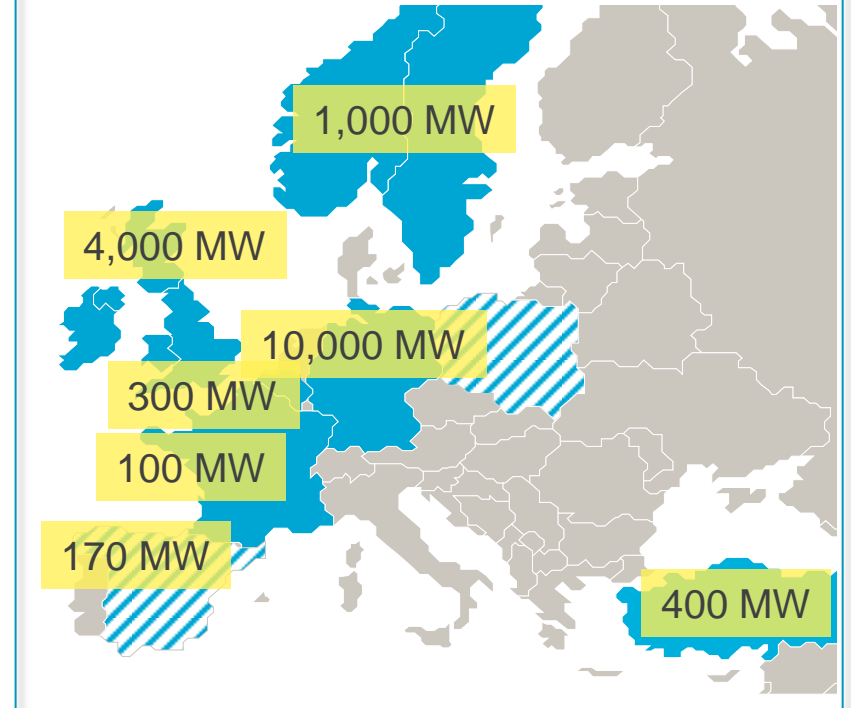


Statkraft is a European leader in PPAs and Route-to-Market Services for Renewable Energy Sources

PPA-Models

- ▶ Short-term PPAs (route-to-market services)
- ▶ Long-term PPAs
 - Complementary PPAs
 - Merchant new-built PPAs
 - Post FIT PPAs (“Ü 20”)

Current Geographical coverage



The HOPE: Results 2nd Offshore Wind Auction



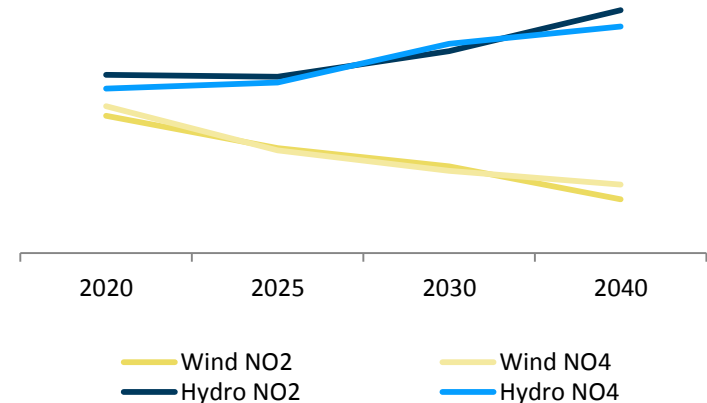
- ▶ In total 1,610 Offshore Wind Capacity was auctioned by German Regulator BNetzA
- ▶ 6 bidders were selected, prices between 0,00 ct/kWh and 9,83 ct/kWh (average 4,66 ct/kWh)
- ▶ Drivers
 - Learning curves reducing Capex and Opex
 - Wind Turbine Size
 - Synergies with other existing offshore windfarms close-by
 - Expected Wholesale Electricity Prices
- ▶ Grid connection of German Offshore Windfarms payed by TSOs and reimbursed via grid costs

In Norway Merchant Wind is driven by good wind sites and low cost of capital



- ▶ We believe onshore wind will be built in Norway on a merchant basis over the next years.
- ▶ Low cost of capital has significant influence.
- ▶ Long term Nordic prices might be capped by onshore wind.
- ▶ While technology costs go down, balancing costs and grid integration will become more costly.

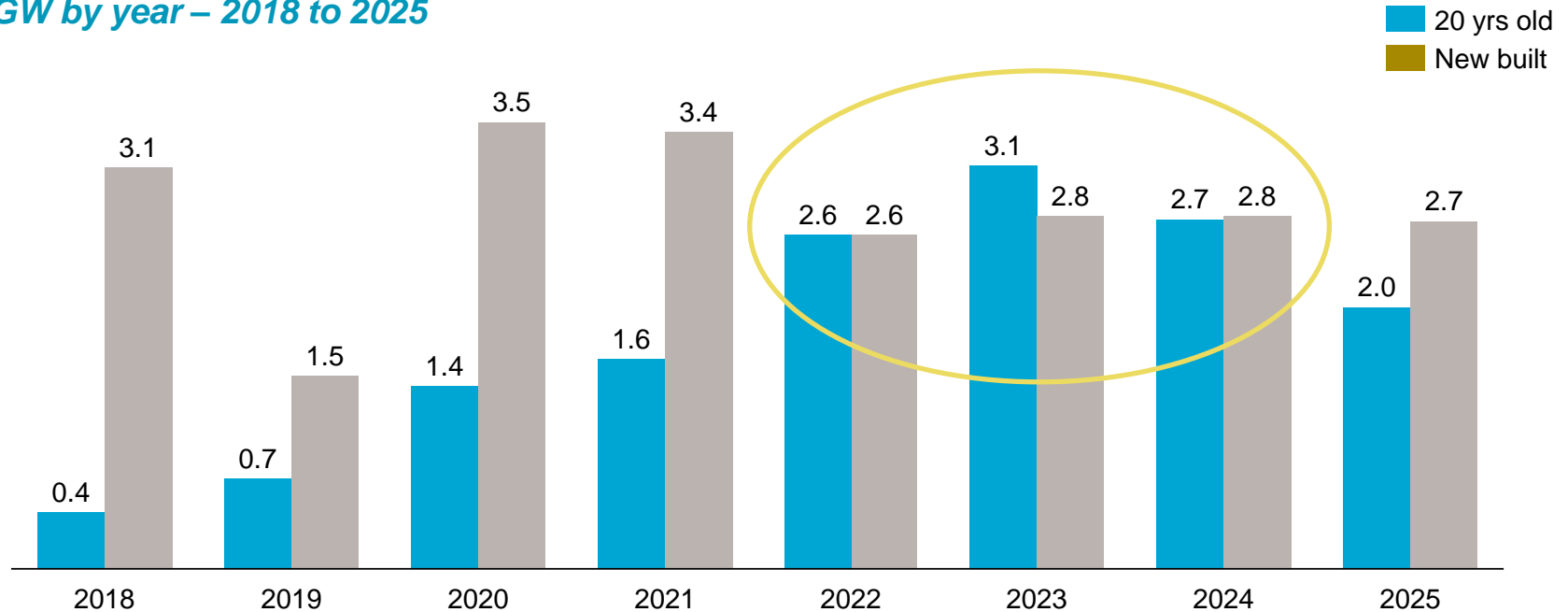
Wind quality factors declining



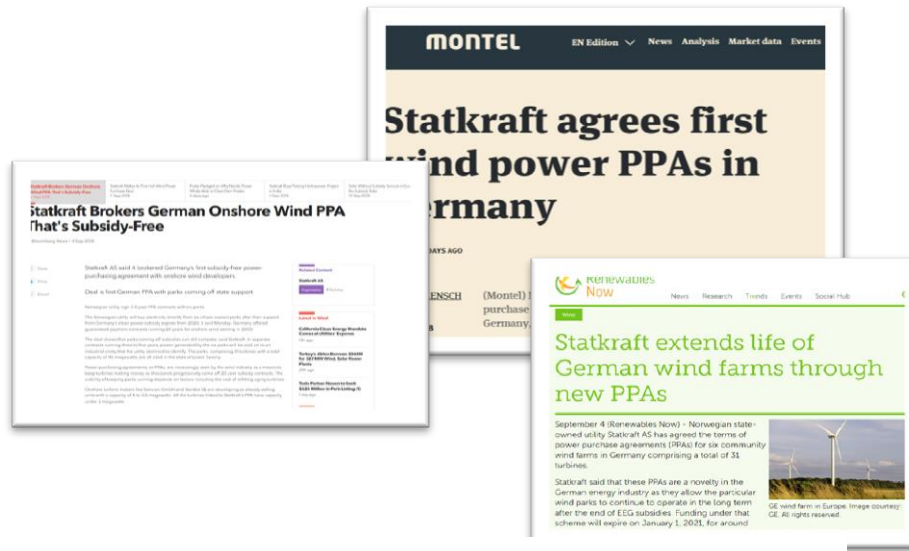
Beyond 2022 Net Growth in Onshore Wind challenged by Windfarms reaching the end of their support scheme



New build vs. 20 yrs old onshore wind
GW by year – 2018 to 2025



Statkraft extends lifetime of German wind farms based on purely market-based PPA terms



Green light for spanish subsidy-free 170 MWp solar plant: BayWa r.e. and Statkraft conclude Power Purchase Agreement

Source: press release Statkraft

- ▶ The PPA is an example for how windfarms can remain online once the support scheme has come to an end.
- ▶ The PPA enables further economic operation of 31 wind turbines for the next years to come.
- ▶ Electricity will be used to supply a large German industrial company without whose commitment the wind farms would have been shut down.
- ▶ Statkraft is able to combine German wind power with power from other RES and by doing so reduces balancing cost.

The TRUTH: Merchant Renewables are a risky business ...

- ▶ For some 20 years RES investments were driven by healthy support schemes
- ▶ Currently there are some RES projects on a merchant, subsidy free basis
- ▶ This requires an offtaker with the willingness to take price risk, as current wholesale electricity markets are not liquid enough nor long-term enough.
- ▶ It is supported by long-term corporate PPAs and interest in “green value” by some customers



THANK YOU



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