

Balansen mellom standardisering og kompleksitet i offshore vind prosjekter

Arve Rettedal, VP Renewables, Equinor Oslo 21.09.2023

Delivering on our strategy

Optimised oil & gas portfolio High value growth in renewables

3.6 M

under Construction

New market opportunities in low carbon solutions

equinor

• Oil and gas - Carbon efficient production

• 2030: Renewables **12-16** GW capacity and potential to produce 35-60 TWh

First Power Dogger Bank

Net zero by 2050

• LCS - 3-5 major hydrogen clusters by 2035



We base decisions on *years* – not news-cycles

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Businessweek

US Editio

Equality Green

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BREAKING: Germany Rakes In EUR 12.6 Billion Through 'Dynamic Bidding' Offshore Wind Auction

CONTRACTS & TENDERS

July 12, 2023, by Adnan Durakovic

Germany's first dynamic bidding process, covering four offshore wind zones with a combined capacity of 7 GW, has generated EUR 12.6 billion in proceeds, according to the Federal Network Agency.

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Energy | Grid & Infrastructure | Exploration & Production | Wind | Clean Energy

Orsted quit German offshore wind auction on price concerns

By Nora Buli

Industries

July 13, 2023 5:02 PM GMT+2 · Updated a month ago

Tech Al Politics

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TROR DET GÅR: Statsminister Jonas Gahr Støre mener det skal la seg gjøre å bygge ut nok ny kraft i Finnmark. Foto: Aurora Ytro

Støre om Melkøya-bråket: Satser alt på vindkraft

Statsminister Jonas Gahr Støre (Ap) lar seg ikke rokke av den massive kritikken mot Melkøya-prosjektet. Men han erkjenner at hans plan er helt avhengig av massiv utbygging av vindkraft – og at det er en risiko.

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REGIONAL REPORTS DRILLING & COMPLETION FIELD DEVELOPMENT SUBSEA GEOSCIENCES PIPELINES PRODUCTION REGIVESSES <u>RENEWABLE ENERGY</u> **bp, Equinor revisit US offshore wind projects power sale agreements** bp and partner Equinor are renegotiating the terms of power supply agreements linked to their giant wind developments off the US East Coast,

bp and partner Equinor are renegotiating the terms of power supply agreements innked to their giant wind developments on the US East Coas according to bp CEO Bernard Looney. Aug. 2, 2023

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Equinor opens world's largest floating wind farm in Norway



Energy | Fuel Oil

Siemens Energy cuts profit outlook on wind turbine woes

By Christoph Steitz and Inti Landauro January 20, 2023 2:27 PM GMT+1 - Updated 7 months ago

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Vestas Warns Wind Turbine Backlog Still Dragging on Earnings

Wealth

Company EBIT swings back to losses during second quarter

Pursuits

Opinion

CEO says Vestas is focused on return to full profitability

Bloomberg

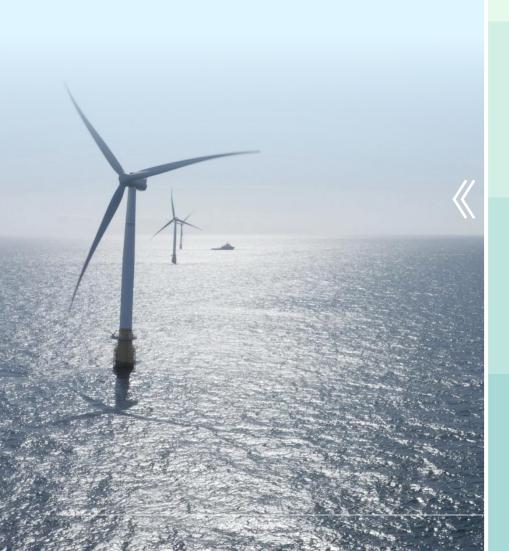
Green

Live Now Markets Economics

FLOATING WIND

4

What does it take?



Transparency and effectiveness in regulatory regimes

Scale to reduce cost

Continue technology development

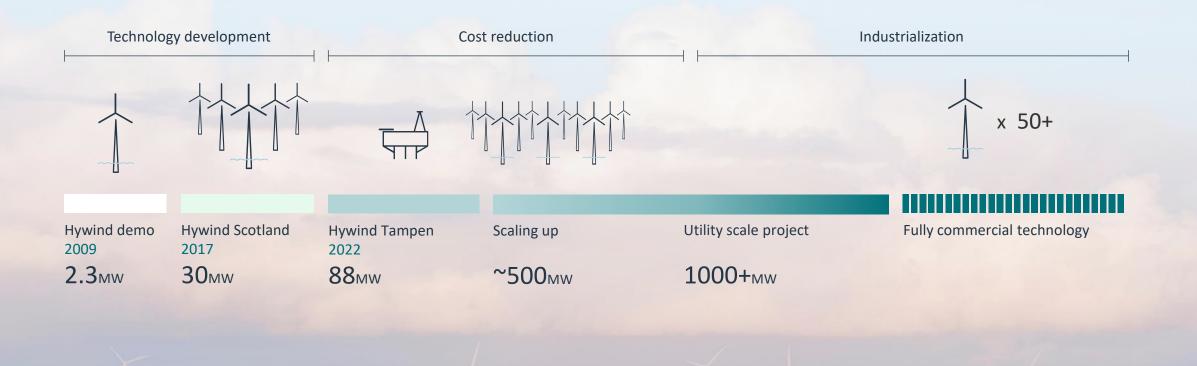
Understanding environmental effects and facilitating for coexistence





FLOATING OFFSHORE WIND

Floating wind is becoming a competitive source of energy





EPCD WHAT WE AIM FOR

The renewable industry poses new challenges for a winning project delivery model



More local

Need to deliver on local customer/market needs, significant front-loading expected



SIEMENS Vestas

Different supplier approach

product innovation, local supply chain, capacity constraints

Competitiveness = effective, improving and shaping project development engine



More commercial risks

power markets, consenting, offtake contracts, project financing – less technical risks



More similarities across projects

"global factory approach", scale and repetition



TECHNOLOGY

Leveraging five decades of oil and gas experience



Safety our first priority Large complex projects and supplier relations

Financial strength & risk management

Leverage local presence & corporate capabilities

Marine operations & maintenance

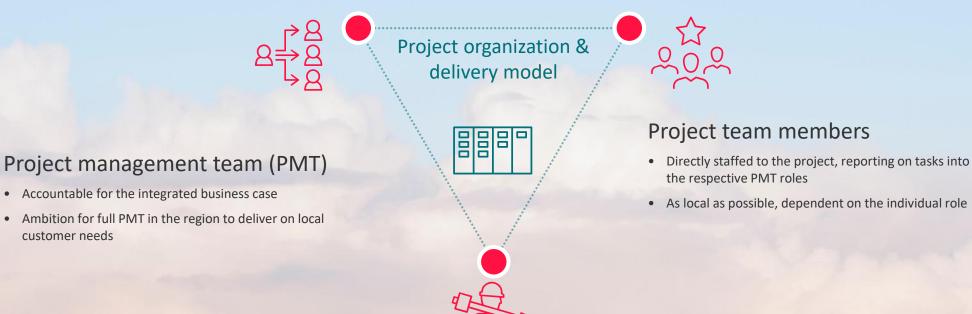
Technology & innovation



EPCD HOW WE WORK

customer needs

Project organizations will look similar as before, but will get stronger support with standardised EPCD deliveries



EPCD deliveries

- Global EPCD resources (e.g. product lines) delivering towards the project team
- Standardised products and approaches as starting point, adjustment to specific project needs



Questions?

Photo: Øyvind Hagen/Statoil



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