

BEST PRACTICE SERIES

Wind power to offshore platforms

Hywind Tampen is the world’s first floating wind farm built specifically to power offshore oil and gas installations, and is now supplying electricity to Equinor’s Snorre and Gullfaks fields in the Norwegian sector of the North Sea. It has a system capacity of 88 MW. It is an important step forward in industrialising solutions and reducing costs for future offshore wind power projects, and acts as a test bed for further development of floating wind, exploring the use of new and larger turbines, installation methods, simplified moorings, concrete substructures and the integration of gas and wind power systems.

Floating power

New power generation: Hywind Tampen, the world's first floating windfarm, powers Equinor's Gullfaks and Snorre production platforms, offshore Norway



PHOTO CREDIT: Karoline Rivero Bernacki / Equinor

★ Benefit

- Power production from 11 (8 MW)
- Reduced use of gas turbines reduces the CO2 emissions by 200 000 tonnes per year
- Wind power meets 35 % of the annual power demand of five platforms

⚙ Implementation

- **2020** Detail design, procurement and preparations
- **2021** Fabrication
- **2022** Assembly, installation, completion and start-up in Q4-2022

☑ Key Learnings

- Hywind Tampen is the world’s first floating wind farm to power offshore oil and gas platforms
- The project will contribute to further develop floating offshore wind technology and reduce the costs of future floating offshore wind farms
- The project investment will be close to NOK 5 billion (US\$456.6 million) and Norwegian authorities have granted funding of up to NOK 2.3 billion. The project will demonstrate a fully integrated gas and renewable power generation system
- The floating wind farm is located around 140km from shore
- The water depth is 260-300 metres
- Power production from the wind farm started in November 2022