NOWITECH

Norwegian Research Centre for Offshore Wind Technology

The objective of NOWITECH is pre-competitive research laying a foundation for industrial value creation and cost-effective offshore wind farms. Emphasis is on "deep-sea" (+30 m) including bottom-fixed and floating wind turbines. Work is focused on technical challenges including a strong PhD and post doc programme:

- Integrated numerical design tools for novel offshore wind energy concepts.
- Energy conversion systems using new materials for blades and generators.
- Novel substructures (bottom-fixed and floaters) for offshore wind turbines.
- Grid connection and system integration of large offshore wind farms.
- Operation and maintenance strategies and technologies.
- Assessment of novel concepts by numerical tools and physical experiments.
- Total budget (2009-2017) is MNOK 320, M€ 41, MUSD 55



Research partners:

- · SINTEF Energy Research (host)
- MARINTEK
- SINTEF Foundation
- Norwegian University of Science and Technology (NTNU)
- Institute for Energy Technology (IFE)

Industry partners:

- · CD-adapco
- · DNV GL
- · DONG Energy
- FDF
- Fedem Technology
- · Fugro Oceanor
- Norsk Automatisering
- Kongsberg Maritime
- Rolls Royce SmartMotor
- Statkraft
- Statnett
- Statoil

Associated research partners:

- DTU Wind Energy
- MIT
- NREL
- · Fraunhofer IWES
- · University of Strathclyde
- TU Delft
- Nanyang Technological University (NTU)
- Michigan Technological University (Michigan Tech)

Associated industry partners:

- Energy Norway
- Enova
- Hexagon Devold AS
- Innovation Norway
- Norwegian Centres of Expertise Instrumentation (NCEI)
- Norwegian Wind Energy Association (NORWEA)
- NVE
- Windcluster Mid-Norway



Established by the Research Council of Norway

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