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 (host)
- Institute for Energy Technology (IFE)
- Norwegian University of Science and Technology (NTNU)

Industry partners:
- CD-adapco
- Det Norske Veritas AS (DNV)
- DONG Energy Power AS
- EDF
- Fedem Technology AS
- Kongsberg Maritime AS
- NTE Holding AS
- SmartMotor AS
- Statkraft Development AS
- Statnett SF
- Statoil Petroleum AS

Associated research partners:
- Technical University of Denmark (DTU Wind Energy)
- Massachusetts Institute of Technology (MIT)
- National Renewable Energy Laboratory (NREL)
- Fraunhofer IWES
- University of Strathclyde
- TU Delft
- Nanyang Technological University (NTU)
- Michigan Technological University (Michigan Tech)

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

CENTRE FOR ENVIRONMENT-FRIENDLY ENERGY RESEARCH

Established by the Research Council of Norway

Contact:
NOWITECH Director John O.G. Tande
john.tande@sintef.no