

NOWITECH

kick-off meeting

24-25 June 2009

Stiklestad hotel
7560 Verdal

NOWITECH

Norwegian Research Centre for Offshore Wind Technology

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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 (2009-2016) is MNOK 320, M€ 38, MUSD 49

Contact:

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Industry partners:

Statkraft
StatoilHydro
DONG Energy
Vestavind Kraft AS
Lyse
Statnett
Umoe Mandal
Aker Solutions
SmartMotor
ScanWind
Devold AMT
SWAY
ChapDrive
Fugro OCEANOR
Vestas
DNV
NTE
TrønderEnergi

Research partners:

SINTEF Energy Research (host)
Norwegian University of Science and Technology (NTNU)
Institute for Energy Technology (IFE)
Norwegian Marine Technology Research Institute (MARINTEK)
SINTEF Materials and Chemistry
SINTEF Information and Communication Technology

National Laboratory for Sustainable Energy at the Technical University of Denmark (Risø DTU)
Massachusetts Institute of Technology (MIT)
National Renewable Energy Laboratory (NREL)
Fraunhofer IWES
University of Strathclyde

Innovation Norway
Norwegian Wind Energy Association (NORWEA)

Wednesday 24 June

0930 Joint transport by bus from Trondheim Airport Værnes to Stiklestad

1030 Registration

1100 **General Assembly**

- Welcome & introduction, John O Tønde, Director NOWITECH
- Pep-talk on NOWITECH addressing organization for successful research by Dr. Per Morten Schiefloe, NTNU, Professor of Sociology and Prof. Torgeir Moan, NTNU, Director Centre for Ships and Ocean Structures

1200 Lunch

1300 **General Assembly continue**

Presentation of work programme by WP leaders

WP0: Management, John O Tønde, SINTEF Energy Research

WP1: Numerical design tools, Roy Stenbro, IFE

WP2: Energy conversion system, A. Knauer, IFE for B. W. Tveiten, SINTEF MC

WP3: Novel substructures, Torgeir Moan, NTNU

WP4: Grid connection, K. Uhlen, NTNU/SINTEF

14.30 Refreshments

15.00 WP5: Operation and maintenance, J. Heggset, SINTEF Energy Research

WP6: Concept validation, P. Berthelsen, MARINTEK

Election of Board

1600 **Board meeting**

1900 Dinner with presentation of Stiklestad and Aker Solutions Verdal.

Thursday 25 June

0830 Registration

0900 **Opening session**

- Welcome & introduction, John O Tønde, Director NOWITECH
- Opening Speech
- Presentations of CEERs on offshore wind; NOWITECH, NORCOWE and CEDREN

1030 Refreshments

1100 **Industry session** - Presentations by Vestas and StatoilHydro on their activities on offshore wind and motivation for participation in NOWITECH

1200 Lunch

1300 **Research session** - Presentations by associate research partners to NOWITECH on their R&D on offshore wind and motivation for collaboration.

- Peter Hauge Madsen, head of wind energy division, Risø DTU
- Dr. Hans-Gerd Busmann, head of Fraunhofer IWES
- Lecturer Olimpo Anayá-Lara, University of Strathclyde
- Prof. Paul Sclavounos, MIT

1445 Joint transport by bus from Stiklestad to Trondheim Airport Værnes

Practical information

Participation is by invitation only and requires pre-registration. Please pre-register before 17 June to randi.aukan@sintef.no.

The General Assembly is open for all participants of NOWITECH, though only formal representatives (one per partner) can vote. The programme for 24 June will be held in Norwegian / Scandinavian. The exception is dinner presentations that are given in English.

The programme for 25 June will be held in English.

Accommodation is available at Stiklestad hotel, phone: +47 74 04 42 00 at NOK 850,- per person per night. Please use reference "Sintef 24-25 June". See www.stiklestad.no for location and further info on the venue (in Norwegian only).

Alternative accommodation is available at

- Verdal hotell <http://www.verdalhotell.no/>
- Stiklestad Park Hotell <http://www.stiklestadpark.no/>

Distance from Stiklestad hotel is about 5 minutes by car.

Please contact randi.aukan@sintef.no for any practical questions.



Established by
the Research Council
of Norway

The Centres for Environment-friendly Energy Research (CEERs) scheme is an initiative to establish time-limited research centres which conduct concentrated, focused and long-term research of high international calibre in order to solve specific challenges in the field of energy and the environment. The centres have been selected via a detailed review process administered by the Research Council of Norway.

Two main assessment criteria formed the basis for the selection of the CEERs; relevance and potential for innovation and value creation, and scientific merit.