



# Research Centres for Environment-friendly Energy Research (FME) NOWITECH final seminar, 22 August 2017

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# The Centre programmes in the Research Council



**The Centres of Excellence scheme (SFF)**  
Centres dedicated to long-term, basic research aimed at enhancing the quality of research.



**The Centres for Research-based Innovation scheme (SFI)**  
Research groups working in close alliances with innovative enterprises.



**The Centres for Environment-friendly Energy Research scheme (FME)**  
Centres which conduct concentrated, focused and long-term research in order to solve specific challenges in the field of environment-friendly energy.

# Centres for Environment-friendly Energy Research (FME)

- *a strong initiative in the energy sector*

- Concentration of the top Norwegian competence in a long-term and concentrated effort of high international standards
- Increase the efforts in areas where Norway can make a difference based on our resources, industry, competence and potential for innovation
- Stimulate cooperation between education, research and industry
- Bridgehead for international cooperation



# The centres have strengthened energy research in Norway

The centres have been active and visible spearheads within their areas.

The midterm evaluation stated that:

*The research at the centres is largely of high scientific quality, with clear potential to achieve international level and recognition*

The centres have become important hubs in international research cooperation.



- More than 2000 scientific publications in journals
- Several «best papers» and «best posters»
- A number of scientists have been awarded prizes

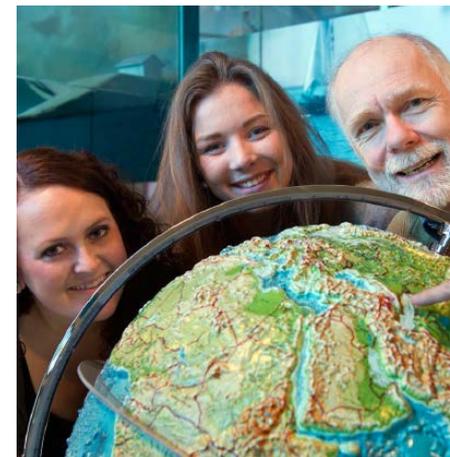


# A lot of candidates ready for research and industry

The education of researchers and master students has been one of the most important tasks of the centers

- High completion rates
- Large activity with summer schools, excursions, seminars etc.
- Industry partners have been engaged in education of students

- More than 200 PhD students have worked in the centres
- A large number of master students has done their MSc thesis in an FME



# Increased cooperation between science and industry

- The FMEs are excellent arenas for long term cooperation between science and industry.
- Strong clusters formed between researchers and industrial partners across disciplines and institutional borders.
- In many centres, the engagement from the industrial partners has increased during the centre period.

## FME – some numbers:

- 130 partners
- 85 user partners
- Total turnover: 2,2 billion NOK
- RCN funding: 1,0 billion NOK
- Industry funding > 0,5 billion NOK



# NOWITECH: looking back .....

2009 – the application:

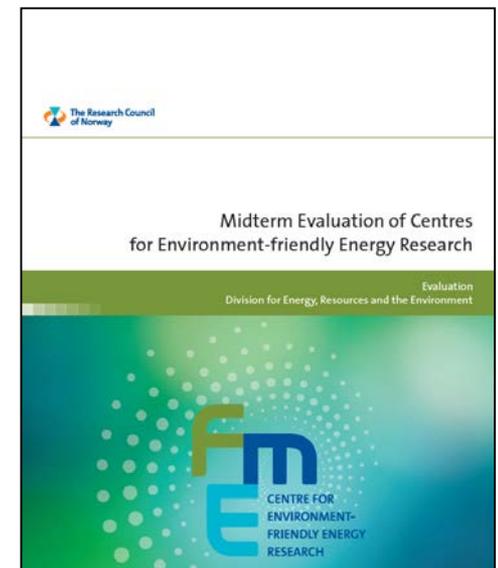
- Huge potential within offshore wind energy: 150 GW expected by 2030 in EU
- The goal: Pre-competitive research laying a foundation for industrial value creation and cost-effective offshore wind farms. Emphasis on cost reduction and deep sea.
- The assessment: Very high quality, mark 6 from both panels (scientific and industrial)

2013 - the midterm evaluation:

- *"NOWITECH has progressed well towards becoming an internationally recognized organisation for research on deep sea wind power, with a uniquely comprehensive research agenda on this topic."*

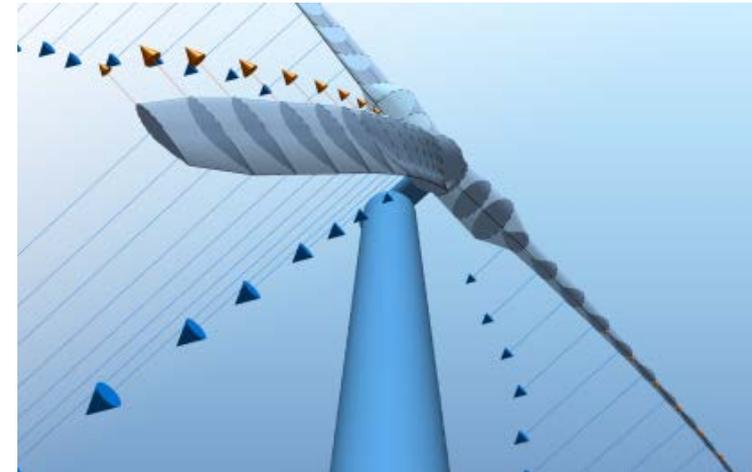


Fig. 1: Floating concepts, from left: HyWind, SWAY and WindSea.



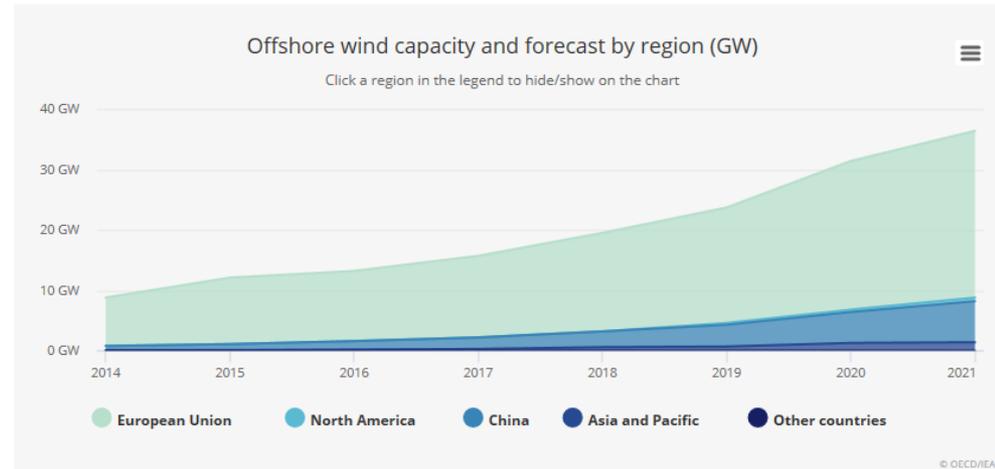
# NOWITECH – some results

- Turnover 340 MNOK
- Education: 25 PhD and 229 MSc
- Increased focus on innovation: 40 innovations with a potential value of more than 5000 MEUR
- Publications: close to 900 – about 25% in journals with peer review
- International cooperation, strong position in EU and Horizon2020



# Looking forward – and utilize the opportunities

- A solid base for further R&D-cooperation between research institutions and industry
- A strong network and visible position in the international R&D community
- An increasing international market with opportunities also for Norwegian actors
- Funding possibilities through the ENERGIX programme (deadlines 6 Sept and 11 Oct.) NOK 500 mill.



 Forskningsrådet

**Stort program energi (ENERGIX)**

FORSIDEN

- Om programmet
- Kontaktpersoner
- Programstyre
- Sentrale dokumenter
- Kalender
- Nyheter**
- > Nyhetsbrev
- > Nyhetsarkiv
- > Videoarkiv

**Stor utlysning til nye prosjekter for miljøvennlig energi**

ENERGIX lyser ut 500 millioner kroner til nye prosjekter med oppstart i 2018. Søknadsfristen er 6. september for forskningsmiljøene og 11. oktober for næringslivet.



Thank you for your attention!

And thanks to  
John Olav Tande  
and  
the NOWITECH management team  
for  
good cooperation and excellent  
centre management through  
eight years!

