

## **Top-level Research Initiative**

## Integration of Large-scale Wind Power

The Nordic countries and the EU have ambitious plans for the further development of wind energy. It is envisaged that 15-20% of the total electricity production in the future can stem from wind energy. The objective of the sub-programme is to promote the development of new, innovative and sustainable forms of wind energy and the integrational aspects connected to wind energy. Further the programme aims to enhance the development of Nordic R&D institutions and businesses within the wind energy field and contribute to promote the Nordic countries in a global context.

There are several areas that need more research, development and innovation connected to large-scale integration of wind energy in the Nordic region. Relevant topics are:

- · Grid aspects
- Power and energy aspects
- · Energy market aspects
- · Operation and maintenance
- Arctic and offshore wind energy
   new initiatives and methods

A call will be launched during October 2009. In this programme there will be a two-stage application procedure. Key activities shall contribute to consolidate and develop the Nordic knowledge base in wind energy technologies. Approximately 30 MNOK is allocated to the call, and all projects are, based on used main instrument, requested to have minimum own and/or external funding.

In this call only Nordic user-driven research projects will be funded. Nordic user-driven research projects are projects with strong user involvement in the knowledge creation and diffusion throughout the project cycle. The rationale is that users and producers of new technologies and systems will produce effective and efficient knowledge creation, adaptation and diffusion through integrated interaction and collaboration. Nordic user-driven research projects can receive maximum 60% funding.



NordForsk Nordic Innovation Centre Nordic Energy Research

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 a major Nordic venture for climate, energy and the environment

The world's major climate and energy challenges demand new knowledge and innovations. The Nordic countries are particularly well placed to contribute to this, due to their high level of education, political will to act, and abundance of natural resources.

The Top-level Research Initiative was initiated by the Nordic Prime Ministers in 2008, and is supported by national institutions and agencies, in particular those financing research and innovation. The initiative will promote research and innovation of the highest level, involving the very best agencies and institutions. Great importance is attached to a close partnership with business and industry to ensure application and utilisation of research results.

The Top-level Research Initiative shall provide a platform for increased international cooperation both within the EU and beyond.

The initiative will last for five years. Calls for proposals begin in the autumn of 2009.

## **Top-level Research Initiative Programmes:**

- 1 Effect Studies and Adaptation to Climate Change
- 2 Climate Changes' Interaction with the Cryosphere
- 3 Integration of Large-scale Wind Power
- 4 Sustainable Biofuels
- 5 Nanotechnology and Energy Efficiency
- 6 Carbon Capture and Storage

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