



Research infrastructure enabling excellence in research September 21st, 2016

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The Research Council of Norway





- The National Funding scheme for infrastructure
- The Road map for Research Infrastructures
- The RCN Centre schemes and Research infrastructure



The Research Council of Norwaya key player in Norwegian research

- Covers all science and technology fields
- Budget of 8 billion NOK
- Research funding
- Adviser to the government
- Networking and dissemination
- International cooperation



The National Funding Scheme for Research Infrastructures (Ris)

The objective of the scheme is:

"to provide researchers with the equipment they need in order to perform high quality science and efficiently meet the needs of the business sector for high-calibre research.

In addition, the initiative aims to enhance the Norwegian research community's international reputation as a provider of outstanding research infrastructure."

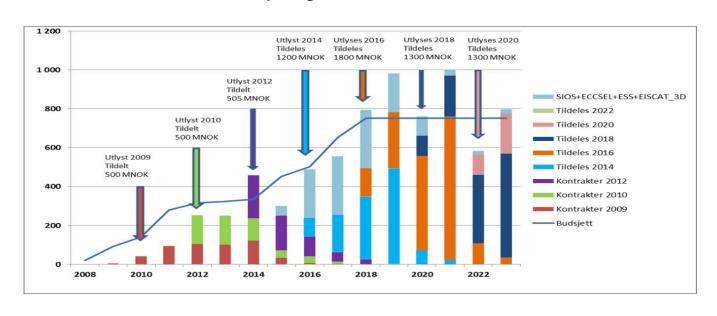




The National Funding Scheme for Research Infrastructures (Ris)

- A separate item in the national budget, with an allocation of 485 MNOK in 2016
- Four open calls in 2009, 2010, 2012 and 2014
- 2,9 billion NOK has so far been allocated to 115 infrastructure projects

Deadline 2016-call: October 12th





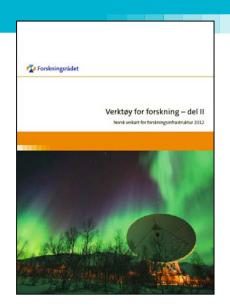
Evaluation process

- Open call and projects selection is based on
 - scientific criteria (evaluated by international experts)
 - strategic criteria (evaluated by the RCN administration)
- The assessment of grant proposals leads to
 - selection of projects for funding
 - selection of projects for inclusion on the Norwegian Roadmap for Ris



Norwegian Roadmap for RIs

- The roadmap is to present large-scale projects in which the RCN recommends investing
- Selection is based on stringent criteria:
 - the infrastructures must be nationally-oriented
 - the proposal has been assessed as outstanding, both in terms of scientific quality and strategic orientation
- Includes projects on the ESFRI Roadmap in which Norway has entered into agreements or has clearly signalled its desire to participate





Energy projects on the roadmap



ECCSEL – European Carbon Dioxide Capture and Storage Laboratory ESFRI project, coordinated by NTNU, RCN funding 200 MNOK



Norwegian Zero
Emission Building
Laboratory
RCN- funding 63 MNOK
2015



National Smart Grid Laboratory RCN funding 28,6 MNOK 2013



Norwegian laboratory for silicon-based solar cell technology RCN funding 30 MNOK 2015



NorwegianBiorefinery Laboratory RCN funding 37,5 MNOK 2013



Norwegian Fuel Cell and Hydrogen Centre RCN funding 26 MNOK 2015



The Offshore Boundary Layer Observatory (OBLO) RCN funding 21MNOK 2013



The research infrastructure itself, will not give excellent research,

..... but excellent infrastructure in combination with excellent scientists will lay a foundation for excellent research.





Centre schemes

Funding of time-limited research centres characterized by longterm research efforts of a high quality. Researcher training is an important aspect. Innovation-oriented centres (SFI and FME) have both research partners and industrial partners.





21 centres dedicated to long-term, basic research aimed at enhancing the quality of research.



The Centres for Research-based Innovation scheme (SFI)

24 research groups working in close alliances with innovative enterprises.



The Centres for Environment-friendly Energy Research scheme (FME)

11 centres which conduct concentrated, focused and long-term research in order to solve specific challenges in this field.



The FME scheme – objectives

The overall objectives of the FME scheme is to

- help to solve key challenges in the energy sector,
- generate solutions for the low-emission society and
- enhance the innovation capacity of the business sector.

Through:

 Long-term R&D-activity in close collaboration between research institutions, industrial companies and other user-groups.









Centres for Environment-friendly Energy Research (FME)

- 2009 2017:
 - 8 centres technical
 - Total annual RCN-funding 125 MNOK
- **2011** 2019:
 - 3 centres within social sciences
 - Total annual RCN-funding 24 MNOK
- 2016/17 2024:
 - 8 centres technical
 - Total annual RCN-funding 160 MNOK









Centre for intelligent electricity distribution – CINELDI

Centre for an Energy Efficient and Competitive

Industry for the

Future - HighEFF



Mobility Zero Emission Energy Systems MoZEES

Norwegian CCS
Research Centre
NCCS

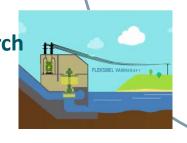






Research Centre for Sustainable Solar Cell Technology

Norwegian Research
Centre for
Hydropower
Technology
HydroCen







Norwegian Centre for Sustainable Bio-based Fuels and Energy Bio4Fuel

The Research Centre on Zero Energy
Neighbourhoods in Smart Cities – ZEN Centre



FME CINELDI

RI National Smart Grid Laboratory







FME MoZEES

RI Norwegian Fuel Cell and Hydrogen Centre



RI ECCSEL





FME Solar Cell Technology

RI Norw. Lab. for silicon-based solar cell techn.









FME Bio4Fuel

RI Norwegian Biorefinery Lab.

FME ZEN Centre

RI ZEB Lab









Excellent research

of

Great value to industry and society at large!