

The Nordic Top-level Research Initiative and Green Growth

Rolf Annerberg

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Top-level Research Initiative

Background Facts

- Initiated by the Prime Ministers to constitute a central, coordinated Nordic effort in research and innovation
- To find solutions to the great global challenges of climate, energy and environment
- Six thematic programs dealing with effects of climate change and solutions: societal adaptation, new energy solutions, technological development and innovations

Research Questions being Addressed (1/3)



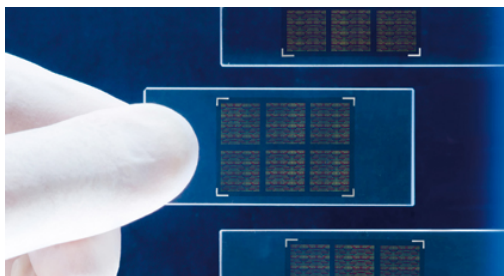
Effect studies and adaptation to climate change

Impacts of climate change, and the adaptation needs of the society as well as new opportunities



Interaction between climate change and the cryosphere

Science driven questions of high interest to society, science, industry and/or infrastructure



Energy efficiency with nanotechnology

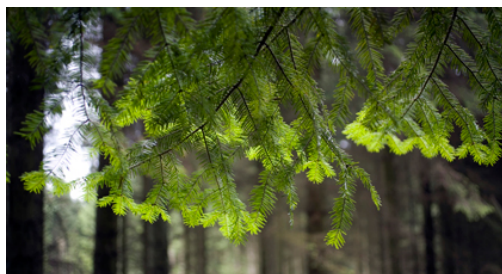
Future sufficient and sustainable energy systems in the transport sector, electricity production and utility

Research Questions being Addressed (2/3)



Integration of large-scale wind power

Focus on grid issues, energy balances and energy markets issues



Sustainable bio-fuels

Renewable bio-fuels from non-food resources such as wood and agricultural residues



CO₂ – capture and storage (CCS)

Coordinate research and innovation and exchange of experience among Nordic countries to avoid manifold investments in the same themes



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Platform for Nordic collaboration

- Five years economic commitments from each of the Nordic countries agreed on governmental level and additional contribution from the Nordic Council of Ministers and the Nordic institutions
- A cross-sectorial Management Board (MB) representing stakeholders/main financiers charged with overall responsibility for the initiative (15 members)
- Total budget 50 MEUR over five years; in addition, projects generate the same amount of funding from other sources

Main Results – So far

- More than 30 high-quality R&I collaborations launched
 - Six Nordic Centres of Excellence on Climate Change
 - A Nordic Competence Centre for joint research-industry cooperation on CCS
 - 10 R&D projects on Energy issues: Integration of Large-Scale Windpower, Sustainable Biofuels, and Nanotechnology
 - Several extensive networks in Climate and Energy for researchers, private and public sector

TRI within the NCM Strategy for Green Growth

- **Working Together on Education, Training and Research for Green Growth**
 - TRI is based on commitment from the national institutions and research and innovation sectors, especially funding bodies
 - Partnership with business and industry is heavily weighted in order to ensure that the research findings have practical applications
 - Boosting Nordic R&D into green growth will involve building on TRI and the experiences gained during it – in particular, taking into account the universities in the Region, which constitute a major resource in this area

TRI experiences to Green growth (1/2)

- A holistic approach towards finding new solutions to great challenges:
 - TRI has created a new platform for Nordic cooperation on climate, energy and the environment, bringing together central actors in research and innovation with participation of both big industry and SME
- Strong national anchoring creates economy of scale and activities, which can result in long-term progress:
 - Nordic Centres of Excellence in Climate change research and Competence Centre in CCS are good examples of activities with potential for continuation

TRI experiences to Green growth (2/2)

- True interdisciplinary approach makes it possible to define the problems:
 - This includes both merging social sciences/humanities with natural sciences and technology, as well as academia-industry-public sector cooperation
- Strong political incentives ensure fast progress:
 - TRI made policy to action within two years time, and according to evaluation halfway through the programme period is well on its way to meeting most of the goals of the programme

TRI possible development towards Green growth?

- Further development of relevant activities in one or several of the thematic sub-programmes
 - Recent mapping shows that all thematic programmes include activities relevant to Green growth



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Thank you for your attention!

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