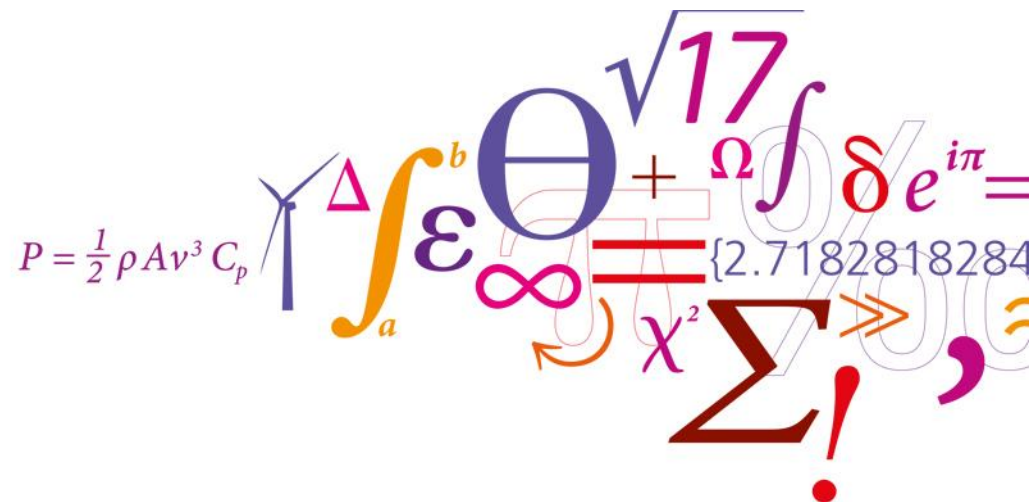


NER Flagship Projects on Energy Research

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Project coordinator



Four challenges for the Nordic Energy System

1. Infrastructure

1. Integration in electricity infrastructure
2. Market design and greater shares of variable generation
3. Balancing variable electricity generation with heat

NER Strategy 2015-18

Challenges for the Nordic Energy system

2. Transportation fuels and biomass

1. Sea, air and road
2. Global sea trade
3. Agriculture and commercial sectors
4. Advanced biofuels

NER Strategy 2015-18

Challenges for the Nordic Energy system

3. Energy efficiency

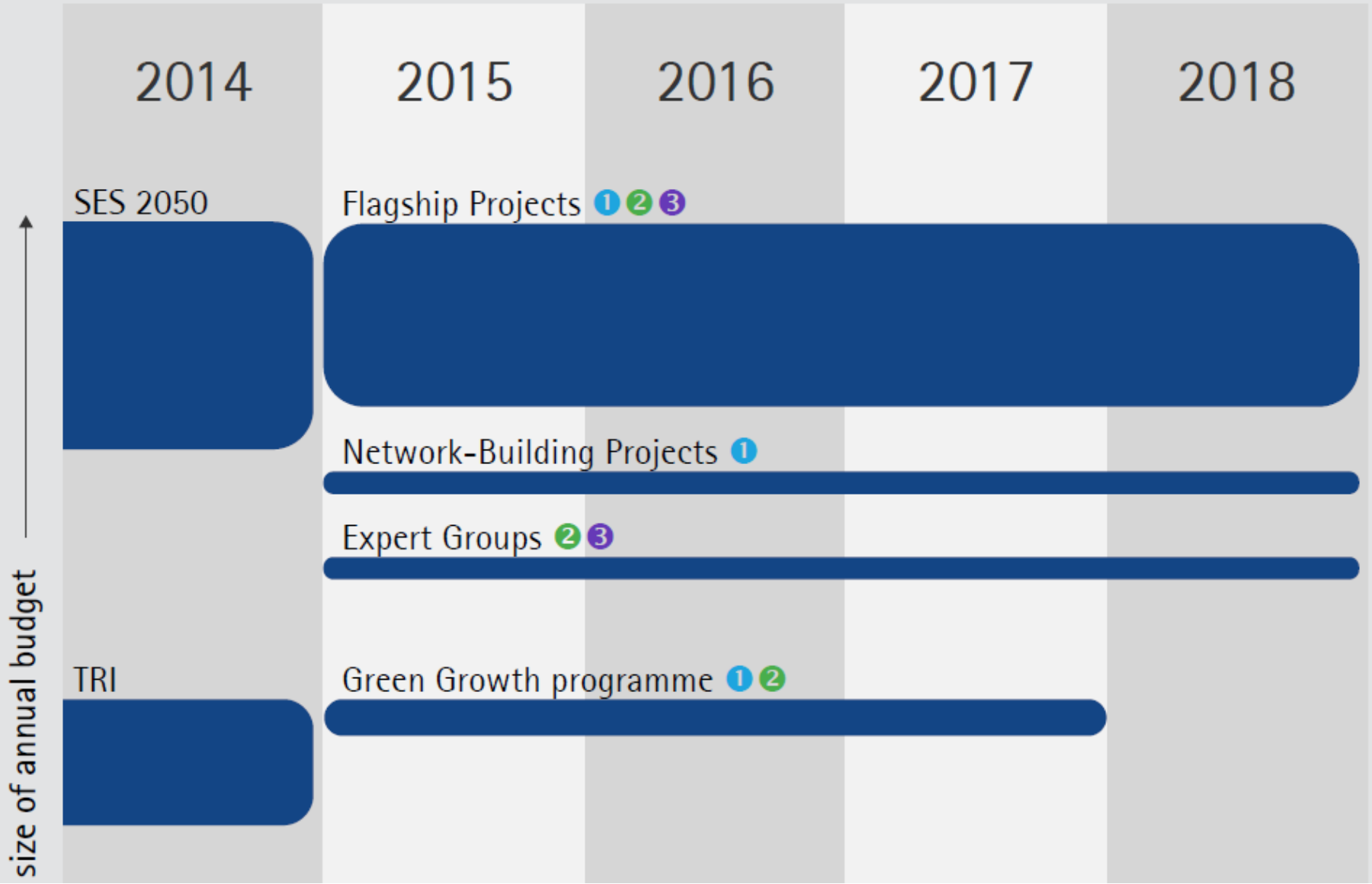
1. Buildings
2. Energy intensive industry
3. Smart energy networks

Challenges for the Nordic Energy system

4. Decarbonisation of energy-intensive industry

1. Reduction of process related emissions in cases where renewable energy cannot solve the problem
2. Carbon capture
3. New processes

NER instruments



Flagship projects

- 80% of budget of 80 mill. NOK
- Research projects involving 3 or more Nordic countries
- Small number of large projects
- Call launched 8 December – pre-proposal 19 Feb 2015
- Press release 1 December: The Nordic ministers approve the Strategy and underline "continued collaboration on the Integration of the Nordic electricity markets"

Thematic focus

The thematic focus of the Flagship Projects will be determined by the project proposals that successfully receive funding, not by the strategy or call text. In addition to criteria for scientific quality, the two-stage call text will require that pre-proposals fulfil detailed criteria based on the three principles of the strategy: Nordic added value; System perspective; and Politically relevant research results.

Projects will have a greater focus on delivering mid-term results, a focus that may be reinforced by a staggered funding format, the details of which will be determined when planning the programme. Industry involvement and co-financing will be sought. A share of Nordic Energy Research's direct research funding is earmarked for the integration of researchers from the Baltic Sea region. Half of these earmarked funds may be distributed through this instrument.

Core principles for evaluation

Principle 1. Nordic added value

- Activities should provide clear and explicit additionality to activities already supported by national or EU funding.
- Limited Nordic resources should be focused where they can make a difference.
- Activities should address uniquely Nordic challenges common to at least three countries in the region.
- Activities should enhance Nordic integration and facilitate network-building and information exchange.

Core principles for evaluation

Principle 2. System perspective

- Activities should address challenges at the system level, and where feasible, address broader aspects of a sustainable energy system such as competitiveness and societal impacts.
- Activities should be multidisciplinary where needed, covering natural sciences, economics, social sciences, energy system modelling, or analysis of markets and regulatory frameworks as required in order to solve the targeted challenge.

Core principles for evaluation

Principle 3. Politically relevant

- Activities should address a limited number of critical challenges that are central in meeting national energy and climate goals.
- Research projects and results should be disseminated in a way that is tangible, understandable and interesting to a broad range of stakeholders, including the Ministers of energy and industry.
- Nordic cooperation should bring visibility to the work of research participants by establishing relevant partnerships with influential organisations and effectively publishing project results.



DTU Wind Energy