Industrial development and export opportunities for Nordic energy industry

A sub-project to Nordic Energy Perspectives,
with funding from Nordic Energy Research

Task 5:
Cooperation with the GoReNEST project

Cooperation with the GoReNEST project

Two joint workshops during 2008

March, 2009

Nordic Energy Perspectives

Preface

Nordic Energy Perspectives (NEP) is an interdisciplinary Nordic energy research project with the overall goal of demonstrating means for stronger and sustainable growth and development in the Nordic countries.

NEP analyses the national and international political goals, directives, and policy instruments within the energy area, as well as their influence on the Nordic energy markets and energy systems and the infrastructures and institutional structures. NEP aims at clarifying to decision-makers the consequences of political and strategic decisions for politicians, energy actors and the public. The project is to promote a constructive dialogue among researchers, politicians, authorities and actors on the energy markets. For further information about the project, please visit: *www.nordicenergyperspectives.org*. This series of reports are the second reporting from the second phase of the project. The following intermediate and final reports are now presented:

Synthesis report, March 2009:

- Second NEP2 synthesis report *(Responsible: Peter Fritz, Håkan Sköldberg, Bo Rydén)*

Final reports, March 2009:

- Widened view of energy efficiency and the resource management *(Responsible: Bo Rydén)*
- Technology options for a low CO_2 energy system *(Responsible: Tiina Koljonen)*
- Wood markets and the situation of the forest industry in the Nordic countries *(Responsible: Per Erik Springfeldt)*

Intermediate reports, March 2009:

- Reference and policy scenarios *(Responsible: The NEP model group)*
- Global scenarios *(Responsible: Janne Niemi)*
- Biomass market and potentials *(Responsible: Tiina Koljonen)*
- Nordic perspectives on the EU goals relating to CO_2, renewable energy and energy efficiency *(Responsible: Thomas Unger, Bo Rydén)*
- Prominent strategies for environmental sustainability in the stationary energy sector *(Responsible: Anders Sandoff)*
- The future of the Nordic district heating *(Responsible: Monica Havskjold, Håkan Sköldberg)*
- Trade within the RES directive and related power interconnection issues *(Responsible: Berit Tennbakk)*
- Natural gas in the Nordic countries *(Responsible: Peter Fritz)*

And (March 2009):

- Reports and intermediate report to Nordic Energy Research on task 1, 2, 3 and 5

Oslo, March 2009
The NEP Research Group

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Introduction and summary

Nordic Energy Perspectives (NEP) is an interdisciplinary Nordic energy research project with the overall goal of demonstrating means for stronger and sustainable growth and development in the Nordic countries. The Nordic energy systems are the point of departure, seen from a European and a global perspective.

This sub-project to NEP, with funding from Nordic Energy Research, is focused on industrial development and export opportunities for Nordic energy industry. Four tasks will be analysed:

1. Sustainable development in the Nordic countries – impact of different energy carriers and energy conversion alternatives, based on model calculations;
2. Sustainability driven strategies and export opportunities for Nordic energy industries and other companies in the energy field;
3. Quantification of the different export markets for knowledge/products in the field of climate change and sustainable development;
4. Transfer of know-how and technologies and problems related to this – with special focus on bio-energy.
5. NEP will also co-operate with the project GoReNEST. If possible, the GoReNEST-results will be used and further developed in the NEP project

Cooperation with the GoReNEST project

NEP has had two joint workshops with the project Governance and Research of Nordic Energy System Transition (GoReNEST, NEF-application in August 2007), which is focused on improving the understanding of processes supporting the effective transition towards sustainable energy systems and solutions.

The aim of the GoReNEST-project is:

- to develop an analytical framework for the Nordic governance of energy system transition,
- to analyse Nordic research in support of the governance of energy system transition,
- to explore governance and funding models and practices for energy system transition,
- to increase the awareness of energy transition perspectives, in particular related to the use of energy models,
- to support and engage Nordic actors to take advantage of emerging energy and climate related opportunities as well as to participate proactively in the implementation of the Strategic Energy Technology Plan for Europe and other international climate and energy initiatives.

During these workshops, in which both the NEP stakeholders and the NEP researchers were involved, we evaluated if the GoReNEST-results could be used and further developed in the NEP project, e.g. to investigate the funding models and practices for energy system transition.

Our conclusion was that this is not feasible. The main reasons are that the GoReNEST results are outside the scope of the research focus in NEP and that the GoReNEST findings are too theoretical for an applied research project like NEP. The GoReNEST results will therefore not be used and further developed in the NEP project.

The programmes for the two joint workshops are given on the following pages. The first workshop in Helsinki in September 2009 was an internal research-group workshop. The second, in Copenhagen in October 2008, was open also for stakeholders in both projects. The participation list from the second workshop is also given below.

NEP-GoReNEST research workshop in Helsinki

Programme

Time		Start: 24.9.2008 at 12.00 End: 25.9.2008 at 14.00	
Place		VTT Technical Research Centre of Finland, Espoo VATT Government Institute for Economic Research, Helsinki	
Agenda	**Wednesday 24.9.2008 at VTT**		
	1	Welcome & agreement of the agenda (Bosse, Tiina)	12.00-12.15
	2	Lunch	12.15-13.00
	3	Presentation of the GoReNEST project (Annele) - Discussion around co-operation possibilities - Decisions	13.00-15.00
	4	Workplans for the fall 2008 A: Markets & infrastructure (Berit, Peter, Monica) B: CO_2 reduction, renewables, … (Tiina, Juha, Esa) C: Energy efficiency (Bosse, Raili) D: Security of supply (Peter) E: Scenarios (Per-Erik?) Co-operation with GoReNEST ??	15.00-18.00
	5	Dinner at VTT (sauna is also heated)	18.00
	Thursday 25.9.2008 at VATT		
	1	Agreement of the workplans (open for the Finnish financiers)	09.00-11.00
	2	Workshop in Copenhagen - Presentations to be agreed - GoReNEST	11.00-12.00
	3	Lunch	12.00-13.00
	4	Next steps and other business - Project meeting in Copenhagen - First deadlines for the reports	13.00-14.00
	5	The meeting ends	14.00

The projects ”Nordic Energy Perspectives” (NEP) and “Governance and Research of Nordic Energy System Transition” (GoReNEST)

Program

Workshop

and discussion about up-to-date energy issues

When?

Thursday, 23 October 2008, 10.00-15.30

Where?

Copenhagen, Nordic Council of Ministers office, Store Strandstræde 18

Program

10.00	Nordic energy research and governance of energy system transition, including “a framework for Nordic governance of energy system transitions”. *Annele Eerola, VTT/GoReNEST*
	Industrial development and export opportunities for Nordic companies in the energy field *Anders Sandoff and Gabriela Schaad, School of Business, University of Gothenburg* - Sustainable strategies within the stationary energy sector, case study results - Challenges and opportunities within the biomass sector, sustainability driven business models - Governance and funding of clean technologies within the energy sector, models and practices
	Nordic perspectives on the EU 20% targets related to CO_2 reduction, renewables and energy efficiency by 2020, a few examples of the NEP model results. *Thomas Unger and Bo Rydén, Profu*
	Discussion, based on the GoReNEST framework for Nordic governance of energy system transitions
12.15	Lunch
13.15	Electrical vehicles and the impact on Nordic power demand, *Göran Koreneff, VTT*
	A “business as usual” scenario: results from 6-7 NEP global and Nordic energy models, *Peter Fritz and Per-Erik Springfeldt, EME Analys*
	Trade within RES-directive, interconnections in the North European power system, etc., *Berit Tennbakk, ECON Pöyrö*
15.30	Workshop ends

Information?

The workshop is open for all financiers and related partners of the projects.

For further questions about the workshop please contact: Profu +46 (0)31-720 83 90

For information about the NEP project, please visit: www.nordicenergyperspectives.org
For information about the GoReNEST project, please contact: Annele.Eerola@vtt.fi

Why should I attend?

An important aim for the workshop is to give the researchers feedback on their ongoing research work. Therefore your participation is of great importance.

Participants list: NEP and GoReNEST

Workshop and discussion about up-to-date energy issues, October 23, 2008, Copenhagen

Bender, Ann-Sofie	Nordiska Ministerrådet
Clemmesen, Frans	Danish Energy Association
Eerola, Annele	VTT
Engström, Lisa	E.ON
Fritz, Peter	EME-Analys
Grenaa Jensen, Stina	Danish Energy Association
Havskjold, Monica	Xrgia
Koljonen, Tiina	VTT
Koreneff, Göran	VTT
Larsson, Erik	Svensk Fjärrvärme
Montin, Stefan	Elforsk
Niemi, Janne	VATT
Nygren, Nils	Fortum
Rozite, Vida	Nordic Energy Research
Rydén, Bo	Profu
Sandoff, Anders	Handelshögskolan, Göteborg
Schaad, Gabriela	Handelshögskolan, Göteborg
Sköldberg, Håkan	Profu
Slungård, Ingrid	Enova
Springfeldt, PerErik	EME Analys
Tennbakk, Berit	ECON Pöyry
Unger, Thomas	Profu
Westin, Paul	Swedish Energy Agency
Wiborgh, Hans-Erik	Fortum Portfolio Management & Trading
Wigdahl, Tom	EBL-kompetanse AS
Wärnberg, Maria	Näringsdepartementet
Östman, Beata	E.ON