## **New Nordic Energy Research**

# Adding Value to National Programs

Seminar, by invitation only 25 October 2018, 09:30 – 16:00 Swedish Ministry of the Environment and Energy Malmtorgsgatan 3 Stockholm, Sweden



## **Program**

Seminar moderator: Bo Diczfalusy, Senior Adviser at Nordic Energy Research

- 09:30 10:00 Coffee and registration
- 10:00 10:10 Welcome address by Anna Törner, Head of Unit, Ministry of the Environment and Energy, Sweden
- 10:10 10:20 Short introduction by Hans Jørgen Koch, Director of Nordic Energy Research

The aim of the seminar is to initiate a discussion on the added value and benefits of increased Nordic cooperation within Nordic stronghold areas in energy research; to invite stakeholders to discuss and assess ideas for new joint Nordic research initiatives within Nordic stronghold areas; and to define an appropriate process for further in-depth assessment that can be translated into proposed joint Nordic research initiatives.

Background: The Nordic energy minister meeting in Lund on 22 May 2018 mandated that Nordic Energy Research to propose roadmaps for

- creating a 67 MEUR Nordic research and demonstration program promoting Nordic positions of strength,
- · using Mission Innovation to create and reinforce Nordic positions of strength, and
- setting up a Nordic PhD program within energy.

This seminar will present and review initial ideas for a possible 67 MEUR research and demonstration program based on Nordic preparatory meetings, the recommendations in the Ollila report and the new Nordic Energy Research strategy.

10:20 – 10:40 Presentation of added value of joint Nordic research programs – success stories and financing models

Presenters:

Eivind Hovden, NordForsk

Tore Duvold, Innovation Fund Denmark

Aage Stangeland, The Research Council of Norway

Examples on completed Nordic research programs and associated financing models applied.

10:40 – 11:05 Reflections by decision makers in Nordic energy research councils on added value of Nordic energy research cooperation

Panellists:

Tore Duvold, Innovation Fund Denmark

Reko Leino, Academy of Finland

Guðni A. Jóhannesson, Orkustofnun (Iceland)

Rune Volla, The Research Council of Norway

Josephine Bahr Ljungdell, Swedish Energy Agency

Directors and high-level officials from the Nordic research councils will give their views on the key elements needed to increase Nordic added value in joint energy research. Focus will be on financing, organisational models and structures.

#### 11:05 – 12:00 Initial ideas for joint energy research initiatives – Presentations by national research councils

Presenters:

Saila Seppo, Academy of Finland & Ilkka Homanen, Business Finland Niels Langvad, Innovation Fund Denmark Ane Torvanger Brunvoll, Research Council of Norway Guðni A. Jóhannesson, Orkustofnun Josephine Bahr Ljugdell, Swedish Energy Agency

Initial thematic research program ideas will be presented by representatives from Nordic countries. Presentations will be short and stimulate group discussions following the lunch break.

#### 12:00 – 12:30 Reflections on the ideas offered by energy research experts

Panellists:

Lene Mostue, Energi21 Guðni A. Jóhannesson, Orkustofnun Tomas Kåberger, Chalmers University of Technology Tuula Mäkinen, Technical Research Centre of Finland Jacob Østergaard, Technical University of Denmark Tejs Vegge, Technical University of Denmark

This panel will reflect upon pros and cons of different financing and organisational models that have been presented. They will also comment on the initial thematic ideas on research initiatives and give their views on what areas that might benefit the most of Nordic collaboration.

#### 12:30 - 13:15 Lunch

## 13:15 – 14:30 Group discussions of initial ideas involving stakeholders from all the Nordic countries, supported by the high-level energy research experts

The seminar participants will be subdivided into groups focusing on the heading of the seminar, i.e. how to achieve added value to national energy research programs through new joint Nordic energy research. Discussions will cover both financial and organisational perspectives and thematic initial ideas of Nordic research. Questions for the group discussions:

- What are the preferred financing and organisational models?
- Are the presented thematic ideas the most suitable areas for joint Nordic energy research collaboration? Are there other strong initiative candidates?
- How could Nordic collaboration contribute to adding value to national programs?

#### 14:30 - 15:00 Coffee

#### 15:00 – 15:45 Break out group presentations from the group reviews

Conclusions and recommendations will be presented by the respective groups.

#### 15:45 – 16:00 Conclusions and closing remarks by Hans Jørgen Koch

To the extent that the seminar identifies areas with a potential for enhanced Nordic collaboration, a proposal on continued work towards detailing initiatives will be given.

The main recommendations of this seminar will be summarized and presented in a report at the Nordic Energy Ministerial meeting in June 2019.



## **Speaker profiles**



**Bo Diczfalusy** is senior adviser at Nordic Energy Research (NER). Prior to joining NER he was Director of the Directorate of Sustainable Energy Policy and Technology at the International Energy Agency (IEA). He has served as Director-General for Energy and Head of the Energy Division of the Swedish Ministry of Enterprise, Energy and Communications, and was the Swedish representative to the IEA Governing Board from 2003 to 2009.



**Anna Törner** is Head of Unit Sustainable & Innovative Energy Systems, in the Ministry of the Environment and Energy, Sweden. She holds two Masters Degrees focused on Environmental studies from the International Institute for Industrial Environmental Economics (IIIEE) and International Economics from Lund University.



Hans Jørgen Koch is the head of Nordic Energy Research. In the periods 1982–1994 and 2002–2014, Mr. Koch worked in the ministries responsible for energy issues in Denmark. He was director general, deputy permanent secretary of state, and several times acting minister. In 1994–2002, Mr. Koch was director on energy efficiency, renewable energy and research, development and deployment in the IEA.



**Eivind Hovden** is Organisation Manager at NordForsk. He holds a PhD from London School of Economics and Political Science and before joining NordForsk he was Director of the Department of Welfare and Education at the Research Council of Norway.



**Dr. Aage Stangeland** is a Speical Adviser at the Research Council of Norway. He is the Programme Coordinator for the CLIMIT programme, Norway's program for funding RD&D within CO2 Capture and Storage (CCS). His career before joining the Research Council covered both research, industry and Bellona, an environmental NGO.



**Niels Langvad** is Scientific Officer in Innovation Fund Denmark. He has a Material Science degree and an MBA from Danish Technical University. Mr. Langvad has more than 20 years' experience from industrial research and development including fuel cells and biofuels, and is an experienced manager of large international research and development projects. From 2002 to 2006 Mr. Langvad served as Investment Manager in the VC Clean Tech Fund "New Energy Solutions".



**Tore Duvold** serves as Executive Vice President at Innovation Fund Denmark. Mr. Duvold has been Senior Vice President for New Product Discovery at LEO Pharma A/S since July 2011. Mr. Duvold served as Vice President of Discovery of LEO Pharma from 2004 to July 2011. He joined LEO Pharma in 1997.

## **Speaker profiles**



**Dr. Reko Leino** is a member of the board of the Academy of Finland, and Professor of Synthetic Organic Chemistry at Åbo Akademi.



Ane Torvanger Brunvoll is Speical Adviser (eResource Industries and the Environment) at the Research Council of Norway. She is Programme Coordinator for the ENERGIX programme, Norway's main funding instrument for clean energy R&D. Her career before joining the Research Council covered both the energy industry and Bellona, an environmental NGO.



**Tuula Mäkinen** is Vice President, Smart Energy and Transport Solutions at VTT, Finland. She has been active in energy and transport research within VTT since 2008. Among other things, Tuula Mäkinen has been Coordinator of BioRefine New Biomass Products 2007-2012 Programme of Tekes.



**Dr. Guðni A. Jóhannesson** is Director General for The Icelandic National Energy authority and affiliated professor at KTH Sweden. He received his Ph.D. at Lund University and was full professor at KTH, Stockholm.



**Dr. Rune Volla** is Director at The Research Council of Norway. He has had several managerial positions at Hafslund. Dr. Volla has been chairman of the board at Norwegian District Heating Association and board member of Euroheat & Power.



**Dr. Josephine Bahr Ljungdell** is Director of International affairs at Swedish Energy Agency. She holds a Ph.D. in chemistry and has been working at Swedish national Board of Housing, Building and Planning (Boverket) and National Board of Industrial Development (NUTEK).



**Dr. Saila Seppo** is Programme Manager at Academy of Finland. She has been head of strategic research at Kemira Pigments Oy and has a Ph.D. in chemistry from University of Eastern Finland.

## **Speaker profiles**



**Ilkka Homanen** is Head of Industry Cleantech at Business Finland, and Finland's representative in the Nordic Sustainable City program.



**Lene Mostue** is Director for the Energi21 strategy, the Norwegian national strategy for research, development and commercialisation of new, climate-friendly energy technology. She has 20 years operational and theoretical experience from the energy sector in Norway and abroad. She has a Master Science degree in electrical engineering from NTNU, Norway and an excecutive Master of Management degree from BI, The Norwegian Business school.



**Dr. Tomas Kåberger** is Professor at Chalmers University of Technology and Executive Board Chairman of Renewable Energy Institute in Japan. He has been Director-General of Swedish Energy Agency.



**Dr. Jacob Østergaard** is professor and Head of Center at University of Denmark. His specialties are wind power integration, new network and control architectures of electric power systems, integration of electricity demand and other energy sectors into the electric power system.



**Dr. Tejs Vegge** is Professor and Head of Section at Technical University of Denmark Energy (DTU), and coordinator of battery activities. He has a PhD in materials physics. Among other things, he has worked as an "Innovation postdoc" with Danfoss Corporate Ventures and DTU, a senior scientist at Risø DTU, and been a visiting Professor at Stanford University (SUNCAT@SLAC) and the Technical University of Münich (TUM).

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