

The Nordic countries have a unique and long-standing cooperation on energy, which has created a solid foundation for the development of a sustainable and secure energy supply in the region. Now it is time to take the next step in furthering the Nordic cooperation on energy, with the green transition as the new framework.

The green transition is a process of changing our production, our way of thought, our investments and our institutions for a sustainable future. In that future, the Nordic countries aim at being decarbonized, while still being competitive and socially sustainable. The Nordic region is well positioned for this, but we need to act fast in order to hit the unique window of opportunity for the Nordics to lead the green transition.

The Nordic electricity and heat sectors could be carbon neutral as early as the 2030s, leading the way towards the decarbonization of other sectors of the economy as well as the energy systems of other European countries, expected to be completed by 2050. There are, however, still obstacles to achieving this vision.

Even though rapid technological developments have solved many of the energy-related perplexities, as of today, there are still barriers to be overcome, for example (non-exhaustive list)

- **Structural barriers in financing, procurement and market development** that affect the willingness to invest and thus prevents the large-scale deployment of new and sustainable solutions,
- Uncertainties regarding **social acceptance** and **social distribution of cost & benefits** of energy projects,
- Legal and regulatory barriers.

Nordic Energy Research wants to shape innovative research and promote new ideas with exciting perspectives which, in turn, can bring added value to the Nordic region. **This is where you come in!**

Therefore, we ask; how can we overcome the barriers that are standing in the way of the Nordics becoming the most sustainable and integrated region in the world? And how can



further Nordic energy cooperation facilitate the combination of high environmental ambitions with economic growth, by favoring a broad and strong commitment from the public, business, industry and civil society?

Submit your innovative proposal for the Nordic cooperation needed to overcome barriers

We encourage all stakeholders to submit contributions: companies from the energy sector or other sectors, researchers/academics, non-profit organizations, business and sectorial associations, think-tanks, students and individuals.

Submissions should:

- Feature scenarios for a 2050 carbon neutral Nordic society with competitive sustainable solutions, a 2040 carbon neutral Nordic energy system, and a 2030 carbon neutral Nordic electricity system.
- Describe how different barriers can be handled on the pathway towards 2050.
- Describe the added value of Nordic cooperation.

The contributions should ideally tackle sustainable solutions and the barriers to deployment of these solutions across sectors, as well as within the energy sector, e.g. electrification and sector coupling, green transport solutions, energy hubs and digitalization, energy storage, carbon capture, energy efficiency and behavior.

Technological progress and innovation will have a significant influence on the energy use and the energy sectors of tomorrow as well as on the coupling to other sectors. Therefore, we encourage all participants to have a clear set of assumptions as a base for their renewing visions.

We will also appreciate if the submission includes a description and analysis of your suggested pathway towards a decarbonized, competitive and social sustainable Nordic region in 2050 and the role of energy research collaboration.

How to participate

The Nordic Energy Challenge is divided into three stages.

Stage 1. Submit an abstract by the **18th of May 2020**, at the latest, for consistency check with the objectives. The abstract should consist of up to 5,000 characters and include a short description of:

- The barriers you are addressing.
- What assumptions form the basis of your proposal.
- Your methodology.
- Expected outcome of your analysis.

All submissions will be examined by a jury, who on the 8th of June 2020 will announce which submissions have qualified to participate in the next stage.



Stage 2. Due on the 14th of September 2020, the qualifying submissions shall be finalized and submitted in full. The final submission should consist of a 5-minute video or 8-10 pages of text (indicative).

On the 2nd of October, the jury will announce the top-three submissions, which have qualified for the final stage.

Stage 3. The selected participants will be awarded at **Nordic Energy Research Forum2020** on the **3-4 of November** in **Oslo**.

Send your submissions, as well as any questions, to:

tender@nordicenergy.org

with the subject line: Nordic Energy Challenge

Selection

Jury

The jury will consist of highly qualified representatives from Nordic Energy Research and from the Nordic energy community. The jury will assess the submitted proposals and select the most relevant, complete, comprehensive and innovative contributions.

Awards

- The top-three selected contributions will be invited to give a presentation at Nordic Energy Research Forum 2020 on the 3-4 of November in Oslo. During the event, the winner will be announced and awarded by the jury. Policy makers, energy stakeholders and researchers will also be invited to debate with the authors,
- The best contribution will be awarded with a speaker fee of 50,000 NOK, the second best with 10,000 NOK and the third best with 5,000 NOK for their presentations at Nordic Energy Research Forum 2020,
- Selected authors will have the possibility to publish a summary of their proposal on the Nordic Energy Research website,
- Authors will be interviewed with videos published on Nordic Energy Research website/social networks.

For inspiration have a look at <u>carbonneutralnordics.org</u> as well as <u>NordicEnergy.org</u>



Terms and conditions

By participating in the competition Nordic Energy Challenge 2020, the submitter(s) agree to be bound by the stated terms and conditions. The submitter(s) accepts that Nordic Energy Research (NER) uses name and submission for marketing purposes in connection with the competition. If NER, in its discretion, finds any submission to be unacceptable, then such submission shall be deemed disqualified.

NER also reserves the right to further develop ideas submitted in the competition, regardless of the continued involvement of the submitter(s). This right cover all submitted proposals, regardless of further qualification after submission of the first abstract, and also extends to the time after the end of the competition. However, in relation to NER, the submitter(s) retains the copyright to the written work submitted. Nonetheless, NER shall, at its discretion, be granted royalty-free, non-exclusive license and user rights to the top-three winning proposals. These rights include, but are not limited to: printing, editing, translation, distribution and reproduction of documents and materials.

The award cannot be transferred or changed in terms of content or scope. Nor will NER be responsible for any extra costs that emanates from the participation in the competition (unless otherwise stated). All tax liabilities (including income tax) arising from this competition will be the sole responsibility of the three award winners.



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