

Strategic Plan for CREE – Oslo Centre for Research on Environmentally friendly Energy: 2015-2019

This strategic plan is intended as a long-term management document for CREE for the final four years of activity, i.e., from summer 2015 to summer 2019, given that CREE get funding for the last three years (2016-19). It is based on the Strategic Plan for 2011-2014, and the plan for meeting the criticism in the appeal to the Research Council of Norway (RCN). Both are attached as appendices to this plan. The new plan will describe the aims for the last period and the strategies for reaching these aims.

1. The expectations of the Research Council of Norway for CREE

The Research Council has expressed its expectations for the FME Centres for Social Science-related Energy Research (FME Samfunn) as success criteria. These criteria are documented in the governing documents from the Research Council ("Requirements and Guidelines" and "Information for applicants for the announcement of the Research Centres of green energy within the social sciences (FME Society)"):

Research activity

1. The centre has a distinct research profile, conducts long-term, thematically relevant research of high international calibre in the field specified in the project description, and demonstrates this through its production of doctorates, scientific publications, papers for presentation at recognised international conferences and other measures of scientific excellence.
2. The centre utilises a multidisciplinary approach in its research activities; i.e. it forges close links between various subject areas within the field of social science. The centre also strengthens the links between social science-related energy research and technology-related energy research.
3. Researchers from the host institution and research partners participate actively in the centre's research.

Relevance and benefit to users

4. The centre participates visibly in national and international arenas in which energy and climate-related questions are discussed.
5. The centre has implemented measures to ensure that the expertise and results achieved by the research activity are effectively transferred to and utilised by the user partners, and actively disseminates research results to broader user groups and the public at large.
6. The centre has achieved reciprocal mobility of staff between the centre's partners.
7. The centre's user partners have increased their research commitments over time through participation in the centre's activities.

Internationalisation

8. The centre has been successful in achieving recognition at the international level (e.g. researchers associated with the centre have received awards or been invited to be keynote speakers at international conferences).
9. The centre has been successful in international research cooperation, e.g. as a player under the EU's framework programme.
10. The centre engages in active and binding collaboration with international research groups and has contributed in other ways to the internationalisation of Norwegian research. The centre has at least one recognised international partner.
11. The centre attracts outstanding international researchers, including research fellows and senior staff, as visiting researchers.

Researcher training and recruitment

12. The centre has an effective framework in place for researcher training, and helps to train highly skilled personnel in the centre's areas of specialisation.
13. The centre is actively engaged in education, especially at the master's and doctoral levels, and promotes recruitment to the centre's subject areas, including increased recruitment of women.

Partners and funding

14. The centre receives long-term funding from the host institution and partners.
15. Active efforts are made to attract new partners.
16. The centre has been successful in securing other external funding.

Organisation

17. The centre has a visible profile, a strong identity and a successful collaboration with its partners.
18. The centre is organised in a manner that is well adapted to the host institution's organisation.
19. The centre has a board and management which ensure that the intentions and plan for the centre are followed up.
20. The centre has a common administration with a high degree of scientific and administrative autonomy.

2. The challenges for CREE based on the midterm evaluation

The midterm evaluation of the Centres for Social Science-related Energy Research gives five recommendations for CREE:

- **Recommendation 1:** That the Centre produces an integrated research agenda which explicitly addresses the program all the success criteria with regard to research activity.
- **Recommendation 2:** That the Centre develops and implement a strategy for international collaboration at the Centre level (as opposed to the level of individual researchers).
- **Recommendation 3:** That the Centre considers adopting some aspects of the CICEP Board operating model. However it is recommended that CREE retain an independent Board Chair.

- **Recommendation 4:** That the Centre revisits its assignment of senior roles given the need to address the program success criteria. It is important that whoever is Director be interested in a) how to promote high-quality, multidisciplinary research and develop multidisciplinary teams and b) user partner engagement.
- **Recommendation 5:** That the Centre explores new ways of interacting (two-way interaction) with user partners.

In the following we will outline the aims for CREE on these areas as well as the measures to reach the aims.

3. The aims for the final period

As stated in the strategic plan for 2011-14, the aim for CREE is to meet the success criteria outlined by the RCN. Below we will focus on the aims on the topics were we have been criticised by the midterm evaluation.

3.1 Additionality of research

Our research should be of high quality, such that it can be published in good peer reviewed journals, and relevant for users, for instance as input in political processes or as a background for decision making in industry. The research activity and its organization should give additive benefit compared to a situation without CREE. Such additionality may be in the form of development of numerical models, better cooperation between research partners, a larger network and better dialog between users and researchers.

3.2 Multidisciplinarity

Even if the main research of CREE is in the field of economics, we should increase our multidisciplinary research over the next few years as this will broaden the aspects of interesting research topics as well as the understanding of observed phenomena in the society.

3.3 User partner involvement

Users should be more involved in the discussion of research topics and in projects. Dialog with user partners will also broaden our aspects and give input on what is relevant research.

3.4 International cooperation

International cooperation is important for being a leading international research centre within energy, environmental and resource economics. CREE wants to have an extensive cooperation between centres and researchers around the world.

3.5 Organization

CREE wants to have an effective organization that can help reach our aims on the other areas.

4. Strategies to reach the aims of the centre

Below we outline the strategies for reaching the aims listed above. For more details, see also the plan for meeting the criticism in the appeal to the RCN (“Tiltaksdokument for CREE”).

4.1 Strategies for additionality of research

During the first five years of the centre period, CREE has established several meeting places for researchers and user partners such as regular lunch meetings, workshops, seminars and conferences. This broadens our network compared to a situation without the centre. In addition to this CREE researchers from several of the research partners as well as subcontractors cooperate on the majority of research proposals written, and user partners are also involved in many proposals. This would not be possible without the networks created in the centre period, and we believe that the centre creation has had a positive impact on the research of the research partners in CREE, as well having been useful for the users of the research. We will build on this by:

- Improve the meeting places for CREE researchers, sub-contractors and users such that we get a dialog that benefits research.
- Cooperation on research proposals. New proposals should ideally include two or more research partners, one subcontractor (or researchers from another field), and involvement of user partners.
- Revise the research plan for 2016-19 to take into account recent research results, technological innovations and political developments.
- Revise the work packages of CREE to be in accordance with the new research plan.
- Synthesise the research at CREE once a year in connection with the annual reports.

4.2 Strategies for more multidisciplinary

Energy and environmental economics dominates the research activities of CREE. The field incorporates methodologies from mathematics and statistics, as well as knowledge from, for instance, other social sciences, ethics and technology. To fill in gaps in knowledge, broaden the perspectives and develop new research ideas, closer cooperation with experts from other fields will be developed. To improve the multidisciplinary research at CREE we will:

- Include researchers from other fields in research proposals
- Strengthen cooperation with our subcontractors
- Write joint research papers with researchers from other fields
- Continue to invite researchers from other fields to our seminars, workshops and conferences.

4.3 Strategies for better user partner involvement

Social science including economics has traditionally more contact with Governmental bodies than industry. This is also the case with CREE. We will, therefore, strengthen the dialog with our user partners and in particular our industry partners. This will give us new perspectives and ideas, and also ensure that our research is relevant to users. To do this, we want to

- Develop the meeting places between user- and research partners in CREE to arenas for two-way communication.
- Increase user partner funding and participation in research projects, for instance by Knowledge building Projects for Industry (KPN) at RCN.
- Increase the access to our research.
- Involve user partners in research by, e.g., encouraging subjects for Master theses and PhDs based on the arrangements in the RCN for industry and Government.
- Encourage user partners to spend some time at research partners and vice versa.

4.4 Strategies for international cooperation

The centre has a large international network in which we collaborate on research projects and research proposals. Several CREE researchers and PhD students go on research visits abroad, and international researchers visit CREE for workshops, seminars, research collaboration and research stays. However, there is still room for improvements on the international arena. We would like to:

- Strengthen our participation in EU-projects by taking initiatives to research proposals.
- The research collaboration between the Norwegian research partners in CREE and the international partner, Tilburg Sustainability Center, should be strengthened. Some examples are exchange of PhD students, inviting students to participate in PhD courses, write research proposals together, and extend the arenas for communication.
- Develop quantitative measurements for the international cooperation in the work plans and annual reports.
- Strengthen the cooperation with China.
- Take initiatives for research agreements at the centre level with international centres.

4.5 Strategies for better organization

The organization of the centre has followed the plan outlined in the original project proposal. According to the midterm evaluation of the centre, this organization has not been optimal. Thus, we would like to change the organization to improve its functionality. The strategies are to:

- Expand the board by to include all user partners.
- Establish an International Scientific Advisory Board.
- Undergo a further revision of the organization of the centre in connection with the revision of the work packages and research groups.