

Centres for Environment-friendly Energy Research (FME)

Requirements and Guidelines, August 2020

1 Purpose of this document

This document sets out the requirements and guidelines that apply to the scheme for “Centres for Environment-friendly Energy Research (FME)”. The document is an attachment to the contract between the Research Council of Norway (hereafter referred to as the “Research Council”) and the Project Owner on funding for the FME centres (hereafter also referred to as “the FME scheme”, “centre”, “the centre”, “centres” or “the centres”), and contains supplementary provisions regarding the organisation and operation of the centres.

2 General information about the FME scheme

- 2.1 The Centres for Environment-friendly Energy Research scheme (FME) comprises a national scheme under the auspices of the Research Council of Norway. The Research Council of Norway provides the basic funding for the scheme.
- 2.2 The overall objective of the FME scheme is to help to solve key challenges in the energy sector, generate solutions for the low-emission society and enhance the innovation capacity of the business sector.

The FME scheme is designed to:

- Boost innovation and value creation both for companies and public institutions participating in the centre’s activities and for Norwegian society at large;
- Help to reduce national and international greenhouse gas emissions, promote more efficient use of energy and increase production of renewable energy;
- Cultivate research groups that are in the forefront of the international research community and that are an integral part of dynamic national and international networks;
- Increase the visibility of research results and promote a knowledge-based debate on environment-friendly energy.

While the FME scheme will focus primarily on enhancing the innovation capacity of the business sector, it will also promote quality and efficiency in the public sector. The FME scheme provides user partners with the opportunity to employ long-term perspectives, increase continuity and reduce risks in their research initiatives. For research groups,

the scheme makes it possible to achieve long-term development of expertise through research of high international calibre conducted in close cooperation with users of the research results.

- 2.3 An FME centre is a time-limited research centre affiliated with a research institution that is responsible for the centre's activities, hereafter known as the "host institution". An FME centre is not an independent legal entity. Universities, university colleges or research institutes may act as host institutions for FME centres. If the host institution is a research institute, satisfactory researcher training must be provided through cooperation with a university or university college which has the right to confer doctoral degrees in the relevant field. The host institution is the designated Project Owner in the contract with the Research Council of Norway and bears the responsibility for establishing, implementing and closing down the activities of the centre. The host institution is entitled to use the designation "FME Centre for Environment-friendly Energy Research (FME)" and to use the Research Council's FME logo.
- 2.4 The centre's activities are to include participation of users of the research results. Company partners and public sector organisations that participate in the centre are designated collectively as "*user partners*". User partners must participate in governance and research activities at the centre as well as contribute financing for the centre. Each centre must have at least three user partners.

An FME centre may have one or more research institutions as partners. These participants are designated as "*research partners*". The centre may have subcontractors that provide it with services.

- 2.5 An FME centre may have international user partners and research partners. Allocations to the centre may be used to fund research activities conducted at research institutions abroad, provided that these activities will significantly advance the achievement of the objectives of the centre and are in conformance with the objectives of the FME scheme.

3 FME consortium

- 3.1 A group consisting of the host institution for an FME centre and the centre's user partners and research partners is designated as an "FME consortium", and the participants are designated as "consortium participants". Consortium participants must contribute their own resources in the form of participation in research projects at the centre and/or financial resources in accordance with the funding plan for the centre. Changes in the composition of the partners in an FME consortium over time are allowed in accordance with the rules set out in the provisions of the consortium agreement.
- 3.2 All projects under the auspices of the centre are to be carried out as "effective collaboration", which is defined as follows: Collaboration between at least two independent parties to exchange knowledge or technology, or to achieve a common

objective based on the division of labour, where the parties jointly define the scope of the collaborative project, contribute to its implementation and share its risks, as well as its results. One or several parties may bear the full costs of the project and thus relieve other parties of its financial risks. Contract research and provision of research services are not considered forms of collaboration.

The host institution is responsible for ensuring that a consortium agreement is drawn up between the participants in the consortium. The consortium agreement is to regulate the organisation and implementation of cooperation within the consortium, and stipulate the reciprocal rights and obligations of the participants. The agreement must include, among other things, provisions specifying the participants' obligations to contribute resources in accordance with the centre's funding plan, rules regarding the opportunity to join and withdraw from the FME consortium, rules related to employer's liability, and provisions on the right of ownership, utilisation rights, licensing, publication of project results and confidentiality, cf. Section 11. The Research Council's template for consortium agreements between consortium participants under the FME scheme may be used as a guide for how the rights and obligations of participants in a consortium may be regulated, and it includes several mandatory provisions.

- 3.3 The host institution is responsible for ensuring that the consortium agreement is in keeping with the principles set forth in this document and the General Terms of Contract issued by the Research Council of Norway. A provision establishing this must be included in the consortium agreement. Knowledge on the part of the Research Council of a consortium agreement in no way implies approval of any deviations from the principles in this document or from the Research Council's General Terms of Contract. The consortium agreement must be submitted to the Research Council for informational purposes and is an attachment to the contract between the Research Council and the host institution.

4 Project description

The project description governs the centre's activities and is an attachment to the contract between the Research Council and the host institution. A communication plan must be drawn up describing the dissemination measures to be implemented by the centre.

5 Organisation

The FME centre is to be part of the host institution's organisation and be governed by its own board. The centre must have strong top-level management with a high degree of scientific and administrative autonomy. The centre must be organised to achieve the objectives specified in the project description in an effective manner, have a form of organisation and governance that is well adapted to the host institution's organisation, and establish routines that ensure good interaction with the user partners and research partners in the FME consortium.

6 Location

A centre may consist of research groups located at the same site, or it may be a “virtual” centre where the research groups and partners are geographically dispersed. The centre must have a common administration and a unified research plan in keeping with the project description as well as effective communication systems and systems for exchanging personnel between its various segments.

7 Governance and administration

- 7.1 The board of the FME centre is to consist of representatives of the consortium participants, i.e. the host institution, the user partners and the research partners. To ensure the centre has a strong focus on the users, the representatives of the centre’s user partners are to have a majority on the board. The board chair will be appointed by the host institution in consultation with the other partners in the FME consortium.
- 7.2 The board’s main responsibility is to ensure that the intentions and plans underlying the contract with the Research Council are fulfilled and that all is kept within the stipulated budget and time frameworks. The board is to ensure that cooperation proceeds smoothly between the partners in the FME consortium.
- 7.3 The centre is to be headed by a director supported by a management group. The centre must also have a satisfactory administrative support system. The centre director is to serve as project manager in accordance with the contract between the Research Council of Norway and the host institution. Centre directors must have experience in research as well as proven ability in research management and team-building. The director is to have considerable independence in terms of the scientific context as well as on questions involving the recruitment of staff to the centre. The director and members of the management group will be appointed by the host institution in consultation with the other partners in the FME consortium. The centre director is expected to use a considerable portion of his or her work time to lead the centre.
- 7.4 Clear guidelines regarding responsibility and authority must be established for the centre’s activities, including the board’s powers of authority, rules for representation on the board and a description of the director’s powers of authority. The board’s mandate must, among other things, ensure that the board is unable to adopt decisions that encroach on the host institution’s sphere of responsibility.

8 Staffing and responsibility for human resources

- 8.1 The centres are to be developed around researchers who have demonstrated the potential for a high level of scientific achievement. The host institution and the other consortium participants are to decide among themselves how to handle the employer’s responsibility for staff at the centre, keeping in mind that the centre itself may not take on any employer’s responsibility.

- 8.2 An important part of the centre's activities will be to provide researcher training in its field. The responsibility for training also encompasses master's-level education.
- 8.3 When recruiting personnel, the centre is required to incorporate gender equality perspectives and actively strive to attract outstanding national and international researchers. In particular, the centre is to facilitate the exchange of staff members between consortium participants and international partners.

9 Funding

- 9.1 The centre must have a cost and funding plan for its first five-year period and potential subsequent three-year period. These plans will be part of the contract with the Research Council. The Research Council of Norway, in conjunction with the FME consortium, will provide the resources required to perform the centre's activities.
- 9.2 A budget for centre costs must be drawn up in accordance with the Research Council's ordinary guidelines for project budgets. The Research Council's allocation to the centre may comprise a maximum of 50 per cent of the centre's overall budget. The user partners must contribute funding corresponding to at least 50 per cent of the Research Council's allocation to the centre. Contributions from consortium participants may be provided in the form of direct funding, staff placed at the disposal of the centre or infrastructure that is essential to performing the centre's research activities. The host institution's contribution to the budget may incorporate payroll and social security expenses for the time employees spend carrying out the centre's activities, indirect expenses for operation of the premises, equipment or the like. Costs related to the depreciation of equipment procured specifically for the centre's research purposes may also be included in this. The Research Council may count research funding such as EU funding, project or strategic grants from the Research Council or other sources, towards the contribution required of the consortium participants, if such funding promotes the centre's activities. Such activities must be incorporated into the project description for the centre, cf. Section 4. Activities carried out under innovation projects receiving funding from the Research Council may not be included as contributions to the centre's budget.
- 9.3 Upon signing of the contract with the host institution, the Research Council of Norway will issue a pledge for the first five-year period. The Research Council reserves the right to adjust the annual pledges based on the centre's progress report, and any adjustments in the centre's funding plan and project description as a result of changes in research focus or the funding base. Pledges for a potential final three-year period will be made in the wake of the future decision to extend the centre's period of operation. Allocations from the Research Council of Norway may be carried over from one year to the next.

- 9.4 Business enterprises taking part in the consortium are not eligible to have any of their projects costs covered by the Research Council's allocation.¹ These enterprises are thus not qualified to receive state aid via the funding from the Research Council, but must cover their costs themselves. In this context, "business enterprise" is defined as companies and other entities that conduct economic activities, i.e. who offer goods or services on a market.
- 9.5 Business enterprises that participate in the consortium are also not eligible to receive indirect state aid in the form of advantageous conditions for cooperation with the research organisations taking part in the consortium, cf. Section 11.
- 9.6 The FME scheme will allow changes in the composition of the partners in a FME consortium over time. Withdrawal from a consortium requires at least six months' notice. If the withdrawal of a consortium participant leads to a reduction in funding and loss of essential expertise, the centre's board must seek to secure the resources needed to achieve the objectives stated in the project description. If the withdrawal of partners from the consortium makes it impossible to fulfil the requirements for user financing and co-financing, the Research Council is entitled to reduce the amount of the FME grant. If the changes in the consortium mean that key conditions for the establishment of the centre are no longer met or have been altered significantly, the Research Council is entitled to terminate the contract with the host institution.

10 Scientific and administrative follow-up

- 10.1 The host institution must submit a financial report containing specified information to the Research Council of Norway by no later than 20 January each year.
- 10.2 The host institution must submit an annual report for the previous year with a profit and loss account and notes to the Research Council of Norway by no later than 1 April of each year.
- 10.3 The host institution must submit a progress report via the eRapport online reporting system of the Research Council of Norway by no later than 1 December each year. The report must contain specified information on scientific and administrative factors as input for the Research Council's annual report to the ministries.
- 10.4 Any requests for changes to the approved project framework must be submitted on an ongoing basis via "My RCN Web".
- 10.5 The host institution must submit a work plan for the subsequent year to the Research Council of Norway by no later than 31 December of each year.

¹ When research organisations engage in research and development in effective collaboration with others this activity constitutes non-economic activity. The EFTA Surveillance Authority considers that R&D carried out by a research organisation in effective collaboration with others is part of the organisation's independent R&D activity, as defined in the state aid rules. The research organisation is not considered an enterprise in the context of this activity.

- 10.6 The Research Council of Norway will organise “site visits” of the centre at appropriate intervals where it will perform a review of the centre’s development and activities and the plans for the future. Representatives of the FME consortium, the centre’s board, the centre’s management and the Research Council of Norway must be present.
- 10.7 About two years after the centres are established, each centre is to conduct an internal evaluation using a common framework devised by the Research Council of Norway. A survey of the user partners will comprise part of the evaluation. The results of the internal evaluation are to be discussed by the centre’s board and presented to the Research Council during a site visit. The results may provide a basis for certain changes to the centre’s activities.
- 10.8 The Research Council of Norway will conduct a mid-term evaluation of each centre about 3.5 years after the centres are established. The evaluation will be conducted using a common framework and on the basis of a mandate devised by the Research Council’s governing bodies. The evaluation criteria will be based on the list of success criteria for the FME scheme, cf. the attachment to this document. In addition to this evaluation, the Research Council will assess the administrative framework at each centre. This evaluation will be submitted to the centres for review.
- 10.9 The evaluation, the Research Council’s assessment of the administrative framework at the centre and the centre’s comments to the evaluation will form the basis for the decision regarding whether to continue the individual centre for the remainder of the total eight-year period or to terminate the centre’s activities after five years. The Executive Board of the Research Council of Norway, or a party authorised by the Executive Board, will take the final decision on the matter.

11 Right of ownership, utilisation rights, licensing, publication of project results and confidentiality

The FME scheme is regulated under the Research Council of Norway’s General Terms and Conditions for R&D Projects regarding the right of ownership, utilisation rights, licensing, publication of project results and confidentiality.

The consortium agreement is to contain provisions that further regulate these areas pursuant to the General Terms and Conditions for R&D Projects. The terms of the consortium agreement must also be formulated to ensure that the business enterprises (cf. footnote in Section 9.5) taking part in the project do not receive indirect state aid, as described in the EFTA Surveillance Authority’s guidelines for state aid for research and development and innovation Section 28, paragraph b), c) or d).²

² <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:E2014C0271&from=EN>

12 The centre's period of operation – termination

- 12.1 Funding for each centre is provided for a period of up to eight years from the start-up date. From the time of termination of activity, funding from the Research Council will cease and the centre will no longer have status as an FME.
- 12.2 Should a situation arise which materially alters the assumptions underlying the establishment of a centre or means that a centre can generally no longer be operated on the basis of the principles described in this document, the Research Council of Norway is entitled to terminate the contract with the host institution pursuant to the provisions in the Research Council's General Terms and Conditions for R&D Projects, including the withdrawal of funding and FME centre status.
- 12.3 Attention must be paid to personnel-related factors when closing down a centre. Upon cessation of activity, a host institution must in particular ensure that master's students and research fellows have the opportunity to complete their study programmes on schedule.

Attachment: Success criteria for the Centres for Environment-friendly Energy Research (FME)

In addition to fulfilling the formal requirements, a successful Centre for Environment-friendly Energy Research will be characterised by the following:

Research activity

- The centre conducts long-term, thematically relevant research of high international standard 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.
- The centre has a distinct research profile and 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).
- There is genuine cooperation between the research partners at the centre and the centre has helped to improve the national structure of research carried out within its thematic area.
- The centre's user partners have increased their research commitments both through participation in the centre's activities and their own R&D activities on topics of relevance to the centre.

Innovation and value creation

- The centre's research activity has generated or is expected to generate the potential for innovation and enhanced competitiveness among user partners from the business sector and strengthen the knowledge base for user partners from public sector organisations (better administration and management).
- The centre's research activity has ramifications for society beyond that of the partners directly participating in the centre's activities.
- The centre has achieved reciprocal mobility of staff between the centre and user partners. Researchers from partners work at the centre, and research fellows and researchers from the host institution are seconded to the user partners for periods of time.
- The centre uses work processes that ensure that the research activity is relevant for the user partners and that the expertise and results achieved by the research activity are effectively transferred to and utilised by the partners.
- The centre has a framework for enabling results that fall outside the user partners' core areas to be commercialised by other means, e.g. through establishing new research-based enterprises.

Internationalisation

- The centre has a distinct profile and clearly articulated objectives for international cooperation.
- The centre is successful in international research cooperation, e.g. as an actor under the EU's framework programme.
- The centre engages in active collaboration with international research groups and has contributed in other ways to the internationalisation of Norwegian research and business and industry.

- The centre attracts outstanding international researchers, including research fellows and senior staff, as visiting researchers. Researchers and research fellows at the centre have conducted stays at research institutions abroad.

Researcher training and recruitment

- 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.
- The centre is actively engaged in education, especially at the master's degree level, and promotes recruitment to the centre's subject areas with special focus on increased recruitment of women.

Partners and funding

- The centre receives long-term funding from the host institution and partners, and these have increased their funding beyond the minimum requirements.
- Active efforts are made to attract new user partners, and the user partners include large companies as well as small and medium-sized companies with a high technology and innovation profile.
- The centre has been successful in securing other external funding.

Organisation

- The centre has a visible profile, a strong identity and has established successful collaboration between its partners.
- The centre is organised in a manner that is well adapted to the host institution's organisation.
- The centre has a board and management which ensure that the intentions and plans on which the centre is based are followed up.
- The centre has a common administration with a high degree of scientific and administrative autonomy.
- The centre has achieved a satisfactory gender balance among the management staff and research fellows.