



Research Programme Electricity Call 2026 for Research Proposals

The [Research Programme Electricity](#) addresses strategically relevant research aspects across the entire electricity supply chain, from electricity production to transmission and distribution and consumption. By combining technological innovation, digital transformation and international networking, it lays the foundation for a sustainable and efficient further development of the electricity system and electricity use.

Periodic national calls are being elaborated in order to fund innovative technical research projects. In line with the [Federal Energy Research Masterplan](#) for the period from 2025 to 2028 and with its [Detail Concept](#), the Research Programme Electricity defines research priorities through its individual calls.

For this call, the [Directive on the submission and evaluation of applications for financial support of energy research, pilot and demonstration projects and authorisation of sandbox projects](#) applies.

Scope

In 2026, the Research Program Electricity is looking for about 10 to 15 transformative application oriented research projects ([TRL 2–5](#)). They should explore commercially and/or industrially relevant ideas with a high potential for significant scientific and technical impacts in the medium and long term. A significant step beyond the state-of-the-art is a pre-requisite.

Researchers are invited to submit research proposals in one of the following topics. The focus is primarily on technical and techno-economical aspects, although any need for regulatory adjustments should be adequately addressed as well. The projects must be strongly related to Switzerland.

Topics

This call addresses the following research topics:

1. Efficient integration of renewables in the Swiss energy system
2. Demand flexibility
3. Power quality and stability
4. Converter-driven end-use equipment for grid support
5. Power electronics
6. Digitalization

The topics and their corresponding research questions are described in detail in Appendix 1.

Due to limited financial resources, priorities have been set for this call. Applications from other subject areas (see Appendix 2) will be rejected, regardless of quality. It is therefore important that each proposal is clearly assigned to the relevant topic in the application form.

Furthermore, projects must not duplicate completed or ongoing activities but may supplement and further develop them. Appendix 2 provides a non-exhaustive list of relevant national and international projects and activities.

Timeline

1 December 2025	Launch of the call
15 January 2026	Deadline for questions regarding the call
16 February 2026	Deadline for submission of pre-proposals
Mid of March 2026	Notification of pre-proposals invited to submit a full proposal
4 May 2026	Deadline for full proposal submission
Mid of June 2026	Notification of approved proposals
August 2026–January 2027	Launch of approved projects

Contact information

If you have any question regarding the call, please do not hesitate to contact one of the co-programme managers:

Dr Michael Moser

michael.moser@bfe.admin.ch

Mr Roland Brüniger

roland.brueeniger@brueniger.swiss

The deadline for questions is 15 January 2026. Questions and answers will be published anonymously before 22 January 2026 on the Research Programme Electricity's [website](#).

No extension of the deadline will be granted.

Eligibility

The call is addressed to universities (including ETH-domain), universities of applied science, further research organizations and the private sector in Switzerland. The participation of young scientists in the research teams is encouraged. Researchers in the public and private sector can apply for remuneration of the personnel costs according to the maximum rates provided in the [Directive on the submission and evaluation of applications for financial support of energy research, pilot and demonstration projects and authorisation of sandbox projects](#). The Research Programme Electricity does not pay any contribution to hardware and overhead cost.

Wherever possible and reasonable, the participation of commercial and industrial partners, i.e., utilities (DSO, TSO, ESP) as well as small, medium and large enterprises, is strongly recommended to ensure the relevance of the research to technological development and to the needs of society.

An adequate share of at least 20% of own and/or third-party contributions (in-kind and/or cash) is required and must be indicated at the pre-proposal submission and formally confirmed at the full proposal submission.

Public and private research organisations outside Switzerland are also welcome to apply. They however must do so in a consortium with at least one Swiss partner and work on research questions relevant for Switzerland. The Swiss partner must provide a substantial contribution to the research work performed in the project and has to be listed as the main partner in the application.

Supported projects typically receive public funding between 50 and 300 kCHF. In this call their maximum duration is strictly limited to 36 months. The indicative call budget is in the range of 2–2.5 MCHF and finally depends on the requested distribution of the payments over the fiscal years and on the improvement of annual credits by Parliament.

Applicants must comply with the conditions set out in the [Directive on the submission and evaluation of applications for financial support of energy research, pilot and demonstration projects and authorisation of sandbox projects](#).

Application procedure

The call follows a two-stage submission and evaluation procedure. First, a pre-proposal (maximum 6 pages, see pre-proposal template available on the Research Programme Electricity's [website](#)) is submitted. If the pre-proposal is selected after evaluation, the applicant is invited to submit a full proposal (approximately 10 pages). Invitation to submit a full proposal does not guarantee funding.

The projects presented in the pre-proposal and in the full proposal must be consistent. Any change to the plans described in the pre-proposal must be explained and justified.

At both stages of the application, the main project partner (= coordinator) prepares a proposal (pre-proposal or full proposal) using the template available on the Research Programme Electricity's [website](#) in English.

The pre-proposals must be submitted as one single PDF file by e-mail (subject: "Electricity Call 2026") to energieforschung@bfe.admin.ch by 16 February 2026.

The receipt of the pre-proposal will be confirmed in due time. If you do not receive confirmation of your pre-proposal submission by 20 February 2026, please contact Dr Michael Moser (see below).

Evaluation and approval of proposals

Formal criteria

Proposals that do not meet all the following formal criteria will be rejected regardless of their quality:

- Topic corresponds to description (Appendix 1) and is not on the delimitation list (Appendix 2).
- No significant duplication of completed or ongoing activities.
- Duration up to 36 months.
- Own and/or third-party contributions of at least 20% of the total costs.
- Timely submission of documents.

Pre-proposals and full proposals

1. **Excellence** (Score 0–5): Scientific and/or technological excellence:
 - Clarity and pertinence of the objectives.
 - Relevance of the addressed research questions.
 - Soundness of the concept, and credibility of the proposed methodology.
 - Quality and expertise of individual project partners and as a whole.
 - Ambition and innovation content.
 - Progress beyond the state-of-the-art.
2. **Impact** (Score 0–5): Impact through development, dissemination and use of project results:
 - Sustainable contribution to the Swiss energy policy goals (e.g., [Federal Energy Research Masterplan](#), [Energy Strategy 2050](#), [Net-Zero by 2050](#)).
 - Contribution to enhancing research and innovation capacity.
 - Multiplication potential through major technical and economic advantages.
 - Link and cooperation with related international activities.
 - Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.
3. **Implementation** (Score 0–5): Quality and efficiency of implementation and management:
 - Quality concerning coherence and effectiveness of the work plan.
 - Appropriateness of the management structure and procedures.
 - Appropriateness of allocation and justification of requested resources.
 - Appropriateness of share of own and third-party funding.
 - Identification of risks.

The threshold mark for individual criteria will be 3. The overall threshold mark applying to the sum of the three individual scores will be 10.

General note: Smaller, clearly defined but well designed and sustainable projects will be viewed favourably. Excessive promises without realistic implementation will be viewed critically.

Evaluation scores

Evaluation scores will be awarded for each of the main criteria. Each criterion will be scored out of 5 (half scores are allowed).

The 0–5 scoring system for each criterion indicates the following assessment:

0 – Fail: The criterion is not addressed at all or cannot be assessed due to incomplete information.

1 – Poor: The criterion is inadequately addressed or there are serious inherent weaknesses.

2 – Fair: The criterion is broadly addressed but there are significant weaknesses.

3 – Good: The criterion is well addressed but with a number of shortcomings.

4 – Very Good: The criterion is very well addressed but with a small number of shortcomings.

5 – Excellent: All relevant aspects of the criterion are addressed; any shortcomings are minor.

Invitation to submit a full proposal

Based on the ranking, the top ranked pre-proposals, representing a cumulated requested funding of maximum 125% of the call budget are selected to be invited to submit a full proposal.

Approval

The SFOE strictly approves the full proposals according to the ranking and the available budget.

However, if several proposals overlap significantly in terms of content, the SFOE reserves the right to eliminate the lower-rated ones from the ranking. The same applies to topics for which a maximum of two projects are funded. Furthermore, per main project partner (responsible person) a maximum of two full proposals is accepted.

Appendix 1

Description of Topics

Topic 1: Efficient integration of renewables in the Swiss energy system: Regulation, energy market design and energy policies for an efficient and secure Swiss energy system based on renewables

Until presently, energy policy has focused strongly on building up renewable production capacity in the promotion of investments in renewables. As installed capacity increases, the focus is switching to the efficient integration of renewables in the energy system. Projects should focus on the development of technical concepts, regulation, energy market design and energy policies and offer solutions for the transition from the current to an optimized regulation.

Topic 1 is being announced in collaboration with the SFOE [Research Programme Energy-Economy-Society](#) (EES/EWG). For a detailed description of the topic, please refer to the [EES/EWG call text](#). Please note that **proposals for Topic 1 must be submitted as part of the EES/EWG call**. The evaluation and approval of Topic 1 proposals is subject to the rules of the EES/EWG call only.

Topic 2: Demand flexibility

Involving end customers in tapping demand flexibility is often difficult, for example because the technical interface is expensive or complicated, or because customers must play an active role. Disruptive approaches are being sought to overcome this challenge.

- What demand flexibility measures that require customer interaction exist, e.g. load shifting incentivised by different pricing models? What issues arise in this context? (Based on a literature review and personal experience.)
- What alternative, innovative and unexplored approaches to interacting with different groups of customers are conceivable? These approaches should be simple, customer-friendly and highly accepted. Do they have multiplication potential, and can this be quantified?
- What hurdles might nevertheless prevent the implementation of these alternatives?
- How can the identified hurdles be overcome to implement these new concepts?

Successful projects must address all of these questions at least.

A maximum of two projects will be funded for topic 2.

Topic 3: Power quality and stability

The growing reliance on power electronics is having a significant impact on power quality in electrical distribution and transmission grids. For example, this can lead to undesirable interactions with power electronic devices, impair protection systems, or directly jeopardise grid stability. The solution space includes components, market design and grid codes. Potential research questions (not exhaustive) include, **for example**:

- How does power quality affect the behaviour and performance of power electronic devices?
- How does cabling in distribution grids affect power quality at higher grid levels?
- How can power quality be maintained at higher grid levels?
- How can power quality be maintained in small or isolated grids, or during grid restoration?
- How should protection systems be designed in future to cope with changing power quality?

Successful projects should investigate specific power quality and stability issues scientifically, collaborating closely with industry and/or grid operators to develop practical, scalable solutions.

Topic 4: Converter-driven end-use equipment for grid support

Grid-connected converters have the potential to help stabilise and control grid frequency, voltage and quality. However, these functionalities are usually unavailable for converters that supply end-use equipment such as industrial motors, water pumps, heat pumps and refrigerators. The potential benefits to the grid of implementing these functionalities should be investigated.

- Has this topic already been investigated in any ongoing or completed projects, and what were the conclusions? (Based on a national and international literature review and personal experience.)
- For which end-use equipment could grid interaction be reasonable due to the installed power?
- Which functions could support the grid in these converters, and how would they be implemented, controlled, and steered?
- What would the benefits be for the owner of this end-use equipment?
- Which policy measures would help to implement these grid-supportive functions?

Successful projects must address all of the above questions.

A maximum of two projects will be funded for topic 4.

Note: This topic does not cover inverters for feeding power into the grid. These are covered in Topic 1, where similar questions arise.

Topic 5: Power electronics

Power electronics is a key technology for the conversion, control, distribution and utilisation of electrical energy. Technologically, new designs and topologies, as well as innovative semiconductor materials such as silicon carbide (SiC) and gallium nitride (GaN) — known as wide bandgap (WBG) semiconductors — enable significant improvements, including reduced losses, better thermal performance and smaller volumes. The following technical questions are of interest:

- Are there any new converter topologies, particularly those using WBG semiconductors, that could contribute to greater improvements than existing versions? In which appliances are they beneficial, and to what extent?
- Are there any new converter technologies, particularly those using WBG semiconductors, which contribute to greater improvements compared to existing versions? In which appliances and to what extent are they beneficial?
- Are there any new converter designs, particularly those using WBG semiconductors, which contribute to improvements in comparison to existing versions and which can also contribute to circular economy aspects? In which appliances and to what extent are they beneficial?

Successful projects must address at least one of the above questions.

Topic 6: Digitalization

Artificial intelligence (AI) offers enormous potential to increase the flexibility and efficiency of the energy system. To explore new approaches with AI support in energy systems, it would be interesting to investigate creative, innovative and disruptive, unexplored use cases at a strategic level in one project. The identified use cases will be evaluated after the project concludes, and the most promising ideas might be investigated further in subsequent projects (outside the scope of this call):

- Are there any household or commercial appliances, energy waste situations or grid-related issues that could be made more energy efficient or contribute to a more effective energy system with the help of an innovative and unexplored AI implementation?
- Does this application have multiplication potential, and can this be quantified?
- What should the next step be in outlining follow-up projects for the elaborated cases to be realised?
- What obstacles to implementation exist, and how can these be reduced or eliminated?

Successful projects must address this topic in its entirety, covering all the described questions, and including at least five disruptive use cases, either as

Subtopic 6.1: in two of the three areas of mains households, commerce, and waste energy, or

Subtopic 6.2: in the area of power grids and systems.

A maximum of two projects will be funded for topic 6.

Appendix 2 Delimitation

Ongoing and completed projects

The Research Programme Electricity has supported and continues to support a number of projects in the area of call topics. In addition, several [Technology Collaboration Programmes](#) (TCP) of the International Energy Agency (IEA), in which Switzerland participates, are also addressing these issues. These include, in particular, the [4E TCP](#) (Energy Efficient End-use Equipment) with its EDNA, PECTA and EMSA platforms, the [ISGAN TCP](#) (International Smart Grids Action Networks) with Working Groups 5, 6 and 9, and the [Users TCP](#). On the one hand, international collaborations serve to exploit synergies, and on the other hand, they also serve to avoid duplication in research and its funding.

The following list provides a non-exhaustive overview of these activities:

Demand flexibility

- [EMSA-DF – Electric Motor Systems and their Demand Flexibility](#)
- [Regelpooling mit Infrastrukturanlagen \(Wasserversorgungen und ARA\)](#)
- [Load management potential of Swiss infrastructure facilities](#)
- [Teilnahme industrieller Regelleistungs-Anbieter am Schweizer SDL-Markt](#)
- [WARMup – Optimal usage of flexibility of thermal storage](#) and [WarmUp Phase 3](#)
- [MuLDeR – Multi-Level Demand Response](#)
- [Innovative Eigenverbrauchsoptimierung für Mehrfamilien-Arealüberbauung mit lokaler Strombörse](#)
- [Demand-Response.ch](#)
- [Efficient, Demand Flexible Networked Appliances \(EDNA\) - 4E Energy Efficient End-use Equipment](#)
- [New guidebook: Applying behavioural insights to unlock energy demand flexibility - UsersTCP](#)
- [Social License to Automate Task - UsersTCP](#)
- [ISGAN TCP WG 9 Flexibility Markets](#)

Power quality and stability

- [ASPPECT – Assessment of Stability and Power Quality Challenges in Power Electronics Converters](#)
- [PLANET – Optimal use of the technical rules in efficient grid planning](#)
- [Formidable – Community-Microgrid with Grid-Forming Inverters Equipped with Improved Damping and Virtual Inertia](#)
- [RESTART – Novel Restoration Approaches for Grids with a high share of Renewables and Converter Technologies](#)
- [QUINPORTION – Measurement and quantification of inertia on electrical power systems](#)
- [GODA – Grid optimization with intelligent decentralized actors](#)
- [PRODICON – Power system protection in presence of high shares of distributed converter-interfaced resources](#)
- [QuVert – Use of quality reserves in electrical distribution grids](#)
- [MESH4U – Optimal integration of electric vehicles fast charging stations into medium voltage power distribution grids](#)
- [BackupFlex – Emergency operations with decentralised assets](#)
- [COSTAM – Comparative performance assessment of STATCOM based on modular multilevel architectures](#)
- [BAT4SG – Grid-optimized operation of decentralized customer storage systems](#)
- [iREF-Grid – Improvement of the Reliability and Efficiency of Grid operation through continuous monitoring of system perturbations caused by customer installations](#)
- [GREAT – Grid-forming control of renewable generation and power electronics](#)
- [Z-NET – Pre normalisation of grid impedance measurement in the power line communication frequency band](#)
- [ACSICON – Novel Analysis and Control Solutions for Dynamic Security Issues in the future](#)
- [OptiQ – Optimization of the planning and operation of distribution grids taking into account power quality phenomena](#)
- [Prosumer-Lab – Influence of novel strategies and components of the energy management of grid-integrated, smart buildings on the stability and quality of the house and distribution grids](#)
- [REMIGATE – Reduction of electromagnetic interferences in smart grid applications: site tests and assessment](#)
- [CloudGrid – Transnational CLOUD for Interconnection of Demonstration Facilities for Smart GRID Lab Research](#)
- [Swinging Grids – Measurement and modelling of oscillations in distribution grids](#)
- [ISGAN TCP WG 5 Testing Labs](#)
- [ISGAN TCP WG 6 Power Systems](#)

Power electronics

- [MuSiC – SiC Dual Inverter for Industrial Drive Systems](#)
- [IEA 4E TCP PECTA: Analysis and Loss Measurements of WBG-based Devices](#)
- [SUNSHINE – Sun Swiss Hybrid Inverter](#)
- [ENCOMPE – Environmentally Compatible Power Electronics](#)
- [LIFETIME – Silicon Carbide Power Semiconductors Dynamic Reliability](#)
- [Wimpact – Wide Bandgap Impact on Industrial Motors: Performance, Analysis and Converter Technologies](#)
- [Power Electronic Conversion Technology Platform - 4E Energy Efficient End-use Equipment](#)

Digitalization

- [SAFE-AI – Sustainability Assessment Framework for the Environmental Impacts of Artificial Intelligence](#)
- [TODC – Temperatur-Optimierung von Rechenzentren](#)
- [EIMP – Intelligent calibration and predictive maintenance of measurements units for different energy networks](#)
- [CEST-DC – Circular Economy Synergies and Trade-offs in Data Centres](#)
- [KI-WP – KI in der Wärmepumpenberatung](#)
- [Efficient, Demand Flexible Networked Appliances \(EDNA\) - 4E Energy Efficient End-use Equipment](#)

Applicants must familiarise themselves with these activities before submitting their (pre-)proposals. Applications must not duplicate ongoing or completed projects (not only those of the SFOE) but may build on them and provide meaningful additions. The link to ongoing or completed activities must be explained in the proposal.

Excluded topics

The [Detail Concept](#) of the Research Programme Electricity covers a wide range of research topics. However, **this call only addresses those topics that are explicitly described in Appendix 1.** To support applicants, the following non-exhaustive list shows which topics are explicitly excluded:

Topics mentioned in the Detail Concept of the Research Programme Electricity

Excluded are:

- All technical aspects and topics with the focus on of electric motors and drive systems in industry as well as generators.
- Focussed work on circular economy.

Topics not explicitly mentioned in the Detail Concept of the Research Programme Electricity

Excluded are:

- Any technical aspects of low or high temperature superconductivity.
- Any technical aspects of waste heat energy recovery like thermo-electric, thermos-magnetic, pyroelectric, osmosis, etc.
- Any technical aspects of compressed air and other mechanical storage systems.
- Any technical aspects of lighting and illumination.

General exclusions of the call

Excluded are:

- Any proposal covering ongoing or completed projects.
- Any proposal with a clear characteristic of basic research (TRL 1).
- Any proposal with a clear characteristic of product development (TRL 6-9).

Proposals containing activities relating to excluded topics will be excluded from the call.