

Bundesamt für Energie BFE Marktregulierung

# Research Program Energy-Economy-Society (EWG) Call 2023-2024 for Research Proposals

<u>The Energy – Economy – Society (EES)</u> research programme promotes application-oriented research in the field of energy policy. To this end the EES focuses on economic, social, psychological and political issues throughout the energy sector supply chain. EES elaborates calls to fund innovative socio-economic research projects that address relevant energy-policy questions for Switzerland. In line with the <u>Federal Energy Research Masterplan</u> for the period from 2021 to 2024 and with the <u>"Energy</u> <u>research concept of the Swiss Federal Office of Energy"</u>, EES defines research priorities through its calls.

For this call, the <u>Directive on the submission and evaluation of applications for financial support of</u> energy research, pilot and demonstration projects applies.

## Scope

In 2024, researchers are invited to submit research proposals in one of the following fields (see below). Projects can concentrate on one aspect of the fields proposed and do not have to treat all sub-points and research questions listed. The projects must be strongly related to Switzerland.

#### 1) Electricity market design and development of system flexibility

- Electricity market design: analysis of new electricity market designs discussed in the EU and Switzerland, and consequences of European market design choices on optimal designs in Switzerland
- Role and efficient regulation of storage for an efficient integration of intermittent renewables in the Swiss and European energy system, while ensuring security of supply and network stability

## 2) Energy transition and the economy

- The Swiss industry on the road to net zero emissions: policies and measures to encourage the transition: what is needed beyond current and planned measures? Impact on the whole value chain and impact on international competitiveness
- Impact of the energy transition and energy system digitalization/uptake of digital technologies on the Swiss labour market and vice versa including changes in productivity and qualifications. Measures to enable an efficient and socially responsible transition on the labour markets
- Impact of the clean energy transition on low-income households: energy efficiency and renewables in mobility and buildings: participation of low-income households in the transition, distributional impact of policies to enable the transition and options to support low-income households, analysis of energy justice

## 3) Future of hydrogen and gas in Switzerland

- Hydrogen: how can regulation maximise the value of hydrogen for the Swiss energy system? What can hydrogen contribute to security of electricity and energy supply? What advantages can hydrogen bring to the electricity grid?
- How can regulation maximise the value of hydrogen for high temperature heat provision?
- Analysis of the future of gas supply and gas supply firms: future use of gas grids, decommissioning, transition to district heating, role of renewable gases, repurposing of gas network for hydrogen





#### 4) Changes in consumer behaviour

- Analysis of changes in consumer behaviour, lifestyles and energy related social norms as consequence of energy price increases, security of supply risks and changes in climate change awareness



#### Timeline

January 18th 2024, 14:00 CET Deadline for quest	ons regarding the call
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February 12 <sup>th</sup> 2024, 14:00 CET	Deadline for submission of pre-proposals
March 2024	Notification of accepted pre-proposals
April 2024	Deadline for full proposal submission
May 2024	Notification of accepted projects
July November 2024	Launch of accepted projects

July - November 2024 Launch of accepted projects

#### **Contact Information**

If you have any question regarding the call, please do not hesitate to contact:

Anne-Kathrin Faust anne-kathrin.faust@bfe.admin.ch Phone +41 58 465 54 45

The deadline for questions is January 18th, 14:00 CET. Answers to questions of general interest and relevance will be published on the <u>EWG Website</u> on January 25<sup>th</sup> 2024.

After January 18th, only administrative questions will be answered.

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, and particularly PhD students, in the research teams is encouraged. Researchers in the public and private sector can apply for remuneration of the personnel costs according to the rules provided in the Appendix 1 (Remuneration of personnel expenses in research and P&D projects). The Energy-Economy-Society research programme does not pay any contribution to overhead cost.<sup>1</sup>

Proposals from working groups including specialists from different fields are welcome (the contact person should be specified). Own and third-party contributions (in-kind and/or cash) have to be indicated at the pre-proposal submission and formally confirmed at the full proposal submission.

Only projects with a focus on social science and humanities shall be considered for funding. The projects should address questions relevant for Switzerland.

Universities, universities of applied sciences, further research organisations and the private sector based outside Switzerland are welcome to apply. They however have to do so in a consortium with at least one Swiss partner and work on research questions relevant for Switzerland. The Swiss partner has to provide a substantial contribution to the research work performed in the project and be listed as the main partner in the application.

<sup>&</sup>lt;sup>1</sup> Please beware that the EWG research programme expects fully financed Professors (from the ETH domain, Universities etc) to include their work on a project as own contribution (and not ask for SFOE funding).



Supported projects typically receive public funding in the order of 100–300 kCHF and have a duration between 24 and 36 months. However, there are no formal limits.

Applicants must comply with the conditions set out in the <u>Directive on the submission and evaluation of</u> applications for financial support of energy research, pilot and demonstration projects.

## **Application Procedure**

The call follows a two-stage submission and evaluation procedure. First, a pre-proposal (max. 6 pages, see the EES / EWG pre-proposal template for the Call 2023-2024 on the Research Program Energy-Economy-Society <u>website</u>) is submitted. If the pre-proposal is selected after evaluation, the applicant is invited to submit a full proposal. 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 should be explained and justified.

At both stages of the application, the main project partner prepares a proposal (pre-proposal or full proposal) using the template available on the Research Program Energy-Economy-Society <u>website</u> in any national language or in English.

The pre-proposals have to be submitted as one single PDF file by e-mail to <u>energieforschung@bfe.admin.ch</u>, by February 12<sup>th</sup> 2024, 14:00 CET.

The receipt of the pre-proposal will be confirmed in due time. If you do not receive confirmation of your pre-proposal submission by February 19<sup>th</sup> 2024 please contact Anne-Kathrin Faust.

## **Evaluation of Proposals**

The project proposals will be evaluated along the criteria listed in Appendix 2 both at the pre-proposal and the full proposal stage.



## Appendix 1 Remuneration of personnel expenses in research and P+D projects

#### Principle

The determination of the own personnel costs of the project partners is based on the actual hours worked and the actual gross salaries paid to the employees plus the following supplements:

- Employer contributions according to AHVG / IVG / EOG, BVG, AVIG and UVG.

• Opportunity costs due to incomplete productive utilization of employees, e.g. due to vacations, training, internal administrative work, order acquisition etc.

• In the case of private companies, additional opportunity costs in connection with loss of revenue and profits due to development activities.

The defined maximum hourly rates merely specify the upper limit of the allowable project costs. In case of doubt, the declared hourly rates and expenses must be substantiated. Self-employed persons who do not pay themselves a salary may declare gross salaries customary in the market for an equivalent position without a management function. The following rule of thumb can be used to roughly estimate the permissible hourly rate: The employee's gross salary divided by the regular yearly working hours and multiplied by a supplement factor. This factor is 1.5 for universities and public research institutions and 2.0 for private companies.

#### **Functional categories**

The eligibility of hourly rates depends, among other things, on the function and, in a broader sense, on the education and training of the employee:

Category	Universities & public research institutions	Private companies
A <sup>19</sup>	Professor	Upper management/ Head of company or division
В	Senior scientist (min. 5 years experience after graduation/PhD)	Middle management/ Head of business unit or team
с	Post-doc (max. 5 years of experience after graduation/PhD)	Expert with high education and/or min. 5 years of relevant work experience
D	PhD student or technical/scientific staff member	Expert with low education and/or max. 5 years of relevant work experience

<sup>19</sup>: For category A, a maximum of 20% of the total working hours and not more than 200 hours per year and employee may be declared. This limit may only be exceeded if it is proven that the increased cooperation of these persons is indispensable for the implementation of the project.



Maximum hourly rates:

For the defined organization types and function categories, the following maximum hourly rates apply. Calculation examples: According to the rule of thumb, an hourly rate of 115 CHF/h in a university corresponds approximately to a gross salary of CHF 161,000. An hourly rate of 135 CHF/h in a private company corresponds approximately to a gross salary of CHF 142'000.-.

Category	Universities & public research institutions	Private companies
А	135 CHF/h	170 CHF/h
В	115 CHF/h	135 CHF/h
с	80 CHF/h	115 CHF/h
D	50 CHF/h	90 CHF/h



## Appendix 2 Evaluation criteria

The project has to fulfill <u>all</u> eligibility criteria to be evaluated.

#### Eligibility criteria

#### Formal criteria:

Criteria		
F1	Is the application complete (does the proposal include all information requested in the call)?	🗆 yes 🛛 no
F2	Are the objectives of the research project clear and is the research proposal well structured?	🗆 yes 🛛 no
F3	Was the application submitted in time?	🗆 yes 🛛 no
F4	In the case of scientific publications: Is Open Access granted?	🗆 yes 🛛 no

#### Content related criteria:

Criteria	1		
C1	Do the research questions to be addressed fit the call, and do they fall into the competence of the SFOE?	□ yes	🗆 no
C2	May the findings of the project be made accessible to the public? (See provisions on monitoring and open access in the <u>Directive on the submission and evaluation of applications for financial support of energy research, pilot and demonstration projects)</u>	□ yes	🗌 no

#### **Qualitative Criteria**

Each of the sub-criteria will be scored on a scale from 1 to 5. The 1–5 scoring system for each subcriterion indicates the following assessment:

- 1 Poor: The sub-criterion is inadequately addressed or there are serious inherent weaknesses.
- 2 Unsatisfactory: The sub-criterion is broadly addressed but there are significant weaknesses.
- 3 Satisfactory: The sub- criterion is addressed but with a number of shortcomings.
- 4 Good: The sub-criterion is well addressed but with a number of shortcomings.
- 5 Very Good: All relevant aspects of the sub-criterion are addressed; any shortcomings are minor.

For a project to qualify for an invitation<sup>2</sup> to submit a full proposal to the second round of the call, each qualitative criterion (Q1 to Q5) has to obtain a minimum score listed in the table. Some sub-criteria are also subject to a minimum score. The score for each qualitative criterion (Q1 to Q5) is the average of the listed sub-criteria. The criteria are weighted as indicated below.

<sup>&</sup>lt;sup>2</sup> Qualifying is a necessary condition for an invitation to the second round, but not a sufficient condition.

Griterion		Minimum evaluation
Q1	Organisation (weight: 1.0)	ø 3
	Competencies, organisation, responsibility	
	Are all the competencies crucial to the project covered? Has a clear project organisation been established? Are the responsibilities laid down clearly?	At least 3
	Schedule and milestones	
	Is the proposed schedule realistic and efficiently drawn up? Have clearly measurable milestones been stipulated (stage-gate targets)?	
	Cost-benefit ratio, subsidiarity	
	Does a project hold out the prospect of significant benefits in relationship to the costs involved? Have sufficient in-kind contributions and third-party funds been promised?	

Criteri	on	Minimum evaluation
Q2	Excellence (weight: 1.0)	ø 3
	Preliminary work, suitability, expertise	
	Can the project team build on previous work? Does the project team have the expertise required (suitability)?	
	Academic record, recognition	
	Does the project team have broad experience (academic record) or are they recognised specialists in their field?	
	Teams' potential for success	
	Is clear potential for success discernible in this project team?	
Q3	Content of project (weight: 2.0)	ø 3
	Relevance, national and international cooperation	
	Is the project scientifically, politically and strategically relevant and does the content contribute to a research priority set out in the call? Is it part of an international cooperation within the IEA <sup>3</sup> or the EU research programme, or is it part of other national or international collaboration schemes (e.g. DACH)?	At least 3
	Value creation, innovative content	
	Do the findings lead us to expect high value creation for Switzerland - in an economic or scientific respect? Does the project build up a large body of knowledge or know-how and/or does it pursue an innovative or novel approach?	
	Approach, methodology and data	
	Is the proposed approach suitable to deal with the issue? Is the methodology adequate to solve the issue?	At least 3

<sup>&</sup>lt;sup>3</sup> The most important aspect here is that the project is scientifically, politically and strategically relevant and that the content contributes to a research priority set out in the call. A national or international cooperation would be viewed positively, but is not a necessity.

Q4	Opportunities, risks (weight: 1.0)	ø 3
	Energy potential	
	Does the project contribute to a safe, sustainable and economical energy provision or to a lower and rational energy consumption?	
	Discussion in public or before a professional audience	
	Are the research findings of interest to the general public? Do the findings constitute a useful foundation for the opinion building and decision-making processes among informed people?	
	Sustainability	
	Will the findings contribute to sustainable development in all three dimensions (ecological, economic and social) at national or global level?	
Q5	Monitoring, dissemination, and educational effects (weight: 1.0)	None
	Monitoring	
	Is a monitoring or other accompanying activity such as workshops or a monitoring group planned?	
	Knowledge transfer	
	Are knowledge transfer and publications planned? Is an open access / data / model strategy included?	
	Promotion of doctoral candidates	
	Are doctoral candidates working on the project?	